PUBLIC

UNITED STATES OF AMERICA
BEFORE THE FEDERAL TRADE COMMISSION
OFFICE OF ADMINISTRATIVE LAW JUDGES

In the Matter of **Altria Group, Inc.** **a corporation;** **and** **JUUL Labs, Inc.** **a corporation.**	**DOCKET NO. 9393**

COMPLAINT COUNSEL'S SECOND CORRECTED POST-TRIAL PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW

Mark Woodward
Acting Deputy Director

Jennifer Milici
Chief Trial Counsel

Dominic E. Vote
Assistant Director

Peggy Bayer Femenella
Deputy Assistant Director

Federal Trade Commission
Bureau of Competition
600 Pennsylvania Ave., NW
Washington, DC 20580
Telephone: (202) 326-2470
Facsimile: (202) 326-3496
Email: jabell@ftc.gov

Stephen Rodger
James Abell
Jeanine Balbach
Michael Blevins
Erik Herron
Frances Anne Johnson
Joonsuk Lee
Meredith Levert
Nicole Lindquist
Michael Lovinger
David Morris
Kristian Rogers

Attorneys

Dated: October 20, 2021

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I. JURISDICTION

1. Altria Group, Inc. ("Altria") is a for-profit corporation with its principal place of business at 6601 West Broad Street, Richmond, Virginia 23230. (JX0001 at 001 (¶ 1) (Joint Stipulations of Law and Fact)).

2. JUUL Labs, Inc. ("JLI") is a for-profit corporation with its principal place of business at 1000 F Street NW, Washington, D.C., 20004. (JX0001 at 001 (¶ 6) (Joint Stipulations of Law and Fact)).

3. Altria and JLI engage in activities in or affecting commerce as defined in Section 4 of the FTC Act, 15 U.S.C. § 44, and Section 1 of the Clayton Act, 15 U.S.C. § 12. (JX0001 at 001 (¶¶ 4, 7) (Joint Stipulations of Law and Fact)).

II. THE PARTIES

A. ALTRIA

4. Respondent Altria is a holding company incorporated in Virginia and headquartered at 6601 West Broad Street, Richmond, Virginia 23230. (JX0001 at 001 (¶¶ 2, 3) (Joint Stipulations of Law and Fact)).

5. Altria is the parent company of multiple tobacco companies, including Philip Morris USA. (JX0001 at 001 (¶ 3) (Joint Stipulations of Law and Fact)).

6. Philip Morris USA is the largest cigarette company in the United States. (PX9017 (Altria) at 005).

7. Altria's operating subsidiaries are primarily engaged in the manufacture and sale of tobacco products in the United States. (JX0001 at 001 (¶ 3) (Joint Stipulations of Law and Fact)).

8. Altria's tobacco subsidiaries' products include: smokable tobacco products consisting of combustible cigarettes manufactured and sold by PM USA and Nat Sherman; machine-made large cigars and pipe tobacco manufactured and sold by Middleton and premium cigars sold by Nat Sherman; smokeless tobacco products consisting of moist and smokeless tobacco ("MST") and snus products manufactured and sold by USSTC. (PX9017 (Altria) at 005 (Altria FY2018 10-K)).

1. Nu Mark

9. Prior to December 2018, Altria participated in the e-vapor category and developed and commercialized innovative tobacco products through its operating subsidiary Nu Mark LLC ("Nu Mark"). (PX9017 (Altria) at 005 (Altria FY2018 10-K)).

10. "Nu Mark was Altria's innovation business, primarily focused on competing in the e-vapor business." (PX7041 (Quigley (Altria), Dep. at 14-15)).

11. "Nu Mark ha[d] a diverse products portfolio and a diverse pipeline of promising products." (Willard (Altria) Tr. 1157; PX9045 (Altria) at 007 (2018 CAGNY Conference Remarks by Howard Willard, Feb. 21, 2018)).

12. In November 2017, Jody Begley, Nu Mark's President and General Manager, told investors that "MarkTen is currently available in about 65,000 stores and has nearly tripled its market share since 2014. It is now one of the leading e-vapor brands, with a 13.5% retail share in mainstream channels, and 27% retail share in major chain accounts selling MarkTen for the full third quarter of 2017." (PX9000 (Altria) at 017 (Nov. 2017 Investor Day remarks)).

13. Nu Mark utilized Altria's "[e]xceptional speed to market made possible by: Partnerships with existing network of suppliers; Existing quality and compliance systems to integrate new suppliers; Collaboration with cross-functional teams." (PX1298 (Altria) at 028 (Nu Mark 2018-2020 Three Year Strategic Plan BOD Deck Draft; slide title: "Rapid Commercialization of Elite")).

14. Nu Mark had roughly 145 employees in the US as well as employees in Israel and China. (Quigley (Altria) Tr. 1938-39 ("Q. When you were president and CEO of NuMark, NuMark had roughly 145 employees, correct? A. That sounds -- that sounds about right. Q. Now, there were also employees in Israel, correct? A. Yes, there was an organization in Israel called NMI."); Schwartz (Altria) Tr. 1857 ("They were Altria employees. So Richmond, China, Israel, Miami.")).

15. NMI was a research and development facility located in Israel that conducted technology scouting efforts on behalf of Altria. (PX7016 (Jupe (Altria), Dep. at 28-29)).

16. NMI also had "a facility that enabled the efficient prototyping of technologies and/or new products." (PX7016 (Jupe (Altria), Dep. at 28-29)).

17. NMI could manufacture "hundreds" of e-cigarette prototypes if necessary. (PX7016 (Jupe (Altria), Dep. at 153-54)).

18. In 2018, Altria sought to invest additional resources to expand NMI's already good prototyping capacity. (PX7016 (Jupe (Altria), Dep. at 199) ("NMI had some very good prototyping capability. We wanted to improve that. We were looking for expanding the shop, if you will, so that they could do more prototyping for us.")).

19. NMI's expansion included hiring new personnel as well as expanding the physical prototyping infrastructure. (PX7016 (Jupe (Altria), Dep. at 199-200)).

20. Nu Mark's August 2018 brand report on MarkTen highlighted the fact that it was the 2nd fastest growing e-vapor brand overall and the fastest growing cigalike brand in the U.S (PX1056 (Altria) at 028 (Nu Mark August 2018 Brand Report)).

21. Until late-2018, Altria, through Nu Mark, sold the following products: MarkTen Elite and Apex pod-based products, MarkTen cigalikes, and Green Smoke cigalikes. (PX9114 (Altria) at 002 (Altria 2018Q3 Press Release); PX2002 (JLI) at 001; PX4029 (Altria) at 021 (April 2018 Nu Mark BOD Orientation); PX0015 (Altria) at 007-009 (Altria Response

to Request for Additional Information and Documentary Materials dated Oct. 8, 2019) (*in camera*). Cigalikes sold under the MarkTen brand included MarkTen Bold, and MarkTen. (O'Hara (JLI) Tr. 506; PX9114 (Altria) at 009, 012 (Altria 2018Q3 Press Release)).

22. [redacted] (PX0007 (Altria) at 005) (*in camera*)).

23. [redacted]. (PX0015 (Altria) at 007 (Altria Response to Request for Additional Information and Documentary Materials dated Oct. 8, 2019)) (*in camera*)).

24. [redacted]} (PX0015 (Altria) at 007 (Altria Response to Request for Additional Information and Documentary Materials dated Oct. 8, 2019)) (*in camera*).

25. [redacted] (*in camera*)).

26. Nu Mark planned to triple its 2018 new product launch from $7 million to $23 million; $8 million of the increase was solely to accelerate the Mark Ten Elite launch. (PX1606 (Altria) at 015 (Altria 2018 Original Budget Update)).

B. JLI

27. JLI is a for-profit corporation incorporated in Delaware, with its principal place of business at 1000 F Street NW, Washington, D.C., 20004. (JX0001 at 001 (¶ 6) (Joint Stipulations of Law and Fact)).

28. JLI was originally called Ploom, then changed to PAX, and finally to JUUL Labs, Inc. in 2015-2016. (Valani (JLI) Tr. 900).

29. JLI sells an e-cigarette, referred to as the "JUUL" or "Juul" product, which heats a nicotine-based liquid into an aerosol to deliver nicotine to users. (PX2218 (JLI) at 003 (HSR Notification Form)).

30. The JUUL e-cigarette is a closed-system pod-based product and was first introduced in 2015. (PX0017 (Altria) at 003 (Altria's Minority Investment in JUUL Labs dated April 2, 2019)).

31. In 2018, JUUL was the best-selling e-cigarette in the United States and the "market leader." (Pritzker (JLI) Tr. 729; PX2098 (JLI) at 001, 014; PX9017 (Altria Group, Inc. Form 10-K) at 058; *see also* Huckabee (Reynolds) Tr. 442-43 (*in camera*); PX1316 (Altria) at 007; PX3228 (Reynolds) at 006 (*in camera*)); PX1115 (Altria) at 003).

32. JLI's sales in 2018 were over $1 billion. (PX2142 (JLI) at 006 (JUUL Project Tree Board of Directors Meeting, Dec. 19, 2018)).

III. THE TRANSACTION

A. ALTRIA ACQUIRED A 35% NON-VOTING EQUITY INTEREST IN JLI

33. On December 20, 2018, Altria and JLI signed an agreement ("Purchase Agreement"), whereby Altria acquired a 35% non-voting equity interest in JLI for $12.8 billion in cash. (PX2141 (Altria/JLI) at 006-07 (Purchase Agreement, Dec. 20, 2018); PX2010 (JLI) at 003 (Q&A talking points regarding transaction, Dec. 20, 2018).

34. On December 20, 2018, the 35% non-voting equity interest sale from JLI to Altria closed. (PX2218 (JLI) at 003 (Hart-Scott-Rodino ("HSR") notification); PX2010 (JLI) at 001, 003, 007-08 (Q&A talking points regarding transaction, Dec. 20, 2018)).

35. Altria and JLI did not file an HSR notification to acquire the 35% non-voting equity interest in JLI for $12.8 billion. (PX2010 (JLI) at 007 (Q&A talking points regarding transaction, Dec. 20, 2018)).

36. JLI distributed most of the proceeds from Altria's investment to JLI investors and employees as a special dividend. (PX2010 (JLI) at 003, 008 (Q&A talking points regarding transaction, Dec. 20, 2018) ("$12.7 billion of the capital received from Altria's investment is being paid to shareholders in the form of a dividend and to holders of options and RSUs pursuant to their provisions.")).

1. Altria and JLI Entered Several Agreements As Part of Altria's Investment in JLI

37. The December 20, 2018 Purchase Agreement signed by Altria and JLI incorporates several agreements between Altria and JLI. (PX2141 (Altria/JLI) at 011 (Purchase Agreement, Dec. 20, 2018) (incorporating ancillary agreements); PX2216 (Altria/JLI) (Voting Agreement, Dec. 20, 2018); PX1276 (Altria/JLI) (Relationship Agreement, Dec. 20, 2018); PX1275 (Altria/JLI) (Services Agreement, Dec. 20, 2018); PX2214 (Altria/JLI) (Investors' Rights Agreement, Dec. 20, 2018); PX2215 (Altria/JLI) (Right of First Refusal and Co-Sale Agreement, Dec. 20, 2018); PX2139 (Altria/JLI) (Intellectual Property License Agreement, Dec. 20, 2018); PX2217 (Altria/JLI) (True-Up Convertible Security Agreement, Dec. 20, 2018)).

a) <u>Altria Agreed to a Non-Compete with JLI</u>

38. Pursuant to the Relationship Agreement, Altria was prohibited from competing in all aspects of the e-vapor business, including research and development, for an initial term of six years, with very limited exceptions. (PX1276 (Altria/JLI) at 025-27, 064 (Relationship Agreement, Dec. 20, 2018); PX1275 (Altria/JLI) at 005, 014 (Services Agreement, Dec. 20, 2018)). The initial term of six years is indefinitely extendable by three-year increments if not terminated by either party. (PX1276 (Altria/JLI) at 025-27, 064 (Relationship

Agreement, Dec. 20, 2018); PX1275 (Altria/JLI) at 005, 014 (Services Agreement, Dec. 20, 2018)).

39. As part of the transaction with JLI, Altria agreed it would not do any more product development for e-cigarettes, including internal development and development collaborations with third parties. (Jupe (Altria) Tr. 2192-94). Jupe testified that, "As part of that JLI deal, one of the closers was we [Altria] would not be doing any more product development within the e-vapor space." (Jupe (Altria) Tr, 2192-93). Altria was "obliged to" end internal and external product development and to "unwind" product development collaborations. (Jupe (Altria) Tr. 2193-94).

40. As part of the transaction with JLI, Altria committed to participate in the e-vapor business exclusively through JLI. (PX1181 (Altria) at 067 ("E-Vapor Update" presentation prepared for Altria board of directors, Dec. 2018) ("[S]elected transaction terms […] Altria commits to conduct e-vapor operations exclusively through [JLI]"); PX1265 (Altria) at 002 (Email from Murray Garnick, Dec. 10, 2018) ("[O]ur participation in e[-]vapor area will be exclusively through [JLI]."); Pritzker (JLI) Tr. 912 ("Q. During the course of negotiations with Altria, you told Mr. Willard and Mr. Gifford that, post-transaction, Altria would need to participate in e-vapor exclusively through JLI, correct? A. That is correct . . . .")).

41. The negotiations for the transaction began in the middle of 2017. (*See* CCFF ¶ 614, below) Prior to the signing of the final deal documents, Altria had already announced the removal of the MarkTen Elite pod products and the discontinuation of its e-cigarette business. (*See* CCFF ¶¶ 861-64, below).

b) <u>Altria Appointed an Observer to JLI's Board of Directors</u>

42. Pursuant to the Voting Agreement, Altria acquired the right to immediately appoint a non-voting board observer to JLI's board of directors. (PX2216 (Altria/JLI) at 008–009 (Voting Agreement, Dec. 20, 2018); PX2010 (JLI) at 007 (Q&A talking points regarding transaction, Dec. 20, 2018)).

43. Following Altria's investment in JLI, Altria appointed a non-voting board observer, Altria's Chief Growth Officer, K.C. Crosthwaite, to JLI's board of directors. (PX7006 (Crosthwaite (Altria/JLI), IHT at 145)).

c) <u>Altria Agreed to Provide Services to JLI</u>

44. Pursuant to the Services Agreement, Altria agreed to provide JLI with certain services, including mission support, government and regulatory affairs, distribution support, fixture services, database, legal and related services, direct marketing support, and sales services. (PX1275 (Altria/JLI) at 027-33 (Services Agreement, Dec. 20, 2018)).

45. The services agreement had an initial six-year term, subject to early termination by mutual consent or in case of material breach, bankruptcy, or insolvency. (PX1275 (Altria/JLI) at 005, 014-15 (Services Agreement, Dec. 20, 2018)).

46. On January 28, 2020, Altria and JLI amended the services agreement, thereby eliminating all services other than regulatory support services and retail shelf space through March 31, 2020. (*See* CCFF ¶¶ 1880-83, below).

B. Altria and JLI Filed for HSR Clearance to Convert Altria's Interests to Voting Securities in February 2019

47. On February 4, 2019, Altria and JLI filed for HSR clearance to convert Altria's non-voting interests in JLI to voting interests and to appoint three members of JLI's board of directors. (PX2218 (JLI) at 003 (HSR notification) ("Altria is now filing notification to convert these economic interests into voting securities . . . ."); PX2141 (Altria/JLI) at 009-10, 037 (Purchase Agreement, Dec. 20, 2018); PX2216 (Altria/JLI) at 004-06, 052 (Voting Agreement, Dec. 20, 2018)).

48. The HSR notification was filed two months after December 2018, when "Altria announced the decision to refocus its innovative product efforts, which included Nu Mark's discontinuation of production and distribution of all e-vapor products." (PX9017 (Altria) at 004 (Form 10-K, Feb. 26, 2019); *see* PX9080 (Altria) at 001 (noting that on Dec. 7, 2018, Altria announced discontinuation of MarkTen and Green Smoke); PX9114 (Altria) at 002 (noting that on Oct. 25, 2018, Altria announced plans to discontinue MarkTen Elite and Apex by MarkTen)).

49. In November 2020, Altria announced the conversion of its non-voting JLI shares to voting shares, but did not exercise the right to elect directors to JLI's board of directors. (PX9099 (Altria) at 001).

C. Altria and JLI Amended the Purchase Agreement and Incorporated Agreements in January 2020

50. On January 30, 2020, Altria announced that Altria and JLI had entered into an amended Purchase Agreement and amended Relationship Agreement. Altria also announced amendments to the Services Agreement and the Voting Agreement. (PX9028 (Altria) at 002; PX9029 (Altria) at 003 (Form 8-K); PX0010 (Altria/JLI) (Amended Purchase Agreement, Jan. 28, 2020); PX0011 (Altria/JLI) (Amended Relationship Agreement, Jan. 28, 2020); PX0012 (Altria/JLI) (Amended Services Agreement, Jan. 28, 2020); PX0014 (Altria/JLI) (Amended and Restated Voting Agreement, Jan. 28, 2020)). Altria and JLI also entered into a cooperation agreement. (PX0013 (Altria/JLI) (Cooperation Agreement, Jan. 28, 2020)).

51. The Amended Services Agreement eliminated all services except for regulatory support services relating to JLI's PMTA and other approval processes. (PX0012 (Altria/JLI) at 002 (Amended Services Agreement, Jan. 28, 2020); PX1275 (Altria/JLI) at 028 (Services Agreement, Dec. 20, 2018); PX9029 (Altria) at 003 (Press Release, Jan. 30, 2020)).

52. The Amended Services Agreement became effective on January 28, 2020. (PX0012 (Altria/JLI) at 001 (Amended Services Agreement, Jan. 28, 2020); PX9028 (Altria) at 002 (Form 8-K)).

53. The amended Relationship Agreement gave Altria the option to be released from the non-compete if JLI is prohibited by federal law from selling e-cigarette products in the United States for at least a year or if Altria's internal valuation of the carrying value of its investment falls below 10 percent of the transaction amount of $12.8 billion. (PX0011 (Altria/JLI) at 002-003 (Amended Relationship Agreement, Jan. 28, 2020); PX9029 (Altria) at 003 (Press Release, Jan. 30, 2020)).

54. The January 2020 amendments to the transaction were made at Altria's request. (PX7011 (Valani (JLI), IHT at 175-76, 183, 195)).

55. Today, the only remaining services that Altria is providing JLI are those related to regulatory support services. (*See* CCFF ¶¶ 1880-83, below).

IV. E-CIGARETTE INDUSTRY BACKGROUND

56. An electronic cigarette ("e-cigarette") is an electronic device that aerosolizes nicotine-containing liquid ("e-liquid"). (JX0001 at 002 (¶ 10)).

57. The terms "e-cigarettes" and "e-vapor" can be used interchangeably. (JX0001 at 002 (¶ 11); Farrell (NJOY) Tr. 207). E-cigarettes and e-vapor products can also be referred to as vapor products. (Farrell (NJOY) Tr. 207; (Huckabee (Reynolds) Tr. 384).

58. Electronic nicotine delivery systems is abbreviated as ("ENDS"). ENDS is a term the FDA uses to refer to "all the e-vapor products." (Willard (Altria) Tr. 1361; Murillo (Altria/JLI) Tr. 2908-09) ("ENDS is an acronym that the FDA uses for I believe it's electronic nicotine delivery system, and so it's yet another word for an e-cigarette or e-vapor.")).

A. THE RISE OF ELECTRONIC CIGARETTES

1. E-Cigarettes Are the Fastest Growing Tobacco Segment

59. E-cigarettes are critically important to the future of tobacco companies because they represent a fast-growing category, whereas traditional combustible cigarette volumes have declined steadily. (*See* CCFF ¶¶ 60-74, 94-117, below.)

60. Prior to 2017, demand for traditional cigarettes had decreased at a rate of around 2 to 4 percent annually. (PX5000 at 041 (¶ 94) (Rothman Expert Report); *see* Willard (Altria) Tr. 1324-25 (Altria's top-selling combustible cigarette was declining in volume); (PX7004 (Willard (Altria), IHT at 41-45) (estimating 3 to 4 percent annual decline in the volume of cigarette sales up until 2017 or 2018, and a 5.5 percent decline in the first nine months of 2019)).

61. To offset this volume decline, cigarette manufacturers have relied on regular price increases. (PX7004 (Willard (Altria), IHT at 41-42)).

62. In late 2017, the e-cigarette category experienced rapid growth. (PX1316 (Altria) at 005 ("E-vapor category growth has accelerated"); PX1424 (Altria) at 003-06, 010-11; PX1229 (Altria) at 007 (*in camera*)).

63. Howard Willard testified that when Altria evaluates a product market's overall attractiveness, it will look to the size of the market, the market's growth rate, and the "competitive environment" in a segment. (PX7004 (Willard (Altria), IHT at 054-55)). In the first half of 2017, Altria assessed that the closed tank e-cigarette market was highly attractive because JLI "was starting to demonstrate some strong growth . . . ." (PX7004 (Willard (Altria), IHT at 55-56); PX1286 (Altria) at 009).

64. The rapid growth in e-cigarettes was driven almost entirely by JLI's e-cigarette product, JUUL. (Willard (Altria) Tr. 1106 ("[A]s a category, it was growing faster than you had anticipated, and specifically what was driving that was pod-based products"); Schwartz (Altria) Tr. 1866 ("The pod business was growing exponentially, driven by JUUL. And, you know, we were getting our butts kicked week in and week out."); PX1424 (Altria) at 010-011; PX1041 (Altria) at 007; PX1229 (Altria) at 004-005, 012; PX1229 (Altria) at 007 (*in camera*); PX2040 (JLI) at 002 ("[W]e are the category killer"); PX2168 (JLI) at 006; PX4029 (Altria) at 016; PX3228 (Reynolds) at 003, 006 (*in camera*); *see also* King (PMI) Tr. 2378-79).

65. In 2018, JLI's share grew and sales exceeded $1 billion. (PX2142 (JLI) at 006). JLI's JUUL, a pod-based product, was the best-selling e-cigarette in the U.S. (Pritzker (JLI) Tr. 728-30).

66. JLI intended to "kill" the cigarette category. (PX2040 (JLI) at 002 ("JUUL is an elegant cigarette alternative that provides satisfaction, rapid nicotine delivery, and convenience at a greater value than combustibles: **we are the category killer**") (*emphasis in original*); PX9050 (JLI) at 001; PX7011 (Valani (JLI), IHT at 41-42, 52) ("the goal for JUUL is to eliminate cigarettes, and so if you don't have cigarettes, there really won't be cigarette companies. . . Q. Did JUUL see its product as a possible threat to Big Tobacco? A. It's intended as an actual threat.")).

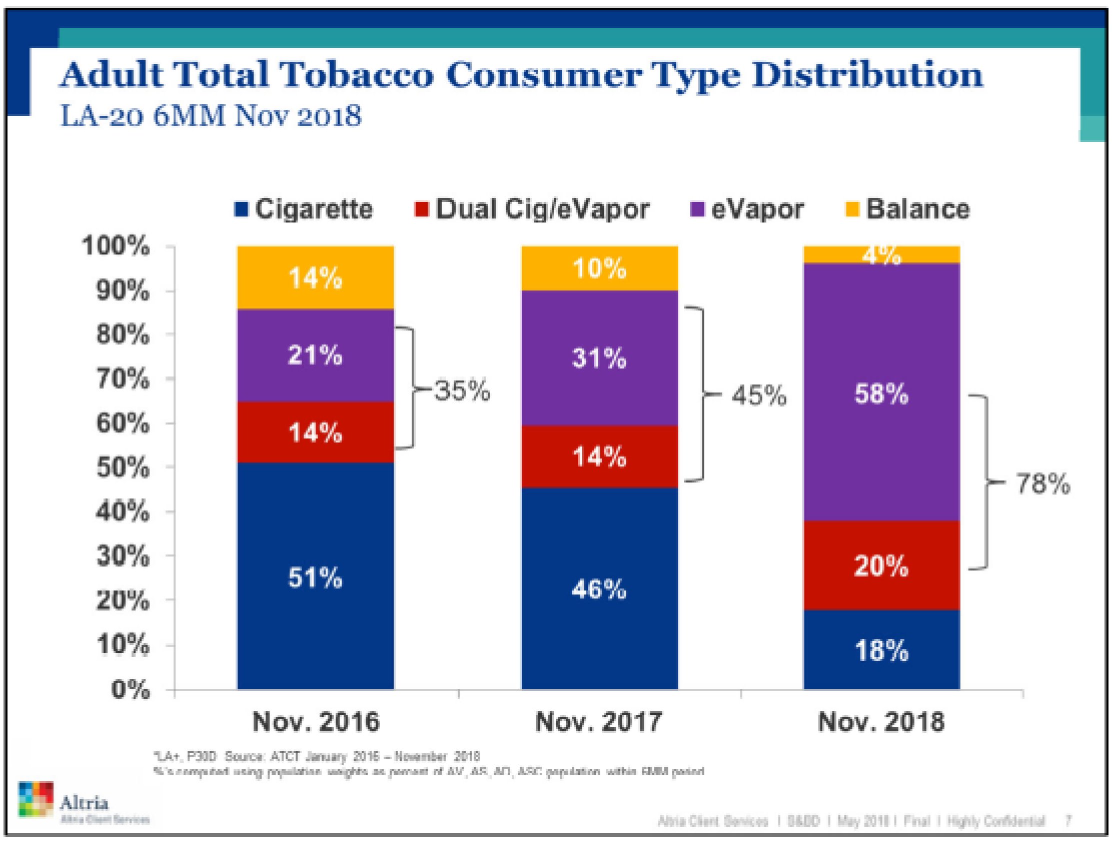
67. In 2018, the closed-system e-cigarette segment was "growing rapidly" while the decline in the traditional cigarette segment was "noticeably increasing." (PX7023 (Fernandez (Altria), Dep. at 59) ("In 2018, the e-vapor category was growing rapidly, to very rapidly."); PX7021 (Pritzker (JLI), Dep. at 49); *see also* Willard (Altria) Tr. 1146)).

68. Facing rapid e-cigarette growth driven by JUUL and the accelerating decline in combustible cigarette volumes, Altria tried to develop strategic options on how to respond, including pursuing a transaction with JLI. (PX1229 (Altria) at 005, 011, 026-27; PX1229 (Altria) at 007, 010, 025) (*in camera*)).

69. In an August 2018 Altria presentation on Project Tree prepared for Altria's board of directors, Altria estimated that [redacted] (PX1124 (Altria) at 019 (*in camera*); *see also* PX1979 (Altria) at 008-011 (Altria Board of Directors Strategy Update, October 2018)). [redacted] (PX1443 (Altria) at 009).

70. As JLI's sales increased, cigarette sales continued to decline. (Pritzker (JLI) Tr. 782-783 ("[T]he revenues of JUUL were growing at this point something like 30 percent a month, and it was very noticeable that the -- that the rates of the -- that the revenues of cigarette companies were declining faster than ever, and it might have been reasonable to assume that that was – that there was causation there."); PX7021 (Pritzker (JLI), Dep. at 49) ("[T]he decline in cigarette revenues in the United States was increasing, noticeably increasing."); Willard (Altria) Tr. 1145-47; PX2098 (JLI) at 017; PX2168 (JLI) at 006; PX1229 (Altria) at 010 (*in camera*)). The rate of decline in traditional cigarette volumes increased to around 5-6 percent in 2019. (PX8011 at 002 (¶ 7) (Eldridge (ITG), Decl.)).

71. A January 2019 presentation prepared by Altria's Consumer & Marketplace Insights Group ("CMI") showed that tobacco users aged between the then-legal minimum to 20 years old were rapidly shifting from traditional cigarettes to e-cigarettes, with 51 percent of tobacco users in that age group using only traditional cigarettes in November 2016 and only 18 percent using only traditional cigarettes in November 2018. (PX4023 at 019) (Altria presentation entitled "E-Vapor Business Review," Jan. 8, 2019.)).



(PX4023 (Altria) at 019).

72. The decline in cigarettes "posed challenges" that Altria "would have to deal with in delivering against our earning growth objectives." (Willard (Altria) Tr. 1324; PX1172 (Altria) at 007 (Willard interview with the *Wall Street Journal* dated March 23, 2019); *see* King (PMI) Tr. 2378-79 ("The success of JUUL was causing investors to be very

concerned about disruption for established cigarette companies, and we received a great number of questions from investors about what we were doing to be able to compete in the e-cigarette space.")).

73. Altria viewed JLI as a threat to its core business, attributing the accelerated decline in cigarette sales to the growth of e-vapor and {[redacted]}. (PX1268 (Altria) at 3 (*in camera*); PX1041 (Altria) at 005-007 (*in camera*); PX1041 (Altria) at 003-004; PX9039 (Altria Earnings Call Transcript, Jan. 30, 2020) at 007; PX9030 (Altria Earnings Call Slides, Jan. 30, 2020) at 019.

74. [redacted]} (PX1166 (Altria) at 006 (*in camera*); *see also* PX1166 (Altria) at 007 ({[redacted]), 009 ([redacted]} (*in camera*); PX1172 (Altria) at 007 (Willard interview with the *Wall Street Journal* dated March 23, 2019); *see* CCFF ¶¶ 94-117, 1794-802, below).

2. Closed-System E-Cigarettes

75. There are two main types of e-cigarettes: closed-system cigarettes and open tank e-cigarettes. (*See* CCFF ¶¶ 210-37, below).

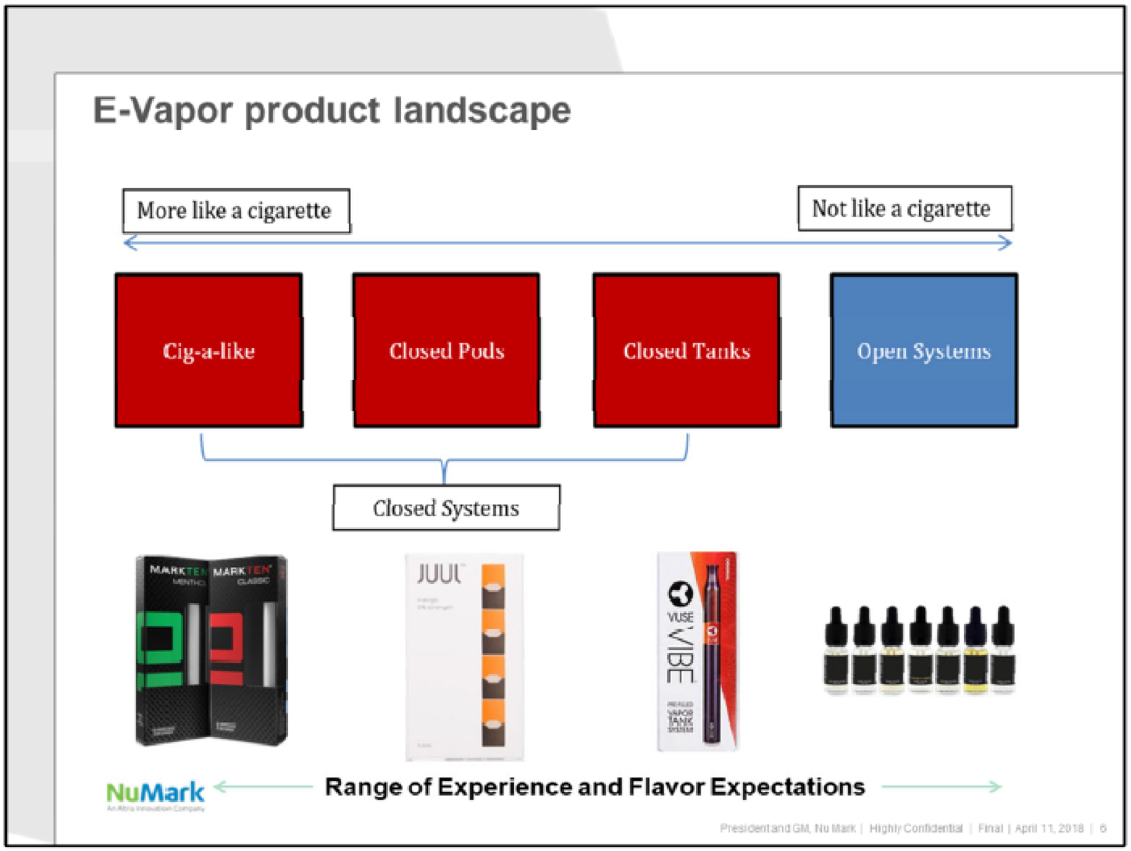
76. Closed system e-cigarettes are those with pods or cartridges that are prefilled with nicotine liquids. The pods or cartridges are not meant to be refilled by users. (Huckabee (Reynolds) Tr. 384 ("[C]losed-system terminology refers specifically to the cartridge or pod or tank which is not meant to be refillable."); Farrell (NJOY) Tr. 207, 210 ("Closed systems are comprised of a battery and a container that is referenced in a variety of ways, either called pods, cartridges, capsules, tanks, but suffice it to say there is a battery and then a container that comes prefilled with liquid, contains nicotine."); King (PMI) Tr. 2341-42; PX7035 (Masoudi (JLI), Dep. at 107); PX7022 (Begley (Altria), Dep. at 74)).

77. "Closed systems are comprised of . . . a battery and then a container that comes prefilled with liquid [that] contains nicotine." (Farrell (NJOY) Tr. 207, 209-10; Schwartz (Altria) Tr. 1851-52; *see* Willard (Altria) Tr. 1352 ("[T]he cigalike product, in some respects, bears some similarity to these pod-based products in that you can unscrew the top part of that cigarette-looking thing, and I guess technically one could call the top part the pod and the bottom part the battery, but that's not the way consumers looked at it.")).

78. Closed system e-cigarettes can be sold as a kit including the battery and the prefilled pod or cartridge, or as separate components. (Farrell (NJOY) Tr. 214-15; PX7009 (Burns (JLI), IHT 022-23)).

79. Closed system e-cigarettes can take an array of forms or "form factors." (Huckabee (Reynolds) Tr. 384-85; Farrell (NJOY) Tr. 210-11; King (PMI) Tr. 2342; PX4014 (Altria) at 030).

80. Cigalikes and pod-based products are closed system e-cigarettes. (Huckabee (Reynolds) Tr. 384-85 ("Q. Do you consider cigalike vapor products to be a closed system? A. I do. Q. And do you consider pod products to be a closed system? A. I do."); Crozier (Sheetz) Tr. 1492-93 (describing how Sheetz sells "a mix of pods and cigalike products in our e-cigarette assortment" which are closed-system); Begley (Altria) Tr. 969 ("Q. Cigalikes are closed-system e-vapor products? A. They are."); Farrell (NJOY) Tr. 206-07, 210-11; PX4029 (Altria) at 007 (*copied below*); PX2579 (JLI) at 181; PX7022 (Begley (Altria), Dep. at 74, 169)).



(PX4029 (Altria) at 007).

81. Cigalike and pod-based e-cigarettes may or may not contain nicotine salts. (O'Hara (JLI) Tr. 504-05 ("The original myblu did not have nicotine salts."); PX4015 (Altria) at 012; PX4115 (Altria) at 010; PX3005 (ITG) at 008, 022-23 (*in camera*); Farrell (NJOY) Tr. 289-90 [redacted] (*in camera*); PX7012 (Eldridge (ITG), Dep. at 168); PX7013 (Brace (Altria), Dep. at 181-82) (describing that MarkTen Elite did not have nicotine salts but "MarkTen Bold Classic and MarkTen Bold Menthol had nicotine salts"); PX1166 (Altria) at 021 (*in camera*)).

82. Cigalike and pod-based products can have an array of nicotine strengths. (Begley (Altria) Tr. 982 (discussing PX9000 (Altria) at 017); Huckabee (Reynolds) Tr. 395; Farrell (NJOY) Tr. 228-29, 341-42 (*in camera*); Gardner (Altria) Tr. 2673-75); PX7025 (Burns (JLI), Dep. at 45-46); PX4115 (Altria) at 010; PX4014 (Altria) at 030).

a) <u>Cigalikes</u>

83. "[A] cigalike product will be narrow and tubular in nature, similar to a traditional cigarette." (Huckabee (Reynolds) Tr. 385; Farrell (NJOY) Tr. 210-11, 213-14 (stating that a cigalike is "generally longer than it is wide, and reminds someone of a combustible cigarette."); (Gifford (Altria) Tr. 2721-22; PX4029 (Altria) at 007; PX7026 (Gardner (Altria), Dep. at 48)).

84. Some cigalikes are disposable and "designed for one time use." (Farrell (NJOY) Tr. 213; Farrell (NJOY) Tr. 212-14, 285 (*in camera*), 290 (*in camera*), 361; Crozier (Sheetz) Tr. 1491; PX9101 at 004; PX7026 (Gardner (Altria), Dep. at 48-49); PX7012 (Eldridge (ITG), Dep. at 49); PX7019 (Crozier (Sheetz), Dep. at 55-56)).

85. Some cigalikes have rechargeable batteries, and these cigalikes are not considered disposable. (*See* Farrell (NJOY) Tr. 212-14; PX9101 at 005; PX7026 (Gardner (Altria), Dep. at 48–49)).

b) <u>Pod-Based Products</u>

86. "Pod products can vary. [Reynolds'] product is more rectangular in nature, larger, and not tubular or similar to a traditional cigarette." (Huckabee (Reynolds) Tr. 385; Farrell (NJOY) Tr. 210-11, 214). Pod-based products can look like a USB drive. (O'Hara (JLI) Tr. 496; Begley (Altria) Tr. 1095 (*in camera*); Farrell (NJOY) Tr. 210).

87. Pod-based e-cigarettes are designed to be used with disposable pods or cartridges that come prefilled with liquid nicotine and attach to the device. (Crozier (Sheetz) Tr. 1487-89; King (PMI) Tr. 2346; Farrell (NJOY) Tr. 214-15; Gifford (Altria) Tr. 2722; PX7035 (Masoudi (JLI), Dep. at 107)).

88. Pod-based e-cigarettes are also referred to as "hybrid." (Begley (Altria) Tr. 1041 (*in camera*); Gifford (Altria) Tr. 2722).

3. Open-System E-Cigarettes

89. "Open system describes the ability of a consumer to refill a cartridge or tank in the device with a fluid, different than a closed system, which is a sealed cartridge or pod." (Huckabee (Reynolds) Tr. 383; Farrell (NJOY) Tr. 207-09; King (PMI) Tr. 2342; Crozier (Sheetz) Tr. 1492; PX7035 (Masoudi (JLI), Dep. at 107)).

90. Open-tank e-cigarettes are "typically sold in vape shops." (Huckabee (Reynolds) Tr. 386-87; Farrell (NJOY) Tr. 208; Begley (Altria) Tr. 972-73; Gifford (Altria) Tr. 2756; PX4029 (Altria) at 008; Gifford (Altria) Tr. 2741; Crozier (Sheetz) Tr. 1494-95 ("Generally

speaking, vape shops sell more of the open systems and C-stores sell more pod systems and cigalike-type products.”).

91. The term “open tank e-cigarettes” is interchangeable with “open system e-cigarette.” (Begley (Altria) Tr. 969).

B. E-CIGARETTES ARE STRATEGICALLY IMPORTANT TO TOBACCO COMPANIES

92. As cigarettes sales declined and e-cigarette sales rose, e-cigarettes became strategically important to tobacco companies, who invested for the long term. (*See* CCFF ¶¶ 59-74, above).

1. Altria Was Committed to E-Cigarette Leadership

93. Altria is the leading tobacco company in the United States. (*See* CCFF ¶ 119, below).

94. As early as 2016, Altria believed that e-cigarettes represented a “significant long-term opportunity.” (PX7022 (Begley (Altria), Dep. at 92-94); PX4040 (Altria) at 018 (“Nu Mark 2016-2018 Strategic Plan”) (“E-Vapor Category Represents a Significant Longer-Term Opportunity”); PX7023 (Fernandez (Altria), Dep. at 181-82)). In 2016, there were already more adult vapers than adult dippers or adult large mass cigar smokers. (PX4040 (Altria) at 018). Jody Begley, Altria’s current EVP and COO and former President and General Manager of Nu Mark, testified that Altria saw a long-term opportunity in the e-cigarette market because “there is a significant consumer base that are interested in [e-cigarette] products.” (PX7022 (Begley (Altria), Dep. at 92-94)).

95. [redacted]} (Begley (Altria) Tr. 1019-20) (*in camera*)).

96. Howard Willard testified that while he was CEO and COO of Altria, one of Altria’s “strategic initiatives” was to attain a leading position in the U.S. e-vapor market. The decline in traditional cigarettes and growth in e-cigarettes “was one of the elements that made focusing on the e-vapor category attractive.” (Willard (Altria) Tr. 1146-47; *see also* PX1172 (Altria) at 007 (Willard interview with the *Wall Street Journal* dated March 23, 2019); PX1268 (Altria) at 003 (*in camera*); PX7006 (Crosthwaite (Altria/JLI), IHT at 78-79) (*in camera*)).

97. Willard testified that Altria wanted to achieve leadership in the e-vapor category and “spent well over half a billion dollars, maybe up to a billion dollars, investing in the e-vapor category.” (Willard (Altria) Tr. 1341).

98. Begley testified that in November 2017, he told investors Altria’s long term goal was to the lead the U.S. e-vapor category and that Altria “fully expected” to achieve its long-term goals. (Begley (Altria) Tr. 978-79; PX1229 (Altria) at 007 (*in camera*); PX4014 (Altria) at

029; *see also* Begley (Altria) Tr. 965, 1021-22 (*in camera*); PX4042 (Altria) at 006 {[redacted]} (*in camera*)).

99. Begley testified that at the time of his Investor Day remarks in November 2017, he believed that Nu Mark had a portfolio of products that could potentially compete into the future. (Begley (Altria) Tr. 979 ("Q. And so you did, in fact, believe at the time that NuMark had a portfolio of products that could potentially compete into the future? A. We did, but, again, it was early days for a number of the product formats."))

100. In November 2017, Altria's former Chairman and CEO, Marty Barrington, told investors, "[s]o we'll be clear: We aspire to be the U.S. leader in authorized, non-combustible, reduced-risk products." (PX9000 (Altria) at 005 (Nov. 2017 Investor Day remarks)).

101. Begley testified that Nu Mark's long-term goal of leading the U.S. e-vapor category was set before Begley became President and General Manager of Nu Mark. Begley testified he believed Altria's board was aligned with Nu Mark's long-term goal. (Begley (Altria) Tr. 966-67.)

102. Begley testified that Nu Mark wanted to build a portfolio of e-vapor products because it didn't know which product platforms were going to be successful or how the market was going to evolve. As a result, Nu Mark thought it was important to place as many bets as it could in the closed-system market. (Begley (Altria) Tr. 967-69 (discussing (PX4040 (Altria) at 007 ("Nu Mark 2016-2018 Strategic Plan")); Begley (Altria) Tr. 979-80 (discussing PX4014 (Altria) at 030)).

103. Although he acknowledged that Altria had not achieved its goals, Willard testified that in February 2018, it was Altria's goal to achieve sustained long-term leadership in the e-vapor category. (Willard (Altria) Tr. 1151, 1155-56; *see also* PX9045 at 007 (2018 CAGNY Conference Remarks by Howard Willard, Feb. 21, 2018) ("Of course, the e-vapor category continues to evolve, and leadership has changed hands numerous times over the past seven years. Sustained, long-term leadership won't be achieved overnight. Nu Mark has a diverse product portfolio and a pipeline of promising products in development. We believe it is well positioned to achieve long-term leadership in the category, bolstered by our companies' world-class marketing, sales and distribution and regulatory capabilities."); PX9045 at 006 ("Nu Mark's goal is to lead the U.S. e-vapor category with a portfolio . . .")).

104. Willard testified that in February 2018, it was Altria's strategy to use part of the income generated from its traditional business in innovation and harm reduction, which included investments in e-cigarettes. (Willard (Altria) Tr. 1151, 1154; *see also* PX9045 at 005 (2018 CAGNY Conference Remarks by Howard Willard, Feb. 21, 2018)).

105. In February 2018, Marty Barrington, Altria's CEO, said in his prepared remarks for the 2018 Consumer Analyst Group of New York (CAGNY) Conference, "We aspire to be the U.S. leader in authorized, non-combustible, reduced-risk products. The range of tobacco products available in the U.S. is diverse when compared to many international markets, and different product platforms appeal to different U.S. adult tobacco consumers. That's

why we're taking a portfolio approach, focusing on the three most promising platforms for U.S. adult tobacco consumers: smokeless tobacco and oral nicotine-containing products, e-vapor and heated tobacco." (PX9045 (Altria) at 002).

106. In May 2018, Nu Mark remained interested in building a portfolio of e-vapor products. (Begley (Altria) Tr. 969; *see* Willard (Altria) Tr. 1371-72).

107. In December 2018, Willard was quoted in an Altria press release as saying that Altria "remain[s] committed to being the leader in providing adult smokers innovative alternative products that reduce risk, including e-vapor." (PX9080 at 001). As part of the transaction with JLI, Altria committed to participate in the e-vapor business exclusively through JLI. (PX1181 (Altria) at 067 (E-Vapor Update, Dec. 2018) ("[S]elected transaction terms […] Altria commits to conduct e-vapor operations exclusively through [JLI]"); PX1265 (Altria) at 002 (Email from Murray Garnick, Dec. 10, 2018) ("[O]ur participation in e[-]vapor area will be exclusively through [JLI]."); Pritzker (JLI) Tr. 912 ("Q. During the course of negotiations with Altria, you told Mr. Willard and Mr. Gifford that, post-transaction, Altria would need to participate in e-vapor exclusively through JLI, correct? A. That is correct . . . .")).

108. In a 2019 interview with the *Wall Street Journal*, Willard acknowledged the critical importance of Altria's participation in e-vapor in view of changing market dynamics: "At a time when e-vapor is going to grow rapidly and likely cannibalize the consumers we have in our core business, if you don't invest in the new areas you potentially put your ability to deliver that financial result at risk." (PX1172 (Altria) at 007).

2. Other Tobacco Companies Committed to Significant Long-Term Investments in E-Cigarettes

109. [redacted] (*See* CCFF ¶¶ 110-14, 163-82, below). Philip Morris International ("PMI"), another tobacco company, has similarly {[redacted]} invested in e-cigarettes. (*See* CCFF ¶¶ 115-17, below). {[redacted] (*See* CCFF ¶¶ 110-17, below). All of the tobacco companies, except for Altria, continue to invest and compete in the e-vapor segment today. (*See* CCFF ¶¶ 132, 169, 178, 185, below).

110. [redacted]}. (Huckabee (Reynolds) Tr. 406-07 (*in camera*)).

111. [redacted]. (Huckabee

(Reynolds) Tr. 406-07, 416-18) (*in camera*); PX8009 at 017 (¶ 50) (Gardner (Reynolds), Decl.) (*in camera*); *see also* King (PMI) Tr. 2379)).

112. {[redacted]}. (PX8011 at 007-08 (¶ 35) (Eldridge (ITG), Decl.)) (*in camera*)).

113. Eldridge testified that ITG remains committed to competing in e-vapor due to "an opportunity for growth." (PX7012 (Eldridge (ITG), Dep. at 188-89)).

114. [redacted] (PX3071 (ITG) at 002-05 [redacted] (*in camera*)).

115. Martin King, CEO of PMI America, testified that PMI started to develop e-cigarettes in 2008, with investments in research and development and personnel. PMI believes it is important to be able to participate in the e-cigarette business as a tobacco company. (King (PMI) Tr. 2371-72 ("There are obviously a lot of people that have been able to switch to e-cigarettes, so it's a very viable, very important segment, and we've always felt it was very important that we be able to participate in that segment. We've put a great deal of time and effort into having the very best possible products to place there."), 2374-78 (referring to 2008), 2379-80 ("[T]he investors and others were adamant that companies like PMI and Altria address the e-cigarette space and have some way to compete and make sure that they're not being disrupted, and it would have been, I think, unusual for a major tobacco company at the time not to have some initiative or way to deal with the growth of e-cigarettes.")).

116. [redacted] (King (PMI) Tr. 2382-83) (*in camera*).

117. [redacted]} (King (PMI) Tr. 2383) (*in camera*).

C. THE MARKET FOR CLOSED-SYSTEM E-CIGARETTES IN THE UNITED STATES IS DOMINATED BY A SMALL GROUP OF COMPETITORS

118. Prior to December 2018, closed-system U.S. industry participants viewed their major competitors as JUUL, Reynolds, Altria, Logic, NJOY, and Blu. (Farrell (NJOY) Tr. 226-27; Huckabee (Reynolds) Tr. 39092, 408 (*in camera*); PX7012 (Eldridge (ITG), Dep. at 99-100, 170-71, 194); *see also* PX1229 (Altria) at 012; PX2061 (JLI) at 032).

1. Altria

119. Altria is the leader for tobacco products in the U.S. (Huckabee (Reynolds) Tr. 372; PX2010 (JLI) at 001 (quoting Kevin Burns, JLI CEO, discussing JLI's affiliation and partnership with "the largest tobacco company in the U.S."); PX9017 (Altria Group, Inc. Form 10-K) at 005 ("PM USA is the largest cigarette company in the United States," Marlboro "has been the largest-selling cigarette brand in the United States for over 40 years," and "USSTC is the leading producer and marketer of MST"); PX8011 at 006 (¶ 28) (Eldridge (ITG), Decl.) ("Given Altria's resources as the largest tobacco company in the U.S . . . .").

120. Altria is a holding company. (PX9017 (Altria Group, Inc. Form 10-K) at 004).

121. Altria wholly owns Philip Morris USA Inc. ("PM USA"), which "is engaged in the manufacture and sale of cigarettes in the United States." (PX9017 (Altria Group, Inc. Form 10-K) at 004).

122. Altria wholly owns U.S. Smokeless Tobacco Company LLC (USSTC). "USSTC is the leading producer and marketer of MST [most smokeless tobacco] products. The smokeless products segment includes the premium brands, *Copenhagen* and *Skoal*, and value brands, *Red Seal* and *Husky*. Substantially all of the smokeless tobacco products are manufactured and sold to customers in the United States." (PX9017 (Altria Group, Inc. Form 10-K) at 004-05).

123. Howard Willard testified that Altria's strategy was to participate in all of the major tobacco categories during his tenure as chairman and CEO. (Willard (Altria) Tr. 1145).

124. Altria never manufactured or sold open tank e-cigarettes. (Garnick (Altria) Tr. 1693; PX7014 (Baculis (Altria), Dep. at 79-80); PX4029 (Altria) at 021; *see also* Crozier (Sheetz) Tr. 1494).

a) <u>Nu Mark</u>

125. In 2012, Altria established its Nu Mark operating company with the goal of developing and marketing innovative tobacco products, including e-cigarette products, for adult tobacco consumers. (JX0001 at 002 (¶ 12)).

126. Nu Mark was an Altria operating company responsible for competing in the e-cigarette space in the United States. (Begley (Altria) Tr. 961-62 ("Q. NuMark was responsible for competing in the e-vapor space in the United States? A. That's correct."); PX9017 (Altria Group, Inc. Form 10-K) at 005 ("Nu Mark participated in the e-vapor category and developed and commercialized other innovative tobacco products.")).

127. Nu Mark was Altria's innovation company that focused primarily on e-vapor products. (Quigley (Altria) Tr. 1937-38).

128. "In 2018 and 2017, Altria's subsidiaries purchased certain intellectual property related to innovative tobacco products." (PX9017 (Altria Group, Inc. Form 10-K) at 005).

129. Until October 25, 2018, Altria, through Nu Mark, sold the MarkTen Elite and Apex pod-based products; until December 2018, Nu Mark sold the MarkTen cigalikes, and Green Smoke cigalikes. (PX9114 (Altria) at 002; PX4029 (Altria) at 021; PX0015 (Altria) at 007-09 (Altria Response to Request for Additional Information and Documentary Materials dated Oct. 8, 2019) (*in camera*). Cigalikes sold under the MarkTen brand included MarkTen Bold, MarkTen XL, and MarkTen. (O'Hara (JLI) Tr. 506; PX9114 (Altria) at 009, 012). MarkTen XL was a larger version of MarkTen (PX7034 (Mountjoy (Altria), Dep. at 57)), and MarkTen XL had several varieties, including MarkTen Bold. (PX7015 (Gogova (Altria), Dep. at 30)).

130. In June 2018, Howard Willard publicly said that the "primary products that we [Altria] have in distribution at retail in large numbers of stores are the original MarkTen, the MarkTen Bold product with nicotine salts, and then MarkTen Elite." (PX9047 (Altria) at 009 (Altria's Q2 2018 Earnings Call)).

131. Altria stopped selling MarkTen Elite and Apex after Altria announced it would remove the products from the market on October 25, 2018. (PX9114 (Altria) at 002; Willard (Altria) Tr. 1239-45, 1274, 1277).

132. "In December 2018, Altria announced the decision to refocus its innovative product efforts, which included Nu Mark's discontinuation of production and distribution of all e-vapor products." (PX9017 (Altria) at 004 (Form 10-K, Feb. 2019)). Altria stopped selling all MarkTen cigalikes and Green Smoke cigalikes after it announced on December 7, 2018 that it would discontinue production and distribution of those products. (PX9080 (Altria) at 001; Willard (Altria) Tr. 1274, 1277).

133. [redacted]. (PX5000 at 043 (¶ 89) (Rothman Expert Report) (*in camera*); PX7048 (Rothman, Trial Dep. at 25-26)).

(1) MarkTen

134. In 2013, Nu Mark launched the MarkTen cigalike. (JX0001 at 002 (¶ 13)).

135. MarkTen Bold was a cigalike product that had higher levels of nicotine and included nicotine salt. (Begley (Altria) Tr. 980-81; PX9047 at 009 (Altria's Q2 2018 Earnings Call)). Nicotine salts mask the harshness of products with higher levels of nicotine in them. They allow more nicotine to be absorbed into the lungs. (Begley (Altria) Tr. 981).

136. [redacted]. (Begley (Altria) Tr. 1022 (*in camera*); PX4042 at 006 {[redacted]} (*in camera*); PX4248 (Altria) at 004; *see* PX1098 (Altria) at 012-13).

137. In mid-2017, MarkTen held second place by market share in the multi-outlet convenience channel (PX1280 (Altria) at 010), which is {[redacted]} (Begley (Altria) Tr. 1122-23 (*in camera*)); PX4029 (Altria) at 008). {[redacted]

[redacted]} (Begley (Altria) Tr. 1023 (*in camera*); PX4042 at 006, 018 {[redacted]} (*in camera*)).

138. In February 2018, Nu Mark launched MarkTen Elite, a pod-based closed system e-cigarette. (Jupe (Altria) Tr. 2244-45; Schwartz (Altria) Tr. 1871; Willard (Altria) Tr. 1308 (*in camera*), 1354; Begley (Altria) Tr. 984, 990, 1059 (*in camera*)). Altria acquired the right to MarkTen Elite in late 2017 from a Chinese manufacturer, Smoore. (Begley (Altria) Tr. 984-85; Jupe (Altria) Tr. 2244-45; Schwartz (Altria) Tr. 1862-64; Murillo (Altria/JLI) Tr. 2941-42; PX2084 (JLI) at 020). Nu Mark also entered into a partnership with a U.S. e-vapor company (Avail) that made e-liquids for Elite. (Begley (Altria) Tr. 984-85; PX9045 at 006 (2018 CAGNY Conference Remarks by Howard Willard, Feb. 21, 2018)).

139. Elite's launch was accelerated. (Begley (Altria) Tr. 989-91) ("Q. . . . NuMark commercialized Elite within four months of executing the exclusivity agreement through which it acquired its rights, correct? A. I believe that's the appropriate timing. It was quick. Q. You don't recall ever launching a product so quickly, correct, Mr. Begley? A. I don't. Q. Mr. Begley, you asked your team at NuMark how quickly it could bring Elite to market, correct? A. I did. Q. And Elite's launch was accelerated by a few months as compared to the company's initial launch plans, correct? A. That's correct.").

140. Elite was sold on the market by another company before the August 8, 2016 Deeming Rule. (Begley (Altria) Tr. 984; Garnick (Altria) Tr. 1690; Jupe (Altria) Tr. 2134).

141. Jody Begley, Nu Mark's former President and General Manager testified that Nu Mark was interested in acquiring Elite because the company had started to see pod-based products gain popularity in the marketplace. Nu Mark thought that it was important in terms of placing multiple bets to participate in the pod segment. (Begley (Altria) Tr. 985) ("Q. NuMark was interested in acquiring Elite because the company had started to see pod-based products gain in popularity in the marketplace? A. That's correct. Q. NuMark thought it was important in terms of placing the multiple bets that we've spoken of to participate in the pod segment, correct? A. We did. We saw fairly rapid growth of the pod segment and we thought it was important to compete.").

142. Begley testified that Nu Mark "was hopeful" Elite would disrupt JUUL's growth when Altria launched Elite. (Begley (Altria) Tr. 985, 990-91). Nu Mark took into account the price of JUUL in setting Elite's price. (Begley (Altria) Tr. 991). A January 2018 JLI slide deck titled "Major Next-Gen Competitor Products," prepared for JLI's co-founder for the purpose of providing "an overview of the next gen competitive landscape," included a slide on MarkTen Elite. (PX2081 (JLI) at 002, 008; O'Hara (JLI) Tr. 551-53).

(2) Apex

143. Apex was a closed-system pod-based product that was developed by PMI. (Willard (Altria) Tr. 1157-58, 1240; Schwartz (Altria) Tr. 1916; PX9114 (Altria) at 002)). Altria had the rights to commercialize Apex in the United States pursuant to a research, development, and

distribution agreement between Altria and PMI. (Begley (Altria) Tr. 983-84; Jupe (Altria) Tr. 2133); King (PMI) Tr. 2545).

144. Around August 2018, Altria was selling Apex in e-commerce. (Murillo (Altria/JLI) Tr. 3053; King (PMI) Tr. 2535; Begley (Altria) Tr. 984; PX2022-002). Apex was introduced in the U.S. prior to the 2016 Deeming Rule. (PX7020 (King (PMI), Dep. at 228)).

145. Altria had a strategic partnership with PMI focused on next-generation nicotine products. The partnership included a Joint Research, Development and Technology Sharing Agreement ("JRDTA") pursuant to which Altria and PMI would "collaborate to develop the next generation of e-vapor products for commercialization in the United States by Altria and in markets outside the United States by PMI." (PX1484 (Altria) at 003; *see also* RX0873 (Altria/PMI) [redacted] (*in camera*); Schwartz (Altria) Tr. 1916; Begley (Altria) Tr. 983-84; King (PMI) Tr. 2357-60, 2407; PX4480 (Altria) at 001-02).

146. After Altria entered into the transaction with JLI in December 2018, {[redacted]} King (PMI) Tr. 2389 (*in camera*); PX3106 (PMI) (*in camera*) [redacted]).

147. PMI sells a closed-system e-cigarette outside of the U.S. called VEEV, which "is a pod-based system that uses a proprietary technology to create the aerosol." PMI calls the technology "MESH" and the product has been launched in "a number of countries." (King (PMI) Tr. 2344-45, 2350-51). VEEV is not currently sold in the U.S. (King (PMI) Tr. 2354-55).

148. {[redacted]}. (King (PMI) Tr. 2432-33) (*in camera*). {[redacted]} (King (PMI) Tr. 2432-33) (*in camera*); *see also* Jupe (Altria) Tr. 2174). {[redacted]} (PX3009 (PMI) at 034-37 (*in camera*) {[redacted]).

149. PMI has not considered exiting e-cigarettes because of Apex's performance. In fact, according to Martin King, the performance of Apex "reassured us that we had something reliable and that we needed to continue with finishing the improvements and get it on the market as soon as possible." (King (PMI) Tr. 2547).

(3) Green Smoke

150. Green Smoke was a cigalike. (PX9114 (Altria) at 002).

151. "In April 2014, Nu Mark acquired the e-vapor business of Green Smoke, Inc. and its affiliates, which began selling e-vapor products in 2009." (PX9017 (Altria Group, Inc. Form 10-K) at 005).

152. Altria sold Green Smoke primarily through e-commerce. (PX9080 (Altria) at 001).

2. JLI

153. What is now known as JLI was founded in 2007 by Adam Bowen and James Monsees, two former graduate students at Stanford University. JLI was originally incorporated as PLOOM, Inc. in 2007. It was later renamed Pax Labs, Inc. On June 30, 2017, Pax Labs renamed itself Juul Labs, Inc., and spun off certain assets and employees and other non-nicotine vaporizer product into a new company Pax Labs, Inc. (JX0001 at 003 (¶ 14)).

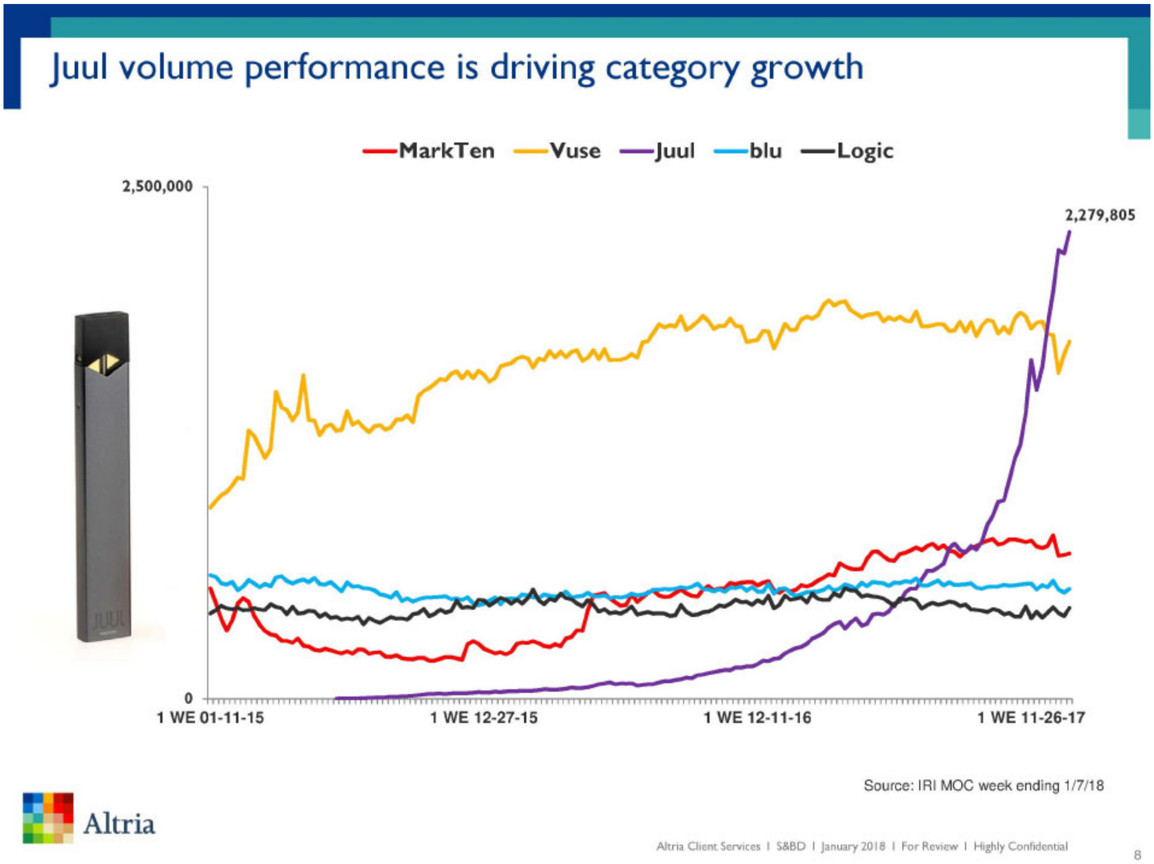
154. In 2015, JLI, then operating under the name Pax Labs, launched a product called JUUL. (JX0001 at 003 (¶ 15)).

155. JUUL is a closed-system pod-based e-cigarette. (Pritzker (JLI) Tr. 729; Begley (Altria) Tr. 975-76; PX0017 (Altria) at 003)).

156. {[redacted]} (Huckabee (Reynolds) Tr. 410 *(in camera)*.

157. "MOC" stands for "multi-outlet convenience" and refers to the sales channel that includes "conventional convenience stores, supermarkets, and various other outlets where cigarettes are sold." (Begley (Altria) Tr. 1090).

158. Altria's January 2018 draft Board presentation noted that "Juul volume performance is driving category growth . . . Juul is now the MOC e-vapor market share leader." (PX1280 (Altria) at 009-10); *see also* PX1424 (Altria) at 011 (Altria August 2018 Board presentation) ("JUUL volume performance is driving e-vapor category growth."); King, (PMI) Tr. 2378-79)).



(PX1280 (Altria) at 009).

159. In 2018, JLI was the best-selling e-cigarette in the United States and "market leader." (Pritzker (JLI) Tr. 729 (discussing PX2022) ("Q. As of the date of this letter, JUUL was the best-selling e-cigarette product in the U.S., correct? A. "I believe so, yes."); PX2098 at 014 ("JUUL continues to lead the vapor category"); PX9017 (Altria Group, Inc. Form 10-K) at 058 ("On December 20, 2018, Altria entered into a stock purchase agreement with, JUUL, the U.S. leader in e-vapor"); PX1115 (Altria) at 003 ("JUUL is the undisputed leader in the U.S. e-vapor market")).

160. In 2018, JLI's sales grew and exceeded $1 billion. (PX2142 (JLI) at 006). JUUL, a pod-based product, was the best-selling e-cigarette in the U.S. (Pritzker (JLI) Tr. 728-30).

161. JLI became the dominant supplier of e-cigarettes in the U.S. in 2018. (*See* PX3107 (PMI) at 004 (*in camera*) ({[redacted]}). JUUL led in sales in the multi-outlet convenience channel (PX1280 (Altria) at 010), which is comprised almost entirely of closed-system e-vapor products. (Begley, (Altria) Tr. 1123; PX4029 (Altria) at 008).

162. Dr. Rothman analyzed market shares for the twelve months prior to Altria's exit (ending in Sept. 2018) and concluded that JLI's share of the closed-system e-cigarette market was approximately 51 percent. (PX5000 at 043 (¶ 89) (Rothman Expert Report)); PX7048 (Rothman, Trial Dep. at 025-26).

3. Reynolds

163. Reynolds American, Inc. owns RJR Tobacco Company and RAI Innovations Company. RAI Innovations Company owns RJR Vapor Company ("Reynolds"). British American Tobacco owns Reynolds American, Inc. (Huckabee (Reynolds) Tr. 371-72; O'Hara (JLI) Tr. 501).

164. Reynolds is the second-largest tobacco company in the U.S. after Altria. (Begley (Altria) Tr. 1120; Huckabee (Reynolds) Tr. 372).

165. Reynolds currently sells four e-cigarettes under the Vuse brand: Vuse Solo, Vuse Ciro, Vuse Vibe, and Vuse Alto. (Huckabee (Reynolds) Tr. 377). All of these products are closed-system e-cigarettes. (Huckabee (Reynolds) Tr. 381-82).

166. [redacted]}. (Huckabee (Reynolds) Tr. 444-45) (*in camera*).

167. Vuse Solo, Vuse Vibe, and Vuse Ciro are cigalikes. (O'Hara (JLI) Tr. 502; Huckabee (Reynolds) Tr. 378, 441 (*in camera*)).

168. Vuse Alto is a pod product. (Huckabee (Reynolds) Tr. 378). {[redacted]}. (Huckabee (Reynolds) Tr. 405) (*in camera*). Vuse Alto was launched in August 2018 by Reynolds. (Huckabee (Reynolds) Tr. 395).

169. Vuse Alto today is offered in three nicotine strengths: 1.8%, 2.4%, and 5%. (Huckabee Tr. 395). Wade Huckabee testified that Reynolds offers different nicotine strengths because "there are a range of consumers with a range of desired product attributes, we've found that consumers prefer different nicotine strengths as well. Some consumers prefer a higher nicotine strength product. Others, like myself, prefer a lower nicotine strength product.") (Huckabee (Reynolds) Tr. 395).

170. [redacted]}. (Huckabee (Reynolds) Tr. 409-10 (*in camera*); PX1280 (Altria) at 009-10).

171. Dr. Rothman analyzed market shares for the twelve months prior to Altria's exit (ending in Sept. 2018) and concluded that Reynolds' share of the closed-system e-cigarette market was approximately 22.7 percent. (PX5000 at 043 (¶ 89) (Rothman Expert Report); PX7048 (Rothman, Trial Dep. at 025-26)).

172. Reynolds does not sell open-tank e-cigarettes. (Huckabee (Reynolds) Tr. 383-84; *see also* Crozier (Sheetz) Tr. 1494).

4. ITG

173. ITG Brands ("ITG") is the third-largest tobacco company in the U.S. (PX8011 at 001 (¶ 2) (Eldridge (ITG), Decl.); PX8010 at 001 (¶ 2) (Folmar (ITG), Decl.)).

174. ITG is a subsidiary of British-based tobacco company Imperial Brands PLC. (PX8011 at 001 (¶ 3) (Eldridge (ITG), Decl.); PX8010 at 001 (¶ 1) (Folmar (ITG), Decl.)).

175. Like ITG, Fontem US is a subsidiary of Imperial Brands. (PX7012 (Eldridge (ITG), Dep. at 32-33; PX8011 at ¶ 4 (Eldridge (ITG), Decl.). Fontem US is focused on next-generation nicotine products, and its primary product is the blu brand of e-cigarettes. (PX3025 (ITG) at 004) ("Fontem US is devoted to the development of next generation nicotine products and has developed the blu brand of electronic cigarettes . . . ."). ITG is the sales agent for Fontem US. (PX7012 (Eldridge (ITG), Dep. at 32-33)).

176. ITG sells e-cigarettes under the brand name blu. (PX8011 at 004 (¶ 19) (Eldridge (ITG), Decl.); PX8010 at 001 (¶ 2) (Folmar (ITG), Decl.)). Blu is a closed system product line. (Begley (Altria) Tr. 976).

177. ITG shares responsibility for blu vapor products with Fontem U.S. LLC, whose ultimate parent is Imperial Brands PLC. (PX8011 at 001 (¶ 4) (Eldridge (ITG), Decl.)).

178. ITG sells three types of closed system e-cigarettes: *my*blu pod device; the blu Plus+ cigalike, and the single-use blu Disposable, which is a cigalike. (PX7012 (Eldridge (ITG), Dep. at 49-50; PX8011 at 004-05 (¶ 19) (Eldridge (ITG), Decl.); PX8010 at 001 (¶ 2) (Folmar (ITG), Decl.)).

179. ITG introduced the *my*blu device and *my*blu pods in 2017. (PX8011 at 005 (¶ 19) (Eldridge (ITG), Decl.)).

180. Imperial Brands acquired its blu e-cigarette brand in 2015. (PX8011 at 001 (¶ 3) (Eldridge (ITG), Decl.)).

181. Dr. Rothman analyzed market shares for the twelve months prior to Altria's exit (ending in Sept. 2018) and concluded that ITG had approximately 6.6 percent of the closed-system e-cigarette market. (PX5000 at 043 (¶ 89) (Rothman Expert Report); PX7048 (Rothman, Trial Dep. at 025-26)).

182. ITG does not sell open tank e-cigarettes. (PX7012 (Eldridge (ITG), Dep. at 170)).

5. JTI

183. JTI is a tobacco company that sells the Logic e-cigarette brand. (Begley (Altria) Tr. 977; Crozier (Sheetz) Tr. 1489; Farrell (NJOY) Tr. 272 (*in camera*); PX7022 (Begley (Altria), Dep. at 92)).

184. Logic sells closed-system e-cigarettes. (Crozier (Sheetz) Tr. 1488-89; Begley (Altria), 977).

185. Logic sells several products, including Logic Pro (Crozier (Sheetz) Tr. 1489) and Logic Power (PX2597 (JLI) at 040). Logic also sells a pod-based product called Logic Compact. (PX2084 (Altria) at 020; O'Hara (JLI) Tr. 575-76).

186. Logic Compact is manufactured by Smoore. (PX2084 (Altria) at 020; O'Hara (JLI) Tr. 575-76).

187. Dr. Rothman analyzed market shares for the twelve months prior to Altria's exit (ending in Sept. 2018) and concluded that Logic's share of the closed-system e-cigarette market was approximately 3.7 percent. (PX5000 at 043 (¶ 89) (Rothman Expert Report)).

6. NJOY

188. NJOY is a privately held "manufacturer of e-cigarettes." (Farrell (NJOY) Tr. 200).

189. {[redacted]} (Farrell (NJOY) Tr. 326) (*in camera*); O'Hara (JLI) Tr. 505).

190. NJOY "currently sells a closed-system pod" product with a rechargeable battery called the NJOY Ace, and a closed system disposable NJOY Daily. (Farrell (NJOY) Tr. 206; PX3216 (NJOY) at 003-04). NOJ Daily is a cigalike. (Farrell (NJOY) Tr. 214).

191. {[redacted]} (Farrell (NJOY) Tr. 336) (*in camera*).

192. In 2018, NJOY also sold three e-cigarettes: Loop, PFT, and King, all of which were closed-system products. (Farrell (NJOY) Tr. 206-07).

193. NJOY Ace is manufactured by Smoore. (O'Hara (JLI) Tr. 577; PX3195 (NJOY) at 10 (*in camera*)).

194. NJOY's products are made in China. (PX7029 (Farrell (NJOY), Dep. at 157)).

195. Dr. Rothman analyzed market shares for the twelve months prior to Altria's exit (ending in Sept. 2018) and concluded that NJOY's share of the closed-system e-cigarette market was around 1.8 percent. (PX5000 at 043 (¶ 89) (Rothman Expert Report)).

196. NJOY does not sell open tank e-cigarettes. (PX7029 (Farrell (NJOY), Dep. at 145); Farrell (NJOY) Tr. 206-07)).

D. FDA's Regulation of E-Cigarettes and the PMTA Process

197. The U.S. Food & Drug Administration's ("FDA") 2016 Deeming Rule designated e-cigarette products as "tobacco products" under the Tobacco Control Act, requiring manufacturers to obtain FDA authorization before introducing any e-cigarette products to the market. 81 Fed. Reg. 28,974 (May 10, 2016); *see* 21 U.S.C. § 387j(a)(1). (JX0001 at 002 (¶ 16)).

198. The FDA deferred enforcement action against products that were sold in the United States before August 8, 2016 provided that the manufacturer submitted, by a specified date, a premarket tobacco product application ("PMTA") seeking FDA authorization. 81 Fed. Reg. at 29,009 to 29,015; 21 U.S.C. § 387j(c)(4). (JX0001 at 002 (¶ 17)).

199. Any e-cigarette product requires PMTA authorization before it can be sold in the United States unless (a) it was on the market as of August 8, 2016, and (b) a PMTA for that product was submitted by a deadline that changed multiple times, but ultimately was set as September 9, 2020. (JX0001 at 002 (¶ 18)).

200. E-cigarette manufacturers can submit PMTAs for their new products after the September 9, 2020 deadline, but they cannot sell those products until receiving FDA authorization. (JX0001 at 003 (¶ 19)).

201. Under the 2016 Deeming Rule, the deadline for submitting a PMTA was initially August 2018. The deadline was moved to November 2018 by a May 2017 FDA guidance and further extended to August 2022 by a July 2017 FDA guidance. In July 2019, however, a federal judge presiding over a legal challenge to the deferral policy in the Deeming Rule imposed a new deadline of May 2020. *See Am. Acad. Of Pediatrics v. FDA*, 399 F. Supp. 3d 479 (D. Md. 2019); *Am. Acad. of Pediatrics v. FDA*, 379 F. Supp. 3d 461 (D. Md. 2019). That deadline was eventually moved to September 2020 due to the COVID-19 pandemic. (JX0001 at 003 (¶ 20)).

202. Submitting PMTAs can require {[redacted]}. (*See* CCFF ¶¶ 1794-802, below).

203. FDA regulations did not require an e-cigarette to remain on the market continuously since August 8, 2016 in order to be grandfathered by the Deeming Rule. (Murillo (Altria/JLI) Tr. 3022) ("Q. Okay. For a product to be grandfathered under the FDA's deeming regulation, it didn't have to be on the market continuously since August 8th of 2016, is that right, just as of that date? A. Correct. It needed -- well, I think the language was it needed to have been in commerce in the U.S. on or before that date.").

204. An e-cigarette that was grandfathered under FDA's regulations could be transferred from one company to another and remain on the market. (Murillo (Altria/JLI) Tr. 3026). ("Q. … Is it your understanding that if a company decided to transfer a grandfathered product to another company, that other company could sell it on the market without a PMTA as long as it was before the deadline? In other words, it's a grandfathered product regardless of who's selling it? A. Yes, if it's the same product.").

205. Not all product modifications to a grandfathered product constitute a "new product" that would require a new PMTA application. (PX7026 (Gardner (Altria), Dep. at 41-42) ("To introduce a new product into the market, you needed a PMTA -- new product into the market after August of 2016, you needed a preapproval from the agency to launch that product. Product modifications that led to a product being defined as new was – was something we were looking to understand. You know, changing a supplier on a material that has no significant impact on the product or the delivery or the consumer usage, it's a change, but we did not think that was a material change to warrant it being a new product."); *see also* King (PMI) Tr. 2548 ("at the time, there was some discussion around whether small differences or small enough differences would be still considered grandfathered, and there were a number of companies that apparently were making some improvements to their devices and still having them under the grandfather piece.")).

206. "[A]ny significant change resulted in a new tobacco product for which you needed preapproval, but exactly where the line was was [sic] unclear …." (Garnick (Altria) Tr. 1691; *see also* King (PMI) Tr. 2548).

207. FDA permits the use of "bridging" data from an existing product to a new PMTA application. (Gardner (Altria,) Tr. 2572-73) ("Bridging is an approach that's allowed. The FDA accepts it in the pharmaceutical industry and has mentioned it's appropriate for use in tobacco products, too -- also. So bridging is literally bridging -- building a bridge from the prior data to a new product.")).In January 2020, the FDA announced a new enforcement policy that required all non-tobacco, non-menthol flavored cartridge-based e-cigarettes (such as fruit and mint-flavored pods and cigalikes) be removed from the market until they receive PMTA approval. (PX9016 (FDA) at 001).

V. THE RELEVANT MARKET IS THE SALE OF CLOSED-SYSTEM E-CIGARETTES IN THE UNITED STATES

208. The relevant market is the sale of closed-system e-cigarettes in the United States. (*See* CCFF ¶¶ 209-408, below).

209. Dr. Rothman concluded that the relevant antitrust market in this matter is "[t]he sale of closed-system e-cigarettes in the United States." (PX7048 (Rothman, Trial Dep. at 13-14); PX5000 at 031 (¶ 62) (Rothman Expert Report)). In reaching this conclusion, Dr. Rothman followed the hypothetical monopolist test as set forth in the U.S. Department of Justice & Federal Trade Commission Horizontal Merger Guidelines (2010) ("Horizontal Merger Guidelines"). (PX7048 (Rothman, Trial Dep. at 14); PX5000 at 031-32 (¶¶ 64-66) (Rothman Expert Report); PX9098 (Horizontal Merger Guidelines) § 4.1.1 at 011-13).

A. CLOSED-SYSTEM E-CIGARETTES IS A RELEVANT PRODUCT MARKET

210. The qualitative and quantitative evidence make clear that closed-system e-cigarettes make up a relevant product market. (*See* CCFF ¶¶ 218-407, below).

211. Market participants agree that the distinct features of closed-system e-cigarettes offer a user experience that is more simple, convenient, and discreet as compared to open-system products. (*See* CCFF ¶¶ 218-37, below).

212. Both Altria and JLI viewed themselves as competing in a market for closed-system e-cigarettes, and the views of other market participants are consistent. (*See* CCFF ¶¶ 238-67, below).

213. Testimony and ordinary-course documents demonstrate that cigalikes and pod-based products compete in the same market for closed-system e-cigarettes. (*See* CCFF ¶¶ 268-350, below). Both form factors consist of a battery and a sealed pod or cartridge, provide a similar user experience, are subject to the same FDA regulations, and are distributed largely through the multi-outlet and convenience channel. (*See* CCFF ¶¶ 278-98, below).

214. Ordinary-course evidence consistently shows that JLI and Altria each saw themselves as competing with both cigalikes and pod-based products, as did other closed-system e-cigarette producers. (*See* CCFF ¶¶ 299-350, below).

215. Open systems and other reduced-risk products are not close substitutes for closed-system e-cigarettes. (*See* CCFF ¶¶ 351-94, below). Open systems differ from closed systems in that they are larger, more complex, and highly customizable, allowing users to swap out device parts and mix their own e-liquid. (*See* CCFF ¶¶ 352-62, below). Open systems appeal to a different customer base than closed systems, and are largely distributed through separate retail channels. (*See* CCFF ¶¶ 363-78, below). Moreover, market participants recognize the reality that consumers do not view open- and closed-system products as close substitutes. (*See* CCFF ¶¶ 379-83, below).

216. Based on his review of testimony and ordinary-course documents, and confirmed by his application of the hypothetical monopolist test, Dr. Rothman likewise concluded that closed-system e-cigarettes are a relevant product market. (*See* CCFF ¶ 209, above; ¶¶ 395-407, below).

217. Dr. Murphy failed to perform quantitative analysis to define the relevant market. (*See* CCFF ¶¶ 2086-93, below).

1. Closed-System E-Cigarettes Have Distinct Product Features

218. Closed-system e-cigarettes "are comprised of a battery and a container that is referenced in a variety of ways, either called pods, cartridges, capsules, tanks, but suffice it to say there is a battery and then a container that comes prefilled with liquid, contains nicotine." (Farrell (NJOY) Tr. 207-08).

219. Closed-system e-cigarettes are typically smaller than open-system products. (Gifford (Altria) Tr. 2722, 2793; Jupe (Altria) Tr. 2241).

220. An open-system product allows the user to customize the device by swapping out components, such as the mouthpiece and coil. (*See* CCFF ¶ 354, below). By contrast, a closed-system device "is a single system built to work as a single system," meaning "[t]here is no mixing and matching of batteries or cartridges with batteries." (Schwartz (Altria) Tr. 1851-52).

221. An open-system product requires the user to refill the tank with e-liquid, and allows the user to mix his or her own e-liquid. (*See* CCFF ¶¶ 352-53, 355-56, below). By contrast, in a closed-system product, the pod or cartridge containing e-liquid is not refillable by the consumer. (PX7012 (Eldridge (ITG), Dep. at 22); PX7004 (Willard (Altria), IHT at 56); PX7002 (Schwartz (Altria), IHT at 25-26); PX8008 at 005-06 (¶ 12) (Huckabee (Reynolds), Decl.); PX8004 at 002 (¶ 11) (Farrell (NJOY), Decl.)).

222. For most participants in the closed-system market, a consumer buys pods, which are "not designed to be tampered with and emptied and have another e-liquid inserted in them." (Farrell (NJOY) Tr. 210).

223. In a May 2017 pricing survey for JLI, McKinsey, a consulting firm, noted that "[c]losed-system vaporizers . . . include disposable e-cigarettes or e-cigarettes that use replaceable cartridges or pods" that "are not intended to be refilled or used with bottled e-juice." (PX2579 (JLI) at 181). The pricing survey also distinguished closed systems from open systems, which it described as "vaporizers used with refillable tanks or re-buildable atomizers used for vaporizing bottled e-juice." (PX2579 (JLI) at 181).

224. In contrast to an open-system product, the consumer lacks the ability to adjust the performance of a closed-system device. (Begley (Altria) Tr. 970; PX7022 (Begley (Altria), Dep. at 74-76); PX7002 (Schwartz (Altria), IHT at 28)).

225. A reviewer's guide for the *my*blu PMTA submission notes that the product "was designed with the express intent to minimize the ability of adult consumers to modify the system, components, or function in any manner whatsoever." (PX3020 (ITG) at 008).

2. Closed-System E-Cigarettes Provide a Unique User Experience and Are Distributed in Distinct Retail Channels

226. Open systems tend to appeal to hobbyists or enthusiasts, who enjoy customizing their device and sampling different or unusual flavors. (*See* CCFF ¶¶ 363-67, below).

227. In contrast to open systems, "[c]losed system e-cigarette products are a little bit more convenient," having fewer "component parts" and requiring "less maintenance." (Farrell (NJOY) Tr. 209-10).

228. Altria's Begley testified that as of 2016 "there were different product characteristics that were appealing to different types of consumers," explaining that "a number of adult vapers used, for example, open system products, which allowed consumers to both customize their device as well as customize the liquid and a number of different elements," and that "there were also consumers that preferred the simplicity of closed system products." (PX7022 (Begley (Altria), Dep. at 72-73)).

229. Although some consumers may like the complexity of an open-system product, "for most adult tobacco consumers, if there are choices that are more simple and still quite satisfying rather than complex . . . a number of consumers would prefer the simpler product, assuming it provides a use experience that's acceptable." (PX7004 (Willard (Altria), IHT at 57-58)).

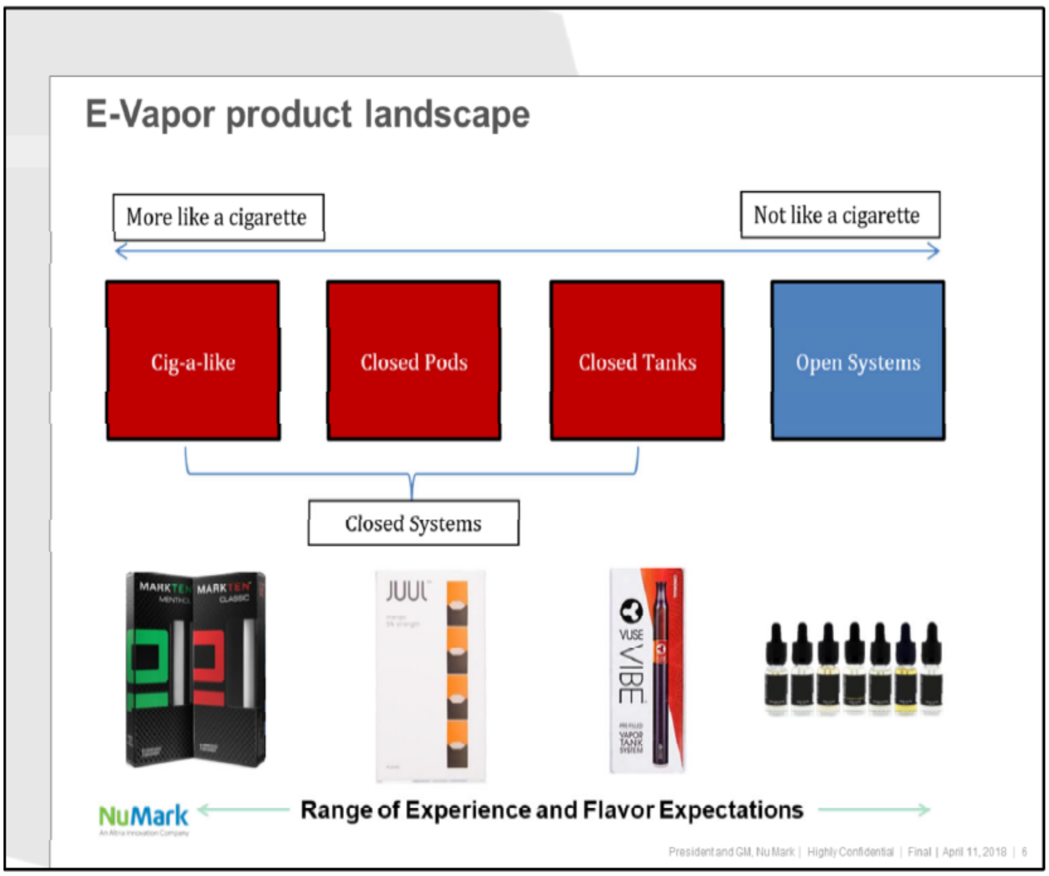
230. In Altria's 2017 Investor Day remarks, Begley noted that closed-system products "consist of pre-filled cartridges of e-liquid that are used in different format devices," and that "[a]dult tobacco consumers interested in these products . . . want flavor and nicotine satisfaction . . . without the complexity of open system products." (PX9000 (Altria) at 018).

231. In contrast to open systems, closed-system e-cigarettes "contain a smaller battery and a pod or cartridge that is pre-filled with e-liquid," are "simpler to use," and "require very little cleaning or maintenance." (PX8004 at 002 (¶ 11) (Farrell (NJOY), Decl.)).

232. A closed-system e-cigarette offers an "appealing" combination of factors to consumers in that it is "a convenient product that is also typically very discreet in nature, meaning its vapor cloud is relatively low." (Huckabee (Reynolds) Tr. 385-86).

233. Closed-system products can be "very appealing" to consumers "[i]n occasions where they are perhaps in their car . . . if they are traveling, if they are driving to work, if they are in an area where . . . they may be moving or with a group of friends where discretion is more important." (Huckabee (Reynolds) Tr. 386; *see also* PX8008 at 005-06 (¶ 12) (Huckabee (Reynolds), Decl.)).

234. An April 2018 Nu Mark presentation to the Altria Board of Directors distinguishes closed systems from open systems in terms of a consumer's range of experience and flavor expectations. (PX4029 (Altria) at 007)).



(PX4029 (Altria) at 007).

235. Open-system products tend to be sold in vape shops. (*See* CCFF ¶¶ 368-72, below). By contrast, closed-system e-cigarettes are sold primarily in gas stations and convenience stores. (Begley (Altria) Tr. 971-72 (acknowledging that the MOC channel is the major sales channel for the sale of closed-system e-vapor products); Huckabee (Reynolds) Tr. 387 (testifying that Reynolds "sells the vast majority of our closed-system products in traditional retail channels, convenience stores being the biggest percentage by far"); Farrell (NJOY) Tr. 220-21 ("NJOY has focused its attention on convenience and gas stores, so a

convenience market."); PX8008 at 006 (¶ 14) (Huckabee (Reynolds), Decl.); PX8004 at 002 (¶ 11) (Farrell (NJOY), Decl.)).

236. The MOC channel is almost entirely closed-system e-vapor products. (Begley (Altria) Tr. 1123).

237. In an April 2018 presentation to Altria's Board, Nu Mark indicated that in the MOC channel, closed-system sales account for 90% of the volume, whereas in the vape store channel the majority of volume is open-system. (PX4029 (Altria) at 008).

3. Respondents View Closed-System E-Cigarettes As a Distinct Market

238. During Begley's tenure as President and General Manager of Nu Mark, all of the e-cigarettes that Nu Mark sold or had in development were closed-system products. (Begley (Altria) Tr. 970-71; PX7022 (Begley (Altria), Dep. at 76-77); *see also* PX7014 (Baculis (Altria), Dep. at 32-33, 78-80) (testifying that "everything [Altria] sold was closed, and everything [Altria was] working on developing was closed")).

239. Nu Mark's 2016-2018 strategic plan states that one of Nu Mark's "strategies" for 2017 was to "[e]stablish *MarkTen*® as a leading brand in the closed system e-vapor segment within multi-outlet & convenience stores (MOC), while utilizing *Green Smoke*® to flank *MarkTen*®." (PX4040 (Altria) at 007).

240. A 2016 memorandum to the Altria Board notes that [redacted] Begley (Altria) Tr. 1018 (*in camera*)). Begley confirmed that that share target was based on the MOC channel, which consists almost entirely of closed-system e-vapor products. (Begley (Altria) Tr. 1123).

241. Nu Mark regularly tracked its share in the MOC channel, which reflected, at a high level, Nu Mark's share of the closed-system e-cigarette market. (Begley (Altria) Tr. 973); *see, e.g.*, PX1280 (Altria) at 010 (Altria Board update); PX1087 (Altria) at 004 (MarkTen weekly share report); PX1703 (Altria) at 043-44 (Nu Mark business update); (PX1284 (Altria) at 016).

242. Altria tracked the sales performance of its MarkTen brand along with Vuse, Juul, Blu, and Logic. (*See, e.g.*, PX1424 (Altria) at 011 (E-vapor update to Altria Board); PX1229 (Altria) at 005 (Altria Board update); PX1294 (Altria) at 005, 011 (weekly Juul performance update); PX4012 (Altria) at 012 ("Nu Mark 2018 Three Year Strategic Plan"); PX4028 (Altria) at 011 (Nu Mark update to Altria Board); PX4029 (Altria) at 013 (Nu Mark Board orientation).

243. Nu Mark's 2018 three-year strategic plan from February 2018 includes a slide showing Nu Mark's retail share target for 2018. (PX4012 (Altria) at 009; Begley (Altria) Tr. 1122-23). That target was based on e-vapor product sold in the multi-outlet and convenience channel, which is predominantly closed-system products. (Begley (Altria) Tr. 1122-23).

244. In an August 2018 brand update, Nu Mark compared MarkTen Elite against *my*blu and Juul in terms of sales volume following their date of introduction. (PX1013 (Altria) at 009).

245. In an August 2018 brand update, Nu Mark tracked the promotion and launch activities of *my*blu, Juul, and Vuse. (PX1056 (Altria) at 023).

246. Nu Mark tracked the prices for e-vapor products under the brands Vuse, Juul, Blu, and Logic, and compared them against products sold under the MarkTen brand. (PX1087 (Altria) at 005) (weekly share report); PX1100 (Altria) at 040 (Nu Mark business update).

247. An April 2018 weekly business update prepared by Altria's Consumer & Marketplace Insights group includes only closed-system products among competitive products. (PX1098 (Altria) at 004).

248. A September 2018 competitive update summary prepared by Altria's Consumer Insights & Engagement group includes a slide showing that volume sales grew for MarkTen, Vuse, Blu, and Logic in 2018 even though their shares fell as sales of Juul increased. (PX1098 (Altria) at 040).

249. As Michelle Baculis testified, "Really, all of the vapor products in closed systems sold in MOC were part of the competitive set for Nu Mark." PX7014 (Baculis (Altria), Dep. at 75)). Specifically, she identified Blu, Vuse, and Juul, all closed-system products, as included in that set. (PX7014 (Baculis (Altria), Dep. at 71)).

250. Quigley referred to "the four major brands" as "Mark Ten, Vuse, Blu, and JUUL," which are all closed-system products (PX7003 (Quigley (Altria), IHT at 92-93 (discussing PX1174 (Altria) at 011) (August 2018 Nu Mark slide deck)).

251. During deal negotiations between Altria and JLI, {[redacted] (PX7001 (Devitre (Altria), IHT at 74-75) (*in camera*)).

252. In a draft credit investor presentation from November 2018, JLI included a slide titled "U.S. competition overview" showing sales for Vuse, Juul, MarkTen XL Bold, Elite, Logic Power, Blu Plus, and *my*blu, which are all closed-system e-cigarette products. (PX2145 (JLI) at 023; *see also* PX2532 (JLI) at 016 ("JUUL continues to grow despite competitive launches")).

253. An internal JLI email dated February 2018 notes developments including the upcoming rollout of Elite and Altria's testing of "other closed-system devices in 2018." (PX2176 (JLI) at 001).

254. A JLI slide deck from January 2018 includes a slide titled "Other Competitive Product Pipelines" that features new products by Blu and MarkTen, including MarkTen Bold and MarkTen Elite. (PX2044 (JLI) at 005).

255. In an internal JLI Email Robbins references "our competitors (Vuse, Blu, Logic & Mark10)." PX2485 (JLI) at 001.

256. Internal JLI documents show that JLI tracked the performance of MarkTen, Vuse, Blu, Logic, and sometimes NJOY, all of which are closed-system products. (*See, e.g.*, PX2062 (JLI) at 007 (sales and marketing deck); PX2471 (JLI) at 031 (Email attaching internal JLI report); PX2528 (JLI) at 022 (weekly data report); PX2289 (JLI) at 021 (Email attaching competitive analysis framework).

257. In a confidential information memorandum from November 2018, JLI includes a graph that depicts U.S. e-vapor sales and includes Vuse, MarkTen, Blu, Logic, and Juul. (PX2531 (JLI) at 034).

258. A December 2018 Email attaches a JLI quarterly update that includes a slide describing the "[c]ompetitive landscape" and referring to Vuse, MarkTen, Blu, Logic, and Juul. (PX2526 (JLI) at 007; *see* PX7042 (Danaher (JLI), Dep. at 61-69)).

259. A JLI investor update for FY2018 and 2018 Q4, dated February 2019, includes a slide titled "Competitive landscape" showing JLI's growth in share of the vapor category as compared to Vuse, MarkTen, Blu, and Logic. (PX2098 (JLI) at 014).

4. Other Market Participants View Closed-System E-Cigarettes As a Distinct Market

260. Reynolds sees the primary competitors for its Vuse products as {[redacted]} (PX8008 at 012 (¶ 22) (Huckabee (Reynolds), Decl.) (*in camera*)).

261. In setting prices for its Vuse products, Reynolds considers a range of factors that includes closed-system competitor pricing but does not include the pricing of open systems. (PX8008 at 021 (¶ 41) (Huckabee (Reynolds), Decl.)).

262. Reynolds "has focused its efforts on the promotion and sales of closed systems because closed systems are more consistent with Reynolds' existing distribution system and strengths in marketing." (PX8008 at 011 (¶ 20) (Huckabee (Reynolds), Decl.)).

263. As of December 2020, ITG's primary e-vapor competitors were Juul, Reynolds' Vuse, and NJOY, all of which are closed-system brands. (PX7012 (Eldridge (ITG), Dep. at 170)).

264. ITG tracks market shares for Juul, Reynolds' Vuse, and NJOY. (PX7012 (Eldridge (ITG), Dep. at 170-71)).

265. Andrew Farrell considers NJOY's main competitors to be Juul, Vuse, Blu, and Logic, all of which are closed-system brands. (Farrell (NJOY) Tr. 225; PX7029 (Farrell (NJOY), Dep. at 147); PX8004 at 002 (¶ 12) (Farrell (NJOY), Decl.)). In 2018, he viewed Altria's MarkTen brand as a main competitor as well. (Farrell (NJOY) Tr. 226-27; PX8004 at 002 (¶ 12) (Farrell (NJOY), Decl.)).

266. Internal NJOY documents from 2017 show that NJOY tracked its performance against Vuse, MarkTen, Blu, and Logic, all of which are closed-system e-cigarette brands. (PX3003 (NJOY) at 011-12 (February 2017 business plan); PX3002 (NJOY) at 035 (showing key account targets)).

267. PMI sells closed-system products because, in PMI's view, "it's very important to be able to control and know what the consumer is getting in both how the device performs but also in the liquid that they use in order to make sure that they perform appropriately together." (King (PMI) Tr. 2342-43; *see also* PX7020 (King (PMI), Dep. at 12-13)).

5. Both Cigalikes and Pod-Based Products Are Properly Included in the Relevant Product Market

268. Dr. Rothman concluded that, despite differences in shape between cigalikes and pod-based products, "all closed-system e-cigarettes are part of the same competitive set." (PX7048 (Rothman, Trial Dep. at 21); PX5001 at 017-18 (¶¶ 27-29) (Rothman Rebuttal Report)).

269. In reaching his conclusion that closed-system e-cigarettes are a relevant product market, Dr. Rothman explained that both cigalikes and pod-based products "share the same essential features" in that "[t]hey all heat pre-filled liquid nicotine to create a vapor which is then inhaled," that both are "primarily sold in convenience stores," and that "JLI considered Altria to be a competitive threat" prior to February 2018 when Altria was only selling cigalikes. (PX7048 (Rothman, Trial Dep. at 21-22); PX5001 at 018-19 (¶ 30) (Rothman Rebuttal Report)).

270. Altria introduced MarkTen Elite, its first pod-based product, into the U.S. market in February 2018. (Willard (Altria) Tr. 1356-57).

271. Ordinary-course documents show that JLI tracked and compared its pod-based Juul product against Altria's MarkTen cigalike products well before Altria introduced its pod-based Elite product in February 2018. (*See* CCFF ¶¶ 299-308, below). During that time, Altria also tracked JUUL's performance. (*See* CCFF ¶¶ 331-35, below). Even after Altria introduced MarkTen Elite, JLI continued to track Altria's cigalike and pod products. (*See* CCFF ¶¶ 309-26, below).

272. [redacted]

273. Ordinary-course documents show that JLI tracked and compared its pod-based Juul product against Reynolds' Vuse cigalike products well before Reynolds introduced its pod-based Alto product in August 2018. (*See* CCFF ¶¶ 301-09, 314-18, below). During that time, Reynolds also considered Juul a competitor. (*See* CCFF ¶¶ 346-47, below).

274. Closed-system e-cigarette producers, including Altria and JLI, tracked each other and identified each other as competitors regardless of whether their business focused on cigalikes, pod products, or both. (*See* CCFF ¶¶ 299-350, below).

275. Consistent with Respondents' ordinary-course documents, Dr. Rothman notes that "[d]ata that the [R]espondents use in the ordinary course of business—including Nielsen, IRI, and STARS—track sales in these retail channels and appear not to distinguish between cig-a-like and pod-based products." (PX5001 at 026 (¶ 38) (Rothman Rebuttal Report)).

276. [redacted]

277. ITG continues to sell a cigalike product called Blu Plus. (PX7012 (Eldridge (ITG), Dep. at 49)).

a) <u>Cigalikes and Pod-Based Products Have Similar Features</u>

278. Closed-system products come in different shapes, referred to as "form factors." (Farrell (NJOY) Tr. 210-11). For example, the "NJOY Ace is an oval shape" and "rather short," the Juul devices "looks like a flash drive" and "is a little bit longer," and cigalikes "are long and thin and look like a cigarette." (Farrell (NJOY) Tr. 210-11). The "JUUL [device] was a rectangular device and Elite was a sort of smashed diamond shape." (PX7026 (Gardner (Altria), Dep. at 211); *see also* Crozier (Sheetz) Tr. 1488 (noting that the Juul device "kind of looks like a long USB thumb drive")).

279. The cigalike format "is cigarette-like. It looks like a cigarette. It's a closed-system. It usually has two parts, the battery and the cartridge assembly." (PX7026 (Gardner (Altria), Dep. at 48); *see also* PX7004 (Willard (Altria), IHT at 104)).

280. The MarkTen XL was an Altria cigalike product. (Begley (Altria) Tr. 1072-73).

281. [redacted]

282. The Blu Plus is an ITG cigalike product. (PX8011 at 004-5 (¶ 19) (Eldridge (ITG), Decl.)).

283. Cigalikes are considered closed-system e-vapor products. (Valani (JLI) Tr. 969; PX7022 (Begley (Altria), Dep. at 74)).

284. MarkTen Elite, a pod-based product, was a closed-system e-cigarette product. (PX7022 (Begley (Altria), Dep. at 169)).

285. The MarkTen cigalike "in some respects, bears some similarity to these pod-based products" in that both consisted of a cartridge and a rechargeable battery. (Willard (Altria) Tr. 1352-53).

286. Both cigalikes and pod-based products are closed-system e-cigarettes, and, as such, both use pre-filled, sealed cartridges or pods. (PX8008 at 005-06 (¶¶ 11-12) (Huckabee (Reynolds), Decl.)).

287. In a May 2017 pricing survey commissioned by JLI, McKinsey noted that "[c]losed-system vaporizers, sometimes known as cigalikes and e-cigs . . . include disposable e-cigarettes or e-cigarettes that use replaceable cartridges or pods" that "are not intended to be refilled or used with bottled e-juice." (PX2579 (JLI) at 181).

288. Both cigalikes and pod-based e-cigarettes may or may not contain nicotine salts. (PX1129 (Altria) at 012 (describing Bold formulation for MarkTen cigalike as using "a proprietary recipe for nicotine salts)); PX1029 (Altria) at 003-04 (Email attaching slides comparing MarkTen against both pods and cigalikes in terms of various product attributes).

289. [redacted]

b) <u>Cigalikes and Pod-Based Products Are Similar in Terms of User Experience and Distribution, and Are Regulated Similarly by the FDA</u>

290. An April 2018 Nu Mark presentation to the Altria Board of Directors identifies both cigalikes and closed pods as closed-system products and distinguishes them from open systems in terms of consumer experience and flavor expectations. (PX4029 (Altria) at 007)).

291. A Nu Mark situation update from August 2018 includes slides showing both pods and cigalikes appealed to the same consumer experience segments. (PX1174 (Altria) at 016-17; *see also* PX7041 (Quigley (Altria), Dep. at 20-22)).

292. In terms of price-setting for Reynolds' Vuse products, "the consumers that are purchasing [Vuse] products in stores are making decisions across brands based on the competitive set that's present in those stores." (Huckabee (Reynolds) Tr. 389-90).

293. Altria categorized e-vapor products, including both cigalikes and pod-based products, as reduced-risk products. (PX7041 (Quigley (Altria), Dep. at 127)).

294. The FDA's flavor ban that went into effect in February 2020 applied to both pod-based products and rechargeable cigalikes equally. (Sheetz (Crozier) Tr. 1495-96; PX9016 at 001-02 (Jan. 2020 FDA news release)).

295. Crozier, Category Manager at retailer Sheetz, testified that "[g]enerally speaking, vape shops sell more of the open systems and C-stores sell more pod systems and cigalike-type products." (Crozier (Sheetz) Tr. 1494-95). Sheetz retail stores carry "a mix of pods and cigalike products in our e-cigarette assortment," both types being closed-system products. (Crozier (Sheetz) Tr. 1492-93).

296. Nu Mark's 2018 three-year strategic plan includes a plan for future merchandising shelf space showing both its pod-based Elite and its MarkTen cigalike displayed on adjacent shelves. (PX4012 (Altria) at 40)).

297. NJOY uses the same distributors for both its pod-based product Ace and its cigalike product Daily. (Farrell (NJOY) Tr. 257-58).

298. The majority of retailers who sell NJOY's e-cigarette products sell both NJOY's pod-based product Ace and its cigalike product Daily. Moreover, at a majority of those retailers, both products are displayed next to each other on shelves. (Farrell (NJOY) Tr. 257-58).

c) <u>Respondents View Cigalikes and Pod-Based Products As Competing in the Same Market</u>

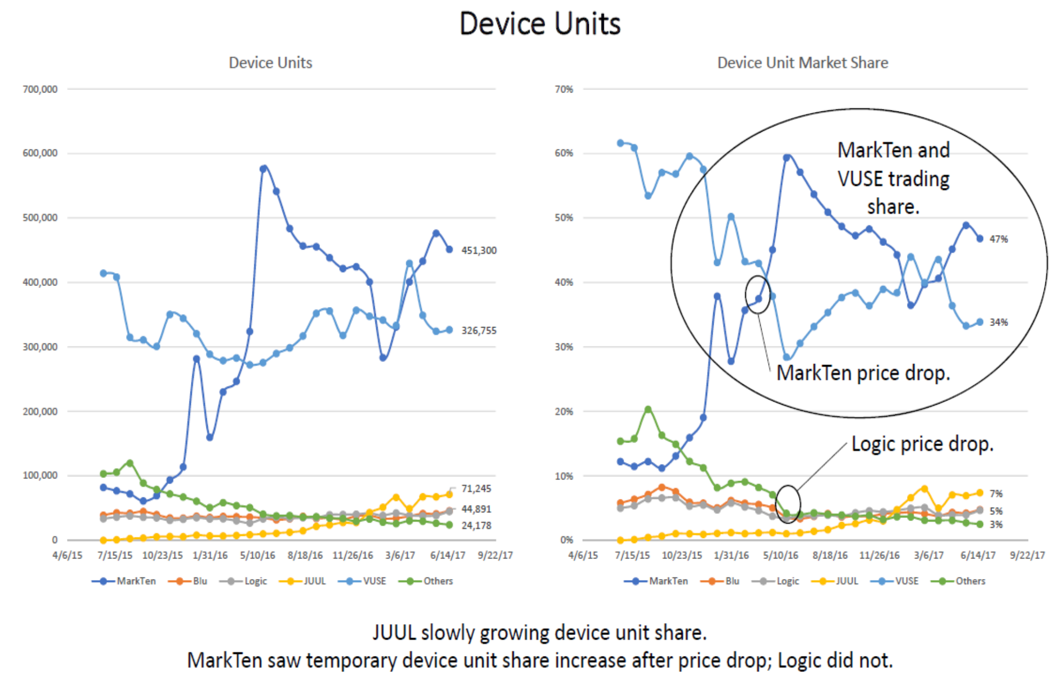
(1) JLI View Cigalikes and Pod-Based Products As Competing in the Same Market

299. In an internal Email exchange from April 2017, before Elite was introduced, JLI executives discussed the extent to which MarkTen's growth was funded by couponing as well as the nature of MarkTen promotions over the previous year. (PX2585 (JLI) at 001).

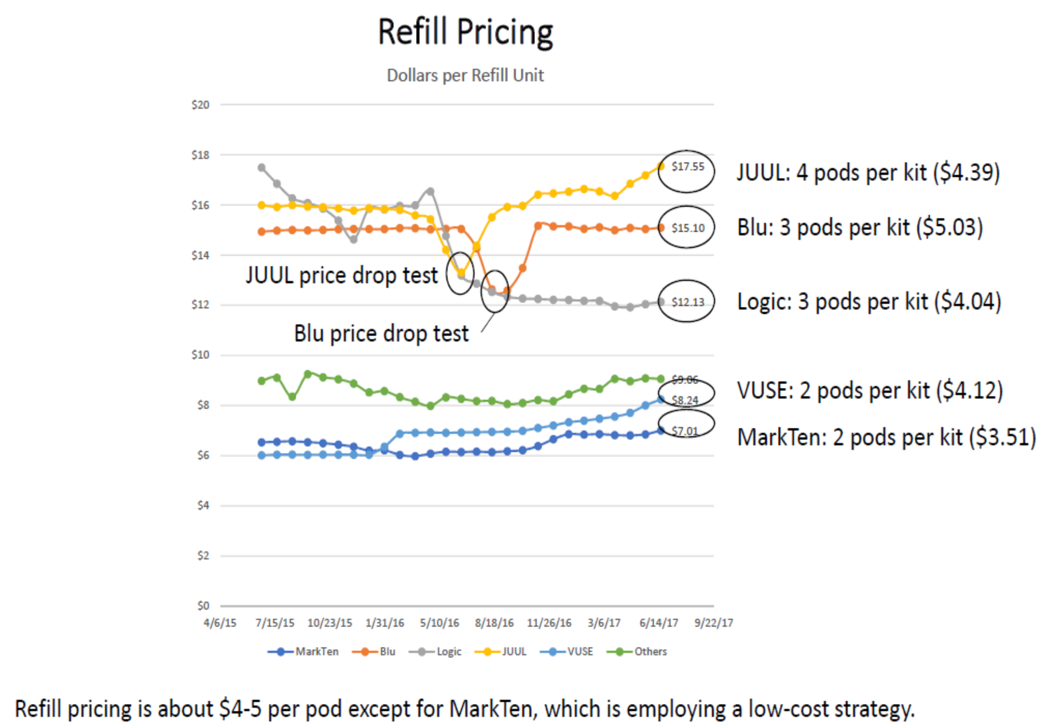
300. In an internal Email exchange from April 2017, before Elite was introduced, JLI executives discussed retailer feedback and one JLI executive noted, "MarkTen promotions worth taking a look at." (PX2586 (JLI) at 001).

301. A June 2017 McKinsey slide deck on pricing strategy prepared for JLI includes a slide comparing prices for a number of e-vapor products, including JUUL's pod product as well as cigalike products MarkTen XL, Vuse Solo, and Blu Plus. (PX2579 (JLI) at 007 (listing in footnote specific products used for comparison)).

302. An internal JLI slide deck from July 2017, before Elite and Alto were introduced, summarizes Nielsen data and compares Juul to MarkTen, Vuse, Blu, and Logic across a range of metrics, including device pricing, device units, refill pricing, and refill dollars. (PX2333 (JLI) at 005-08).



(PX2333 (JLI) at 006).



(PX2333 (JLI) at 007).

303. An internal JLI Email from September 2017, before MarkTen Elite and Vuse Alto were introduced, forwards a slide deck that includes the results from brand survey on Juul and four competitors, including MarkTen, Vuse, Blu, and Logic. (PX2580 (JLI) at 003).

304. In a Board update dated September 2017, before MarkTen Elite and Vuse Alto were introduced, JLI tracked starter kit unit shares over time for competitors, including Vuse and MarkTen. (PX2588 (JLI) at 003). The same update contains a "Competitive Analysis" slide on brand marketing and includes Vuse, Blu, Logic, MarkTen, and IQOS. (PX2588 (JLI) at 017).

305. In internal email chains from October 2017 and January 2018, before MarkTen Elite and Vuse Alto were introduced, JLI reported on market shares for MarkTen, Vuse, Blu, Logic, and Juul. (PX2488 (JLI) at 002; PX2487 (JLI) at 001 (January 2018 email) (noting change in MarkTen's share); PX2483 (JLI) at 002 (January 2018 email) (noting efficient MarkTen distribution)).

306. A JLI business overview from December 2017 includes a slide titled "JUUL competes within an ecosystem with a range of vaporizer products" that identifies cigalikes, pod products, and open systems, but notes that cigalikes and pod products both "target[] smokers," whereas open systems "target[] 'hard core' vapers." (PX2597 (JLI) at 039). The deck also includes a slide that identifies competitors as including Blu, MarkTen, and Vuse. (PX2597 (JLI) at 037).

307. An internal JLI Email from January 2018, before Elite and Alto were introduced, attaches a document with topic heading "Product Team Competitive Intel Overview" that identifies MarkTen, Vuse, and Blu as among JLI's competitors. (PX2080 (JLI) at 003).

308. An internal JLI Email from January 2018 attaches information on "some baseline competitive offerings and price positioning info," including price information on MarkTen, Blu Plus, and Vuse Solo cigalikes. (PX2350 (JLI) at 001, 003, 005, 007).

309. An internal JLI Email from February 2018, before Vuse Alto was introduced, includes a summary of Nielsen data including sales trends in the vapor category, specifically calling out Juul, Vuse, and MarkTen. (PX2482 (JLI) at 001).

310. An internal JLI Email from February 2018 notes that the MarkTen XL Bold was one of the "emerging players" and had been "driving overall MarkTen growth in Convenience." (PX2492 (JLI) at 003).

311. An internal JLI Email from February 2018 attaches a slide deck that refers to JLI's "[c]ompetition from big companies" and in the case of Altria includes both the pod-based MarkTen Elite and the MarkTen XL cigalike. (PX2079 (JLI) at 014).

312. In a March 2018 investor presentation, JLI compared its Juul product with both MarkTen and Elite in terms of nicotine satisfaction and consumer experience. (PX2067 (JLI) at 014).

313. In a series of confidential information memoranda from 2018, JLI compared its Juul product with both MarkTen and Elite, as well as Vuse, Blu, Logic, and NJOY, in terms of nicotine satisfaction and consumer experience. (PX2590 (JLI) at 029 (March 2018 CIM); PX2158 (JLI) at 047 (May 2018 CIM); PX2531 (JLI) at 033 (November 2018 CIM)).

314. In an April 2018 competitor benchmarking presentation, JLI compared flavor and nicotine attributes of closed-system products, including cigalike products such as MarkTen, Vuse Solo, and Blu Plus. (PX2344 (JLI) at 004, 007).

315. A 2018 Q1 investor update for JLI includes a slide comparing JUUL's change in share at retail from April 2017 to April 2018, before Alto was introduced, to those of Vuse, Blu, MarkTen, and Logic. (PX2345 (JLI) at 004).

316. A May 2018 JLI slide deck titled "Flavor Competitive Landscape" includes a slide comparing JUUL's flavor offerings to those of "top competitors," including both Elite and MarkTen, as well as cigalikes Vuse Solo, Vuse Ciro, and Blu Plus. (PX2090 (JLI) at 009).

317. An internal JLI Email from May 2018 includes a table comparing flavor and nicotine range for a number of e-vapor products, including both Elite and MarkTen, as well as cigalikes Vuse Solo, Vuse Ciro, and Blu Plus. (PX2481 (JLI) at 002).

318. In a draft pricing update performed for JLI from June 2018, before Vuse Alto was introduced, McKinsey [redacted]} (PX2486 (JLI) at 013 (*in camera*)). [redacted] (PX2486 (JLI) at 042-43).

319. A JLI sales and marketing slide deck from November 2018 included a slide comparing market shares from October 2017 to November 2018 of Juul, Vuse, Blu, MarkTen, Logic, and NJOY, and includes both Altria's Elite and cigalike products. (PX2062 (JLI) at 007; Robbins (JLI) Tr. 3246).

320. An internal JLI Email from November 2018 attached a JLI investor presentation that tracked "competitive [product] launches," including cigalike products MarkTen Bold, Vuse Ciro, and Blu Plus. (PX2532 (JLI) at 016; PX7042 (Danaher (JLI), Dep. at 70-75)).

321. A JLI draft competitor product performance evaluation from December 2018 covered of a range of products, among which were the pod-based MarkTen Elite and NJOY disposable cigalike product Daily and cigalike product Loop, as well as products with and without nicotine salts. (PX2084 (JLI) at 005; O'Hara (JLI) Tr. 561-65); Farrell (NJOY) Tr. 212-23, 287 (identifying Daily as NJOY disposable e-cigarette and Loop as NJOY cigalike product)).

322. An internal JLI Email from January 2019 refers to a competitor product study that included Juul as well as cigalike products MarkTen, Vuse Solo, and NJOY Daily. (PX2460 (JLI) at 001; PX7033 (O'Hara (JLI), Dep. at 179-80)).

323. JLI's Riaz Valani testified that, during Respondents' transaction negotiations, JLI sought a commitment from Altria not to develop or sell its own products that would compete with JLI, including both pod-based products and, broadly, cigalikes. (PX7032 (Valani (JLI), Dep. at 54-55)).

324. The non-compete provision of the Relationship Agreement to which Altria agreed as part of the transaction applies to Altria's MarkTen cigalike product: The non-compete section prohibits Altria from competing in the "e-Vapor business" for an initial term of six years, with very limited exceptions. (PX1276 (Altria/JLI) at 025-027, 064 (Relationship Agreement, Dec. 20, 2018) (Altria "shall not . . . (1) own, manage, operate, control, engage in or assist others in engaging in, the e-Vapor Business")). As defined in the Relationship Agreement, the "e-Vapor business" includes both cigalike and pod products. (PX1276 (Altria/JLI) at 009 ("'e-Vapor Business' means business activities and operations relating to vapor-based electronic nicotine delivery systems (including vaporizers and e-cigarettes that create an aerosol, vapor or other gaseous form that the user inhales) other than Heat-not-Burn Nicotine Delivery Systems"); *see also* CCFF ¶¶ 914-24, below ({[redacted]})).

325. In his competitive intelligence role at JLI, Joseph O'Hara tracked the MarkTen cigalike products, including MarkTen, MarkTen XL, and MarkTen Bold. (O'Hara (JLI) Tr. 506-07; PX7033 (O'Hara (JLI), Dep. at 48-49)).

326. In terms of whether JLI competed with MarkTen cigalikes on price, Danaher testified that "price is certainly part of that decisionmaking process that a consumer would go through." (PX7005 (Danaher (JLI), IHT at 114-15)).

(2) Altria Viewed Cigalikes and Pod-Based Products as Competing in the Same Market

327. Nu Mark's 2016-2018 strategic plan, which Begley presented to the Altria Board in February 2016, discussed pod-based products. (PX4040 (Altria) at 046). As of February 2016, there were closed-system products on the market apart from cigalikes. (Begley (Altria) Tr. 1116-17). For example, at that time pod-based products were being sold commercially in the United States. (Begley (Altria) Tr. 1117-19).

328. Altria's Michelle Baculis testified that "all of the vapor products in closed systems sold in MOC were part of the competitive set for Nu Mark." (PX7014 (Baculis (Altria), Dep. at 75)).

329. Bill Gardner testified that "[e]veryone that sold an e-vapor product was a competitor to Nu Mark," and identified among Altria's big tobacco competitors Vuse, which "had a cigalike, as well as a pod-based product," Blu, and Logic. (PX7026 (Gardner (Altria), Dep. at 65-66)).

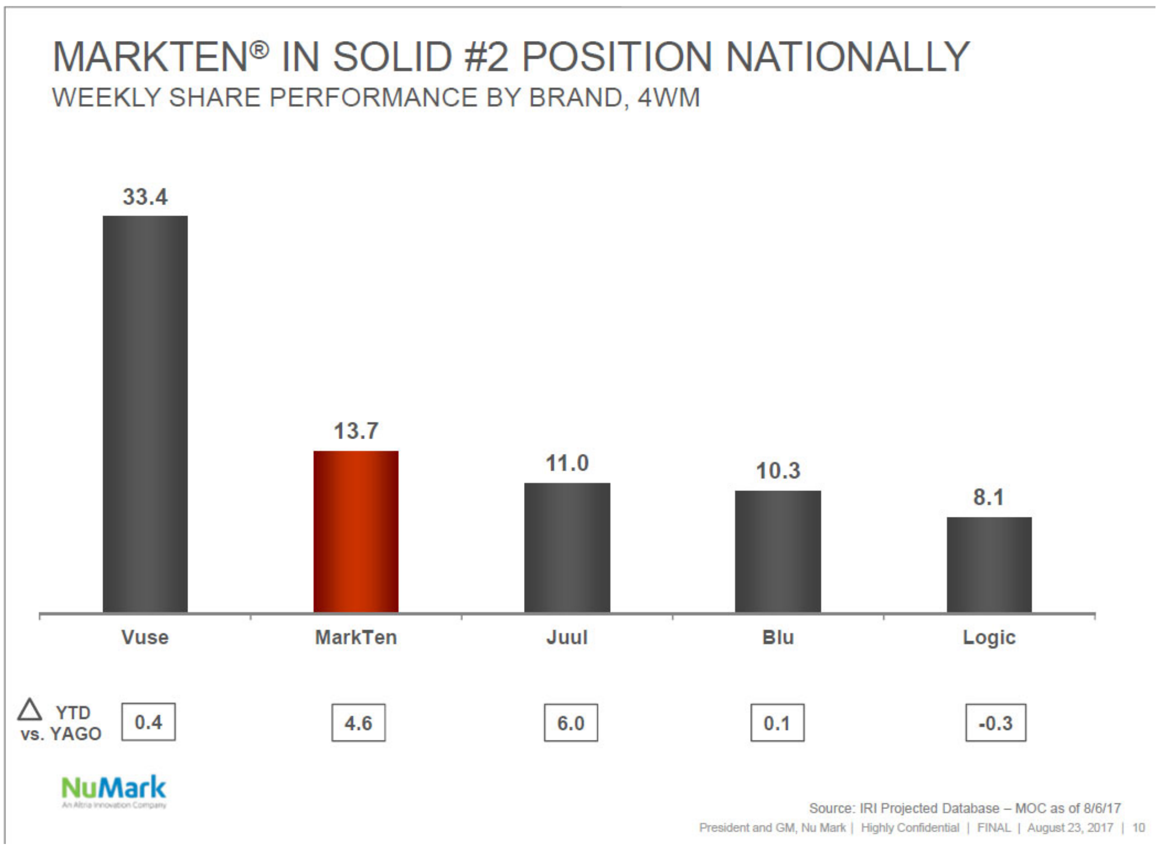
330. Pascal Fernandez testified that the cigalike form factor "was one of the forms that provided an e-vapor experience for smokers interested by e-vapor," so "it would have been part of our tracking and looking at the e-vapor space." (PX7023 (Fernandez (Altria), Dep. at 73)).

331. The market share figures presented to Altria's Board in February 2017, long before MarkTen Elite or Vuse Alto were introduced, included JUUL's pod-based products and Vuse and MarkTen cigalikes. (RX0746 (Altria) at 014).

332. Altria's Mountjoy testified that "[a]s JUUL picked up presence in the market, I'm sure they were included in [Altria's consumer] research more frequently," and confirmed that Altria would perform research comparing consumer reactions to different products that included JUUL and Altria products. (PX7034 (Mountjoy (Altria), Dep. at 54-58)).

333. Draft slides from May 2017, before MarkTen Elite was introduced, note that "Juul has momentum and positive word of mouth, but (based on limited trial) ATCs are open to other products that give them a 'reason to believe.'" (PX4248 (Altria) at 004).

334. An August 2017 Nu Mark update to the Altria Board of Directors included a slide showing MarkTen's weekly share performance as compared to Vuse, Juul, Blu, and Logic. (PX4028 (Altria) at 011). As Begley confirmed, these share figures take into account both cigalike and pod products. (Begley (Altria) Tr. 976). The update also presents retail volume share by brand, including Vuse Vibe, Vuse Solo, MarkTen XL, MarkTen KS, NJOY, Blu, Vapin Plus, Logic, and Juul. (PX4028 (Altria) at 012).



(PX4028 (Altria) at 011).

335. A January 2018 update to the Altria Board of Directors includes a slide estimating a potential combined Altria-JUUL e-vapor share that includes both cigalikes and JUUL's pod product. (PX1280 (Altria) at 015).

336. Nu Mark's 2018 three-year strategic plan from February 2018, before Vuse Alto was introduced, includes a slide showing 2017 market shares for Vuse, MarkTen, Juul, Logic, and Blu. (PX4012 (Altria) 012).

337. In a February 2018 draft of its 2018-2020 3-year strategic plan, Nu Mark compared the pricing for its Elite product against both pod-based products (Juul) and cigalikes (Vuse Solo and MarkTen cigalike). (PX1298 (Altria) at 030).

338. An internal slide deck for an Altria long-term strategic planning meeting in February 2018, before Vuse Alto was introduced, included a "Juul development process comparison" in the context of discussing Altria's product pipeline aspirations, as well as an innovation scorecard that compared Altria to Juul and Vuse across a range of factors, including market share, effective price, and OCI margin. (PX1000 (Altria) at 003, 008; *see also* PX7023 (Fernandez (Altria), Dep. at 124-26)).

339. In a Board orientation from April 2018, before Vuse Alto was introduced, Nu Mark presented a slide showing top e-vapor brands from 2017 by share position in the MOC channel, including Vuse, MarkTen, Juul, Logic, and Blu. (PX4029 (Altria) at 013).

340. A July 2018 assessment of Altria's operating segments [redacted] (PX4534 (Altria) at 004 (*in camera*)).

d) Other Market Participants View Cigalikes and Pod-Based Products As Competing in the Same Market

341. Reynolds considers the competitive set for its Vuse cigalike products as including both "[p]ods and cigalike products" primarily in the convenience store channel. (Huckabee (Reynolds) Tr. 388).

342. Reynolds considers its Vuse pod-based products as competing with "the other pod-based and cigalike products that are on the market . . . in those same channels." (Huckabee (Reynolds) Tr. 388-89).

343. In pricing its closed-system vapor products, Reynolds "take[s] into account the pricing of competitor pod-based and cigalike product, as well as promotional effectiveness in the market." (Huckabee (Reynolds) Tr. 389).

344. Prior to December 2018, the competitors that Reynolds considered when setting prices for its Vuse closed-system vapor products were Juul, NJOY, Logic, and MarkTen, including both "a cigalike product, MarkTen, and a pod-based product, MarkTen Elite." (Huckabee (Reynolds) Tr. 390).

345. Prior to December 2018, the primary competitors to the Vuse brand were Juul, NJOY, and MarkTen, including both the cigalike and pod products. (Huckabee (Reynolds) Tr. 391-92).

346. [redacted] } [redacted]

347. [redacted] } (PX3218 (Reynolds) at 006 (*in camera*)). The same presentation includes a slide that { [redacted] (PX3218 (Reynolds) at 023 (*in camera*)).

348. [redacted]

349. [redacted] { [redacted] } [redacted]

350. [redacted]

6. Open-System E-Cigarettes Are Properly Excluded from the Relevant Product Market

351. Open-tank systems are distinct from closed-system e-cigarettes due to their very different product attributes, user experiences, and retail sales channels. For those reasons, and the testimony and evidence from market participants, Dr. Rothman concluded that open-tank e-cigarettes are not close substitutes with closed-system e-cigarettes. (PX5000 at 032-39 (¶¶ 68-77) (Rothman Expert Report); PX7048 (Rothman, Trial Dep. at 16-18)).

a) <u>Open-System E-Cigarettes and Closed-System E-Cigarettes Have Distinct Product Attributes</u>

352. Open-tank users source their e-liquids from a range of suppliers. (Huckabee (Reynolds) Tr. 386-87 ("you have to purchase the liquid… [T]here is a very wide range of liquid products in the market"); Farrell (NJOY) Tr. 208 ("the main distinguishing factor of open systems is that the container that will hold nicotine, the liquid that contains nicotine, is open and can be refilled by a variety of different e-liquids that customers have access to and are manufactured by a variety of entities. So the containers don't come prefilled."); Farrell (NJOY) Tr. 209; King (PMI) Tr. 2342-43; PX7035 (Masoudi (JLI), Dep. at 107)).

353. Open tank users can refill their cartridge or tank with e-liquid. (Huckabee (Reynolds) Tr. 383 ("open system describes the ability of a consumer to refill a cartridge or tank in the device with a fluid"); Farrell (NJOY) Tr. 208-209; King (PMI) Tr. 2342-43, Garnick (Altria) Tr. 1693; PX7035 (Masoudi (JLI), Dep. at 107)).

354. Open-tank devices can be customized by users. (Farrell (NJOY) Tr. 207-09 ("There are varying degrees of complexity in any open system, but the components can include a battery, a tank. The consumer can switch out the mouthpiece. I have had direct experience with some products where a consumer can purchase a different type of coil and insert that coil into the system. And so in doing that, you know, the user has to maintain the different parts."); Begley (Altria) Tr. 969-70 (Q. Open systems allow consumers to adjust the product's device settings? A. They do."); Garnick (Altria) Tr. 1693; PX2579 (JLI) at 180-81; PX7004 (Willard (Altria), IHT at 057-58)).

355. Open-tank users can select from a variety of e-liquids and can mix them. (Begley (Altria) Tr. 970 ("Q. Open systems also allow consumers to adjust e-liquid formulations to their own liking? A. That's correct."); Begley (Altria) Tr. 1043 (*in camera*); Farrell (NJOY) Tr. 208 ("[T]he main distinguishing factor of open systems is that the container that will hold nicotine, the liquid that contains nicotine, is open and can be refilled by a variety of different e-liquids that customers have access to and are manufactured by a variety of entities."); Garnick (Altria) Tr. 1693; PX7004 (Willard (Altria), IHT at 057-58)).

356. There are more available flavors for open-tank systems compared to closed-systems. (PX7025 (Burns (JLI), Dep. at 55) (describing the "range of flavors" that are different from closed-systems); PX7009 (Burns (JLI), IHT at 052-53) ("If you look at an open system and you go to a vape shop, there are literally hundreds of flavors available of different manufacturers and type," including "dragon's blood and bubble gum"); *see also* Crozier (Sheetz) Tr. 1492 (describing "different flavors" and strengths consumers of open-tank systems can buy); Garnick (Altria) Tr. 1692-1693 (comparing closed systems and open-tank, that in open-tank systems, "you mixed flavors, you mixed chemicals with different devices."); Huckabee (Reynolds) Tr. 386-87 ("there is a very wide range of liquid products in the market, typically sold in vape shops")).

357. Open-tank e-cigarettes are "typically much larger" than closed-system e-cigarettes. (Gifford (Altria) Tr. 2722, 2793; Jupe (Altria) Tr. 2241).

358. Open-tank e-cigarettes are require maintenance and cleaning, and accordingly are more "complex" than closed system e-cigarettes. (Farrell (NJOY) Tr. 207-09; Huckabee (Reynolds) Tr. 386 ("a great deal more time and effort is required … to engage" open-tank e-cigarettes); PX8001 at 003 (¶ 13) (Stout (7-Eleven), Decl.) (Open-tank systems "are more complicated to use than closed vaping systems."); PX9000 (Altria) at 019 (Nov. 2017 Investor Day remarks) (addressing the "complexity" of open-tank e-cigarettes compared to closed-systems)).

359. Closed system e-cigarettes have pods or cartridges that are prefilled with nicotine liquids. The pods or cartridges are not meant to be refilled by users. (Huckabee (Reynolds) Tr. 384 ("closed-system terminology refers specifically to the cartridge or pod or tank which is not

meant to be refillable."); Farrell (NJOY) Tr. 207, 210 ("Closed systems are comprised of a battery and a container that is referenced in a variety of ways, either called pods, cartridges, capsules, tanks, but suffice it to say there is a battery and then a container that comes prefilled with liquid, contains nicotine."); King (PMI) Tr. 2341-42; PX7035 (Masoudi (JLI), Dep. at 107); PX7022 (Begley (Altria), Dep. at 74)).

360. Consumers do not have the ability to adjust the performance of the device when using closed system e-cigarettes. (Begley (Altria) Tr. 970). ("Q. With closed-system e-vapor products, consumers don't have the ability to adjust the performance of the device, correct? A. That's correct.")).

361. Closed system e-cigarettes are not designed to allow devices and cartridges or pods to be mixed-and-matched among brands; a closed system "is a single system built to work as a single system." (Schwartz (Altria) Tr. 1852; Farrell (NJOY) Tr. 210 ("They're not designed to be tampered with and emptied and have another e-liquid inserted in them. So when a customer buys an NJOY product, they are using a product that is intended solely for use with NJOY's e-liquids."); King (PMI) Tr. 2341-42; PX7035 (Masoudi (JLI), Dep. at 107)).

362. Convenience stores have expressed concern about the lack of quality assurance controls and recent health issues with open-tank products. (PX8006 at 003 (¶ 12) (Kloss (Wawa), Decl.) ("Open tank systems were also responsible for health issues associated with vaping that were widely reported in the press in 2019.").

b) Open-System E-Cigarettes and Closed-System E-Cigarettes Do Not Provide the Same User Experience

363. Open-tank e-cigarette users tend to be used by "hobbyists or vapor enthusiasts." (Huckabee (Reynolds) Tr. 386-87). Open-tank e-cigarette users typically enjoy customization and possess "a more intimate knowledge of the various ways" to have an e-vapor experience. (Farrell (NJOY) Tr. 221-22; PX7025 (Burns (JLI), Dep. at 55); PX7004 (Willard (Altria), IHT at 057-058)). Open-tank e-cigarette users "interested in sampling different or unusual flavors" of e-liquids. (PX8008 at 005-06 (¶ 12) (Huckabee (Reynolds), Decl.)).

364. E-cigarette suppliers have no control over the open-tank user experience in terms of "ingredients and the impacts, the toxicology, all of the other aspects" that closed-system e-cigarette suppliers would otherwise verify and submit through the regulatory process. (King (PMI) Tr. 2343).

365. According to Paul Crozier, Category Manager for Cigarettes and Tobacco at Sheetz, open-tank users are a "completely different type of customer segment." (PX7019 (Crozier (Sheetz), Dep. at 124)).

366. Closed systems are convenient to use. For example, customers can use closed-system e-cigarettes while driving to work or when moving around. (Huckabee (Reynolds) Tr. 386 ("[A] closed system and convenient product that is also typically very discreet in nature, meaning its vapor cloud is relatively low, consumers find those combinations of factors appealing. In occasions where they are perhaps in their car, if they are -- if they are traveling, if they are driving to work, if they are in an area where they -- they may be

moving or with a group of friends where discretion is more important, closed-system products can be very --very appealing."); Farrell (NJOY) Tr. 209-10 ("Closed-system e-cigarette products are a little bit more convenient. You know, there's less component parts, less maintenance. In order to create a vaping experience, a user will have bought a battery that connects to a container that's prefilled with liquid, and when the user sucks on the closed system, an atomizer, which is just a part of this whole system that turns the liquid into vapor, does so, and as the user is sucking in, they experience nicotine."); PX7004 (Willard (Altria), IHT at 57-58)).

367. Closed system users "just bought the product, and even if you changed the pod, the product was -- was the same." (Garnick (Altria) Tr. 1693; Schwartz (Altria) Tr. 1852; Farrell (NJOY) Tr. 210).

c) Open-System E-Cigarettes and Closed-System E-Cigarettes Are Sold in Different Retail Channels

368. Open-tank e-cigarettes are typically sold in vape stores or online, whereas the vast majority of and closed-system e-cigarettes are sold in mass/convenience store channels. (PX4029 (Altria) at 008 (Nu Mark BOD Orientation Presentation, April 11, 2018 – Jody Begley, President & General Manager, Nu Mark)).

(PX4029 (Altria) at 008).

369. Market participants confirmed that open-tank e-cigarettes are "typically sold in vape shops." (Huckabee (Reynolds) Tr. 386-87; *see also* Farrell (NJOY) Tr. 208; Begley (Altria) Tr. 972-73; Gifford (Altria) Tr. 2756; Gifford (Altria) Tr. 2741; Crozier (Sheetz) Tr. 1494-95 ("Generally speaking, vape shops sell more of the open systems and C-stores sell more pod systems and cigalike-type products.").

370. Sheetz's Paul Crozier testified that "A vape shop is a retailer that specializes in e-cigarettes, vapor sales. That's generally where you would find open-tank systems. They have the room, space, time where they can afford to talk with consumers and walk them through how to use devices and the appropriate liquids in each device, and offer a wide variety of flavors and strengths of products. And their -- generally their sole purpose is to sell e-cigarettes, vapor, e-liquids, accessories." (Crozier (Sheetz) Tr. 1494; *see also* Begley (Altria) Tr. 972).

371. Altria's Jody Begley testified that vape shops are considered a distinct sales channel. (Begley (Altria) Tr. 972-73 ("Q. Vape stores are considered a distinct sales channel, correct? A. That's correct.")).

372. Open-tank e-cigarettes and open tank e-liquids are also sold online or in smoke shops. (Farrell (NJOY) Tr. 208; Huckabee (Reynolds) Tr. 383).

373. Closed system e-cigarettes are sold primarily in convenience stores. (PX4029 (Altria) at 008 (Nu Mark BOD Orientation Presentation, April 11, 2018); Huckabee (Reynolds) Tr. 387-88; Farrell (NJOY) Tr. 220-21, 235-36; Begley (Altria) Tr. 971-72, 1122-23; PX4029 (Altria) at 008; Quigley (Altria) Tr. 2088; Crozier (Sheetz) Tr. 1494-95).

374. The MOC channel is the major sales channel for closed system products. (Begley (Altria) Tr. 971-72). Jody Begley testified that he agreed that the MOC channel is primarily a closed-system outlet. (Begley (Altria) Tr. 971-72)).

375. Convenience stores typically sell only closed-system e-cigs and do not sell open-tank e-cigarettes. (Crozier (Sheetz) Tr. 1492-94; PX7019 (Crozier (Sheetz), Dep. at 121-22); PX8006 at 003 (¶¶ 11-12) (Kloss (Wawa), Decl.); PX8001 at 003 (¶ 13) (Stout (7-Eleven), Decl.); PX7029 (Farrell (NJOY), Dep. at 145)). Jeff Eldridge of ITG testified that convenience stores selling open-tank e-cigarettes "tends to be [the] exception." (PX7012 (Eldridge (ITG), Dep. at 166-67)).

376. Convenience stores do not offer the services needed to educate consumers on the use of open-tank products. (PX8000 at 004 (¶ 20) (Crozier (Sheetz), Decl.) ("Sheetz does not have the staff or the time to educate consumers on the use of open systems."); PX8001 at 003 (¶ 14) (Stout (7-Eleven), Decl.) ("Open vape systems are typically sold at vape shops rather than convenience stores because vape shops are more prepared to educate customers on the use of these complex products. Convenience stores are transaction-focused and typically do not provide the level of service that a true vape enthusiast would look for in a primary tobacco retailer."); PX8003 at 003 (¶ 17) (Wexler (Turning Point Brands), Decl.) ("A new customer who enters one of our vape shops will typically receive a high degree of attention from our staff. […] This interaction can take several minutes, as our goal is to ensure that

we are matching the customer with the vaping experience that they are seeking. This contrasts with a convenience store interaction, which usually takes no more than 90 seconds.")).

377. Convenience stores also have inventory constraints that make it difficult to stock open-tank components. (PX8006 at 003 (¶ 12) (Kloss (Wawa), Decl.) ("Wawa has chosen not to sell open tank vaping devices because of lack of quality assurance controls, greater risk of counterfeit products, and a large variety of customer devices and e-liquids that would be difficult to maintain at convenience stores that sell limited SKUs."); *see also* Farrell (NJOY) Tr. 221; Crozier (Sheetz) Tr. 1494).

378. Based on testimony and evidence competitors and customers, Dr. Rothman concluded that because of these differences between open-tank and closed-system e-cigarette products, purchasers of closed-system e-cigarettes are unlikely to substitute to open-tank e-cigarettes in response to a small change in price. Dr. Rothman explained, that among other things, doing so would require purchasing from a different store and learning to use a different type of product. (PX5000 at 032-39 (¶¶ 67-77) (Rothman Expert Report)).

d) <u>Industry Participants Do Not View Open-System E-Cigarettes and Closed-System E-Cigarettes As Close Substitutes</u>

379. Based on testimony from convenience stores that sell e-cigarettes, Dr. Rothman concluded that market participants do not view open-tank e-cigarettes and closed-system e-cigarettes as close substitutes. (PX7048 (Rothman, Trial Dep. at 18-19); (PX5000 at 035-39 (¶¶ 73-77) (Rothman Expert Report)).

380. Paul Crozier (Sheetz) testified that he does not consider vape shops to be competitors to Sheetz for e-cigarette sales since Sheetz does not sell open-tank e-cigarettes. (Crozier (Sheetz) Tr. 1495).

381. Convenience stores do not consider open-tank e-cigarette prices when setting prices for closed system e-cigarettes. (PX8001 at 003 (¶ 14) (Stout (7-Eleven), Decl.) ("As a result, 7-Eleven does not track the prices of open vape products, or use the prices of open vape systems when making retail price recommendations for closed systems or traditional combustible cigarettes sold at 7-Eleven stores."); PX8000 at 003 (¶ 18) (Crozier (Sheetz), Decl.) ("Prices at vape stores are not a factor that Sheetz considers when deciding on how to price vapor products."); PX7019 (Crozier (Sheetz), Dep. at 124) ("Q. Can you help me understand why doesn't Sheetz consider prices at vape stores when deciding how to price vape products? A. A lot of the products sold at vapor -- vape shops are products we don't sell."); *compare* PX8003 at 004 (¶ 21) (Wexler (Turning Point Brands), Decl.) ("When we determine the pricing at which we sell our open systems in our vape shops, we primarily look to other vape shops for comparisons. We do not focus on the pricing of evapor products sold in the convenience store channel as benchmark for the pricing of our open systems.")).

382. Closed-system e-cigarette producers do not consider prices of open-tank e-cigarettes when setting prices for closed system e-cigarettes. (Begley (Altria) Tr. 971 ("Q. NuMark did not

price any of its closed-system products based on the price of open-tank products, correct? A. That's correct. We priced them consistent with the segment they competed in.")); Huckabee (Reynolds) Tr. 390-91 (public), 408 (*in camera*) (identifying JUUL, MarkTen, NJOY, Logic, and {[redacted]} as the competitors that Reynolds considered when setting prices for its Vuse closed-system e-cigarette products); PX7012 (Eldridge (ITG), Dep. at 171 ("Q. Did ITG track prices for JUUL and NJOY products? A. Yes. Q. Does ITG track prices for any open systems brands? A. Not that I know of."), 182; PX8008 at 021 (¶ 41) (Huckabee (Reynolds), Decl.) ("RJR Vapor does not consider the pricing of open systems when setting the prices of its VUSE products.")).

383. Wade Huckabee (Reynolds) testified that open-tank and closed–system e-cigarettes are not substitutes. (Huckabee (Reynolds) Tr. 387) (Q. Do you view open systems and closed systems as substitutes? A. No, I do not.")). Wade Huckabee testified that open-tank and closed systems are "highly complementary." (Huckabee (Reynolds) Tr. 387).

7. Other Reduced-Risk Products Are Properly Excluded from the Relevant Product Market

384. Based on his review of testimony and documents, Dr. Rothman concluded that alternative nicotine products, such as smokeless tobacco or nicotine gum, differ from closed-system e-cigarettes in that they do not offer the consumer the experience of inhaling vapor. (PX7048 (Rothman, Trial Dep. at 18); PX5000 at 035 (¶ 72) (Rothman Expert Report)). Accordingly, he concluded that market participants do not view alternative nicotine products as close substitutes for closed-system e-cigarettes. (PX7048 (Rothman, Trial Dep. at 18); PX5000 at 035-39 (¶¶ 73-77) (Rothman Expert Report)).

385. Altria's Begley does not consider IQOS to be an e-cigarette product; rather, it is a "heat-not-burn product, which "heats the tobacco up to the point prior to actual combustion. So it heats it, does not burn it, and that heat on the real tobacco creates and aerosol. So I view those as different from e-vapor." (Begley (Altria) Tr. 1051).

386. PMI's Martin King testified that IQOS is not an e-cigarette product, but belongs to "a different category," and uses "a totally different way of creating the aerosol from a different source and a different means than an e-cigarette." (King (PMI) Tr. 2349-50).

387. In an email from June 2017, JLI's James Monsees noted that "[h]eat-not-burn products are substantially safer than regular cigarettes but can't match the simple chemistry of e-cigarettes (particularly using some of JUUL's core technologies," adding, "we don't believe the [IQOS] product is any good." (PX2083 (JLI) at 001).

388. The non-compete provision to which Altria agreed as part of the transaction did not apply to Altria's IQOS heat-not-burn product. (Willard (Altria) Tr. 1195).

389. Nicotine gum absorbs much more slowly into the bloodstream than nicotine absorbed through a user's lungs. (PX7009 (Burns (JLI), IHT at 116-17)).

390. In Michelle Baculis's view, adult smokers looking for a reduced-harm product see inhalable products as "a ritual thing and it's a habitual experience" that they are looking to replicate. (PX7014 (Baculis (Altria), Dep. at 41-42)).

391. During Begley's time as President and General Manager of Nu Mark, Nu Mark did not consider the price of oral tobacco products, nicotine pouches, or nicotine gum in setting the price of its closed-system e-cigarette products. (PX7022 (Begley (Altria), Dep. at 81)).

392. The non-compete provision to which Altria agreed as part of the transaction did not apply to Altria's moist tobacco business. (Willard (Altria) Tr. 1195).

393. To Jeff Eldridge's knowledge, ITG does not track the prices of any oral nicotine or nicotine gum products. (PX7012 (Eldridge (ITG), Dep. at 183)).

394. To Jeff Eldridge's knowledge, in setting the prices for its Blu products, ITG does not consider the prices of smokeless tobacco, oral nicotine, or nicotine gum products. (PX7012 (Eldridge (ITG), Dep. at 183-85)).

8. The Hypothetical Monopolist Test Confirms That the Sale of Closed-System E-Cigarettes Is a Relevant Product Market

395. Complaint Counsel's economic expert, Dr. Dov Rothman, concluded that the appropriate relevant product market in this matter is the sale of closed-system e-cigarettes. (PX7048 (Rothman, Trial Dep. at 13-14); PX5000 at 031-41 (¶¶ 62-82) (Rothman Expert Report)).

396. Dr. Rothman concluded that open-tank e-cigarettes and other alternative nicotine products are not close substitutes for closed-system e-cigarettes. (PX7048 (Rothman, Trial Dep. at 17); PX5000 at 040 (¶ 78) (Rothman Expert Report)). Dr. Rothman concluded that because open-tank e-cigarettes and other alternative nicotine products are not close substitutes for closed-system e-cigarettes, few consumers would substitute to other nicotine products in response to a small change in the price of closed-system e-cigarettes. (PX5000 at 040 (¶ 78) (Rothman Expert Report)). Dr. Rothman also concluded that because few consumers would substitute to other nicotine products in response to a small change in the price of closed-system e-cigarettes, a hypothetical monopolist of closed system e-cigarettes would likely impose at least a small but significant nontransitory increase in price ("SSNIP"). (PX5000 at 040 (¶ 78) (Rothman Expert Report)). Dr. Rothman thus concluded that open-tank e-cigarettes and other alternative nicotine products not in the relevant market. (PX5000 at 040 (¶ 78) (Rothman Expert Report)).

397. Dr. Rothman based his product market conclusions both on qualitative evidence (*see* CCFF ¶¶ 218-394, above), as well as the analytical framework in the Horizontal Merger Guidelines. (PX7048 (Rothman, Trial Dep. at 14); PX5000 at 040-41 (¶¶ 78-82) (Rothman Expert Report)).

398. Dr. Rothman used the Hypothetical Monopolist Test described in the Horizontal Merger Guidelines to define the relevant product market. (PX7048 (Rothman, Trial Dep. at 14); PX9098 (Horizontal Merger Guidelines) § 4.1 at 011-16)).

399. The Hypothetical Monopolist Test asks if a hypothetical monopolist of a candidate market would impose a SSNIP on at least one of the products sold by one of the merging firms in the candidate market. (PX7048 (Rothman, Trial Dep. at 14); PX9098 (Horizontal Merger Guidelines) § 4.1.1 at 011-13 (the Hypothetical Monopolist Test)). The hypothetical monopolist test starts by defining a candidate market around at least one of the products sold by one of the merging firms or relevant firms. (PX7048 (Rothman, Trial Dep. at 14-15); PX9098 (Horizontal Merger Guidelines) § 4.1.1 at 011-13). If the candidate market includes enough competitively significant products, the hypothetical monopolist of the candidate market would likely impose at least a SSNIP on at least one of the products over one of the merging or relevant firms. (PX7048 (Rothman, Trial Dep. at 15); PX9098 (Horizontal Merger Guidelines) § 4.1.1 at 011-13). If the hypothetical monopolist would likely impose at least a SSNIP, the candidate market is said to pass that hypothetical monopolist test. (PX7048 (Rothman, Trial Dep. at 15); PX9098 (Horizontal Merger Guidelines) § 4.1.1 at 011-13)).

400. To define the relevant product market in this matter, Dr. Rothman started by defining a candidate market around Altria's closed-system e-cigarette products. (PX7048 (Rothman, Trial Dep. at 16)). He then evaluated if a hypothetical monopolist of closed-system e-cigarettes would likely impose at least a SSNIP. (PX7048 (Rothman, Trial Dep. at 16)).

401. Dr. Rothman implemented the hypothetical monopolist test by using what is called a critical elasticity test. (PX7048 (Rothman, Trial Dep. at 19-20); PX5000 at 040 (¶ 79) (Rothman Expert Report)). The objective of a critical elasticity test is to calculate the extent to which consumers would substitute to other products in response to a SSNIP and compare that to the "critical" amount of substitution that would make a SSNIP just profitable for a hypothetical monopolist. (PX7048 (Rothman, Trial Dep. at 19-20); PX5000 at 040 (¶ 79) (Rothman Expert Report)). If the actual amount of substitution (as measured by the actual elasticity) is less than the critical amount of substitution (as measured by the critical elasticity), then the hypothetical monopolist test is satisfied and the market is properly defined. (PX7048 (Rothman, Trial Dep. at 19-20); PX5000 at 040 (¶ 79) (Rothman Expert Report)).

402. The critical elasticity depends on the size of the SSNIP and the hypothetical monopolist's variable margin at pre-SSNIP prices. (PX7048 (Rothman, Trial Dep. at 19); PX5000 at 040 (¶ 80) (Rothman Expert Report)). If a 10 percent price increase is profitable for a hypothetical monopolist, then a 5 percent price increase would be approximately profit maximizing for the hypothetical monopolist. (PX5000 at 040 (¶ 80) (Rothman Expert Report)). Therefore, Dr. Rothman uses a 10 percent SSNIP to calculate the critical elasticity. (PX7048 (Rothman, Trial Dep. at 19-20); PX5000 at 040 (¶ 80) (Rothman Expert Report)).

403. Using financial information from Altria, JLI, JTI, Reynolds, and ITG, Dr. Rothman calculated variable margins for closed-system e-cigarettes. (PX5000 at 040 (¶ 80), 141-45 (Appendix D) (Rothman Expert Report)). Using variable margins from closed-system e-cigarette competitors, Dr. Rothman calculated that the share-weighted average variable margin is 28 percent. (PX5000 at 040 (¶ 80), 141-45 (Appendix D) (Rothman Expert Report); PX7048 (Rothman, Trial Dep. at 19-20)).

404. Dr. Rothman calculated that, given a SSNIP of 10 percent and a variable margin of 28 percent, the critical elasticity is 2.6. (PX7048 (Rothman, Trial Dep. at 19-20); PX5000 at 040 (¶ 80), 138-140 (Appendix C) (Rothman Expert Report)).

405. In his product market analysis, Dr. Rothman considered both academic literature and JLI's own estimates for the actual elasticity of demand for closed-system e-cigarettes. (PX7048 (Rothman, Trial Dep. at 22-23); PX5000 at 041 (¶ 81) (Rothman Expert Report)). Five academic studies report an estimate of the elasticity of demand for closed-system e-cigarettes among consumers in the United States that is less (in absolute value) than 2.6. (PX7048 (Rothman, Trial Dep. at 20); PX5000 at 041 (¶ 81) (Rothman Expert Report) (absolute values of estimate of elasticity of demand for closed-system e-cigarettes were less than 2.1)).

406. [redacted] (PX2486 (JLI) at 013-15 (*in camera*)). [redacted] (PX2486 (JLI) at 013-15 (*in camera*); (PX5000 at 041 (¶ 81) (Rothman Expert Report)). Because elasticities for individual products tend to be higher in absolute value than an aggregate elasticity for a group of products, the McKinsey analysis implies that 1.3 is an upper bound on the magnitude of the elasticity of demand for closed-system e-cigarettes. (PX5000 at 041 (¶ 81) (Rothman Expert Report)).

407. Dr. Rothman concluded that because the estimates of the elasticity of demand for closed-system e-cigarettes from five academic studies and JLI's {[redacted]} are smaller than the critical elasticity of 2.6, a hypothetical monopolist of closed-system e-cigarettes would likely impose at least a SSNIP. (PX7048 (Rothman, Trial Dep. at 20); PX5000 at 041 (¶ 82) (Rothman Expert Report)). Thus, a market consisting of closed-system e-cigarettes is a relevant product market under the Horizontal Merger Guidelines. (PX7048 (Rothman, Trial Dep. at 14, 20); PX5000 at 040-41 (¶ 78-82) (Rothman Expert Report); PX9098 (Horizontal Merger Guidelines) § 4.1 at 011-16).

B. THE RELEVANT GEOGRAPHIC MARKET IS THE UNITED STATES

408. The United States is the relevant geographic market in which to assess the competitive effects of the transaction. (JX0004 at 001 (¶ 1) (Additional Joint Stipulations of Law and Fact)).

VI. PRIOR TO THE TRANSACTION, ALTRIA COMMITTED SIGNIFICANT TIME, RESOURCES, AND MONEY TO ITS E-CIGARETTE BUSINESS, AND PUBLICLY STATED ITS INTENTION TO COMPETE IN THE CLOSED-SYSTEM E-CIGARETTE MARKET LONG-TERM

A. PRIOR TO THE TRANSACTION, ALTRIA COMMITTED SIGNIFICANT TIME, RESOURCES, AND MONEY TO ITS E-CIGARETTE BUSINESS

409. Testimony and ordinary course documents from Altria and JLI confirm that Altria committed as much as $1 billion dollars, over twenty years of work, and hundreds of experts toward developing reduced harm products including e-cigarettes. (*See* CCFF ¶¶ 427-43, 447-54, 507-14, below).

410. "[Altria] spent over half a billion dollars, maybe up to a billion dollars, investing in the e-vapor category." (Willard (Altria) Tr. 1341 ("Q. Did you want to achieve leadership in the e-vapor category? A. Yes, we did. Q. Did you put substantial resources into the e-vapor products sold by Nu Mark to try to achieve leadership in that category? A. Yes, we did. We spent well over half a billion dollars, maybe up to a billion dollars, investing in the e-vapor category.")).

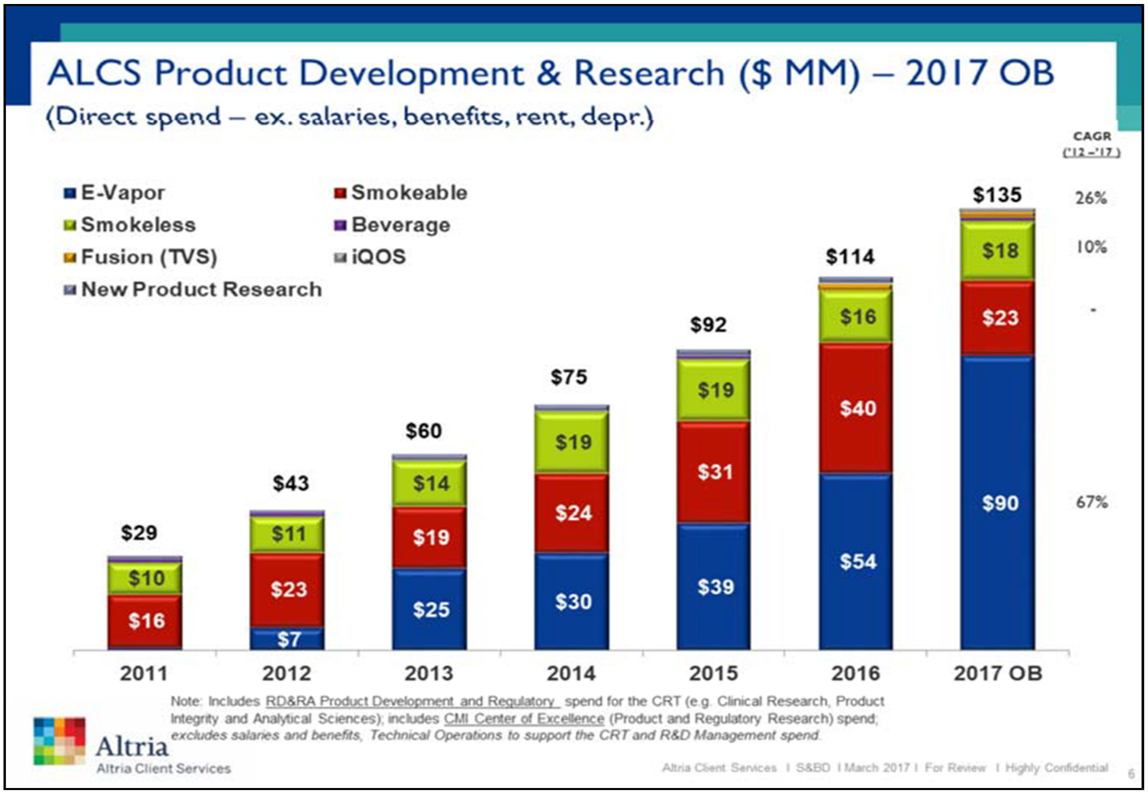
B. ALTRIA WAS A SIGNIFICANT COMPETITOR IN CLOSED-SYSTEM E-CIGARETTES

1. Altria Recognized the Importance of E-Cigarettes to Its Future

411. For over a decade, Altria recognized the importance of reduced-risk products to its future, and pursued federal legislation to facilitate bringing such products to market. (PX9000 (Altria) at 004 (Nov. 2017 Investor Day remarks) (attributing Tobacco Control Act to "Altria's leadership - and only Altria, alone in the industry"); PX7004 (Willard (Altria), IHT at 55-57)).

412. Altria increased spending on research and development (R&D) for reduced harm products, including e-vapor products, every year since 2011. (PX1633 (Altria) at 007 (Reduced Harm Products, Scorecard Summary, Mar. 2017)).

413. A March 2017 Altria document titled "Reduced Harm Products, Scorecard Summary" shows that Altria's direct spend on e-vapor product development and research grew more than tenfold over a five-year period: from $7 million in 2012 to a projected $90 million in 2017. (PX1633 (Altria) at 008).



(PX1633 (Altria) at 008).

414. As early as 2016, Altria believed that e-cigarettes represented a "significant long-term opportunity." (PX7022 (Begley (Altria), Dep. at 92-94); PX4040 (Altria) at 018 ("Nu Mark 2016-2018 Strategic Plan") ("E-Vapor Category Represents a Significant Longer-Term Opportunity"); PX7023 (Fernandez (Altria), Dep. at 181-82)).

415. JLI CEO Burns told JLI investors that Altria's rationale for the transaction was recognition that "we are heading toward a future where adult smokers overwhelmingly choose non-combustible alternatives over cigarettes." (PX2115 (JLI) at 001 (Email from Keven Burns, Dec. 2018)).

416. A 2017 Altria presentation to investors stated Nu Mark's goal was to "[l]ead the U.S. e-vapor category through a portfolio of superior reduced-risk products that adult smokers and vapers choose over cigarettes." (PX4014 (Altria) at 029 (2017 Investor Day slide deck); Begley (Altria) Tr. 978-79).

417. In February 2018, Willard reiterated that "Nu Mark's goal is to lead the U.S. e-vapor category with a portfolio of superior, potentially reduced-risk products. . . ." (PX9045 (Altria) at 006 (2018 CAGNY Conference Remarks by Howard Willard, Feb. 21, 2018)).

418. Willard confirmed that building a leading position in the U.S. e-vapor market through a portfolio of superior e-vapor products was a strategic initiative at Altria. (PX7004 (Willard (Altria), IHT at 89-90); *see also* PX4042 (Altria) at 006 {[redacted]} (*in camera*)).

419. In late 2017, Altria fully expected Nu Mark to achieve its long-term goal of leading the U.S. e-vapor category through a portfolio of reduced risk products. (PX9000 (Altria) at 016 (Nov. 2017 Investor Day remarks)).

420. In November 2017, Altria's then-CEO Barrington stated to investors, "We firmly believe that Altria has assembled the best talent, skills and capability in the industry, equipped them with the resources they need and set them in the right direction: to introduce new, FDA authorized, reduced-risk products as the next leg of our commercial success. So we'll be clear: We aspire to be the U.S. leader in authorized, non-combustible, reduced-risk products." (PX9000 (Altria) at 005 (Nov. 2017 Investor Day remarks)).

421. In reference to the introduction of reduced-risk products, Altria's then-CEO Barrington also told investors that Altria had "helped make it possible" and that "to win in this new environment, we [Altria] immediately set out to acquire top talent for best-in class regulatory and product development capability." (PX9000 (Altria) at 004 (Nov. 2017 Investor Day remarks)).

422. In February 2018, Altria's then-CEO Barrington noted that in order to prepare for the opportunity of reduced-harm alternatives, Altria had "spent years acquiring best-in-class regulatory and product development talent and building a compelling portfolio of non-combustible tobacco products with the potential to reduce risk." (PX9045 (Altria) at 002 (2018 CAGNY Conference Remarks by Marty Barrington, Feb. 21, 2018)).

423. In May 2018 Altria adopted a new organizational structure meant to accelerate its innovative product pipeline and facilitate long-term success. (Willard (Altria) Tr. 1162-63; PX1255 (Altria) at 002 (Altria Town Hall remarks)).

424. Altria's Willard testified that "… for well over twenty years Altria had been focused on developing these potentially reduced harm products and switching adult cigarette smokers to them." (Willard (Altria) Tr. 1336).

425. In a 2019 interview with the *Wall Street Journal*, Altria's Willard acknowledged the critical importance of Altria's participation in the e-vapor category in view of changing market dynamics: "At a time when e-vapor is going to grow rapidly and likely cannibalize the consumers we have in our core business, if you don't invest in the new areas you potentially put your ability to deliver that financial result at risk." (PX1172 (Altria) at 007).

426. [redacted] (PX1268 (Altria) at 003 [redacted] (*in camera*)).

2. Altria Spent a Significant Amount of Money Toward Its Goal to Lead the Closed-System E-Cigarette Market

427. In November 2017, Altria's then-CEO Barrington told investors that Altria adapted its organization to win in the dynamic non-combustible environment and has "an

extraordinary financial engine to support these efforts." (PX9000 (Altria) at 008-09 (Nov. 2017 Investor Day remarks) ("And finally there's our enormous financial engine. We have maximized our core businesses that provide us with, among other things, significant free cash flow - an average of more than $4.5 billion per year for the past three years. We also have a strong balance sheet, which we've improved so as to be able to make the necessary investments for this next chapter of our success.")).

428. Willard testified that Altria wanted to lead the e-vapor category and "spent well over half a billion dollars, maybe up to a billion dollars, investing in the e-vapor category." (Willard (Altria) Tr. 1341).

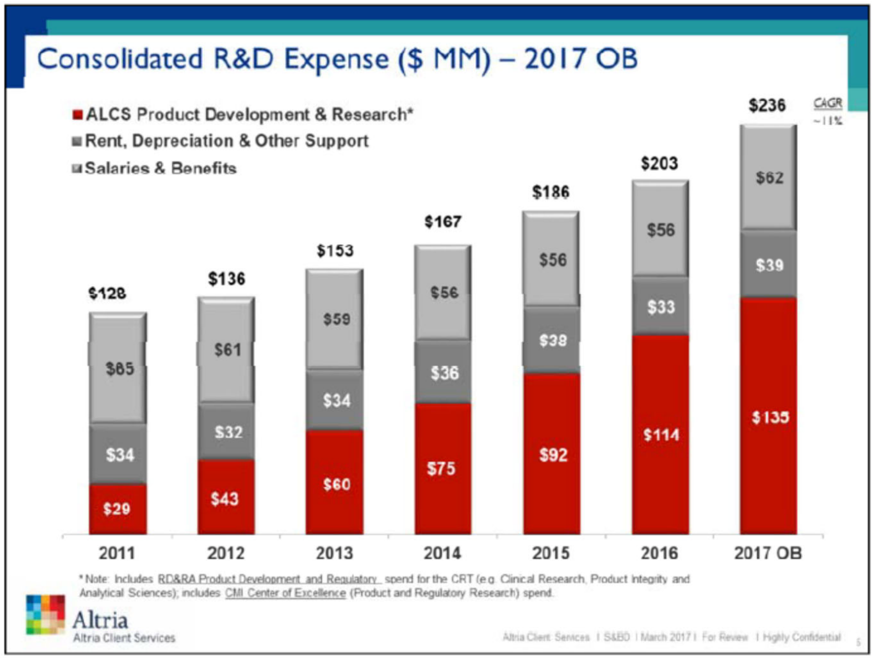
429. In his remarks during Altria's 2018 second-quarter earnings call, Willard told Altria investors, "Just as we lead in traditional tobacco products, we intend to lead in offering adult smokers more choices with innovative reduced-risk products. In May [2018], we announced a new corporate structure to . . . accelerate our innovation pipeline. We believe that our new structure will enhance our ability to drive the change necessary for us to continue our success in the future. (PX9047 (Altria) at 002). Willard confirmed that the referenced innovation pipeline included the suite of reduced-risk products that Altria was working on for the future. (Willard (Altria) Tr. 1162-63).

430. Altria made an investment it referred to as its Innovative Tobacco Products (ITP) program, an "investment that [Altria] made with trade partners to upgrade their merchandising infrastructure, essentially their back bar where they merchandise products, to establish visibility for innovative tobacco products in their stores." (PX7013 (Brace (Altria), Dep. at 81-82)).

431. Over the course of 2018, Altria spent over $100 million on the Nu Mark ITP fixtures. (Quigley (Altria) Tr. 1982; PX7003 (Quigley (Altria), IHT at 48-49)). Nu Mark's 2019 budget anticipated an additional $57 million in expenditures for a second wave of ITP. (PX4232 (Altria) at 013).

432. A Nu Mark slide deck from October 2018 indicated that Nu Mark would spend $76 million on marketing and sales expenditures in 2018 and anticipated spending a further $56 million in 2019. (PX1072 (Altria) at 010). The 2018 expenditures were in addition to the $100 million that Nu Mark spent on ITP that year. (Quigley (Altria) Tr. 1982; PX1194 (Altria) at 001).

433. Altria spent $236 million in consolidated research and development for reduced harm products in 2017. (PX1633 (Altria) at 007 (Reduced Harm Products, Scorecard Summary, Mar. 2017)).



(PX1633 (Altria) at 007).

434. Altria spent approximately $90 million on e-vapor product development in 2017. (PX1633 (Altria) at 017 (Reduced Harm Products, Scorecard Summary, Mar. 2017)).

435. An August 2018 presentation for Altria's Board of Directors pegged Mark Ten's PMTA/MRTPA research costs at approximately $100 million. (PX1247 (Altria) at 007 ("~$100 MM in MarkTen PMTA/MRTPA research costs ('16-18)")).

436. In August 2018 Altria shared a "design brief" and engaged in "multiple conversations" with a product development firm named Bressler to assist Altria's development of e-vapor products in exchange for several hundred thousand dollars. (PX1051 (Altria) at 001, 004-05)).

437. As of October 2018, Altria planned to spend $39.6 million with third-party vendors to develop innovative products, including several e-vapor projects in 2019. (PX1741 (Altria) at 016 (Innovative Product Development Financial Discussion October 2018)).

438. Had it not acquired an interest in JLI, Altria was prepared to "fully support" its e-vapor growth teams," (Garnick (Altria) Tr. 1657-58), even if it meant spending another $100 million (PX7000 (Garnick (Altria), IHT at 130 ("But if they came back and could justify a budget of $100 million and convince us that it was a legitimate need, we certainly would have done that.")).

439. Nu Mark was slated to receive an additional $9 million for marketing support for its cigalike products in response to competitive activity in 2018. (PX1606 (Altria) at 014 (Altria 2018 Original Budget Update)).

440. Nu Mark planned to triple its 2018 new product launch expenditures from $7 million to $23 million; $8 million of the increase was solely to accelerate the Mark Ten Elite launch. (PX1606 (Altria) at 015 (Altria 2018 Original Budget Update)).

441. [redacted] (PX1606 (Altria) at 022 (Altria 2018 Original Budget Update)) (*in camera*).

442. Willard stated in a 2019 interview with the *Wall Street Journal* that "we had put our best people to work on the e-vapor organic effort. They have developed very satisfying products that early on were converting adult cigarette smokers. It just so happened that in the end Juul came up with a more compelling product and started to grow more rapidly." (PX1172 (Altria) at 003).

443. Altria had a "Product development Outpost" in Israel. (Garnick (Altria) Tr. 1666-67; PX1379 (Altria) at 001 (Email between Garnick and Crosthwaite)).

3. Altria's Strategy Was to Build a Portfolio of E-Cigarette Products, and Prior to the Acquisition, Altria Was Working on a Pipeline of Products

444. On November 2, 2017, Altria's then-CEO Barrington stated to investors, "Indeed, we believe the breadth, quality and focus of our non-combustible product portfolio is second to none." (PX9000 (Altria) at 008 (Nov. 2017 Investor Day remarks)).

445. Altria had an initiative to invest $39 million to complete development and prepare a PMTA on a new discrete pod-based system referred to as project "Panama," and stated ." . . Panama is the next generation product for the fastest growing segment of the e-vapor category. . ." (PX1605 (Altria) at 013 (Altria 2018 Prelim. OB Business Case Details from November 2017)).

446. Altria offered as much as $10 million to acquire the U.S. license for a product like Elite, called Phix. (Schwartz (Altria) Tr. 1868 (". . . Smoore manufactured a similar product to Elite called Phix. . . Q. How much did Nu Mark offer for Phix? A. Last offer I made was for $10 million.")).

447. In February 2018, Altria's then-COO Willard stated to investors, "Preparing for this opportunity, we've spent years acquiring best-in-class regulatory and product development talent and building a compelling portfolio of non-combustible tobacco products with the potential to reduce risk." (PX9045 (Altria) at 002 (2018 CAGNY Conference Remarks by Howard Willard, Feb. 21, 2018)).

448. On November 2, 2017, Barrington stated to investors, "First, we began this journey more than 15 years ago when we made the bold decision to pursue federal legislation to grant the FDA jurisdiction over tobacco, legislation that was required to establish the possibility of bringing innovative, reduced-risk products to market." (PX9000 (Altria) at 004 (Nov. 2017 Investor Day remarks)).

449. On November 2, 2017, Barrington stated to investors that nearly a decade of "investment and hard work" at Altria had resulted in a national framework providing the means to pursue innovative, reduced risk products via the Tobacco Control Act in 2009. (PX9000 (Altria) at 004 ("It was because of Altria's leadership - and only Altria, alone in the industry.") (Altria CEO Marty Barrington addressing investors at 2017 Altria Investor Day)).

450. In February 2018, Altria's then-COO Willard stated to investors, "Nu Mark's goal is to lead the U.S. e-vapor category with a portfolio of superior, potentially reduced-risk products . . ." (PX9045 (Altria) at 006 (2018 CAGNY Conference Remarks by Howard Willard, Feb. 21, 2018)).

451. As of June 2018, Altria spent an estimated $96.4 to $104.6 million on PMTA/MRPTA for the Mark Ten cigalike portfolio. (PX1094 (Altria) at 041 (Email attachment MarkTen PMTA MRTPA Update Final)).

452. Altria's CEO addressed investors at Altria's November 2017 Investor Day, stating: "This year we're celebrating the 10th anniversary of our $350 million Center for Research and Technology, which is just miles from here. We built it to house our team of more than 400 scientists, physicians, product developers, engineers, regulatory experts and others who are developing innovative products, pursuing their regulatory authorization and constructively engaging with the FDA on policy." (PX9000 (Altria) at 005 (Nov. 2017 Investor Day remarks)).

453. Altria created growth teams to develop "leap frog" products and compete in e-cigarettes beyond 2018 in the "long term." (Willard (Altria) Tr. 1436 ("Q. And at this point, were you restructuring the company so you could have these growth teams to do those leapfrog, you know, products, do the long-term innovation work that you had talked about earlier? A. Yes, that was the idea. . . and we concluded that giving these growth teams that challenge was the best way to continue to compete in e-vapor. Q. And did you formulate the plan before October 5th when you were not in negotiations with JLI? A. Yeah. I mean, the plan had been in development for -- for quite some time.")).

454. On November 2, 2017, Marty Barrington, Altria's then-CEO, stated to investors that Altria had been adapting its organization to win in the dynamic non-combustible environment and had "an extraordinary financial engine to support these efforts." (PX9000 (Altria) at 008-09 (Nov. 2017 Investor Day remarks)).

4. The Formation of Nu Mark and the Launch of the MarkTen Brand Began with the Cigalike

455. Nu Mark entered the category in 2013 with the first generation MarkTen e-vapor product. We've been thoughtful and disciplined in building this business and have learned a lot over the past five years." (PX9000 (Altria) at 015 (Nov. 2017 Investor Day remarks)).

456. "Every new product that [Altria] designed was really informed by what we knew about already-marketed products." (PX7014 (Baculis (Altria), Dep. at 119)).

457. Altria invested heavily in e-vapor research as early as 2015 “Nu Mark will work with the ALCS Research, Development and Engineering (RD&E) Organization to align the differentiated brand portfolio strategy with the strategy for innovative product and technology development.” “This enhanced program management strategy will be evidenced by: new e-vapor technologies to leapfrog the competition . . . acquisition of products, technologies and expertise to fill gaps in Nu Mark's product portfolio and capability. . .” (PX4508 (Altria) at 006 (2015 e-Vapor Leadership Product Technology 2015 Strategy Meeting)).

458. Altria planned to spend an estimated $79 million on PMTA costs for the Mark Ten cigalike. PX1134 (Altria) at 043 (Nu Mark Three-Year Strategic Plan 2017)).

a) <u>MarkTen Cigalike</u>

459. Howard Willard informed investors at the February 2018 CAGNY conference that “[i]n cig-alikes, MarkTen is available in about 65,000 stores, representing roughly 70% of U.S. e-vapor volume in mainstream channels. In 2017, MarkTen grew volume by approximately 60%, far outpacing competitive cig-alike brands.” (PX2176 (JLI) at 110 (February 2018 CAGNY Summary)).

460. As of late September 2018 Altria was still planning to submit a PMTA for MarkTen cigalike and was continuing foundational science work to support future e-vapor applications. (PX1399 (Altria) at 001, 005 (September 2018 email from William Gardner to Maria Gogova regarding e-vapor product efforts)).

b) <u>MarkTen Bold Cigalike</u>

461. Altria was aware that nicotine salts could help consumers with nicotine satisfaction. With that in mind, Altria introduced the Mark Ten Bold formulation, which relied on nicotine salts, to better mimic the nicotine delivery of a cigarette. (PX9000 (Altria) at 017 (Nov. 2017 Investor Day remarks)).

462. MarkTen Bold nicotine satisfaction was used to inform research and development of nicotine salts for later potential products. (PX7014 (Baculis (Altria), Dep. at 119 (“Was there anything about the nicotine satisfaction associated with MarkTen Bold that you research and development work on nicotine satisfaction for other products? A. Every new product that we designed was really informed by what we knew about already-marketed products.”)).

463. “MarkTen Bold was Altria's attempt to improve upon the original MarkTen product and . . . to improve its satisfaction, for example, in an effort to convert adult smokers.” (PX7028 (Wappler (PWP), Dep. at 45-46)).

464. According to a presentation Altria made to investors in November 2017” [t]he MarkTen Bold formulation, currently in a lead market, offers a better sensory experience and greater nicotine satisfaction for current smokers. It includes 4% nicotine by weight and uses a proprietary recipe for nicotine salts with ingredients commonly found in the tobacco leaf.” (PX1129 (Altria) at 012 (November 2017 Nu Mark Investor Day presentation)).

465. According to Altria CEO Howard Willard while addressing investors in 2018, "MarkTen Bold, which is currently in about 25,000 retail stores, uses a proprietary recipe of nicotine salts, with 4% nicotine by weight to deliver a differentiated sensory experience and nicotine satisfaction, approaching that of cigarettes." (PX2176 (JLI) at 110 (February 2018 CAGNY Summary)).

466. JLI considered MarkTen Bold and Elite to be "[c]ompetition from big companies." (PX2079 (JLI) at 014 (February 2018 Product Roadmap presentation)).

467. In April of 2018, "MarkTen volume sales [were] increasing, primarily driven by Bold expansion." (PX1234 (Altria) at 005 (Nu Mark Business Update April 2018)).

5. Altria's Acquisition and Launch of the MarkTen Elite Pod Product

468. Nu Mark launched its first pod product, Elite, in February 2018. (Begley (Altria) Tr. 990 (Q. NuMark launched Elite in February of 2018. correct? A. I believe that's right, toward the end of February. Q. NuMark did not sell a pod product before it launched Elite, correct? A. We did not."); Jupe (Altria) Tr. 2244-45; Schwartz (Altria) Tr. 1871; Willard (Altria) Tr. 1308 (*in camera*), 1354; Begley (Altria) Tr. 984, 990, 1059 (*in camera*)).

469. Altria acquired the right to MarkTen Elite in late 2017 from a Chinese manufacturer, Smoore. (Begley (Altria) Tr. 984-85; Jupe (Altria) Tr. 2244-45; Schwartz (Altria) Tr. 1862-64; Murillo (Altria/JLI) Tr. 2941-42; PX2084 (JLI) at 020). Nu Mark also entered into a partnership with a U.S. e-vapor company (Avail) that made e-liquids for Elite. (Begley (Altria) Tr. 984-85).

470. Elite was sold on the market before the August 8, 2016 Deeming Rule by another company. (Begley (Altria) Tr. 984; Garnick (Altria) Tr. 1690; Jupe (Altria) Tr. 2134).

471. Elite's launch was accelerated. (Begley (Altria) Tr. 989-91; Schwartz (Altria) Tr. 1871).

472. Nu Mark commercialized Elite within four months of acquiring its product rights. (Begley (Altria) Tr. 989 ("Q. . . NuMark commercialized Elite within four months of executing the exclusivity agreement through which it acquired its rights, correct? A. I believe that's the appropriate timing. It was quick."))

473. Nu Mark had never launched a product more quickly than it launched Elite. (Begley (Altria) Tr. 1124 ("We certainly did it at a speed we had never done it before.")).

474. An August 2018 presentation for Altria's Board of Directors pegged MarkTen's PMTA/MRTPA research costs at approximately $100 million. (PX1247 (Altria) at 007 ("~$100 MM in MarkTen PMTA/MRTPA research costs ('16-18).")).

475. Nu Mark planned to triple its 2018 new product launch from $7 million to $23 million; $8 million of the increase was solely to accelerate the Mark Ten Elite launch. (PX1606 (Altria) at 015 (Altria 2018 Original Budget Update)).

476. Nu Mark had an August 2018 marketing budget variance "Primarily driven by \$3.0MM of Elite promotions and \$0.7MM coupon timing/reversals." (PX1092 (Altria) at 003 (Email attachment August Marketing & Sales Flash Package sent September 2018)).

477. MarkTen Elite's volume increased by 450% in the multi-outlet convenience-store channel between May 2018 and July 2018. Average weekly volume in stores carrying Elite increased by 56% over this period. (PX1056 (Altria) at 033 (February 2019 email from Michael Brace to Brent Chambers with Nu Mark Brand ELT Update attached)).

478. [redacted]} (PX3004 (ITG) at 059 (August 3018 ITG Portfolio Review and Rationalization document) (*in camera*)).

479. Nu Mark planned to triple its 2018 new product launch from \$7 million to \$23 million; \$8 million of the increase was solely to accelerate the Mark Ten Elite launch. (PX1606 (Altria) at 015 (Altria 2018 Original Budget Update)).

6. Altria's E-Cigarette Business Steadily Improved and Met Its Strategic and Financial Objectives

480. [redacted] (PX4073 (Altria) at 002 (*in camera*)).

481. [redacted] (PX4073 (Altria) at 002 ({[redacted]}) (*in camera*)).

482. {[redacted]} (Begley (Altria) Tr. 1017 (*in camera*) ({[redacted]); (PX4073 (Altria) at 002 ({[redacted]}) (*in camera*)).

483. By the end of 2016, Nu Mark had met its OCI target, which had been set by Nu Mark and shared with Altria's board. (PX7022 (Begley (Altria) Dep. at 95-96 ("Q. By the end of 2016, NuMark had met its OCI target, correct? A. I believe that's correct, but the OCI target for 2016 was a loss of \$115 million. Q. But that's the target that Nu Mark set, correct? A. That's correct. Q. And that target was shared and approved by the board, correct? . . . A. We certainly shared that with the board and those were the objectives that we had for the year.")).

484. [redacted]} (Begley (Altria) Tr. 1022-23 ([redacted]

[redacted]) (*in camera*)).

485. [redacted] (Gifford Altria) Tr. 2888 (*in camera*)). [redacted] (Gifford (Altria) Tr. 2888-89 (*in camera*)).

486. In November 2017, Begley, Nu Mark President and General Manager, told investors that "MarkTen is currently available in about 65,000 stores and has nearly tripled its market share since 2014. It is now one of the leading e-vapor brands, with a 13.5% retail share in mainstream channels, and 27% retail share in major chain accounts selling MarkTen for the full third quarter of 2017." (PX9000 (Altria) at 017 (Nov. 2017 Investor Day remarks)).

487. By mid-2018, "Nu Mark grew volume by approximately 16% in the quarter and 23% for the first half, primarily driven by expanded distribution. Most recently, Nu Mark expanded MarkTen Elite from over 6,000 stores in the first quarter to more than 23,000 stores by the end of the second quarter." (PX4566 at 016 (July 30, 2018 Altria presentation: Communications Training Strategy, Message and Tactics)).

488. [redacted]}." (Begley (Altria) Tr. 1021 (*in camera*)).

489. [redacted]}. (Begley (Altria) Tr. 1021-22) {[redacted]) (*in camera*)).

490. While Begley was President and General Manager of Nu Mark, he received a bonus annually that was tied to his job performance as well as the performance of Nu Mark. (PX7022 (Begley (Altria), Dep. at 51 ("Q. Okay. While you were president and general manager of NuMark, did you ever receive a bonus? A. Yes. . . Q. Was your bonus tied to the performance of NuMark? A. Yes.")).

491. In a January 2018 email, Altria's Howard Willard referred to the launch of MarkTen Elite as "a big step forward for our plan to compete vigorously for closed tank volume." (PX1647 (Altria) at 003).

492. A July 2018 Altria presentation for Altria's management to assess Nu Mark's e-vapor portfolio indicated that the MarkTen cigalike was doing well in a declining category (PX7026 (Gardner (Altria), Dep. at 122-25); PX4060 (Altria) at 012 (Vapor Portfolio Assessment)).

C. ALTRIA WAS WELL-POSITIONED TO CONTINUE TO COMPETE IN CLOSED SYSTEM E-CIGARETTES AT THE TIME OF THE ACQUISITION

1. Altria's Traditional Cigarette Business Provided the Company with Significant Advantages in the Sale of E-Cigarettes

a) Altria Has a Large Network of Distributors and an Experienced Network of Sales Representatives

493. A presentation on Altria's innovation strategies observed that Altira was "well-positioned to successfully launch and market [its] products in new markets" and that Altria had "achieved this by leveraging [its] strengths in manufacturing and building individual and organizational capability." (PX1264 (Altria) at 007 (Innovation Challenges and Opportunities Presentation September 2017)).

494. [redacted] (PX4042 (Altria) at 006-07 (2017 Annual Incentive Compensation Memo) (*in camera*)).

495. A February 2018 draft presentation for Altria's Board of Directors highlighted Elite was on retail shelves only three months after simultaneously signing exclusivity agreements and beginning production. (PX1298 (Altria) at 028 (Nu Mark 2018-2020 Three Year Strategic Plan BOD Deck Draft; slide title: "Rapid Commercialization of Elite")).

496. The draft Nu Mark 2018 Three Year Strategic Plan noted that Altria's "[e]xceptional speed to market [was] made possible by: Partnerships with existing network of suppliers, Existing quality and compliance systems to integrate new suppliers, [and] collaboration with cross-functional teams." (PX1298 (Altria) at 028 (Nu Mark 2018-2020 Three Year Strategic Plan BOD Deck Draft; slide title: "Rapid Commercialization of Elite")).

497. JLI's Valani testified that Altria had "huge distribution, huge expertise in the category, a huge customer database . . . and, yeah, huge skills," adding that Altria was "definitely well-equipped to do well in the [e-vapor] space." (PX7011 (Valani (JLI), IHT at 137-38)).

498. ITG executive Jeff Eldridge testified that he expected the MarkTen Elite brand to grow "[g]iven Altria's resources as the largest tobacco company in the U.S." (PX8011 at ¶ 28 (Eldridge (ITG), Decl.)).

b) Altria Has Prime Access to Shelf Space at Top Retailers

499. Prime shelf space is a significant advantage in selling e-vapor products. (King (PMI) Tr. 2362-63 ("the majority of all nicotine products are sold through convenience stores in the U.S. . . . [T]he convenience store universe is the biggest source for e-cigarettes . . . [G]etting distribution and being able to put it on the shelves can greatly facilitate the success of a

product. . .so having the visibility and the ability to put it on the shelves is one aspect that would enhance success in any commercialization of e-cigarette or otherwise."); Begley (Altria) Tr. 1007 ("It is certainly beneficial to have the best space you can at retail stores to communicate your brand messaging."); PX7025 (Burns (JLI), Dep. at 28); *see also* PX8003 at 004 (¶ 24) (Wexler (Turning Point), Decl.) ("Because convenience stores have a relatively limited amount of shelf space available, that space is highly sought after in the channel.")

500. Altria, as the largest tobacco company in the United States, had access to the best shelf space in all of the top retailers. (PX7004 (Willard (Altria) IHT at 23) ("And given the strength of some of our brands, we typically get quite good display space."); PX1618 (Altria) at 005 (Nu Mark Retail Offer Update September 2018) ("60 Accounts signed representing 50% of vapor volume & 41k stores…[a]chieved #1 Position for 3 years with space for current & future products.")).

501. Altria's ownership of the leading tobacco brands in other categories, such as Marlboro cigarettes, gives it leverage to get retailers to carry new products—and to give those products critical shelf placement. (PX7004 (Willard (Altria) IHT at 26-27) (explaining that dominant tobacco brands like Marlboro drive foot traffic to c-stores); PX8011 at 002, 007 (¶¶ 9, 31) (Eldridge (ITG), Decl.); PX7033 (O'Hara (JLI), Dep. at 130-32); PX8004 at 003 (¶ 14) (Farrell (NJOY), Decl.); PX2000 (JLI) at 001; PX2051 (JLI) at 024).

502. Higher shelf space is preferable to lower shelf space because "if you have visibility when customers walk in, they can, A, understand that your products are present and can be purchased; and B, understand what prices the products are offered for." (Farrell (NJOY) Tr. 254-56; PX7025 (Burns (JLI), Dep. at 76-78 ("Depending on the store format, there's a perception that . . . there is certain shelf space that is going to be more attractive based on how consumers look at the shelf. For example, if you're at eye level looking behind the cashier, that's where your eyes would focus. If you're on the bottom level behind the cashier, in fact, from the counter, you might not even be able to see your product if it's in the bottom shelving section of the shelf."); *see also* PX7022 (Begley (Altria), Dep. at 215); Begley (Altria) Tr. 1007)).

503. JLI's management perceived Altria's access to shelf space as a threat, with an executive warning JLI's then-CEO and CFO, "we will have a plan to address the Altria 3 year contracts that are being pitched. This is urgent. If we can't find a strategy around this, we will be severely restricted on shelf in a considerable part of the c-store universe for the next 3 years." (PX2001 (JLI) at 001(Email to JLI exec team in May 2018)).

504. A week later JLI had crafted a presentation entitled "Altria Threat Competitive Response." In the executive summary section the presentation concludes that Altria's new shelf space agreements are "likely the first bid to foreclose shelf-space for their vapor products at the expense of JUUL. Initial analysis indicates that these competitor moved could cost our business ~$0.5B in sales per year." (PX2005 (JLI) at 003).

505. In its "Altria Competitive Threat Response" presentation, JLI listed the implications of Altria's shelving contract at AMPM to include that the "JUUL product would be limited

to a max of 16 facings, putting a significant limitation on the product re-introductions at ampm over a 3-year period – Additionally, knee level displays will likely reduce unplanned purchased due to low visibility." (PX2005 (JLI) at 004).

506. In response to this threat, JLI considered a multi-pronged approach that included among others the possibility of additional incentives to retailers, increased marketing spend, and even legal remedies to "challenge anticompetitive shelf-space foreclosure." (PX2005 (JLI) at 016 ("Altria Threat Competitive Response, May 2018")).

2. Altria Has Significant Scientific and Regulatory Expertise

507. Altria had over 400 scientists, physicians, product developers, engineers, regulatory experts and others dedicated to product research and regulatory sciences. (PX9000 (Altria) at 011 (Nov. 2017 Investor Day remarks)).

508. On November 2, 2017, Marty Barrington, Altria's then-CEO, stated to investors that Altria adapted its organization to win the dynamic non-combustible environment and has "an extraordinary financial engine to support these efforts." (PX9000 (Altria) at 008-09 (Nov. 2017 Investor Day remarks)).

509. Altria's CEO addressed investors at Altria's November 2017 Investor Day, stating: "This year we're celebrating the 10th anniversary of our $350 million Center for Research and Technology, which is just miles from here. We built it to house our team of more than 400 scientists, physicians, product developers, engineers, regulatory experts and others who are developing innovative products, pursuing their regulatory authorization and constructively engaging with the FDA on policy." (PX9000 (Altria) at 005 (Nov. 2017 Investor Day remarks)).

510. On November 2, 2017, Barrington stated to investors, once Altria "helped make [reduced risk products] possible," Altria immediately set out to acquire best-in-class regulatory and product development capability. (PX9000 (Altria) at 004 (Nov. 2017 Investor Day remarks) ("Second, to win in this new environment, we immediately set out to acquire top talent for best-in-class regulatory and product development capability")).

511. On November 2, 2017, Jim Dillard stated to investors that, with respect to reduced harm products, "We have the top talent we need, recruited from around the world. They include nearly 195 PhDs and 75 engineers across multiple disciplines. They represent 16 different countries and speak 32 different languages, all working together under one roof and laser focused on advancing Altria's harm reduction aspiration. Over the past 10 years these employees received over 660 patents and published research in nearly 225 publications." (PX9000 (Altria) at 011 (Nov. 2017 Investor Day remarks)).

512. Altria built the 450,000 square-foot Center for Research and Technology to house its team of over 400 scientists, physicians, product developers, engineers, regulatory experts and others. (PX9000 (Altria) at 011 (Nov. 2017 Investor Day remarks)).

513. "Altria designed the CRT for functionality, collaboration, and flexibility to meet evolving needs. The end result is a truly world-class facility. It has nearly 150,000 square feet of

purpose-designed lab space and the leading equipment which enables us to design new products from start to finish." (PX9000 (Altria) at 011 (Nov. 2017 Investor Day remarks)).

514. Altria continued to supplement the Center of Research and Technology staff of over 400 experts and scientists with numerous additional experts. (Murillo (Altria/JLI) Tr. 2921-22 ("Yeah. We were -- I mean, we were hiring precisely for these things. Some of the folks we hired very specifically because they had unique expertise in these areas. We were constantly looking for more."); PX9000 (Altria) at 011 (Nov. 2017 Investor Day remarks)).

3. Altria Had Exclusive Access to PMI's E-Cigarette Products and R&D Resources in the United States

a) The Joint Research, Development and Technology Sharing Agreement between Altria and PMI

515. Altria used the term "Project Vulcan" to refer to the joint sharing agreement between Altria and PMI in e-vapor. (Begley (Altria) Tr. 983-84).

516. Altria had a Joint Research Development, and Technology sharing agreement with PMI ("JRDTA") "whereby both companies would pool technology, IP, et cetera, around e-cigarette developments and share those – that work with each other and coordinate what could be developed, such that together we would have better products for the e-cigarette space." (King (PMI) Tr. 2357-58).

517. Regarding the JRDTA, "the idea was to pool our resources, to share the IP and technology that were developed by either company, such that PMI would have the technology and IP for international markets, and Altria would have the technology and IP for use in the U.S. And the idea was two can develop better than one, and we could pool resources and knowledge and science and everything else. (King (PMI) Tr. 2359).

518. Altria and PMI entered into the JRDTA "round the middle of the year of 2015." (King (PMI) Tr. 2358).

519. The JRDTA included VEEV, the MESH engine, and additional IP or patents. (King (PMI) Tr. 2358-59 ("That was the primary technology that we were working on, VEEV and the MESH engine and so forth, so that was the majority of it, yes. There may have been some additional IP or patents that had been filed that maybe would cover part of the space beyond just VEEV, but the bulk of it was what we were working on with VEEV. That was our big focus.")).

520. [redacted]} (PX1937 (Altria) at 002-03 (May 2018 E-vapor Assessment Plan) (*in camera*)).

521. Altria could have sold VEEV in the U.S. had it remained in the JRDTA. ("[PMI] own[s] the VEEV trademark now, so [Altria] would need permission from us to use the VEEV trademark in the U.S., but under the JRDTA, the joint research and development, they would have been able to launch VEEV on their own with the technology that was shared

in that agreement. They owned the technology, the IP, during the term of the agreement. They owned that in the United States." (King (PMI) Tr. 2365).

522. Altria could not remain in the JRDTA or launch VEEV while they have a non-compete agreement with JLI. (King (PMI) Tr. 2369 ("the "joint" in joint development and technology would no longer have made sense if Altria wasn't able to launch, develop, work in the e-cigarette space, then there couldn't really be a joint development agreement going forward. And, in fact, even before the term ended, our feeling was that they had -- they had essentially left the playing field because of their agreement not to work in the e-cigarette space.")).

b) <u>Altria's Introduction of Apex in the U.S. under the JRDTA</u>

523. Apex is a pod-based e-vapor product primarily developed by PMI. (Begley (Altria) Tr. 983; Willard (Altria) Tr. 1240).

524. Nu Mark confirmed they were a planning a PMTA for APEX in January 2017. (PX1779 at 001 (January email from Magness regarding PMTAs)).

525. Altria had the rights to commercialize Apex and its MESH technology in the United States through the JRDTA with PMI. (Begley (Altria) Tr. 983-84 (Q. Altria had the rights to commercialize Apex in its mesh technology in the United States, correct? A. That's correct. Q. And Altria had those rights pursuant to an IP sharing agreement that was entered into between Altria and PMI, correct? A. That's correct. Q. Altria used the term "Project Vulcan" to refer to the joint sharing agreement between Altria and PMI in e-vapor, correct? A. That's correct"); Schwartz (Altria) Tr. 1916 ("Q. What about the Apex product? A. Apex product was a PMI product. Here again, with our relationship with PMI, the Vulcan agreement, we had access to that technology. . .")).

526. Nu Mark's President Judy Begley explained APEX to investors in 2017: "Through our joint development agreement with PMI, Nu Mark has exclusive rights to commercialize the "MESH" technology, which we put in the U.S. market before the FDA's August 8, 2016 deeming deadline. The product consists of a closed tank of e-liquid that is heated through a mesh-like metal plate, rather than the traditional wick and coil method. We've received positive results from our initial consumer research, and as a result, we plan to further test this product - called APEX in the U.S. – as a line extension under the MarkTen brand." (PX9000 (Altria) at 018 (Nov. 2017 Investor Day remarks)).

527. And Nu Mark sold Apex on a limited basis through e-commerce in the United States. (Begley (Altria) Tr. 984). {[redacted]} (PX0018 (Altria) at 008 (Altria Response to Request for Additional Information and Documentary Materials, Oct. 3, 2019) ([redacted]) (*in camera*)).

528. [redacted]

[redacted]} (PX4042 (Altria) at 007 ({[redacted]}) (*in camera*)).

529. Altria recognized an alternative to obtaining a controlling interest in JUUL in which ". . . Altria would leverage the PMI vapor Apex partnership." (PX1632 at 004 (June 2018 Altria presentation: Level Setting Session Follow Up Small Group)).

530. [redacted]} (PX1144 (Altria) at 017 (July 2018 Altria presentation: Combined Assessment e-Vapor Pipeline) (*in camera*)).

531. Altria was still investing in Apex at least past August 2018 when Nu Mark approved moving forward with a new version of the Apex mouthpiece without a PMTA on August 30, 2018. (PX1638 (Altria) at 001 (Email between Michael Brace and Michelle Baculis)).

D. ALTRIA PUBLICLY STATED ITS INTENTION TO COMPETE IN THE CLOSED-SYSTEM E-CIGARETTE MARKET LONG-TERM

532. Testimony and ordinary-course documents of Altria and JLI show Altria publicly stated its intention to compete in the closed-system e-cigarette market long term. (*See* CCFF ¶¶ 533-44, below).

533. On November 2, 2017, Barrington stated to investors, "So we'll be clear: We aspire to be the U.S. leader in authorized, non-combustible, reduced-risk products." (PX9000 (Altria) at 005 (Nov. 2017 Investor Day remarks)).

534. On November 2, 2017, Barrington stated to investors, once Altria "helped make reduced risk products possible," Altria immediately set out to acquire best-in-class regulatory and product development capability. (PX9000 (Altria) at 004 (Nov. 2017 Investor Day remarks) ("Second, to win in this new environment, we immediately set out to acquire top talent for best-in-class regulatory and product development capability")).

535. In November 2017, Barrington also stated to investors, "Winning long term in this dynamic axis of competition will require the financial firepower and flexibility to invest in products, capabilities and market-building actions as may be appropriate. With the free cash flow we generate and a strong balance sheet, we have plenty of both firepower and flexibility . . . to make the necessary investments. We've been investing for years and now, with the FDA's new direction on innovative products, we're prepared to make any further investments we need to win." (PX9000 (Altria) at 008).

536. On November 2, 2017, Willard stated to investors: "As Marty [Barrington] said, we aspire to be the U.S. leader in authorized, non-combustible, reduced-risk products" at Altria's 2017 Investor Day. (Willard (Altria) Tr. 1150-51; PX9000 (Altria) at 010).

537. Altria's CEO gave a presentation at the February 2018 Consumer Analysis Group New York ("CAGNY") conference stating "We aspire to be the U.S. leader in authorized, non-

combustible, reduced-risk products." (PX9044 (Altria) at 015 (February 2018 Altria CAGNY Investor Presentation February)).

538. In February 2018, Altria's CEO stated to investors, "Preparing for this opportunity, we've spent years acquiring best-in-class regulatory and product development talent and building a compelling portfolio of non-combustible tobacco products with the potential to reduce risk." (PX9045 (Altria) at 002 (2018 CAGNY Conference Remarks by Marty Barrington, Feb. 21, 2018)).

539. In February 2018, Howard Willard stated to investors, "Nu Mark's goal is to lead the U.S. e-vapor category with a portfolio of superior, potentially reduced-risk products. . ." (PX9045 (Altria) at 006 (2018 CAGNY Conference Remarks by Howard Willard, Feb. 21, 2018)).

540. In May 2018, Altria announced a major restructuring, designed to realize "its aspiration to be the U.S. leader in authorized, non-combustible, reduced-risk products." The new structure included the creation of a Chief Growth Officer position that was filled by K.C. Crosthwaite and that reported directly to the CEO. (PX9042 (Altria) at 001; *see also* PX2003 (JLI) at 001 ("the CGO reports to the CEO")).

541. In a July 2018 earnings conference call, Willard noted that Altria continued to make strategic investments in pursuit of long-term leadership in innovative tobacco products. (PX9047 (Altria) at 003 ("And we continue to make strategic investments to support long-term strength in our core tobacco businesses and our pursuit of leadership in innovative products…. And just as we lead in traditional tobacco products, we intend to lead in offering adult smokers more choices with innovative reduced-risk products. In May, we announced a new corporate structure to maximize our core tobacco businesses and accelerate our innovation pipeline")).

542. Willard told investors in November 2018 that Altria was prepared to make significant investments to achieve long-term leadership in e- vapor. (Willard (Altria) Tr. 1156 ("Q. And Altria here is signaling to its investors that it's prepared to make those investments necessary to achieve sustained long-term leadership in the e-vapor category, correct? A. Certainly we were communicating that that was our goal, although we were a fair distance from it at this point."); PX9045 (Altria) at 007 (2018 CAGNY Conference Remarks by Howard Willard, Feb. 21, 2018)).

543. As late as September 2018, Altria planned to continue optimizing MarkTen support, improve merchandising and visibility, e commerce, vapor customer data, PMTAs, and licensing for third-party platforms. (PX1323 (Altria) at 024 (September 2018 Ranch Presentation)).

544. An October 24, 2018, Altria "Communication and Engagement Plan" draft stated "We fully intend to offer a compelling portfolio of e vapor products. . ." (PX1034 (Altria) at 004 (Communications and Engagement Plan)).

VII. JLI'S RAPID GROWTH THREATENED ALTRIA'S GOAL OF LEADING THE CLOSED-SYSTEM E-CIGARETTE MARKET, LEADING ALTRIA TO INVEST IN INNOVATION TO BETTER COMPETE WITH JLI

545. Testimony and ordinary course documents show that Altria considered JLI's growth to be incredibly rapid, a threat to Altria's goal of leading the closed-system e-cigarette market, and led Altria to invest in several potential competing products as well as developing and innovating future products. (*See* CCFF ¶¶ 546-48, 555-71, below).

A. THE DRAMATIC GROWTH OF JUUL IN 2017 AND 2018

546. Willard testified "JUUL was experiencing incredibly rapid growth. They had been growing for quite some time, but when you got into the back half of 2017 and early 2018, they grew quite dramatically and, frankly, became the number one selling product in the e-vapor category." (Willard (Altria) Tr. 1355-56).

547. In the first half of 2017, Altria assessed that the closed tank e-cigarette market was highly attractive because JUUL "was starting to demonstrate some strong growth . . ." (PX7004 (Willard (Altria), IHT at 055-56); PX1286 (Altria) at 009).

548. Howard Willard testified that when Altria evaluates a product market's overall attractiveness, it will look to the "size of the market," the "market's growth rate," and the "competitive environment" in a segment. (PX7004 (Willard (Altria) IHT at 054-55)).

B. THE E-CIGARETTE INDUSTRY VIEWED JLI AS A DISRUPTIVE THREAT

1. JLI Considered Itself a Disruptive Threat to the Tobacco Industry

549. March 2018 internal JLI investor talking points reveal "[JLI] The Company views traditional cigarettes and tobacco as the main competition. (PX2017 (JLI) at 039 (March 2018 JUUL Investor Presentation Script)).

550. In an October 2018 JUUL investor presentation, JUUL shares that it views converting users of traditional cigarettes as "the engine for its future growth" and stressed its proven ability to "capture share" from traditional cigarettes. (PX2061 (JLI) at 036 (JUUL Confidential Information Memorandum October 2018).

551. A Q4 2018 JLI earnings script states, "[a]s JUUL has gained both dollar and volume share of the U.S. combined cigarette and ENDS market, cigarette declines have accelerated." (PX2098 (JLI) at 017 (JUUL 4Q18 Earnings Script)).

552. JLI's goal was to switch over 20 million smokers switch from cigarettes by 2020. (PX7005 (Danaher (JLI), IHT at 050 (Q. And then, "Our goal is to help over 20 million smokers switch away from cigarettes by 2020?" A. Right. Q. Was that a goal at JLI? A. Yeah, we were talking about by 2020.")).

553. Timothy Danaher, JLI's former CFO, believed JUUL was the "category killer" for traditional cigarettes. (PX7005 (Danaher (JLI), IHT at 054-55 (Q. And what did you mean

when you characterized JUUL as a "category killer?" A. Meaning that it is, once again, core to our mission, right? And speaking about our vision, right, which is then hitting again on our mission to improve the lives of the world's adult smokers, that I believe we can be very successful in our mission.")).

554. Joseph O'Hara, JLI's competitive intelligence expert, viewed JLI as a disruptive player in the combustible tobacco industry. (PX7033 O'Hara (JLI), Dep. at 51-52 (" . . . we were able to convert adult smokers at a level that had never been seen before, and that was highly disruptive to the overall tobacco industry, especially the combustible tobacco industry.")).

2. Altria Viewed JLI as a Disruptive Threat and Responded by Investing in New E-Cigarette Products

555. [redacted]} (Begley (Altria) Tr. 1044 ({[redacted]}) (*in camera*)).

556. Altria saw rapid growth in pod-based products. JUUL's success in pod-based products was a driving factor in Nu Mark's decision to acquire Elite. (Begley (Altria) Tr. 985 ("Q. NuMark thought it was important in terms of placing the multiple bets that we've spoken of to participate in the pod segment, correct? A. We did. We saw fairly rapid growth of the pod segment and we thought it was important to compete. Q. The recent success of JUUL further influenced Nu Mark's desire to acquire Elite, correct? A. That was certainly a driving factor.")).

557. Altria launched MarkTen Elite on February 26, 2018. Willard (Altria) Tr. 1356-57); (O'Hara (JLI) Tr. 631-32 (discussing PX2086 (JLI) at 001-02).

558. Altria hoped Elite would disrupt JUUL's growth. (Begley (Altria) Tr. 991 ("Q. You hoped at the time that Elite would disrupt JUUL's growth, correct? A. We were hopeful at the time.")).

559. Willard testified that, with respect to MarkTen Elite, "-- it was a well-funded launch because we just looked at the growth of JUUL. I mean, if MarkTen Elite had a potential to compete with JUUL, we wanted to get it out there as quickly as possible and we wanted to get it out there effectively. So it was the number one priority of our sales force." (Willard (Altria) Tr. 1356-57).

560. Willard testified that Altria "spent well over half a billion dollars, maybe up to a billion dollars, investing in the e-vapor category." (Willard (Altria) Tr. 1341).

561. In 2018, Altria prepared a competitive assessment called the "JUUL Book of Knowledge" to inform Altria of what JLI was doing to achieve success. (Jupe (Altria) Tr. 2131-32). In a September 10, 2018, email Jupe wrote: We are being asked to put together a total assessment of Juul. I am envisioning something along the lines of a "book" of knowledge

. . . This book should be all encompassing as to the performance of Juul the product, toxicological assessment, IP, market performance, CMI work and the company dynamics. This should include regulatory and social commentary on the product." (PX1986 (Altria) at 001).

562. [redacted] } (PX1268 (Altria) at 003 { [redacted] }) (*in camera*)).

563. In May 2018, Altria changed its corporate structure and added a Chief Innovation Officer to improve Nu Mark and its ability to innovate to be successful in e-vapor. (Willard (Altria) Tr. 1371-72).

564. Altria "Anticipate[d] significant difficulty in threatening JUUL leadership with the current portfolio due to lack of ATC satisfaction" in September 2018 and determined its planned portfolio needed "significant investment in product improvement." (PX1316 (Altria) at 021) (Sept. 22, 2018 [Reduced Harm Product] Ranch presentation: E-vapor takeaways)).

565. Nu Mark expected to 'moderate' their investment in MarkTen in 2018 as focus shifted toward launching other e vapor products such as CYNC, APEX, and VIM in the future. (PX1251 (Altria) at 048 (Altria Group 2018-2020 Three Year Plan)).

566. A September 22, 2018, Altria presentation draft states "We will overhaul Altria's approach to develop and commercialize innovative tobacco products that will convert consumers and win in the market." (PX1316 (Altria) at 031 (Sept. 22, 2018 draft [Reduced Harm Products] presentation)).

567. Altria also proposed at a September of 2018 board meeting to have two core innovation teams for e-vapor. (PX1316 (Altria) at 034 (September 22, 2018 draft [Reduced Harm Products] presentation)).

568. Altria invested in an improved version of MarkTen Elite, Elite 2.0, which would have included nicotine salts, and considered other potential products to compete with JUUL. (Jupe (Altria) Tr. 2155-56).

569. Altria compared the JUUL development process to Elite while working to accelerate Altria's reduced risk products pipeline. (PX1000 (Altria) at 003, 012 (Altria Innovation Aspiration Framework; Long Term Strategic Planning Meeting 2018)).

570. Nu Mark launched MarkTen Elite at a speed they had never done before to compete with JUUL. (Begley (Altria) Tr. 1124).

571. The Elite rapid launch was a significant achievement. (Begley (Altria) Tr. 990 ("Q. You considered Elite's rapid launch a significant achievement A. Yeah, I've got to tell you, a lot of people did a lot of hard work to get that in the market so quickly"))

3. Other Market Participants Perceived JLI As a Disruptive Threat and Responded by Investing in New E-Cigarette Products

572. [redacted] } (PX3218 (Reynolds) at 011 [redacted] } (*in camera*)).

573. [redacted] (PX3218 (Reynolds) at 022 { [redacted] } (*in camera*)). { [redacted] } (PX3218 (Reynolds) at 024-25 [redacted] } (*in camera*)).

574. Martin King of PMI testified about traditional cigarette companies' reaction to JUUL's rapid growth stating, "there was a great deal of effort by Reynolds and Altria and others to have products that could compete, and there was also, you know, some mergers and acquisition type activity of e-cigarette companies and so forth." (King (PMI) Tr. 2378-79 (Martin King being asked how traditional cigarette companies reacted to rapid growth in e cigarettes)).

575. [redacted] (PX3211 (Reynolds) at 002 (Aug. 1, 2019, VUSE Demand Review) (*in camera*)).

576. Reynolds launched its own e-vapor product in response to JUULs rapid growth (PX7037 Huckabee (Reynolds), Dep. at 31-32 ("No. I think the -- the experience that I had in my role at the time was that the company witnessed a high degree of growth of Juul products and we were not participating in -- in that growth. As such, there was interest in developing the portfolio to -- to grow our vapor business.")).

577. JUUL's success and disruption of traditional cigarettes was driving investors to demand traditional cigarette companies to compete in the e-vapor space. (King (PMI) Tr. 2378-79 ("Q. What effect was the growth in e-cigarettes having on sellers of traditional cigarettes in the U.S. around that time, in 2018? A . . . The success of JUUL was causing investors to be very concerned about disruption for established cigarette companies, and we received a great number of questions from investors about what we were doing to be able to compete in the e-cigarette space. And I'm assuming Altria was in a similar situation as PMI. Q. Why are you assuming that? A. Well, I know from reading analyst reports and so forth that they

were receiving similar – similar series of questions. We share essentially the same investor base with Altria, there's a 90, 95 percent overlap. . .")).

VIII. RESPONDENTS AGREED THAT ALTRIA WOULD EXIT THE E-CIGARETTE MARKET IN EXCHANGE FOR A STAKE IN JLI

A. OVERVIEW OF TRANSACTION NEGOTIATIONS

1. Several Senior Altria Executives, Two JLI Board Members, and JLI's Then-CEO Were the Primary Deal Negotiators

a) <u>Altria Deal Negotiators</u>

578. The primary transaction negotiators for Altria were senior executives Howard Willard, William ("Billy") Gifford, Murray Garnick and K.C. Crosthwaite. (Willard (Altria) Tr. 1169-70; PX7031 (Willard (Altria), Dep. at 123); *see also* CCFF ¶¶ 579-88, below). Altria Board member Dinyar ("Dinny") Devitre also played a role in negotiations. (*See* CCFF ¶¶ 590-95, below).

579. JLI's lead negotiators most frequently interacted with Willard, Gifford, and Garnick, with Willard and Gifford being the primary points of contact. (Pritzker (JLI) Tr. 662-63; Gifford (Altria) Tr. 2761; PX7011 (Valani (JLI), IHT at 31)).

580. Willard was the lead negotiator for Altria. (Gifford (Altria) Tr. 2878). Gifford typically joined Willard for in-person meetings with JLI, but Gifford did not participate in every phone conversation that Willard had with JLI. (Gifford (Altria) Tr. 2878).

581. Willard was Chairman and CEO of Altria from approximately May 2018 until April 2020. (JX0001 at 003 (¶ 25)). Prior to becoming CEO in May 2018, Willard was Altria's Chief Operating Officer. (PX7004 (Willard (Altria), IHT at 14-15)).

582. Billy Gifford is Altria's current CEO. (JX0001 at 003 (¶ 26)). He became CEO of Altria in April 2020. (JX0001 at 003 (¶ 26)). Prior to becoming CEO in April 2020, Gifford was Altria's CFO starting in March 2015, and its Vice Chairman starting in May 2018. (JX0001 at 003 (¶ 26)).

583. Murray Garnick is Executive Vice President and General Counsel of Altria, a position he has held since July 2017. (JX0001 at 003 (¶ 27)). Garnick also leads Altria's Regulatory Affairs (since July 2017) and Regulatory Sciences (since June 2018). (JX0001 at 003 (¶ 27)).

584. K.C. Crosthwaite was Chief Growth Officer at Altria from June 2018 until September of 2019. (PX7024 (Crosthwaite (JLI/Altria), Dep. at 14). Prior to becoming Chief Growth Officer, Crosthwaite was President and CEO of Altria subsidiary Philip Morris USA. (PX7024 (Crosthwaite (JLI/Altria), Dep. at 15)).

585. Crosthwaite became CEO of JLI in September 2019, which is the position he still holds today. (PX7024 (Crosthwaite (JLI/Altria), Dep. at 14); PX7006 (Crosthwaite (JLI/Altria), IHT at 8)).

586. Willard discussed Altria/JLI transaction term sheets with Gifford, Garnick, and Crosthwaite, often as a collective discussion in meetings. (PX7031 (Willard (Altria), Dep. at 133-35)).

587. When JLI would send a term sheet, it was the normal practice for Willard to share the term sheet with Gifford, Gifford, and Crosthwaite. (PX7031 (Willard (Altria), Dep. at 176-77)).

588. Willard, Gifford, Garnick, and Crosthwaite would provide verbal comments and feedback on term sheets, and Altria's lawyers would consolidate those comments into marked-up term sheets. (Willard (Altria) Tr. 1195-96). The lawyers would then circulate the mark-ups to make sure that they captured the feedback provided. (Willard (Altria) Tr. 1195-96).

(1) Altria Board Member Dinyar Devitre Was Directly Involved in Negotiations with JLI

589. Altria board member Dinyar ("Dinny") Devitre was involved in negotiations with JLI. (*See* CCFF ¶¶ 590-95, below).

590. Devitre is a member of Altria's board of directors, on which he has sat since 2008. (PX7001 (Devitre (Altria), IHT at 13)). Devitre served as CFO and Senior Vice President at Altria from 2002 until 2008. (PX7001 (Devitre (Altria), IHT at 12)).

591. When Willard and the other key Altria negotiators engaged in discussions with JLI, Devitre sometimes participated. (PX7004 (Willard (Altria), IHT at 191)). Devitre attended some of the negotiation meetings between Altria and JLI. (PX7040 (Gifford (Altria), Dep. at 120)).

592. Devitre was a "facilitator" between the Altria and JLI negotiators. (PX7001 (Devitre (Altria), IHT at 80)).

593. Riaz Valani, one of JLI's board members and lead deal negotiators, would sometimes reach out to Devitre to discuss JLI's thoughts on the deal or to express concerns about what Altria was proposing. (PX7031 (Willard (Altria), Dep. at 143-44)). Devitre was a trusted acquaintance of Valani, and Devitre helped in trying to bring the two parties together. (PX7004 (Willard (Altria), IHT at 191)).

594. Although the senior Altria executives would periodically update the Altria board on discussions with JLI, they kept Devitre more informed than other board members about the deal negotiations. (PX7031 (Willard (Altria), Dep. at 143-44)). The Altria negotiators wanted Devitre to be prepared to respond whenever Valani reached out to him. (PX7031 (Willard (Altria), Dep. at 143-44)).

595. Mr. Devitre kept the Altria negotiators informed regarding what he heard from Valani. (PX7031 (Willard (Altria), Dep. at 143-44)).

(2) James Wappler of Perella Weinberg Partners Was Involved in Negotiating the Transaction for Altria

596. Perella Weinberg Partners ("PWP") is the investment bank that advised Altria on the transaction. (Willard (Altria) Tr. 1181).

597. James Wappler, a partner at PWP, led the PWP team advising Altria on the transaction. (Willard (Altria) Tr. 1182; PX7028 (Wappler (PWP), Dep. at 12)).

598. PWP representatives participated in transaction negotiations and sometimes communicated directly with JLI representatives. (Willard (Altria) Tr. 1181; PX7028 (Wappler (PWP), Dep. at 15-16)).

b) JLI Deal Negotiators

599. The primary deal negotiators for JLI were Nicholas Pritzker, Riaz Valani, and Kevin Burns. (Pritzker (JLI) Tr. 661-62, 676, 758-59; Willard (Altria) Tr. 1171; PX7031 (Willard (Altria), Dep. at 124-25)); *see also* CCFF ¶¶ 600-13, below).

600. Nicholas ("Nick") Pritzker is a member of JLI's board of directors. (JX0001 at 004 (¶ 34)). He has been on the board of JLI (and its predecessors) since approximately 2013. (JX0001 at 004 (¶ 34); Pritzker (JLI) Tr. 764-65).

601. Pritzker is an investor in JLI though his family investment entities. (Pritzker (JLI) Tr. 660). His family investment entity Tao LLC first invested in JLI around 2011. (Pritzker (JLI) Tr. 660). As JLI shareholders, Pritzker's family investment entities received a portion of the $12.8 billion that Altria paid to acquire its 35 percent interest in JLI. (Pritzker (JLI) Tr. 662).

602. Riaz Valani is a member of JLI's board of directors. (JX0001 at 004 (¶ 35); Valani (JLI) Tr. 899). He has been on the board of JLI (and its predecessors) since approximately 2007. (JX0001 at 004 (¶ 35); Valani (JLI) Tr. 899-900).

603. Through his venture capital business, Global Asset Capital ("GAC"), Valani was one of the initial investors in the company that is now JLI. (Valani (JLI) Tr. 899). GAC received a portion of the $12.8 billion that Altria paid to acquire its 35% interest in JLI. (Valani (JLI) Tr. 902).

604. After Pax Labs spun off non-vapor products and became JLI in 2017, Valani and GAC-related entities owned more than 20 percent of JLI's shares. (PX7011 (Valani (JLI), IHT at 21-22)). As of early 2020, Valani and GAC-related entities owned around 10 percent of JLI's shares. (PX7011 (Valani (Altria), IHT at 21-22)).

605. Pritzker and Valani were the only members of the JLI board's Strategic Committee, which was formed to negotiate with Altria. (Pritzker (JLI) Tr. 661-62, 676; Valani (JLI) Tr. 901; PX7011 (Valani (JLI), IHT at 25-26)).

606. Kevin Burns was the CEO of JLI from approximately December 2017 to September 2019. (JX0001 at 004 (¶ 32)).

607. JLI made a cash distribution of [redacted] to Burns as compensation in connection with the transaction. (PX7025 (Burns (JLI), Dep. at 189)).

608. Investment banking firm Goldman Sachs advised JLI on the transaction. (Pritzker (JLI) Tr. 678).

609. Peter Gross, the Vice Chairman of Investment Banking at Goldman Sachs, worked on the Altria transaction on behalf of JLI. (Pritzker (JLI) Tr. 678; PX7043 (Gross (Goldman Sachs), Dep. at 14, 16)). Gross's assignment for JLI was "to help them negotiate an agreement with Altria, where Altria would take some type of minority position in JLI." (PX7043 (Gross (Goldman Sachs), Dep. at 16)).

610. At JLI, Gross worked with Valani, Pritzker, and Burns, and sometimes had discussions with other board members. (PX7043 (Gross (Goldman Sachs), Dep. at 16-17)).

611. Gross was involved in negotiating directly with Altria. (PX7043 (Gross (Goldman Sachs), Dep. at 17)). During negotiations, he spoke with Willard, Gifford, Crosthwaite, and Altria board member Devitre. (PX7043 (Gross (Goldman Sachs), Dep. at 17); PX1309 (Altria) at 002 (June 13, 2018 email indicating that Gross spoke directly to Willard to request a meeting between JLI and Altria negotiators); PX2413 (JLI) at 001 (Nov. 26, 2018, text message to Valani in which Gross mentions speaking to Altria executive Crosthwaite); PX2428 (JLI) (Nov. 28, 2018, Gross text message to Valani referring to speaking to Altria executive Crosthwaite privately)).

612. Altria board member Devitre knew Gross personally from Devitre's time as Altria's CFO. (PX7001 (Devitre (Altria), IHT at 82)). Then-Altria executive (and current JLI CEO) Altria's Crosthwaite also knew Gross. (PX7032 (Valani (JLI), Dep. at 108-10)).

613. Gross sometimes communicated directly with Altria's PWP adviser James Wappler about a potential Altria/JLI transaction. (PX3168 (PWP) at 001 (June 30, 2018, email from Wappler noting that he had spoken to Gross regarding JLI's valuation); PX2446 (JLI) at 002 (June 18, 2018, email from Wappler to Gross confirming a planned meeting in July and referring to a previous discussion with Gross)).

2. The Altria and JLI Deal Negotiators Met and Otherwise Communicated Numerous Times During the 18-Month Course of Negotiations

614. Negotiations between Altria and JLI spanned about 18 months, beginning in mid-2017. (Valani (JLI) Tr. 902-03; Gifford (Altria) Tr. 2761-62; PX7011 (Valani (JLI), IHT at 32)). During the course of negotiations, the Altria and JLI deal negotiators met in person, spoke by phone, and exchanged text messages numerous times. (*See* CCFF ¶¶ 615-24, below).

615. The Altria and JLI negotiators got together "fairly frequently" over the course of 2018, often in person. (PX7031 (Willard (Altria), Dep. at 125-26)). Willard testified that both

Altria and JLI "felt more comfortable [] face to face." (PX7031 (Willard (Altria), Dep. at 125-26)).

616. During the course of negotiations, JLI's Valani, Pritzker, and Burns met in person and spoke on the phone with Altria's Willard and Gifford. (Valani (JLI) Tr. 902; Willard (Altria) Tr. 1168; PX7011 (Valani (JLI), IHT at 32-33)).

617. For some of these meetings and phone calls, no counsel was present. (Pritzker (JLI) Tr. 887-88).

618. JLI negotiators Pritzker and Valani met with Altria's Willard and Gifford about fifteen to twenty times over the course of negotiations. (PX7011 (Valani (JLI), IHT at 32-33)).

619. Pritzker and Valani had roughly the same number (fifteen to twenty) of joint phone calls with Willard and Gifford over the course of negotiations. (PX7011 (Valani (JLI), IHT at 32-33)).

620. In addition, there were other calls in which Pritzker was the only JLI representative on phone with Willard. (PX7011 (Valani (JLI), IHT at 32-33)).

621. When negotiating important deal points, particularly points on which there was disagreement between Altria and JLI, oftentimes Pritzker, Valani, or Burns would reach out to one of the four senior executives at Altria—Willard, Gifford, Garnick, or Crosthwaite. (PX7031 (Willard (Altria), Dep. at 130-32)).

622. Valani also had meetings and calls with Altria board member Devitre. (Valani (JLI) Tr. 903). During the course of negotiations, JLI's Valani and Altria board member Devitre had "back channel-type" discussions about how to get the parties to talk. (PX7011 (Valani (Altria), IHT at 96)).

623. Over the course of negotiating the transaction, Valani estimates that he met with Devitre around ten to fifteen times. (PX7032 (Valani (JLI), Dep. at 16-17)). Valani and Devitre were the only attendees at some of these meetings. (PX7032 (Valani (JLI), Dep. at 17)).

624. Over the course of negotiating the transaction, Valani also had phone calls with Devitre. (PX7032 (Valani (JLI), Dep. at 18)). For some of these calls, Valani and Devitre were the only call participants. (PX7032 (Valani (JLI), Dep. at 18)).

3. "Tree," "Richard," and "Jack" Were Transaction-Related Code Names

625. During negotiations, Altria and JLI used several code names relating to the potential transaction. (*See* CCFF ¶¶ 626-28, below).

626. "Tree" or "Project Tree" referred to the potential Altria/JLI transaction, or to JLI itself. (Pritzker (JLI) Tr. 725; Willard (Altria) Tr. 1183).

627. The code name "Richard" referred to Altria. (Pritzker (JLI) Tr. 688-89; Willard (Altria) Tr. 1210; Garnick (Altria) Tr. 1586).

628. The code name "Jack" referred to JLI. (Pritzker (JLI) Tr. 688; Garnick (Altria) Tr. 1586).

B. Altria and JLI First Started Discussing a Potential Transaction in 2017

629. Altria and JLI began discussing a potential transaction in 2017. (*See* CCFF ¶¶ 630-38, below).

630. Devitre met with Valani in late 2016 or early 2017, by which time JLI was selling the JUUL product that exists today. (PX7001 (Devitre (Altria), IHT at 47-48)). After that meeting, Devitre gave JLI's contact information to Altria's then-head of R&D. (PX7001 (Devitre (Altria), IHT at 48)).

631. In April 2017, at Altria's request, the first exploratory conversation took place at JLI's headquarters in San Francisco. (PX7022 (Begley (Altria), Dep. at 152)). The attendees at that meeting were Altria's Jody Begley (then-President of Nu Mark), Crosthwaite, David Wise, and Steve Schroeder, and JLI's co-founder James Monsees and then-CEO Tyler Goldman. (PX7022 (Begley (Altria), Dep. at 152-53)).

632. Subsequently, Altria senior management wanted to meet with JLI. (PX7001 (Devitre (Altria), IHT at 49)).

633. On June 5, 2017, Altria board member Devitre introduced JLI's Valani to Altria's then-CFO Gifford via email. (PX1340 (Altria); PX1341 (Altria); PX7001 (Devitre (Altria), IHT at 50-51)). In response to Devitre's introductory email, Valani asked Gifford about a possible meeting on the West Coast in late June or July 2017. (PX1342 (Altria)).

634. After introducing Valani and Gifford in June 2017, Devitre met with Valani "quite a few" times in 2017, "maybe two or three times a month." (PX7001 (Devitre (Altria), IHT at 66)).

635. JLI's Valani first met in person with Altria's Willard and Gifford in July 2017, and met with them two more times before the end of 2017. (Valani (JLI) Tr. 902-03). At the time of the July 2017 meeting, both Altria and JLI sold e-cigarettes. (Valani (JLI) Tr. 902-03).

636. In the fall (Q4) of 2017, Valani and Pritzker met with Willard and Gifford at Altria's offices. (Pritzker (JLI) Tr. 663-64, 771-73). This was the first time Pritzker met Willard and Gifford. (Pritzker (JLI) Tr. 663-64, 771-73).

637. At this meeting in Q4 of 2017, Altria suggested purchasing all of JLI's domestic business. (Pritzker (JLI) Tr. 663-64, 772-73).

638. On December 15, 2017, Willard and Gifford met with Valani and Pritzker. (PX3167 (PWP) at 002; PX3164 (PWP)). Afterwards, Altria's PWP adviser Wappler exchanged emails with JLI's Goldman Sachs adviser Gross regarding continuing discussions. (PX3167 (PWP) at 001-02).

C. During the First Half of 2018, Altria and JLI Negotiators Had Meetings and Communicated about a Potential Transaction

639. During the first six months of 2018, Altria and JLI negotiators met and communicated about a potential transaction. (*See* CCFF ¶¶ 640-67, below). Instead of a transaction for Altria to purchase all of JLI's domestic business, as Altria initially proposed in 2017 (*see* CCFF ¶ 637, above), the discussions came to focus on the notion of Altria purchasing a partial interest in JLI. (*See* CCFF ¶¶ 640-67, below).

640. Discussions between Altria and JLI about a potential deal continued into early 2018. (Valani (JLI) Tr. 903; Gifford (Altria) Tr. 2761-62; Pritzker (JLI) Tr. 664).

641. On January 17, 2018, Altria's PWP adviser Wappler had a call with JLI's Goldman Sachs adviser Gross. (PX3163 (PWP) at 001). After that call, Wappler worked with Altria to develop a proposed structure for a transaction. (PX3163 (PWP) at 001). In the resulting document, Altria's position was that it was willing to acquire less than 100% of JLI, but that it must own more than 50% "in order to provide meaningful operational assistance" to JLI. (PX3163 (PWP) at 004) (Project Tree: Illustrative Transaction Structure, Jan. 18, 2018)).

642. Willard and Wappler met with JLI's adviser Gross on January 19, 2018. (PX3164 (PWP)). Wappler wrote to his PWP colleagues that Willard "was disappointed in the outcome" of the meeting, and that assuming Gross came "back with bad news," Altria could either tell JLI "'good luck' or potentially try one more back channel with Riaz [Valani]." (PX3164 (PWP)).

643. On February 8, 2018, Willard, Gifford, Jay Moore (Altria's then-SVP of Strategy and Business Development), and Wappler scheduled a call with Pritzker, Valani, and Gross. (PX2293 (JLI); PX2292 (JLI)).

644. In a February 23, 2018 email, Altria's Jay Moore provided a list of key takeaways to Gifford in preparation for a call between Gifford and Altria board member Devitre. (PX1216 (Altria) at 001). One of the key takeaways is that "JUUL proposal for 40% does not work for antitrust purposes. . ." (PX1216 (Altria) at 001).

645. On March 1, 2018, Devitre told JLI's Valani that he expected Altria's Willard would be calling Valani the following day. (PX2294 (JLI)).

646. On April 5, 2018, JLI's Valani, Pritzker, and Burns met with Altria's Willard and Gifford at Altria's headquarters in Richmond. (Pritzker (JLI) Tr. 664-65; PX2296 (JLI); PX2297 (JLI)). At the meeting, they discussed a potential transaction in which Altria would acquire an interest in JLI, including some general terms and some specifics about how a transaction might happen. (Pritzker (JLI) Tr. 664-65, 776-77). The same group had dinner together the night before the meeting. (Pritzker (JLI) Tr. 664-65).

647. After the meeting in Richmond, Pritzker emailed Willard and Gifford and thanked them for the "very constructive conversation." (PX2299 (JLI)).

648. On April 16, 2018, Willard emailed an illustrative payment structure proposal to Pritzker, Valani, and Burns ahead of a conference call to discuss the transaction. (PX2124 (JLI) at 001-02). The proposed structure envisioned Altria purchasing 50.1% of JLI. (PX2124 (JLI) at 002).

649. Willard suggested in his April 16, 2018 email that Altria's and JLI's antitrust counsel "connect to assess antitrust risk." (PX2124 (JLI) at 001). That afternoon, Willard and Gifford scheduled a call with Pritzker, Burns, and Valani. (PX2547 (JLI)).

650. On April 20, 2018, JLI CEO Burns sent a letter to Altria CEO Willard reflecting JLI's "current thinking on price, payment and related terms." (PX2026 (JLI) at 001-02). Burns' April 20, 2018, letter contemplated Altria purchasing a 50.1% interest in JLI. (PX2026 (JLI) at 003).

651. Burns' April 20, 2018, letter proposed that "JUUL's and Altria's respective anti-trust counsel would discuss and develop a plan with respect to seeking and obtaining regulatory approval for the majority investment, including the treatment of any competitive products owned by Altria." (PX2026 (JLI) at 003). Valani understood the reference to "competitive products" to mean electronic nicotine delivery systems. (PX7032 (Valani (JLI), Dep. at 30)). As of April 20, 2018, the electronic nicotine delivery systems [e-cigarettes] sold by Altria included MarkTen and MarkTen Elite. (Pritzker (JLI) Tr. 667-68).

652. Willard and Gifford scheduled a call with Pritzker, Burns, and Valani on the afternoon of April 20, 2018, after Burns sent his letter. (PX4385 (Altria) at 001; PX2549 (JLI)).

653. The Altria and JLI negotiators first had conversations about what Altria would do with its existing e-cigarette products around the time that the notion of Altria purchasing less than 100% of JLI arose. (PX7021 (Pritzker (JLI), Dep. at 64-65)).

654. Between the April 20, 2018, letter from Burns to Willard and July 30, 2018, Altria and JLI had several conversations and Altria sent at least two letters to JLI to propose additional terms. (Pritzker (JLI) Tr. 793).

655. On April 23, 2018, Altria's Willard and Gifford scheduled a call with JLI's Burns, Pritzker, and Valani. (PX2551 (JLI)).

656. On April 24, 2018, Willard sent an email to Valani, Pritzker, and Burns stating that he had a "proposal to partially address your antitrust risk concern." (PX2303 (JLI)). Valani testified that he thinks Willard was referring to the issue of whether Altria would purchase nonvoting stock initially (JLI's preference) or enter an agreement for voting stock that "wouldn't be completed until after antitrust clearance was obtained." (PX7032 (Valani (JLI), Dep. at 31-33)).

657. Later in the day on April 24, 2018, Willard, Gifford, Valani, Pritzker, and Burns scheduled a conference call. (PX2551 (JLI); PX2303 (JLI)).

658. On April 26, 2018, Willard emailed Pritzker and proposed a meeting between Altria and JLI on May 6, 2018, in Chicago. (PX2390 (JLI) at 001). Willard wrote that they would have "the antitrust experts available by phone." (PX2390 (JLI) at 001).

659. On May 3, 2018, Willard sent a letter to Burns, Pritzker, and Valani in response to Burns' April 20, 2018, letter. (PX2184 (JLI) at 001). Prior to sending the letter, Willard suggested by email that the Altria and JLI negotiators have an in-person meeting and "exclude bankers and outside lawyers" from the meeting. (PX4389 (Altria)).

660. Pritzker and Valani scheduled a phone call with Willard and Gifford on May 15, 2018. (PX2403 (JLI)).

661. On May 29, 2018, Willard emailed Valani and Pritzker, writing, "We are finalizing our response to the subjects we discussed last week and we will send it out to you tomorrow May 30." (PX2414 (JLI)).

662. On May 30, 2018, Willard sent a letter to Pritzker and Valani regarding potential deal terms. (PX1355 (Altria) at 002-03).

663. On June 3, 2018, Valani forwarded Pritzker an "open issues list" from JLI board member Zach Frankel that included, "Does [Altria] divest Markten?" (PX2406 (JLI); PX7032 (Valani (JLI), Dep. at 36-38)).

664. On June 13, 2018, Altria's PWP adviser James Wappler had a 30-minute call with Peter Gross, JLI's Goldman Sachs adviser. (PX1309 (Altria) at 002 (email from James Wappler to Altria executives). During that call, Gross requested that Altria meet with JLI on July 13, 2018. (PX1309 (Altria) at 002). Gross had previously spoken directly to Willard to request a meeting on July 13, 2018. (PX1309 (Altria) at 002).

665. On June 14, 2018, Valani told Devitre that he would call that evening. (PX2388 (JLI) at 001).

666. On June 15, 2018, Devitre emailed Valani to ask if he was available to speak in the next few hours. (PX2389 (JLI)). After an exchange of emails, Valani wrote that he would call Devitre on the evening of June 16, 2018. (PX2389 (JLI)).

667. Altria and JLI planned to have a meeting on July 13, 2018. (PX1195 (Altria) at 001, 006). On June 18, 2018, Altria's PWP adviser Wappler emailed JLI's Goldman Sachs' adviser Gross to confirm the planned meeting between JLI and Altria on July 13, 2018, noting that for Altria, Willard, Gifford, and Crosthwaite planned to attend. (PX2446 (JLI) at 002). Wappler also noted that he and Gross had discussed Burns, Valani, and Pritzker attending the planned July 13, 2018 meeting for JLI. (PX2446 (JLI) at 002).

D. Deal Negotiations Continued in July 2018, with JLI Sending the First Draft Term Sheet on July 30, 2018

1. Altria and JLI Communications Increased Leading up to the July 30, 2018 Term Sheet

668. JLI and Altria negotiators communicated a number of times in July 2018, leading up to JLI sending the July 30, 2018 initial term sheet. (*See* CCFF ¶¶ 669-79, below).

669. On July 9, 2018, JLI's Pritzker emailed Altria's Willard and Gifford to tell them that JLI had to cancel the planned July 13, 2018, meeting. (PX4390 (Altria)). Pritzker and Willard arranged to speak by phone the next day, with Valani and Burns joining as well. (PX4390 (Altria)).

670. On July 10, 2018, Altria board member Devitre and JLI's Valani spoke by phone. (PX4374 (Altria) at 005) (Devitre phone records)).

671. On July 18, 2018, JLI's Goldman Sachs adviser Peter Gross called Altria CEO Willard and indicated that another major tobacco company was "willing to buy a minority stake" in JLI. (PX3183 (Altria)).

672. On July 19, 2018, Pritzker emailed Willard that he was available to talk that afternoon or evening, or the next morning. (PX2329 (JLI)). Pritzker and Willard had a 25-minute phone call on July 19, 2018. (PX4376 (Altria) at 002 (Willard phone records).

673. On July 24, 2018, Altria's PWP adviser, Wappler, emailed Willard and said he received the update that Willard was planning to speak to JLI adviser Gross regarding JLI's valuation. (PX3170 (PWP) at 001). Wappler's email included some valuation-related discussion topics for Willard to consider covering with Gross. (PX3170 (PWP) at 001).

674. On July 26, 2018, JLI's board discussed a proposed transaction with Altria, and the board meeting minutes stated:

> Mr. Pritzker, with input from Mr. Valani presented on the status of Project Richard, focusing on recent conversations and exchanges with Richard, who had presented revised terms for Richard's proposed investment. As part of this presentation, Mr. Pritzker and Mr. Valani described in detail Richard's changes to its previous non-binding, high-level positions and the reasons provided for same, as well as highlighted the elements of such positions that were unchanged. The Board, then discussed the terms of a possible response to certain elements of Richard's changed positions and considered a draft Summary of Terms (the "Summary of Terms"), a copy of which had been circulated to the Board prior to the meeting. Mr. del Calvo explained that the Summary of Terms was intended to be responsive to the positions taken by Richard. An interactive discussion followed. Mr. Gross and Mr. Ryan (the "Goldman Representatives") then joined the meeting telephonically. They described to the Board their recent exchanges with Richard and its representatives and then presented to the Board their thoughts on the terms presented by Richard. (PX2117 (JLI) at 019).

675. In a July 27, 2018 email to Pritzker, JLI's Goldman Sachs adviser Peter Gross wrote that he was "under the impression that [Altria] would just shut down Mark 10." (PX2330 (JLI) at 001).

676. Pritzker responded, "I think they may need to sell it." (PX2330 (JLI) at 001). "They" refers to Altria and "it" refers to Altria's competitive products. (Pritzker (JLI) Tr. 797-98 (discussing PX2330 (JLI) at 001)).

677. On July 28, 2018, Pritzker and Willard spoke on the phone. (PX2305 (JLI); PX2304 (JLI); PX4376 (Altria) at 002 (Willard phone records)).

678. On July 29, 2018, JLI's board discussed in detail the status and terms of the proposed transaction with Altria. (PX2117 (JLI) at 022). The board meeting minutes state:

> Initially, Mr. Pritzker made a presentation to the Board regarding his discussions with Richard since the preceding Board meeting. A discussion followed, during which the Board covered in detail the status of the Richard negotiations and the terms of the proposed investment from, and strategic relationship with, Richard. Mr. Pritzker recommended as a next step that the Company finalize and send to Richard a non-binding Summary of Terms, setting forth the Company's current position on the proposed transaction with Richard.
>
> Mr. del Calvo then presented to the Board revisions that had been made to the Summary of Terms which had been previously circulated to the Board on July 26, 2018. He noted that a draft Summary of Terms, as so revised, had been circulated to the Board prior to this meeting. Mr. del Calvo also noted that such revisions reflected input from Mr. Pritzker (based on his conversations with Richard), outside counsel, management and others. (PX2117 (JLI) at 022).

679. On July 30, 2018, JLI's board met to consider "revisions that had been made, at the direction of the Board since its last meeting, to the proposed non-binding Summary of Terms []." (PX2117 (JLI) at 024). At the conclusion of the meeting, "the Board authorized Mr. Pritzker to forward the Summary of Terms as so revised to [Altria] and continue discussions with [Altria], together with Mr. Valani and Mr. Burns, regarding a potential investment and strategic transaction on that basis." (PX2117 (JLI) at 024).

2. JLI's July 30, 2018 Term Sheet Required Altria to Dispose of Its E-Cigarette Assets and to Refrain from Competing in E-Cigarettes

680. On July 30, 2018, JLI sent Altria the first term sheet. (*See* CCFF ¶¶ 681-88, below). JLI's July 30, 2018 term sheet required Altria to get rid of its existing e-cigarette products and assets by divesting them, contributing them, or ceasing to operate them. (*See* CCFF ¶¶ 684-85, below). The July 30, 2018 term sheet also included a non-competition provision requiring Altria to refrain from competing in e-cigarettes. (*See* CCFF ¶ 686, below).

681. On July 30, 2018, JLI's Pritzker sent Altria's Willard a Summary of Terms on behalf of JLI's negotiating team. (PX1300 (Altria) at 001-02; PX2173 (JLI) at 001-02; Pritzker (JLI)

Tr. 693). Pritzker reviewed the Summary of Terms before sending it. (Pritzker (JLI) Tr. 693).

682. Prior to sending the July 30, 2018 Summary of Terms, Pritzker told Altria that he would be sending a term sheet. (Pritzker (JLI) Tr. 803-04).

683. The July 30, 2018 Summary of Terms was the first term sheet exchanged between JLI and Altria. (Pritzker (JLI) Tr. 804).

684. The July 30, 2018 Summary of Terms that Pritzker sent to Willard included the following term:

> Promptly and in no event later than nine months following the Purchase, subject to the license referenced above, Richard [Altria] will divest (or if divestiture is not reasonably practicable, contribute at no cost to Jack [JLI] and if such a contribution is not reasonably practicable, then cease to operate), all Richard [Altria] assets relating to the Field in the U.S., including all electronic nicotine delivery systems and products it acquired, developed, or has under development. (PX1300 (Altria) at 005).

685. "Richard" refers to Altria, and "Jack" refers to JLI. (Pritzker (JLI) Tr. 688-89). "Field" is defined as "vapor-based electronic nicotine delivery systems." (PX2173 (JLI) at 004). The word "contribute" referred to Altria selling or granting to JLI its e-cigarette products. (Pritzker (JLI) Tr. 689-90).

686. The July 30, 2018 term sheet included a term that stated:

> Richard agrees, for so long as it owns at least 5% of Jack's outstanding shares, to refrain from competing anywhere in the world in the e-vapor business (other than with respect to MarkTen and MarkTen Elite prior to their divestiture or contribution as described above)." (PX1300 (Altria) at 006)).

687. Altria's and JLI's final transaction agreement specifies that Altria is prohibited from competing in all aspects of the e-cigarette business, including research and development, for an initial term of six years, with very limited exceptions. (*See* Section III.A.1. at ¶¶ 38-40, above).

688. After Altria's Willard received the July 30, 2018 term sheet from JLI, he sent it to his Altria colleagues Gifford, Garnick, and Crosthwaite. (PX1300 (Altria) at 001). Willard, Gifford, Garnick, and Crosthwaite reviewed and discussed the term sheet. (PX7004 (Willard (Altria), IHT at 167-68)).

E. Deal Negotiations Intensified in Early August 2018 with the Exchange of Additional Term Sheets

1. Altria and JLI Negotiators Met at the Park Hyatt in Washington, D.C., on August 1, 2018, and JLI Subsequently Sent a Revised Term Sheet

689. JLI and Altria negotiators met on August 1, 2018 at the Park Hyatt hotel in Washington, D.C., to discuss JLI's July 30, 2018 term sheet. (*See* CCFF ¶¶ 690-91, below). On August 4, 2018, JLI sent a revised term sheet. (*See* CCFF ¶¶ 692-94, below).

690. On the evening of August 1, 2018, Altria's Willard and Gifford met with JLI's Pritzker, Valani, and Burns at the Park Hyatt hotel in Washington, D.C. (Pritzker (JLI) Tr. 703-04; PX2173 (JLI) at 001; PX7031 (Willard (Altria), Dep. at 174-75)). The group met and had dinner in Pritzker's hotel suite. (PX2310 (JLI); PX7031 (Willard (Altria), Dep. at 174-75)). Burns arrived at the meeting after the others. (PX2173 (JLI) at 001; PX7031 (Willard (Altria), Dep. at 174-75)).

691. The participants at the August 1, 2018, meeting at the Park Hyatt discussed the July 30, 2018, term sheet. (Pritzker (JLI) Tr. 703-04; PX7032 (Valani (JLI), Dep. at 56); PX7009 (Burns (JLI), IHT at 135-36)).

692. On August 3, 2018, Pritzker wrote to Willard that JLI was ready to send responses in a draft of the term sheet to specific issues raised by Altria. (PX2311 (JLI)). Pritzker asked to talk before sending it, and on August 4, 2018, Willard sent Pritzker his phone number. (PX2311 (JLI)).

693. Pritzker and Willard spoke prior to Pritzker sending the revised term sheet, and Willard agreed with Pritzker "that an in person meeting asap is called for if we are going to get together." (PX2387 (JLI) at 001). Pritzker told Willard that JLI had taken its "best shot at responding to their concerns, and that we would appreciate any comments to our [term sheet] before or as part of a meeting." (PX2387 (JLI) at 001).

694. On August 4, 2018, Pritzker sent Willard a revised term sheet. (PX2570 (JLI) at 001). One of the revisions was that the word "shutdown" was added to the bullet that reads:

> "Richard agrees, for so long as it owns at least 5% of Jack's outstanding shares, to refrain from competing anywhere in the world in the e-vapor business (other than with respect to MarkTen and MarkTen Elite prior to their divestiture, shutdown, or contribution described above)." (PX2570 (JLI) at 001, 007 (highlighting and underlining of the word "shutdown" in original); Pritzker (JLI) Tr. 704-06) (explaining that highlighting of the word "shutdown" indicates that it was added to the most recent draft of the term sheet).

2. Altria's Talking Points for an August 6, 2018 Call with JLI State That Altria Will "Potentially Exit" Its Own E-Vapor Business If It Does a Transaction with JLI

695. On August 6, 2018, Altria's Willard and Gifford spoke to JLI's Pritzker and Valani by phone. (*See* CCFF ¶ 702, below). Willard's draft talking points for the call state that Altria has accommodated JLI by "demonstrating flexibility with [Altria's] existing e-vapor business," and that Altria will "potentially exit [it's] own e-vapor business" if Altria and JLI do a transaction. (*See* CCFF ¶¶ 696-701, below).

696. On August 5, 2018, Altria in-house attorney Carmine ("Anthony") Reale sent Willard, Garnick, Gifford, and Crosthwaite talking points for Willard's upcoming call with JLI. (PX1390 (Altria) at 001). The talking points were drafted by Altria's adviser PWP, and the talking point forwarded to Willard, Garnick, Gifford, and Crosthwaite incorporated edits suggested by Reale. (PX1390 (Altria) at 001).

697. Willard testified that he had no reason to doubt that the August 5, 2018, talking points accurately summarized the state of the Altria-JLI negotiations at the time they were circulated. (Willard (Altria) Tr. 1191-92 (discussing PX1390 (Altria) at 003)).

698. Altria's August 5, 2018 draft talking points for Willard state: "If we establish this partnership, then we expect that Altria will: . . . potentially exit our own vapor business . . . ." (PX1390 (Altria) at 003).

699. Altria's August 5, 2018 draft talking points for Willard also state: "I think you'll agree that Altria has come a long way to accommodate you in this process, including: . . . [Demonstrating flexibility with our existing vapor business, if necessary, in order to form the partnership.]" (PX1390 (Altria) at 003-04 (brackets in original)).

700. The August 5, 2018 draft talking points for Willard also state that Altria has come a long way to accommodate JLI by "meeting your requested valuation of $28 billion ($12.6 billion for 45%, US only, with Altria's operational support commencing immediately upon closing) [and by] [a]greeing to a minority stake instead of a controlling position." (PX1390 (Altria) at 003).

701. On August 6, 2018, Garnick circulated his comments to the draft talking points. (PX1304 (Altria) at 003). The version Garnick circulated also included the statement that "[i]f we establish this partnership, then we expect that Altria will: . . . potentially exit our own vapor business . . . ." (PX1304 (Altria) at 003). The draft talking points circulated by Garnick state that if a deal does not work out, Altria and JLI should "shake hands, and agree to be competitors." (PX1304 (Altria) at 003).

702. On August 6, 2018, Willard and Gifford called Pritzker and Valani. (PX2312 (JLI); PX3202 (PWP)). Pritzker indicated to Willard that, assuming the parties could agree on a path forward, JLI wanted to meet "asap and negotiate the rest of the term sheet," even suggesting meeting the following weekend of August 11, 2018. (PX3202 (PWP)).

3. Altria's August 9, 2018 Term Sheet Strikes the Commitment to Divest, Contribute, or Cease to Operate Altria's E-Cigarette Assets

703. On August 8, 2018, Altria board member Devitre texted Willard: "I spoke to Riaz [Valani]. . . . He is ready to meet in SFO on Monday [August 13, 2018]. He sounds very eager to do a deal." (PX4167 (Altria) at 003).

704. On August 9, 2018, Altria sent JLI a revised term sheet reflecting Altria's edits to JLI's term sheet. (*See* CCFF ¶ 705, below). Altria's August 9, 2018 term sheet removed the commitment for Altria to divest, contribute, or cease to operate its e-cigarette assets, and reserved the right to compete with existing and under development products prior to such time as the transaction received antitrust clearance. (*See* CCFF ¶¶ 706-07, below).

705. On August 9, 2018, Altria's Gifford sent JLI's Pritzker, Valani, and Burns a markup of JLI's term sheet. (PX1303 (Altria) at 001; PX2313 (JLI) at 001). Gifford wrote that the markup was to "serve as the basis for discussion at our upcoming meeting." (PX1303 (Altria) at 001; PX2313 (JLI) at 001).

706. In Altria's August 9, 2018, markup to the term sheet, Altria struck out the entire provision requiring Altria to "divest (or if divestiture is not reasonably practicable, contribute at no cost to Jack and if such a contribution is not reasonably practicable, then cease to operate), all Richard assets relating to the Field in the U.S., including all electronic nicotine delivery systems and products it acquired, developed, or has under development." (PX1303 (Altria) at 015; PX2313 (JLI) at 015; Pritzker (JLI) Tr. 707-08; Valani (JLI) Tr. 920-21).

707. Altria also edited the non-compete clause, so that the clause appearing in Altria's August 9, 2018, term sheet read:

> Richard agrees to refrain from competing anywhere in the U.S. in the e-vapor business (other than with respect to existing and under development products prior to the non-trademark IP license described above). The non-compete will terminate upon the earliest of (i) failure to receive Antitrust Clearance; (ii) the expiration of the Services Term and (iii) if Richard ceases to own at least 20% of Jack's outstanding shares []. (PX1303 (Altria) at 017; PX2313 (JLI) at 017).

708. The JLI board was disappointed with many of the terms contained in Altria's August 9, 2018, Revised Summary of Terms. (PX2117 (JLI) at 027-28 (Board Meeting Minutes, Aug. 9, 2018)).

F. JLI Provided a List of Basic Conditions to Altria Prior to the August 18, 2018 Meeting between Altria and JLI

709. Prior to finalizing a commitment to meet in person with Altria negotiators on August 18, 2018, in San Francisco, JLI sent Altria a list of "specific points" to make sure Altria understood where JLI would "need to draw the line." (*See* CCFF ¶¶ 710-27, below). One of JLI's specific points was that it had understood that Altria would only compete in e-cigarettes through JLI, and that it was "unacceptable" for Altria to retain any right to compete in e-cigarettes with existing products, products under development, or future

products. (*See* CCFF ¶ 722, below). After JLI provided Altria with its list of specific points, Altria and JLI went forward with the August 18, 2018, meeting. (*See* CCFF ¶ 728, below).

710. On August 13, 2018, at 1:35am, Altria board member Devitre texted JLI's Valani:

> Spoke to Howard [Willard]. We are all set for meeting in SFO this coming weekend. I will be there. You and I should meet sometime this week and try to bake the cake before the weekend meeting. Then we can put icing on the cake on the weekend. Comprende? (PX4172 (Altria) at 001; Valani (JLI) Tr. 925).

711. In response to Devitre's text, Valani responded: "Funny I had the same idea. Let me figure out travel but thinking to stop in NYC Weds. Would that work?" (PX4172 (Altria) at 001; Valani (JLI) Tr. 925-26).

712. At 6:30 P.M. PT on August 13, 2018, JLI's board met telephonically. (PX2117 (JLI) at 029). Pritzker and Valani provided a "description of a planned upcoming meeting between a Richard representative and Mr. Valani, which was intended to discuss open issues between the parties, whether they could be addressed and a process for considering and resolving same []." (PX2117 (JLI) at 029). Then the JLI board discussed "such issues, an approach to same and whether the parties' positions were irreconcilable." (PX2117 (JLI) at 029-30).

713. On August 13, 2018, at 7:37pm, Pritzker emailed Willard and Gifford, copying Valani and Burns: "Howard/Billy: I gather Riaz met with Dinny and that the two of you and maybe Dinny as well may be interested in meeting with us in SF this Saturday. We are happy to do so, and provide lunch and entertainment if desired. Please let us know if you want to confirm and the best times for you." (PX2025 (JLI) at 002). "Riaz" refers to Valani and "Dinny" refers to Altria board member Devitre. (Pritzker (JLI) Tr. 708-10).

714. On August 14, 2018, Willard responded, agreeing to meet in San Francisco the following Saturday (August 18). (PX2025 (JLI) at 001). Willard wrote that he planned for Gifford, Crosthwaite, and Devitre to attend the meeting with him from Altria. (PX2025 (JLI) at 001).

715. Pritzker responded on August 14, 2018, writing:

> Howard/Billy: let's tentatively schedule a meeting in SF Saturday. Is it possible to start earlier, say 9AM? I hope this isn't too difficult considering travel times. We will arrange a location including break out space. Tomorrow night or Thursday morning we will be sending you our position on a number of specific points to make sure you understand where we will need to draw the line before finalizing a commitment to meeting. . . . (PX2025 (JLI) at 001).

716. Pritzker wanted to send Willard and Gifford JLI's "position on a number of specific points" because he wanted them to know some basic conditions that JLI had for a potential transaction. (Pritzker (JLI) Tr. 711).

717. Willard responded to Pritzker on August 15, 2018, writing that "[w]e have arranged to be available in SF this Saturday at 9AM and we will add Murray Garnick our General Counsel and two of our deal lawyers to the meeting." (PX2025 (JLI) at 001).

718. JLI's Burns forwarded Willard's email to Pritzker and Valani, writing "I wouldn't add lawyers to the meeting but would put them in the back rooms for support. Looks like we are a go pending Riaz's meeting today." (PX2025 (JLI) at 001).

719. On August 15, 2018, Valani met with Devitre in Devitre's office in New York, starting around 4:15 or 4:30pm. (PX4172 (Altria) at 001-02 (Devitre phone records); PX1308 (Altria) at 001; PX7001 (Devitre (Altria) IHT at 93-95); Valani (JLI) Tr. 926-27 (discussing PX4171 (JLI) at 001)).

720. On August 15, 2018, either prior to or during the meeting in Devitre's office, Valani emailed to Devitre the list of "specific points to make sure [Altria] understands where [JLI] will need to draw the line before finalizing a commitment to meeting," that Pritzker had told Willard would be forthcoming. (PX4171 (Altria) at 001-02; PX2025 (JLI) at 001; Valani (JLI) Tr. 929; Pritzker (JLI) Tr. 711; PX1308 (Altria) at 001-02); PX7001 (Devitre (Altria) IHT at 93-95)).

721. The list of specific points that Valani sent to Devitre on August 15, 2018 set forth "foundational concepts that were important to JLI." (Valani (JLI) Tr. 929-32). JLI wanted to make sure that Altria was aligned with JLI on these foundational concepts prior to going forward with the August 18, 2018, meeting in San Francisco. (Valani (JLI) Tr. 929-32).

722. The list of specific points that Valani sent to Devitre on August 15, 2018 contained nine bullet points. (PX4171 (Altria) at 002-03). The second bullet point stated:

> We understood that you (and your successors and current and future affiliates) would not compete against us in vapor in the US and that JUUL would be the vehicle for all vapor assets. You have retained the right under certain circumstances to compete not only with existing Mark Ten products, but also with products under development and future products. The commitment to divest Mark Ten has been stricken. This is not acceptable to us. (PX4171 (Altria) at 002).

723. The final bullet in the list of specific points that Valani provided to Devitre read: "There are other matters on which we have fundamental disagreement, but we believe we need clarity on the above matters if there is to be any hope of a productive discussion this weekend." (PX4171 (Altria) at 003).

724. During their meeting on August 15, 2018, JLI's Valani discussed the list of JLI's specific points with Altria's Devitre in order to get "some verification from the Altria team that [] they were aligned with this prior to us sitting down again." (Valani (JLI) Tr. 932; PX7001 (Devitre (Altria) IHT at 96-97)).

725. While Devitre was still meeting with Valani on August 15, 2018, Devitre forwarded JLI's list of specific points to Altria CEO Willard, writing: "I am still with Riaz but this is a list

of matters to be discussed on Saturday in SFO." (PX1308 (Altria) at 001). Devitre told Willard that he would call him to discuss further later that night. (PX1308 (Altria) at 001).

726. About an hour after receiving JLI's list of specific points from Devitre, Willard forwarded the list to his Altria colleagues Garnick and Crosthwaite in separate emails. (PX1168 (Altria) at 001; PX1302 at 001). Crosthwaite then forward it to Gifford, Garnick, and Altria in-house attorney Anthony Reale. (PX1361 (Altria) at 001).

727. After receiving JLI's list of specific points, Altria's PWP adviser Wappler remarked that it "[l]ooks like [JLI] wants us to concede some key points prior to the [Saturday, August 18, 2018] meeting." (PX3174 (PWP) at 001).

728. The planned August 18, 2018, meeting between Altria and JLI in San Francisco did take place. (Pritzker (JLI) Tr. 708-11; Valani (JLI) Tr. 924, 936; PX7032 (Valani (JLI), Dep. at 63-64)).

G. At the August 18, 2018 Meeting, Altria Clarified That There Was No Substantive Disagreement on the Commitment to Exit E-Cigarettes

729. At the August 18, 2018 meeting in San Francisco, Altria clarified to JLI that there was no substantive disagreement regarding Altria's commitment not to compete in e-cigarettes. (*See* CCFF ¶¶ 730-31, below). The revised term sheet that came out of the August 18, 2018 meeting required Altria to contribute or divest its existing e-cigarettes, and prohibited Altria from competing in e-cigarettes except through JLI. (*See* CCFF ¶¶ 732-34, below).

730. In Altria's "Notes/Outline" for the August 18, 2018 meeting with JLI, Willard's opening remarks explain that Altria's removal of the term requiring it divest, contribute, or cease to operate its e-cigarette business was driven by antitrust concerns and not by substantive disagreement. (PX1493 (Altria) at 002). Willard's talking points then reaffirm that upon receiving antitrust approval, Altria will contribute MarkTen to JLI and become subject to robust non-compete:

- Some of the points you flagged in the document sent Wednesday also seem to boil down to miscommunication rather than substantive disagreement
    - For example, our approach on MarkTen was driven by antitrust and for the protection of both companies. Upon receiving antitrust approval, we would contribute MarkTen to Jack and become subject to a robust non-compete that makes Jack our exclusive e-vapor play. We can't agree to these terms under antitrust laws prior to receiving HSR approval, which was driving our clarifications in the term sheet

(PX1493 (Altria) at 002).

731. At the meeting on August 18, 2018, in San Francisco, the Altria and JLI negotiators discussed the list of specific points that Valani had provided to Devitre three days earlier. (PX7001 (Devitre (Altria), IHT at 104-05)). Valani testified that the meeting entailed a detailed discussion around deal points and issues lists. (PX7032 (Valani (JLI), Dep. at 80)).

Devitre testified that "a lot of the meeting was getting clarification from both sides" on what each side meant, and that, as a result, "some of the issues [] became nonissues." (PX7001 (Devitre (Altria), IHT at 104-05)).

732. After the August 18, 2018, meeting, JLI circulated a revised term sheet that was meant to reflect the progress made at the meeting. (PX7011 (Valani (JLI), IHT at 105-06 (discussing PX2185 (JLI) at 001))).

733. The August 18, 2018 revised term sheet required Altria to contribute its e-cigarette assets to JLI upon antitrust clearance, and if antitrust clearance was not obtained by nine months after the purchase, to divest its e-cigarette assets within six months thereafter:

> - Richard agrees that it will contribute, upon receipt of Antitrust Clearance and at no cost to Jack, all Richard assets relating to the Field in the U.S., including all electronic nicotine delivery systems and products it acquired, developed or has under development (in each case to the extent it has the legal right to make such contribution).
> - In the event Antitrust Clearance for the foregoing contribution is not obtained within nine months after the Purchase, then subject to the license referenced above, Richard will divest all such Richard assets relating to the Field in the U.S. within six months thereafter.

(PX2185 (JLI) at 006).

734. The non-competition clause in the revised August 18, 2018 term sheet read

> - Richard agrees to refrain, and to cause its current and future affiliates to refrain, from competing (or preparing to compete including through research and development activities) anywhere in the world in the e-vapor business (other than with respect to MarkTen and MarkTen Elite prior to their contribution or divestiture as described above). Richard will, and will cause its current and future affiliates to, coordinate any e-vapor business efforts through Jack and Jack will be the vehicle through which Richard participates in the e-vapor business. The non-compete will terminate as set forth in "Richard Exit Right" below. Richard agrees that, as a condition to any change of control transaction in which the acquiring party is a Jack competitor, the acquiring party will agree to be bound by the foregoing non-compete as if it were Richard.

(PX2185 (JLI) at 007-08).

H. Project Tree Discussions Continued in Late August and September 2018

735. Project Tree discussions between Altria and JLI continued into late August and September 2018. (*See* CCFF ¶¶ 736-72, below). In late August 2018, an issue arose around whether Altria would agree to pay for non-voting shares up-front at signing, as JLI wanted, or wait to pay until obtaining antitrust approval and converting its interest to voting shares. (*See* CCFF ¶¶ 747-48, below). The parties continued to talk, and shortly after the issue arose, Altria informed JLI that it had a solution and would pay up front. (*See* CCFF ¶¶ 749-56,

779-80, below). Throughout the month of September 2018, Altria discussed plans for continued negotiations with JLI. (*See* CCFF ¶¶ 757-72, below).

736. On August 15, 2018, Willard wrote in an email to Altria's chairman, Thomas Farrell, that Altria and JLI had "agreed to 75 percent of the deal terms" ahead of a planned meeting the next weekend on August 18, 2018. (PX7031 (Willard (Altria) Dep. at 218-19 (discussing PX4076 (Altria) at 001)).

737. On August 18, 2018, Willard met with JLI representatives to negotiate the transaction in San Francisco. (Willard (Altria) Tr. 1467-68). Willard flew directly from the August 18, 2020, negotiating session with JLI in San Francisco to Altria's Crazy Mountain Ranch ("Ranch") in Montana for {[redacted]} (Willard (Altria) Tr. 1468; *see also* PX1344 (Altria) at 001, 003-04 (*in camera*)).

738. On August 19, 2018, Garnick emailed Crosthwaite: "Billy and I think we should not send back a mark up. Instead, we tell our outside counsel that they should 'clarify' the term sheet with Tree's lawyers and resolve the antitrust issues but leave alone those provisions as to which the principals will inevitably have to discuss. We don't want to send them a term sheet and have them send back another angry memo. In the meantime, today, Howard should go ahead and schedule a meeting with Tree post board meeting to discuss and resolve the issues that Wachtell crystalized for us." (PX4288 (Altria)).

739. [redacted] (PX1344 (Altria) at 001, 003-04 (*in camera*)). {[redacted]} (PX1344 (Altria) at 001 (*in camera*)).

740. On August 22, 2018, JLI's Valani and Pritzker had a call with Altria's Willard, Devitre, Gifford, Crosthwaite, and Garnick, who were all at the Ranch in Montana. (PX7032 (Valani (JLI), Dep. at 82-86)).

741. [redacted] (PX1344 (Altria) at 003-04 (*in camera*)).

742. On August 23, 2018, JLI General Counsel Jerry Masoudi sent an email with the subject, "Fwd: Project Richard Term Sheet – IP and Non-Compete," attaching a document called "Tree – Term Sheet Issues List Jack draft 8.22.18. . ." (PX2505 (JLI) at 001). The attached document was withheld for privilege. (PX2505 (JLI) at 002).

743. On August 23, 2018, Willard emailed Pritzker that he had reviewed JLI's response to Altria's "proposal on the remaining issues." (PX2317 (JLI)).

744. On the evening of August 23, 2018, JLI's Valani, Pritzker, Burns, and Masoudi had a call with Altria's Willard, Devitre, Gifford, Crosthwaite, and Garnick. (PX2408 (JLI) at 002-03; PX2559 (JLI)). After that call, Devitre suggested to Valani that he fly to Montana to meet, but then suggested meeting in New York the following Monday instead. (PX2408 (JLI) at 003; PX7032 (Valani (JLI), Dep. at 85)).

745. On August 24, 2018, Altria's Garnick sent an internal email suggesting moving the planned meeting with JLI from Monday (August 27, 2018) to Tuesday (August 28, 2018). (PX4162 (Altria) at 001). Devitre responds that he thinks JLI's Pritzker is leaving for his trip to Africa on Tuesday morning. (PX4162 (Altria) at 001).

746. On August 25, 2018, JLI's Pritzker and Altria's Willard spoke by phone. (PX2317 (JLI); (PX3177 (PWP)). Altria adviser Wappler reported that Pritzker indicated to Willard that "they [JLI] really want to get this deal done." (PX3177 (PWP)).

747. Also on August 25, 2018, Altria board member Thomas Farrell called Willard and confirmed that the board was supportive of moving forward with JLI with one key adjustment to the terms. (PX3177 (PWP)). The board did not want Altria to sign and close the deal simultaneously, but instead wanted to wait for antitrust approval before transferring payment to JLI. (PX3177 (PWP)).

748. On or around August 27, 2018, JLI's Pritzker, Valani, Burns, and outside counsel met with Willard, Gifford, and Altria's outside counsel in New York. (PX7032 (Valani (JLI), Dep. at 87-88); PX7036 (Garnick (Altria), Dep. at 47)). At that meeting, Altria indicated it did not want to pay until after HSR approval, and JLI indicated that was unacceptable. (PX7036 (Garnick (Altria), Dep. at 48); (PX7032 (Valani (JLI), Dep. at 87-89)).

749. On August 28, 2018, Altria's Devitre and JLI's Valani planned to meet in Devitre's office in New York. (PX4155 (Altria)).

750. On August 28, 2018, Devitre's assistant sent an email (copying Devitre) to JLI's outside antitrust counsel Michael Sibarium and JLI's Valani confirming a conference call for August 29, 2018. (PX2394 (JLI); PX7032 (Valani (JLI), Dep. at 91-92)). Valani testified that this may have been a call between JLI outside counsel and Altria's counsel. (PX7032 (Valani (JLI), Dep. at 91-92)). Altria requested the call. (PX7032 (Valani (JLI), Dep. at 92)). Valani thinks Altria was still trying to "find solutions to the deal construct" issue. (PX7032 (Valani (JLI), Dep. at 92)).

751. On August 29, 2018, Willard sent a note to Altria's board stating: "We are still in discussions on the Tree [JLI] Opportunity. We have hit some setbacks and given the unavailability of one the investors for two weeks we will likely have a break in the negotiations. If we have material developments, we will send a note or have a call." (PX4461 (Altria) at 002; PX4462 (Altria)).

752. Garnick testified that in September 2018, Altria had internal discussions about pursuing the JLI transaction. (Garnick (Altria) Tr. 1823).

753. On September 4, 2018, Garnick informed Willard that JLI's Goldman adviser, Peter Gross, called Altria board member Devitre. (PX1314 (Altria)). Garnick also told Willard that he (Garnick) and Devitre had discussed a plan whereby subcommittees would "work on a comprehensive draft" of deal terms. (PX1314 (Altria)). Garnick reported that Devitre would call JLI's Valani to propose that plan. (PX1314 (Altria)).

754. On September 5, 2018, Devitre emailed Garnick: "I spoke to my friend [Riaz Valani]. I have conveyed his views to Howard [Willard]. They are ready to move to anti-trust lawyers speaking to each other as soon as possible. But still not ready for sub-group meetings. We agreed that you should reach out to michael.sibarium@pillsburylaw.com and set up meeting. My friend [Valani] is giving him a heads up that you will be calling." (PX4159 (Altria); PX7001 (Devitre (Altria), IHT at 121)).

755. Devitre recalls that Valani's "views" that he conveyed to Willard, as referenced in his September 5, 2018, email, were related to what would happen if antitrust approval was not received. (PX7001 (Devitre (Altria), IHT at 121) (discussing PX1339 (Altria) at 002)). Valani told Devitre that he (Valani) had spoken to Sibarium and that "the two sides could iron out the matter." (PX7001 (Devitre (Altria), IHT at 123 (discussing PX1339 (Altria) at 002))).

756. On September 6, 2018, Garnick reported that he had spoken with JLI's outside antitrust counsel, Sibarium. (PX1339 (Altria) at 002). Garnick wrote: "I reviewed with him again our revised proposed structure. I told him we would send his client a revised term sheet, but it would contain no surprises, just the proposal I had already reviewed with him when Riaz was on the line. I emphasized our idea of going forward with small drafting teams to prepare a document open to renegotiation by both sides. . . . I told him that we were ready to proceed in any way they preferred." (PX1339 (Altria) at 002).

757. Devitre responded to Garnick, "Thanks. I think they are a very disjointed group! Let things stand for a while." (PX1339 (Altria) at 001).

758. Devitre testified that after September 6, 2018, discussions continued and that "[t]his matter was a small subsect of the discussions and did not come in the way of the main negotiations." (PX7001 (Devitre (Altria), IHT at 124)).

759. On September 10, 2018, Altria's Garnick sent an email to Altria's Willard, Gifford, Crosthwaite, and Reale, writing "I am assuming that given the Tree meeting tomorrow that we are NOT planning to send out the term sheet today." (PX4424 (Altria) (*emphasis in original*)).

760. An Altria presentation dated September 2018 and titled "Project Tree Board Update," which was circulated on September 10, 2018 to the Altria Board of Directors, included a slide stating "Parties met on August 27th to continue negotiations . . . Further discussions have been on hold due to the availability of a Tree principal . . . Parties are discussing time frames for continuing negotiations." (PX4467 (Altria) at 004).

Negotiation update

- Parties met on August 27th to continue negotiations
- Further discussions have been on hold due to the availability of a Tree principal
- Parties are discussing time frames for continuing negotiations

<u>Current Altria Proposal</u>

- $12.6 BN for non-voting shares representing a 45% economic interest and 1 independent Board seat
- Hart-Scott-Rodino filing plan
- Two-year option to convert to 20% voting interest

(PX4467 (Altria) at 004).

761. In the same September 2018 Board Update, "Altria non-compete" was listed as one of the "[k]ey terms for further negotiation." (PX4467 (Altria) at 005).

762. On September 11, 2018, Altria scheduled a "Project Tree Meeting" in Altria's "HQ Boardroom." (PX4466 (Altria)).

763. On September 11, 2018, a cover email shows that Altria internally circulated a revised term sheet for the JLI transaction. (Garnick (Altria) Tr. 1652 (discussing PX1494 (Altria) (attachments not produced))). Altria also prepared a separate document excerpting the revised language regarding "sign and close" and "key antitrust language." (PX1494 (Altria)).

764. Earlier in the day on September 11, 2018, Garnick directed a subordinate to prepare a "document that extracts from the term sheet the provision that says we will make the upfront payment and the antitrust provisions we discussed on HSR clearance. If we decide we want to send just that document it should be ready to go." (PX1555 (Altria)).

765. On September 11, 2018, Devitre and Valani spoke by phone for 32 minutes. (PX4374 (Altria) at 007 (Devitre phone records)).

766. On September 12, 2018, the FDA issued letters to the five top-selling e-cigarette manufacturers (Altria, JLI, Reynolds, ITG, and JTI), requesting that each company submit to the FDA within 60 days its plans to address the issue of youth access and use of its e-

cigarette products. (Murillo (JLI/Altria) Tr. 2961-62 (discussing RX0704 (Altria) at 001); *see also* PX3179 (PWP) at 002).

767. On September 12, 2018, PWP's Wappler told colleagues that he had spoken with Altria's Crosthwaite and that everyone agreed that the FDA letter "had a profound impact on the Tree discussions." (PX7028 (Wappler (PWP), Dep. at 87-89) (discussing PX3180 (PWP) at 001)).

768. On September 13, 2018, PWP's Wappler sent a colleague a draft script for if Altria decided to call JLI. (PX3154 (PWP)). Wappler reported that Devitre had spoken with Valani two days earlier to explain that Altria had "a solution to the simultaneous sign/close issue, and [is] prepared to send a revised term sheet," and that Valani indicated that JLI was focused on a tender offer and not interested in additional discussions. (PX3154 (PWP)). In his September 13, 2018 email, Wappler commented that "[i]n hindsight probably a bad move on their part," given the FDA letter. (PX3154 (PWP)).

769. As of September 18, 2018, PWP was preparing some Project Tree-related analysis at the direction of Altria. (PX1623 (Altria) at 001).

770. On or around September 21, 2018, Altria employees, including Crosthwaite, and Altria's advisers at PWP had discussions and prepared a presentation regarding the potential implications of the FDA's September 12, 2018 letter on Tree negotiations. (PX4273 (Altria) at 001-02). Altria and PWP considered that JLI might have greater strategic rationale for a transaction with Altria in light of the FDA letter. (PX4273 (Altria) at 009-10).

771. Altria General Counsel, Garnick, testified that Altria management continued to some degree to internally discuss the potential Tree deal through the month of September. (Garnick (Altria) Tr. 1655). Garnick testified that he participated in Altria meetings about the potential JLI transaction "all the time" in the latter half of 2018, including some meetings in September 2018. (Garnick (Altria) Tr. 1651).

772. In late September 2018, Altria executives discussed Project Tree during meetings at the Ranch in Montana. (PX4358 (Altria) at 001). On September 25, 2018, Altria employee Brian Blaylock sent Crosthwaite a deck entitled "Project Tree 10YP" with the {[redacted]} writing in his cover email: "As conversations progress at the Ranch we thought it would be beneficial to provide you with how Project Tree could impact the current 10YP LE." (PX4358 (Altria) at 001, 003 (*in camera*)).

I. NEGOTIATIONS INTENSIFIED AGAIN IN OCTOBER 2018

1. In Its October 5, 2018 Letter, Altria Reaffirmed Its Commitment Not to Compete in E-cigarettes

773. In early October 2018, several conversations took place between Altria and JLI representatives, and Altria's Willard reached out to JLI's Pritzker to propose revised deal terms. (*See* CCFF ¶¶ 774-87, below). Pritzker thought the revised deal terms were responsive to JLI's concerns, such that it would be beneficial for Altria to send JLI a letter.

(*See* CCFF ¶ 775, below). On October 5, 2018, Altria's Willard sent a letter to JLI setting forth the proposed key terms for a deal. (*See* CCFF ¶ 779, below). In that letter, Altria reaffirmed its commitment, "consistent with [] previous discussions," not to compete in e-cigarettes. (*See* CCFF ¶¶ 780-87, below).

774. On October 1, 2018, Altria board member Devitre and JLI's Valani had a 33-minute phone call. (PX4374 (Altria) at 008 (Devitre phone records)).

775. A few days prior to October 5, 2018, Willard called Pritzker and outlined some proposed terms to see if Pritzker thought it would be constructive for Willard to submit a letter with those terms to JLI. (Pritzker (JLI) Tr. 857-58). Pritzker thought the terms Willard proposed were sufficiently responsive to JLI's concerns that the parties could move forward, and Willard subsequently sent a letter to JLI on October 5, 2018. (Pritzker (JLI) Tr. 857-58).

776. On October 3, 2018, JLI's Goldman Sachs adviser Gross texted Altria board member Devitre: "I had a long chat with [JLI's] Riaz [Valani] tonight. I pushed him really hard. I am speaking with both him and Nick [Pritzker] tomorrow at 9:30 PM PT." (PX4168 (Altria) at 001).

777. In notes from October 4, 2018 for an Altria board call, Garnick wrote that [redacted] (PX1010 (Altria) at 004 (*in camera*)). {[redacted]} (PX1010 (Altria) at 002-03 (*in camera*)). Garnick wrote that [redacted]} (PX1010 (Altria) at 003 (*in camera*)).

778. In the same October 4, 2018 notes for the Altria board call, Garnick also wrote that [redacted] (PX1010 (Altria) at 004 (*in camera*)).

779. On October 5, 2018, Altria's Willard sent a letter to JLI's Pritzker, Valani, and Burns setting forth eight numbered terms for them to consider. (PX2152 (JLI)). Willard asked to hear back from JLI as to whether they were willing to more forward by no later than October 12, 2018. (PX2152 (JLI) at 003).

780. Among other terms, Willard's letter proposed that Altria would acquire a 35% economic and voting interest in the entire JLI. (PX2152 (JLI) at 002). Previously, Altria had proposed acquiring a 45% interest of only JLI's U.S. business. (Pritzker (JLI) Tr. 825-26). Willard's letter also stated that Altria would make the full investment at closing, at which time Altria would receive non-voting shares, with the parties cooperating to seek regulatory approval to convert those shares into voting shares. (PX2152 (JLI) at 002). Pritzker testified that Altria acquiring a 35% interest (instead of 45%), investing in the entire JLI (not just the U.S. business), and agreeing to pay the full amount at closing addressed JLI's concerns. (PX7021 (Pritzker (JLI), Dep. at 137-38); *see* Pritzker (JLI) Tr. 857-58)).

781. Term 5 of the October 5 letter stated that Altria would "provide support services in the U.S. along the lines previously discussed for a term of six years from closing, which would be renewable for successive three-year terms if mutually agreed. If at the end of any term, we did not mutually agree to extend the support services, Altria would nonetheless provide transition services for a reasonable period." (PX2152 (JLI) at 002-03).

782. Willard's October 5, 2018 letter to JLI also included the following as Term 6:

> 6. Altria would agree that it and its current and future subsidiaries will not compete, in a manner consistent with our previous discussions, in the U.S. e-vapor market for any period, exclusive of the aforementioned transition period, during which it provides support services.

(PX2152 (JLI) at 003).

783. Pritzker testified that he and Willard had previous discussions about "the notion of noncompetition and of existing products before this letter." (Pritzker (JLI) Tr. 713-14).

784. Discussing the October 5 letter, Pritzker explained that the "noncompetition provision was the least of my concerns," and that he thought the previous discussions on the issue were "pretty clear or at least moving towards something that we both believed was not going to be an issue." (PX7021 (Pritzker (JLI), Dep. at 140-41)).

785. Pritzker understood Term 6 in the October 5 letter to be referring to "all of the discussions that we had" and that to him, what Term 6 suggested "was there was an agreement on that, on those points." (PX7021 (Pritzker (JLI), Dep. at 204)). Pritzker did not see Term 6 as a game changer, but saw it as Altria simply saying, "we'll do the thing with the noncompete that we previously exchanged views on." (PX7021 (Pritzker (JLI), Dep. at 204)).

786. The October 5 letter set forth a deal construct that was close to the deal that was actually executed between Altria and JLI. (PX7011 (Valani (JLI), IHT at 115-16)).

787. Pritzker acknowledged receipt of Willard's October 5, 2018 letter and promised to reply before October 12, 2018 as requested. (PX4400 (Altria)).

2. Negotiations Continued to Progress in Mid-October 2018

788. In mid-October 2018, negotiations continued to progress towards a deal based on the terms outlined in Altria's October 5, 2018 letter. (*See* CCFF ¶¶ 789-810, below). On October 15, 2018, Altria sent JLI a revised term sheet reflecting the terms outlined in its October 5, 2018 letter. (*See* CCFF ¶¶ 797-804, below). The October 15, 2018 term sheet obligated Altria to dispose of its e-cigarette products either by contributing them to JLI or by divesting them as necessary to obtain antitrust approval. (*See* CCFF ¶ 798, below). In its October 15, 2018 term sheet, Altria added language tying its provision of certain services to the earlier of the date it contributed its e-cigarette assets to JLI, or when it "otherwise exit[ed]the marketing and sale of [e-cigarettes]." (*See* CCFF ¶¶ 798-803, below). Altria's October 15, 2018 term sheet also contained a non-compete clause. (*See* CCFF ¶ 804,

below). After receiving the October 15, 2018 term sheet, JLI indicated it was "ready to do a deal." (*See* CCFF ¶ 805, below).

789. On October 9, 2018, Pritzker requested a call with Willard and Gifford for Thursday, October 11, 2018. (PX4401 (Altria) (Email exchange between Pritzker, Willard, and Gifford)).

790. On October 11, 2018, JLI's Valani talked to Altria board member Devitre. (PX2385 (JLI) (Email from Valani noting, "Just talked to Dinny [Devitre]")).

791. On the evening of October 11, 2018, Altria's Willard had a conversation with JLI's Pritzker. (Willard (Altria) Tr. 1227-28).

792. On October 11, 2018, Altria's PWP adviser Wappler reported to colleagues: "Pritzker called back this evening and said the [JLI] Board is supportive of moving forward on the terms outlined by Howard [Willard]. They are going to have a call tomorrow to confirm all of the specifics . . .." (PX3198 (PWP)).

793. On October 12, 2018, Willard told Devitre via text: "Spoke to Nick [Pritzker] last night | Tentative agreed to a call on Monday to agree on terms | Agreed on term in the letter." (PX4167 (Altria) at 007).

794. Late in the evening on October 11, 2018, Pritzker emailed Willard, Gifford, and Valani to confirm a call for 11:00pm ET the next day (October 12). (PX2023 (JLI) at 002). On the morning of October 12, 2018, Altria's Willard responded to Pritzker and Valani: "I have a revised proposal. I think it would be more productive if we send you a revised term sheet early next week and then meet or have a call next Friday or on a day that works for you." (PX2023 (JLI) at 002).

795. On October 11, 2018, Willard and Pritzker spoke by phone. (PX4376 (Altria) at 004 (Willard phone records)).

796. In an October 12 draft letter to the Altria board updating them on the status of Project Tree, Willard characterized his October 5 letter as "propos[ing] a modification" of the terms the two companies had been exchanging and the negotiations as "on-going." (PX4292 (Altria) at 002).

797. On October 15, 2018, Willard sent Pritzker, Valani, and Burns a revised term sheet that reflected Altria's edits to the preceding August 18, 2018 term sheet. (PX2147 (JLI)).

798. The October 15, 2018 revised term sheet included a term requiring Altria to contribute its existing e-cigarette business to JLI upon antitrust clearance, if it had not already divested the assets in order to achieve antitrust clearance:

- If Richard has not otherwise transferred its interests in its e-vapor assets to a third party, then Richard agrees that it will contribute, upon receipt of Antitrust Clearance, to Jack all Richard assets relating to the Field in the U.S., including all electronic nicotine delivery systems and products it acquired, developed or has under development as of [●], 2018 (in each case to the extent it has the legal right to make such contribution) and Jack shall pay Richard $[●] million in respect of such contribution.

- Richard will offer to divest all such Richard assets relating to the Field if necessary to obtain Antitrust Clearance, to the extent Richard has the legal right to do so, no later than within 9 months after application for HSR clearance of the Purchase if the parties have not received Antitrust Clearance at that point. To the extent Richard does not have the legal right to divest of any asset relating to the Field within 9 months after application for the HSR clearance of the Purchase, but obtains such a legal right subsequently when the parties have not received Antitrust Clearance, Richard will offer to divest of such assets at that time.

(PX2147 (JLI) at 022-23). In both cases, the term sheet stated that contribution and divestiture were subject to Altria's legal right to take those actions. (PX2147 (JLI) at 022-23).

799. The October 15, 2018 term sheet specified that Altria "shall elect the time (not to exceed two years from closing of the Purchase) when the parties initiate the HSR clearance process." (PX2147 (JLI) at 023).

800. In its October 15, 2018 term sheet, Altria added language referring to Altria "otherwise exiting the marketing and sale of [e-cigarette products]":

- <u>Services provided upon earlier of (i) contribution described above or (ii) Richard otherwise exiting the marketing and sale of products in the Field ("Contribution Date").</u> Richard agrees, effective from the Contribution Date and thereafter during the Services Term to provide the following services in the U.S. (the "Contribution Date Services," and together with the Purchase Date Services, the "Services"):
  - assist with direct marketing programs, including inserts and/or onserts;
  - fully support Jack's efforts to gain distribution, display and in-store support for Jack's products, including support of point of sale prominence for Jack's products alongside Richard's; and
  - grant Jack access to Richard's best in class infrastructure (including distribution) to maximize the growth of Jack.

(PX2147 (JIL) at 024).

801. The underlined language in this term was added by Altria, including the reference to Altria "otherwise exiting the marketing and sale of products in the Field." (PX2147 (JLI) at 008 (redline version showing changes against August 18 term sheet), 024 (clean copy reflecting Altria's edits); Pritzker (JLI) Tr. 726-27).

802. As edited by Altria, this term meant that Altria could start providing certain services to JLI, such as direct marketing programs targeting Altria smokers, upon the earlier of Altria contributing its e-cigarette assets to JLI, or Altria "otherwise exiting the marketing and sale of [e-cigarettes]." (PX2147 (JLI) at 008 (redline version), 024 (clean version); PX7031

(Willard (Altria) Dep. at 235-37) (discussing PX1269 (Altria) at 023) ("Q. And, Mr. Willard, do you have an understanding of what the reference to Richard otherwise exiting the marketing and sale of products in the field as it's used in this term? A. (Document review.) Yeah, I don't -- sounds like it's talking about providing the services if either point 1 happens or -- or point 2 happens. And it sounds like point 2 is a general description of a variety of ways that Altria could exit the marketing and sale of products in the field other than contribution, which is listed in point 1.")). Altria would not begin providing these services, such as inserts or onserts, to JLI while the two companies were competing. (Garnick (Altria) Tr. 1,668-69).

803. The services that Altria would not begin providing to JLI until the two companies were no longer competing included placing JUUL coupons in (inserts) or on (onserts) Altria cigarette packs. (PX2147 (JLI) at 024; Willard (Altria) Tr. 1,232-33; Garnick (Altria) Tr. 1,668-69).

804. The October 15, 2018 term sheet also included a non-compete term:

> • Richard agrees to refrain, and to cause its current and future subsidiaries to refrain, from competing in the e-vapor business (other than with respect to MarkTen and MarkTen Elite prior to their contribution or divestiture as described above). Richard will, and will cause its current and future subsidiaries to, coordinate any e-vapor business efforts through Jack and Jack will be the vehicle through which Richard participates in the e-vapor business. The non-compete will
>
> terminate upon the termination of the Services Term.

(PX2147 (JLI) at 024-25).

805. On Saturday October 20, 2018, JLI's Valani and Altria board member Devitre had a breakfast meeting in New York, and Valani indicated that JLI was "ready to do a deal." (PX1313 (Altria) (email from Willard to Crosthwaite, Gifford, and Garnick); PX7001 (Devitre (Altria), IHT at 127-28)).

806. At the breakfast meeting, Valani suggested the two sides meet the following Monday (October 22). (PX1313 (Altria) (email from Willard to Crosthwaite, Gifford, and Garnick); PX7001 (Devitre (Altria), IHT at 128)). Meeting on Monday would not work for Altria, but Willard suggested internally that Altria should be prepared to meet with JLI on Friday (October 26). (PX1313 (Altria)).

807. On Monday, October 22, 2018, Devitre emailed Altria's Willard and Gifford and told them that JLI's Valani was open to meeting that Friday or Saturday for negotiations. (PX1312 (Altria)). Devitre suggested that he host a dinner the night before negotiations, and asked Willard to invite Valani and Pritzker. (PX1312 (Altria)). Due to an Altria conflict, Willard proposed to JLI's Valani, Pritzker, and Burns that they meet on Monday (October 29) and do dinner the night before. (PX2364 (JLI) at 002).

808. On October 22, 2018, Altria and JLI's legal teams had a call. (PX2364 (JLI) at 002)).

809. An Altria document entitled "Summary of Issues Raised by Tree on October 22, 2018 Lawyers' Call" included the following chart reflecting the positions in Altria's October 15,

2018 term sheet and JLI's comments on those positions, including an Altria term saying: "Altria will not compete in the e-vapor business for six years."

No.	Topic	Altria Term Sheet	Tree Comments[1]
4.	**Antitrust Filing**	• Altria will file for antitrust clearance within two years.	• Tree proposed that this deadline coincide with the termination date of the PMI agreements (July 15, 2020).
5.	**Non-Compete and Support Services**	• Support Services last for six years from closing. • Reasonable transition period at end of support services term. • Altria will not compete in the e-vapor business for six years. An acquirer of Altria is not bound by the non-compete agreement, even if it is a competitor of Tree.	• Tree stated that the full support services and non-compete effectively may only last for 3 1/2 years due to antitrust delay. Tree proposed a support services term of six years from either the date of the antitrust filing or antitrust clearance. [***Note**: Altria's Oct. 5 letter provided for a term of six years from closing, although Tree's counterproposal here does not seem unreasonable*.] • Tree wants to specify a transition term in the term sheet, and floated one year as a possibility • Tree stated that they were not trying to effectively block an acquisition or change of control of Altria. However, they are concerned about a competitor to gaining a material position in Tree while continuing to compete with Tree. • Tree raised the issue of whether Altria should retain its board seats and voting rights if it starts to compete.

(PX1270 (Altria) at 024).

810. On October 23, 2018, Altria's Garnick emailed JLI's outside counsel and suggested that they could resolve a number of issues by having an informal chat by phone. (PX2363 (JLI) at 001-02). JLI counsel responded that he thought having further conversations would be helpful, and proposed a time for that afternoon. (PX2363 (JLI) at 001). He also noted that JLI General Counsel Jerry Masoudi would be available. (PX2363 (JLI) at 001).

J. ALTRIA AND JLI REACHED AGREEMENT ON A FINAL TERM SHEET JUST DAYS AFTER ALTRIA DISCONTINUED ITS POD-BASED E-CIGARETTE PRODUCTS

811. On October 25, 2018, Altria announced that it was pulling its pod-based e-cigarettes from the market, due to a purported concern that pod-based products significantly contribute to youth e-cigarette use. (*See* CCFF ¶ 812, below). Only days later, Altria and JLI, whose market-leading JUUL products are pod-based, reached material agreement on a final term sheet. (*See* CCFF ¶¶ 813-25, below). The final term sheet required Altria to contribute or divest its e-cigarette products, and included a non-compete prohibiting Altria from participating in the e-cigarette business except through JLI. (*See* CCFF ¶¶ 825-30, below).

812. On October 25, 2018, Altria informed the FDA via letter (and announced publicly) that it was removing its pod-based products MarkTen Elite and Apex by MarkTen from the market due to a stated concern that "pod-based products significantly contribute to the rise in youth use of e-vapor products." (PX2022 (JLI) at 003).

813. Early in the morning on October 25, 2018, Willard forwarded Altria's FDA letter to JLI's Pritzker, Valani, and Burns. (PX2022 (JLI) at 001).

814. Later on the morning of October 25, 2018, Altria's Willard and Gifford spoke to JLI's Pritzker, Valani, and Burns by phone. During that call, Willard said that, despite what Altria had told the FDA about pod-based products, Altria still wanted to move forward with acquiring an interest in JLI. (Pritzker (JLI) Tr. 728-30; Valani (JLI) Tr. 945).

815. On the October 25, 2018 phone call, Willard explained that Altria was removing Elite because they had concluded it was not as good as JUUL's product. (PX7021 (Pritzker (JLI), Dep. at 148)).

816. Willard told Pritzker, Valani, and Burns that "he was anxious to continue conversations and to try to do the investment as we had discussed." (Pritzker (JLI) Tr. 875-76). Therefore, Valani, Pritzker, and Burns went forward with the prior plan to meet with Altria on October 29, 2018. (Pritzker (JLI) Tr. 875-76; PX2364 (JLI) at 002 (email dated October 22, 2018 referring to proposed meeting with Altria the following Monday, October 29)).

817. On October 28, 2018, Altria board member Devitre hosted a dinner at his apartment in New York. (Valani (JLI) Tr. 946-47); PX1358 (Altria) (e-mail invitation from Devitre). The attendees of the dinner were Pritzker, Burns, and Valani from JLI, and Devitre, Willard, Gifford, and Crosthwaite from Altria. (Valani (JLI) Tr. 946-47).

818. Also on the evening of October 28, 2018, Altria attorneys met with JLI attorneys. (PX4264 (Altria) (Garnick e-mail referencing meeting with JLI attorneys)).

819. On October 28, 2018, Valani texted Devitre after dinner: "Thank you Dinny. Very nice, and very helpful." (PX2411 (JLI) at 001 (Valani text messages). Devitre responded: "I think both sides have become friends. That is important for the future. BTW, I won't be there tomorrow. I think it is important that Howard should be the only speaker from the Altria side at this stage. Good luck tomorrow. I'd love to hear that the deal is done by midday!" (PX2411 (JLI) at 001; Valani (JLI) Tr. 947-48).

820. On October 29, 2018 the Altria and JLI negotiators met at the office of Altria's counsel, Wachtell. (Valani (JLI) Tr. 945-46). The attendees included Willard, Gifford, Garnick, and Crosthwaite from Altria, and Pritzker, Burns, and Valani from JLI. (Valani (JLI) Tr. 945-46).

821. Around 7:30 p.m. on October 29, 2018, Willard texted Devitre: "We have reached agreement on terms." (PX4167 (Altria) at 008 (text exchanges between Willard and Devitre)).

822. On the evening of October 29, 2018, Devitre texted JLI's Valani: "Congratulations on reaching agreement." (PX2411 (Altria) at 001 (Valani text messages); Valani (JLI) Tr. 948-49)). Valani responded: "Amazing that both sides got there." (PX2411 (Altria) at 001; Valani (JLI) Tr. 948-49)). Valani's response was referring to the JLI/Altria meeting at Wachtell, where for the first time there was alignment on terms in a term sheet. (Valani (JLI) Tr. 948-49).

823. Also on the evening of October 29, 2018, JLI's Pritzker emailed Devitre: "Dinny: thanks so much for hosting last night and for all you have done to make this partnership done!"

(PX4157 (Altria)). Devitre responded that he "look[ed] forward to a very bright future!" (PX4157 (Altria)).

824. Pritzker emailed Willard and Gifford on the night of October 29, 2018, writing: "Howard/Billy: thanks so much for your tenacity, flexibility and creativity. We couldn't be more excited at the prospect of a partnership with you and your team." (PX2322 (JLI)).

825. On the morning of October 30, 2018, JLI's outside counsel sent Altria the "final term sheet." (PX1271 (Altria) at 001).

826. Like the October 15, 2018 term sheet, the October 30, 2018 term sheet included a term requiring Altria to contribute its existing e-cigarette business to JLI upon antitrust clearance, if it had not already divested the assets in order to achieve antitrust clearance:

> If Richard has not otherwise transferred its interests in its e-vapor assets to a third party, then Richard agrees that it will contribute, upon receipt of Antitrust Clearance, to Jack at Jack's election, all Richard assets relating to the Field in the U.S., including all vapor-based electronic nicotine delivery systems and components thereof it acquired, developed or has under development as of the date of the contribution (in each case to the extent it has the legal right to make such contribution) and Jack shall pay Richard an amount to be mutually agreed.
>
> Richard will offer to divest all such Richard assets relating to the Field if necessary to obtain Antitrust Clearance, to the extent Richard has the legal right to do so, no later than within 9 months after application for HSR clearance of the Purchase if the parties have not received Antitrust Clearance at that point. To the extent Richard does not have the legal right to divest of any asset relating to the Field within 9 months after application for the HSR clearance of the Purchase, but obtains such a legal right subsequently when the parties have not received Antitrust Clearance, Richard will offer to divest of such assets at that time.

(PX1271 (Altria) at 022). In both cases, the final term sheet stated that contribution and divestiture were subject to Altria's legal right to take those actions. (PX1271 (Altria) at 022).

827. The October 30, 2018 final term sheet also stated that Altria "shall elect the time (no later than July 15, 2020) when the parties initiate the HSR clearance process." (PX1271 (Altria) at 022).

828. The October 30, 2018 final term sheet contained the same language as the October 15, 2018 term sheet referring to Altria "otherwise exiting the marketing and sale of [e-cigarette products]":

> Extended services provided upon earlier of (i) Antitrust Clearance or (ii) Richard otherwise exiting the marketing and sale of products in the Field ("Extended Services Date"). Richard agrees, effective from the Extended Services Date and thereafter during the Services Term to provide the following services, at Jack's request, in the U.S. (the "Extended Services," and together with the Purchase Date Services, the "Services"):
>
> - assist with direct marketing programs, including inserts and/or onserts;
> - fully support Jack's efforts to gain distribution, display and in-store support for Jack's products, including support of point of sale prominence for Jack's products alongside Richard's; and
> - grant Jack access to Richard's best in class infrastructure (including distribution) to maximize the growth of Jack.

(PX1271 (Altria) at 023).

829. This term meant that Altria could start providing certain services to JLI, such as direct marketing programs targeting Altria smokers, upon the earlier of Altria contributing its e-cigarette assets to JLI, or Altria "otherwise exiting the marketing and sale of [e-cigarettes]." (PX1271 (Altria) at 023).

830. As did prior term sheets, the October 30, 2018 final term sheet also contained a non-compete:

> Richard agrees to refrain, and to cause its current and future subsidiaries and controlled affiliates to refrain, from competing (or preparing to compete, including through research and development activities) in the e-vapor business, other than (i) with respect to MarkTen and MarkTen Elite prior to their contribution or divestiture as described above and (ii) basic research not directed toward the e-vapor business and not undertaken with the intent (primarily or in part) of developing or commercializing technology or products in the e-vapor business. Richard will, and will cause its current and future subsidiaries and controlled affiliates to, coordinate any e-vapor business efforts through Jack and Jack will be the vehicle through which Richard participates in the e-vapor business. Notwithstanding the foregoing, Richard may prepare to compete (including through research and development activities), beginning on the delivery of the Non-Compete Termination Notice.

(PX1271 (Altria) at 024).

K. DUE DILIGENCE AND FINALIZATION OF DEFINITIVE DEAL DOCUMENTS TOOK PLACE IN NOVEMBER AND DECEMBER 2018, CULMINATING IN THE DECEMBER 20, 2018 TRANSACTION

831. Due diligence and the drafting and finalization of long-form transaction documents took place in November and December 2018. (*See* CCFF ¶¶ 832-57, below). On December 7, 2018, Altria announced that it was discontinuing all of its remaining e-cigarette products. (*See* CCFF ¶ 848, below). On December 20, 2018, Altria and JLI closed on the transaction whereby Altria acquired a 35% interest in JLI. (*See* CCFF ¶¶ 859-61, below).

832. At the October 29, 2018 meeting, Altria and JLI reached the point where drafting of definitive deal documentation could begin. (Pritzker (JLI) Tr. 801-02). From the beginning

of November 2018 until the deal was signed, the documentation going between Altria and JLI consisted of long drafts of the corporate deal documents. (Pritzker (JLI) Tr. 802).

833. Due diligence began shortly after the October 29, 2018 meeting. (PX2118 (JLI) at 003 (e-mail correspondence on Altria's preliminary diligence list); PX2383 (JLI) at 001). On October 29, 2018, Altria sent JLI a draft clean team agreement prior to due diligence starting. (PX2362 (JLI) at 001).

834. On October 30, 2018, Altria sent JLI a preliminary list of due diligence requests. (PX2118 (JLI) at 003). On Wednesday, November 7, 2018, Altria board member Devitre mentioned to JLI's Valani that due diligence would start the following Monday. (PX2383 (JLI) at 001).

835. A draft purchase agreement dated November 15, 2018 included a clause that required Altria to divest, dispose of, or contribute its e-vapor assets to JLI:

> (f) Notwithstanding the foregoing, if Antitrust Clearance has not been obtained at such time, the Investor shall, on or prior to the date that is nine (9) months following the filing of the Notification and Report Form pursuant to the HSR Act with respect to the Antitrust Conversion described in Section 4.1(a) (the "**Divestiture Date**"), to the extent permitted by Antitrust Laws, divest or otherwise dispose of the e-Vapor Business of the Investor and any of its Affiliates and, if such divestiture or disposition is not permitted by Antitrust Laws as of the Divestiture Date but subsequently becomes permitted thereunder, the Investor shall as promptly as practicable thereafter provide written notice to the Company that such divestiture or other disposition is permissible and shall divest or otherwise dispose of such e-Vapor Business as promptly as practicable after receipt of confirmation by the Company to do the same. If Antitrust Clearance has been obtained, as promptly as practicable following the Investor's receipt of written request by the Company to do the same, the Investor shall, and shall cause each applicable Affiliate to, take all necessary and appropriate actions including making any filings, notices, notification, requests or applications necessary and appropriate to obtain any permit, clearance, approval or consent from any necessary Governmental Bodies or other third-parties to sell, transfer and assign to the Company any and all right, title and interest in, to and under all of the assets, properties and rights of any e-Vapor Business in the United States of the Investor and any of its Affiliates, including all such assets, properties and rights acquired, developed or under development) as of the date of such sale, transfer or assignment at a purchase price to be calculated based on an aggregate value of $[•].

(PX2182 (JLI) at 302 (Section 4.1(f) of draft Purchase Agreement)).

836. The broad non-compete clause in the mid-November 2018 draft transaction documents only permitted the operation of Mark Ten and Mark Ten Elite until their divestiture or contribution to JLI:

Section 3.1. Direct Non-Compete

(a) Until the six (6) month anniversary of the Non-Compete Termination Notice Date, the Investor shall not, and shall cause its Subsidiaries and controlled Affiliates not to, directly or indirectly, anywhere in the world: (i) own, manage, operate, control, engage in or assist others in engaging in, the e-Vapor Business; (ii) prepare to engage in the e-Vapor Business, including through engaging in or sponsoring research and development activities or otherwise; or (iii) own any equity interest in any Person, other than an aggregate of less than four and nine-tenths percent (4.9%) of the equity interests of any Person which is publicly-listed on a national stock exchange, that engages directly or indirectly in a the e-Vapor Business (other than (x) as a result of the Investor's ownership of Shares or (y) engagement in, or sponsorship of, basic research activities not directed toward the e-Vapor Business and not undertaken with any intent of developing or commercializing technology or products in the e-Vapor Business) (all such actions set forth in clauses (i) through (iii), to "Compete" or "Competition"). Notwithstanding the foregoing, the Investor and its Subsidiaries and controlled Affiliates may engage in the business relating to its [M10] and [M10E] brands as such business is presently conducted, subject to Section [4.1] of the Purchase Agreement.

(PX2182 (JLI) at 385 (Section 3.1(a) of draft Relationship Agreement)).

837. There was a call scheduled for November 27, 2018 between Altria (Crosthwaite, Willard, Garnick, and Gifford) and JLI (Pritzker, Valani, Burns, Masoudi, and CFO Timothy Danaher). (PX2431 (JLI) at 002).

838. On November 28, 2018, Altria's Garnick reached out to JLI's Masoudi to inform him that Altria's Crosthwaite was trying to reach JLI CEO Burns with an "off the record" suggestion "as to how to accelerate things next week." (PX4412 (Altria)).

839. As of late November 2018, the targeted closing date for the transaction was prior to Christmas, 2018. (PX7032 (Valani (JLI), Dep. at 119 (discussing PX2429 (JLI))). That target was met. (PX7032 (Valani (JLI), Dep. at 119)).

840. On December 1, 2018, Garnick informed Altria's Joe Murillo via email of Altria's decision to stop making e-cigarette products altogether and Altria's transition to a post-Tree Altria. (Garnick (Altria) Tr. 1,675; PX4277 (Altria)).

841. By December 4, 2018, JLI was working on a joint JLI/Altria press release to announce the transaction. (PX2130 (JLI); PX7011 (Valani (JLI), IHT at 133)).

842. As of December 5, 2018, the draft purchase agreement still included a provision requiring Altria to divest its e-cigarette assets or contribute them to JLI. (PX1500 (Altria) at 167 (Section 4.1(e) of draft Purchase Agreement)).

843. The December 5, 2018, draft purchase agreement stated that Altria must file for HSR clearance on or before July 15, 2020. (PX1500 (Altria) at 164-65 (Section 4.1(a) of draft Purchase Agreement)).

844. At a meeting on December 5, 2018, Altria board member Devitre told JLI's Valani that Altria was "all systems go" on proceeding with the transaction. (PX2418 (JLI); PX7032 (Valani (JLI), Dep. at 125)).

845. On December 5, Willard spoke to Valani by phone. (PX4376 (Altria) at 005 (Willard phone records)).

846. In reviewing a December 5, 2018 draft joint press release announcing the transaction, JLI's Pritzker asked that it be much more specific in terms of what Altria will do for JLI by way of providing commitments and services. (PX2554 (JLI) at 001).

847. On December 7, 2018, JLI General Counsel Masoudi reached out to Altria General Counsel Garnick via text, asking to discuss PMI. (PX2515 (JLI); JX0002 at 041).

848. On December 7, 2018, Altria announced the "discontinuation of production and distribution of all *MarkTen* and *Green Smoke* e-vapor products." (PX9080 at 001 (Altria press release) (italics in original)). Altria stated that its subsidiaries would "begin working with their retailers, wholesalers, contract manufacturers and suppliers to ensure an orderly [wind down] process." (PX9080 at 001 (Altria press release)).

849. On December 8, 2018, JLI's outside counsel wrote to Altria's outside counsel: "[G]iven Richard's press release this morning and the expedited schedule for obtaining antitrust clearance, we would suggest that the period in which Richard can commence making confidential buyout offers to Jack's board begin 4 years following the closing (instead of the earlier of 5 years after the closing or 2 years after obtaining antitrust clearance)." (PX2605 (JLI) at 010).

850. On the evening of December 8, 2018, Altria's Garnick and JLI's Masoudi spoke by phone for 30 minutes. (PX4375 (Altria) at 003 (Garnick phone records)).

851. On December 9, 2018, Altria's Garnick emailed JLI's Masoudi,

> "I thought while on the plane I would see if we could resolve an issue or two: [. . .] Pre-antitrust do not compete – How about if we agree to file within 90 days (we intend to file within 30 days, but I would like a cushion for unforeseen events). Would that resolve this? Alternatively, if the businesses want to start enhanced services right way, the do not compete provision could start running based on when providing enhanced services begins and tied to that. This is of course a nonissue, since we are not in the market anymore and we can't get back into the market without getting a PMTA. But do not compete cannot start simply with closing for antitrust reasons – section 1 issue."

(PX1734 (Altria)).

852. Garnick testified that in his December 9, 2018 email to Masoudi, "agree to file" referred to making the HSR filing. (Garnick (Altria) Tr. 1,676-77). Pursuant to the October 30, 2020 final draft term sheet, Altria had until July 2020 to file HSR. (Garnick (Altria) Tr. 1676-77; PX1271 (Altria) at 022).

853. On December 9, 2018, Altria and JLI had a principals meeting in connection with the transaction. (PX1553 (Altria) at 013; PX1735 (Altria)).

854. On December 10, 2018, an internal Altria schedule reflected a series of internal Altria meetings and reviews of deal documents, culminating in the transaction closing on December 20, 2018. (PX1553 (Altria) at 013).

855. On December 10, 2018, Altria board member Devitre texted JLI's Valani: "Congratulations! Very good days are ahead for both sides." (PX2438 (JLI)).

856. On December 10, 2018, Altria's Crosthwaite sent an email to Garnick and Gifford asking, "Given the progress last night, should we been seeking BOD approval on Tree? The current presentation is not set up to do this." (PX1508 (Altria)).

857. On December 12, 2018, Altria planned to meet with JLI in New York regarding "PMI docs." (PX1553 (Altria) at 013).

858. On December 13, 2018, Altria sent an email to MarkTen customers stating that pursuant to Altria's December 7, 2018 announcement, MarkTen products would only be available online until 11:59pm December 18, 2018, and at retailers as long as supplies lasted. (PX2459 (JLI) at 001 (JLI copy of email from MarkTen)).

859. [redacted] (PX1347 (Altria) at 001-017 (Altria Board minutes) (*in camera*)); PX2604 (JLI) at 001-08 (JLI Board minutes)).

860. [redacted] (PX1347 (Altria) at 017-18 (*in camera*)).

861. On December 20, 2018, Altria and JLI executed the transaction whereby Altria purchased a 35% interest in JLI for $12.8 billion. (PX2141 (JLI) (Altria/JLI Purchase Agreement); PX9081 (Altria press release)).

862. The final Purchase Agreement no longer included a provision requiring Altria to divest or contribute its e-cigarette products. (PX2141 (JLI) (Altria/JLI Purchase Agreement)). By December 20, 2018, the date the Purchase Agreement was executed, Altria had already discontinued the production and distribution of all of its e-cigarette products. (Willard (Altria) Tr. 1,274; PX2022 at 002-03 (JLI copy of Altria's October 25, 2018 letter to FDA announcing removal of pod-based products and certain flavored cigalikes); PX9080 at 001 (December 7, 2018 Altria press release announcing discontinuation of all e-cigarette products); *see also* CCFF ¶¶ 848, 858, above).

863. The final executed transaction documents did contain a non-compete barring Altria from participating in all aspects of the e-cigarette business, including R&D, for an initial term of 6 years. (PX1276 (Altria) at 025-27 (Dec. 20, 2018 Relationship Agreement); PX1275 (Altria) at 005, 014) (Dec. 20, 2018 Services Agreement)).

864. The final non-compete included a provision allowing Altria to engage in the e-cigarette business relating to MarkTen, MarkTen Elite, and Green Smoke, in each case, "as such business is presently conducted." (PX1276 (Altria) at 026; Garnick (Altria) Tr. 1,682). But

by that date, Altria had already removed MarkTen Elite from the market, and had discontinued the production and distribution of its remaining MarkTen and Green Smoke e-cigarette products. (Garnick (Altria) Tr. 1,682; PX2022 at 002-03 (JLI copy of Altria's October 25, 2018 letter to FDA); PX9080 at 001 (Altria press release); *see also* CCFF ¶¶ 812, 848, 858, above). As of December 20, 2018, Altria was not actively marketing or selling MarkTen, MarkTen Elite or Green Smoke, though the MarkTen cigalike products were still "selling through in the marketplace" at retailers that retained unsold inventory. (Willard (Altria) Tr. 1,274-75).

865. The final Purchase Agreement no longer gave Altria through July 15, 2020 to make its HSR filing, but instead required both Altria and JLI to make their HSR filings within 90 days. (PX2141 (JLI) at 034 (Altria/JLI Purchase Agreement, Section 4.1(a)); *see also* CCFF ¶¶ 843, 852, above).

866. Altria submitted its HSR filing seeking antitrust clearance on February 4, 2019. (Willard (Altria) Tr. 1,472-73 (discussing PX0027 (Altria) at 011 (Answers and Defenses of Respondent Altria)).

L. JLI Demanded That Altria Exit the E-Cigarette Business as Part of the Transaction

1. Restricting Altria's Ability to Compete in E-Cigarettes Now and in the Future Was Critical to JLI

867. JLI's lead negotiators, Valani, Pritzker, and Burns testified that it was critical that Altria not be able to compete with JLI in e-cigarettes post-transaction. (*See* CCFF ¶¶ 868-79, below).

868. On April 20, 2018, JLI CEO Burns sent a letter to Willard contemplating Altria acquiring a 50.1% interest in JLI. (PX2026 (JLI) at 003; s*ee also* CCFF ¶ 650, above). Burns wrote that antitrust counsel would develop a plan to obtain regulatory approval, "including the treatment of any competitive products owned by Altria." (PX2026 (JLI) at 003; PX7011 (Valani (JLI), IHT at 62-63); *see also* CCFF ¶ 651, above).

869. When asked about the reference to "any competitive products owned by Altria," Valani testified that a "precept" of any potential transaction with JLI was that Altria could not compete in e-cigarettes:

> I would just say as a general precept for [] what it would take for Altria to ever have an involvement with JUUL would be that they [] couldn't have a directly competitive offering of their own, and [] they did have, I guess, directly competitive – I meant –I should be clear – e-vapor offering of their own and so – or e-cigarette offering, [] and so, [] we had said that [] if you were going to work with us, you'd need to be exclusive, because we couldn't have you selling some product you own 100 percent of competing on the shelf with something that [] you own less percentage of."

(Valani (JLI) Tr. 910-11; PX7011 (Valani (JLI), IHT at 62-63)).

870. Valani explained that Altria could not have a partial ownership interest in JLI and also have its own competing e-cigarette products because "a natural incentive could be for someone to push a product that they own a hundred percent of." PX7011 (Valani (JLI), IHT at 64-65)). JLI "felt that it was a risk we shouldn't take, [] being [] in bed with [Altria] in any way and having the ability for them to have something that they have a greater incentive to sell that directly [] in market next to our product as a similar offering." (PX7011 (Valani (JLI), IHT at 64-65)).

871. At trial, Valani acknowledged that if Altria still had e-vapor products post-deal, it could have a greater incentive to support its products than to support JUUL. (Valani (JLI) Tr. 912-13). Valani also testified that Altria having access to proprietary JLI information that it could then use to develop its own products was a concern. (Valani (JLI) Tr. 912-13).

872. Valani testified that "it was almost like it was a prerequisite" that Altria would have to divest its e-cigarette assets post-transaction, and that JLI's negotiators "assumed that [Altria] would be the expert at what to do with it." PX7011 (Valani (JLI), IHT at 102-03)).

873. Pritzker's position was that if Altria was "going to acquire a significant position in [JLI] where they would have potential access to data or trade secrets of JUUL, then yes, there would need to be a noncompete." (Pritzker (JLI) Tr. 668-69).

874. Pritzker's view was that for a transaction where Altria would have access to JLI's data or proprietary information, "it would be unacceptable for Altria to be in a position to use that information to compete against JLI . . ." (Pritzker (JLI) Tr. 673-74). Pritzker testified that the process would be overseen by the FTC and that he expected the FTC would require a divestiture of existing Altria products. (Pritzker (JLI) Tr. 673-74).

875. Pritzker testified, "I began to recognize [] that if there was going to be [] some kind of minority investment by Altria in Juul, it would give them access to data and information that was proprietary to Juul that it was not going to be viable for them to be spending their energies on other e-cigarette products or to use information they were getting from Juul to be able to enhance their product or develop new products that would be injurious to Juul's business." (PX7021 (Pritzker (JLI), Dep. at 82-83)).

876. Pritzker testified that "[i]t would not have been acceptable" for Altria to have continued to participate in the e-cigarette business following its investment in JLI "if they continued to insist, as they had, that they have a very significant ownership position and that they have board seats and—and therefore potential access to Juul information." (PX7021 (Pritzker (JLI), Dep. at 125-26)).

877. Pritzker testified that he would have resisted any agreement that would have allowed Altria to market its MarkTen and MarkTen Elite e-cigarettes indefinitely. (Pritzker (JLI) Tr. 895-96). He did not care if the products stayed on the market, but he did not want them marketed by Altria. (Pritzker (JLI) Tr. 895-96).

878. JLI's Burns testified: "It was a topic we talked about that said how can we [JLI] allow you guys [Altria] to be a major shareholder and have access to all of our confidential information and IP and product development, and you guys in parallel are competing with

us in a marketplace. [. . .] It seems like a basic premise that's in conflict." (PX7009 (Burns (JLI), IHT at 137-38)).

879. JLI CFO Timothy Danaher testified that JLI "had always contemplated that Altria would be subject to a noncompete in the e-vapor category as part of any transaction with us," and explained that if Altria was "going to become a 35 percent owner in our business, we didn't want them competing with any product in the e-vapor business against us." (PX7005 (Danaher (JLI), IHT at 164-65)).

2. JLI Clearly Communicated to Altria—and Altria Understood—That a Condition of the Transaction Was That Altria Exit E-cigarettes

a) <u>JLI's Negotiators Told Altria That It Could Not Compete in E-Cigarettes Post-Transaction</u>

880. JLI's negotiators told Altria's negotiators that Altria could not compete in e-cigarettes post-transaction with its own products, but that instead it would need to participate in e-cigarettes only through JLI. (*See* CCFF ¶¶ 881-91, below). JLI's negotiators discussed with Altria's negotiators the topic of what Altria would do with its existing e-cigarette products. (*See* CCFF ¶¶ 881-91, below).

881. Starting around the time that the notion of Altria buying less than a 100% interest in JLI arose, Altria and JLI negotiators had conversations about what Altria would do with its existing e-cigarette products. (PX7021 (Pritzker (JLI), Dep. at 64-65)). Pritzker testified that the notion of Altria purchasing less than a 100% interest in JLI came up around April 2018. (PX7021 (Pritzker (JLI), Dep. at 64-65) (discussing PX2026 (JLI) (April 2018 letter from Burns to Willard))).

882. During negotiations, JLI was clear on the importance of Altria not competing post-transaction. (Valani (JLI) Tr. 917).

883. Valani testified that JLI's negotiators told Altria that if JLI was going to do a transaction with Altria, Altria could not compete in e-cigarettes with its own products, but instead would have to participate in e-cigarettes exclusively through JLI. (Valani (JLI) Tr. 910-12; PX7011 (Valani (JLI), IHT at 63)).

884. Valani testified that he thinks Altria realized "probably pretty early on" in negotiations that JLI was not going to do a transaction unless Altria agreed that it would not sell its own e-cigarette products but instead would participate in e-cigarettes exclusively through JLI. (PX7011 (Valani), IHT at 63-64)).

885. JLI's Pritzker testified that when it became apparent that the transaction would include Altria having board seats and providing services to JLI, JLI's negotiators made clear to Altria that Altria would need to agree not to compete in e-cigarettes. (Pritzker (JLI) Tr. 674-76; PX7021 (Pritzker (JLI), Dep. at 88-89)).

886. Pritzker discussed with Altria's Willard and Gifford that if Altria was going to own a significant portion of JLI, then JLI did not want them using JLI's information to improve or develop new e-vapor products. (PX7021 (Pritzker (JLI), Dep. at 70-71)).

887. JLI CEO Burns explained: "It was a topic we talked about that said how can we [JLI] allow you guys [Altria] to be a major shareholder and have access to all of our confidential information and IP and product development, and you guys in parallel are competing with us in a marketplace. [. . .] It seems like a basic premise that's in conflict." (PX7009 (Burns (JLI), IHT at 137-38); *see also* CCFF ¶ 878, above).

888. Burns testified that Altria "understood [a non-competition commitment] was an important issue we needed to work through throughout the dialogues." (PX7009 (Burns (JLI), IHT at 139)).

889. JLI General Counsel Masoudi recalls "general discussions regarding whether Richard would be able to compete against JLI with vapor assets while receiving information as a shareholder and/or board member of JLI." (PX7035 (Masoudi (JLI), Dep. at 52)).

890. JLI General Counsel Masoudi testified that JLI "express[ed] to Altria at various times [. . .] [that] we were very concerned about Altria getting sensitive information about our company and/or sitting on our board of directors at the same time as they were competing with vapor products against us," and told Altria that "we were concerned about [Altria] getting information about our -- for example, our product development plans or geographic expansion plans or any of our competitive -- competitively sensitive information and then them using it to compete against us." (PX7035 (Masoudi (JLI), Dep. at 41-42)).

891. Howard Willard acknowledged that the non-compete provision was important enough to make the list of eight terms that he conveyed to the senior JLI negotiators in his October 5, 2018 letter. (Willard (Altria) Tr. 1214; (PX1391 at 003 (Altria); *see also* CCFF ¶¶ 779-82, above).

b) <u>JLI's Initial July 30, 2018 Term Sheet Made Clear That Altria Would Have to Get Rid of Its Existing E-Cigarette Business through Divestiture, Contribution, or Ceasing to Operate It</u>

892. JLI's July 30, 2018 term sheet made clear that a requirement of the transaction was that Altria must get rid of its existing e-cigarette business, by either divesting, contributing, or ceasing to operate it. (*See* CCFF ¶¶ 893-97, below). JLI's negotiators testified that they were concerned with the "end state" of Altria not competing in e-cigarettes, and that they did not care how Altria achieved that end state. (*See* CCFF ¶¶ 898-906, below). JLI included the "cease to operate" option as a "fail safe" to ensure that Altria did not have any outs in its commitment not to compete in e-cigarettes. (*See* CCFF ¶¶ 907-09, below). The July 30, 2018 term sheet also included a non-competition clause. (*See* CCFF ¶¶ 910-13, below).

893. JLI's Pritzker testified that JLI's business people would discuss concepts and then instruct JLI's lawyers to put those into term sheets. (Pritzker (JLI) Tr. 789-90). Pritzker reviewed term sheets once they were prepared. (Pritzker (JLI) Tr. 789-90).

894. The July 30, 2018 Summary of Terms that JLI's Pritzker sent to Altria's Willard contained the following term requiring Altria to dispose of its existing e-cigarette business:

> Promptly and in no event later than nine months following the Purchase, subject to the license referenced above, Richard [Altria] will divest (or if divestiture is not reasonably practicable, contribute at no cost to Jack [JLI] and if such a contribution is not reasonably practicable, then cease to operate), all Richard [Altria] assets relating to the Field in the U.S., including all electronic nicotine delivery systems and products it acquired, developed or has under development.

(PX1300 (Altria) at 005); PX2173 (JLI) at 005; (Pritzker (JLI) Tr. 688-89).

895. Pritzker acknowledged that under any of the three options set forth in this term—divest, contribute, or cease to operate—Altria would no longer be competing in e-cigarettes by, at most, nine months post-transaction. (Pritzker (JLI) Tr. 691-92).

896. Pritzker testified that this term addressed the issue of what would happen in the process of regulatory review given JLI's "insistence" that if Altria was going to have a significant ownership interest in JLI, "they could not have competitive products in the market that would benefit from the information from Juul and the technology that they could see that was proprietary." (PX7021 (Pritzker (JLI), Dep. at 93-94)).

897. Valani testified that this term was meant to "reflect the intent [] of them [Altria] not being directly competitive in the electronic cigarette space." (PX7011 (Valani (JLI), IHT at 81-82)).

(1) It Did Not Matter to JLI How Altria Fulfilled Its Obligation to Get Rid of Its Existing Products

898. Referring to the divest/contribute/cease to operate clause in the July 30, 2018 term sheet, Pritzker testified that the "goal was for [Altria] not to be competing against Juul if they had a significant interest in Juul, and I didn't care how that would come about. However, I thought divestiture was clearly the most acceptable way in terms of regulatory approval, from other examples I'd seen." (PX7021 (Pritzker (JLI), Dep. at 96-97)).

899. Valani explained "there was a question as to how they would fulfill such obligation to us, and I guess this text is meant to give them some ability to handle that." (PX7011 (Valani (JLI), IHT at 81-82)).

900. When asked why there was a question as to how Altria could fulfill its obligation not to compete, Valani responded:

> I mean, this is really their problem, not ours, you know? I mean, I think that we're [] more concerned about an end state […] if JUUL can get the assets, then great, and if they have to divest, then great, so I think we were somewhat agnostic [. . .].

(PX7011 (Valani (JLI), IHT at 82)).

901. Valani confirmed that the "divest (or if divestiture is not reasonably practicable, contribute at no cost to Jack [JLI] and if such a contribution is not reasonably practicable, then cease to operate)" language in the July 30, 2018 term sheet would have accomplished the end state that JLI wanted. (PX7011 (Valani (JLI), IHT at 82-83)).

902. [redacted]} (PX7005 (Danaher (JLI), IHT at 167-68) (*in camera*)).

903. Prior to July 30, 2018, Pritzker had discussed with Willard and Gifford what Altria would do with its e-cigarette business if Altria acquired a partial interest in JLI. (Pritzker (JLI) Tr. 683). These discussions were in the context of understanding that what Altria did with its e-cigarette business would require regulatory oversight. (Pritzker (JLI) Tr. 683). One option discussed was that Altria could sell its e-cigarette business. (Pritzker (JLI) Tr. 683). Altria never indicated that it would be unable to find a buyer. (Pritzker (JLI) Tr. 683-84).

904. JLI's negotiators did not care if MarkTen and Elite were on the market so long as Altria wasn't the company marketing them. (PX7021 (Pritzker (JLI), Dep. at 86-87)). So JLI's negotiators did not care whether Altria divested the products, shut them down, or contributed them. (PX7021 (Pritzker (JLI), Dep. at 86-87)).

905. Pritzker testified that if the FTC required Altria to divest its e-vapor products, that would be a way to achieve the goal of not having Altria compete against JLI. (PX7021 (Pritzker (JLI), Dep. at 70-71)).

906. Pritzker testified that "in a transaction . . . where Altria would have access to data or proprietary information of JLI, [] it would be unacceptable for Altria to be in a position to use that information to compete against JLI, but [] the process would be overseen by the FTC, and [] I expected the FTC would likely require a divestiture of existing products." (Pritzker (JLI) Tr. 673-74).

(2) The "Cease to Operate" Option Was a Fail-Safe So That Altria Would Not Have Any Outs in Its Commitment to Exit E-Cigarettes

907. Valani testified that the "cease to operate" language in the July 30, 2018 term sheet was a fail-safe in case the other options had been exhausted:

> And I think that the way that JLI might have thought about it at the time is that a divestiture was likely quite practicable and was the most likely outcome and that, if not, the contribution was the likely outcome. And then the notional concept of "cease to operate" was meant to be a sort of fail-safe if the other options had been exhausted.

(Valani (JLI) Tr. 918-19).

908. Valani testified that construction of the "divest (or if divestiture is not reasonably practicable, contribute at no cost to Jack [JLI] and if such a contribution is not reasonably practicable, then cease to operate)" language in the July 30, 2018 term sheet reflected that "the prevailing assumption from antitrust counsel at the time was that divestiture was probably the most likely route, and if not, a contribution, and if not, that they would find the ability to cease to operate." (Valani (JLI) Tr. 917-18).

909. Valani testified that the "cease to operate" language was "probably a reflection of JLI's desire to not have any outs in the commitment to not be [] competing in market when they're [Altria is] privy to JLI information." (PX7032 (Valani (JLI), Dep. at 53-54)).

(3) JLI's July 30, 2018 Term Sheet Also Included a Non-Compete

910. Valani testified that testified that although the divest/contribute/cease to operate clause in the July 30, 2018 term sheet dealt with what Altria would do with the products it already had in the market, of "equally, if not greater importance to us, was the notion that [Altria] just wouldn't be competing in-market [] with any future products." (Valani (JLI) Tr. 914-15).

911. JLI's July 30, 2018 term sheet included a non-competition clause:

> Richard agrees, for so long as it owns at least 5% of Jack's outstanding shares, to refrain from competing anywhere in the world in the e-vapor business (other than with respect to MarkTen and MarkTen Elite prior to their divestiture or contribution as described above)." (PX1300 (Altria) at 006); PX2173 (JLI) at 006).

912. Valani testified that this non-competition clause in the July 30, 2018 term sheet was consistent with JLI not wanting Altria to have competitive products. (PX7011 (Valani (JLI), IHT at 83-84)).

913. On August 4, 2018, Pritzker sent Willard a revised term sheet. (PX2570 (JLI) at 001). One of the revisions was that the word "shutdown" was added to the non-compete term:

> Richard agrees, for so long as it owns at least 5% of Jack's outstanding shares, to refrain from competing anywhere in the world in the e-vapor business (other than with respect to MarkTen and MarkTen Elite prior to their divestiture, shutdown or contribution described above). (PX2570 (JLI) at 001, 007; Pritzker (JLI) Tr. 704-06).

c) <u>JLI's Response to Altria's August 9, 2018 Term Sheet Made Crystal Clear That Altria Could Not Retain Any Ability to Compete in E-Cigarettes</u>

914. When Altria's August 9, 2018 term sheet removed the commitment to get rid of its existing e-cigarette business, JLI's response made crystal clear that it was "unacceptable" for Altria to retain any right to compete in e-cigarettes, either with existing or future products. (*See* CCFF ¶¶ 915-24, below).

915. In the August 9, 2018 term sheet that Altria's Gifford sent to JLI's Valani, Pritzker, and Burns, Altria struck out the entire provision requiring Altria to "divest (or if divestiture is not reasonably practicable, contribute at no cost to Jack and if such a contribution is not reasonably practicable, then cease to operate), all Richard assets relating to the Field in the U.S., including all electronic nicotine delivery systems and products it acquired, developed or has under development." (PX1303 (Altria) at 015; PX2313 (JLI) at 015; Pritzker (JLI) Tr. 707-08; Valani (JLI) Tr. 920-21; *see also* CCFF ¶¶ 703-08, above).

916. On August 14, 2018, Pritzker wrote to Willard and Gifford that JLI "will be sending you our position on a number of specific points to make sure that you understand where we will need to draw the line before finalizing a commitment to [meet on August 18.]" (PX2025 (JLI) at 001; *see also* CCFF ¶¶ 709-28, above).

917. On August 15, 2018, JLI's Valani emailed Altria's Devitre the list of "specific points" that Pritzker said JLI would send. (PX4171 (Altria); PX2025 (JLI) at 001; Valani (JLI) Tr. 929; Pritzker (JLI) Tr. 711; PX1308 (Altria) at 001-03 (Devitre Email, dated August 15, 2018, sending same list to Altria's Willard); PX7001 (Devitre (Altria), IHT at 93-95); *see also* CCFF ¶¶ 709-28, above).

918. In JLI's August 15, 2018 list of specific points, the second bullet point (of nine) stated:

> We understood that you (and your successors and current and future affiliates) would not compete against us in vapor in the US and that JUUL would be the vehicle for all vapor assets. You have retained the right under certain circumstances to compete not only with existing Mark Ten products, but also with products under development and future products. The commitment to divest Mark Ten has been stricken. This is not acceptable to us. (PX4171 (Altria) at 002 (reflecting redline edits); *see also* CCFF ¶ 722, above).

919. Valani testified that {[redacted]} (PX7032 (Valani (JLI), Dep. at 74-75) ({[redacted]}) (*in camera*)).

920. Valani testified that "it was important to [JLI] that [Altria was] aligned against this set of principles" reflected in the August 15, 2018 list of specific points. (Valani (JLI) Tr. 932-33).

921. Upon reviewing the August 15, 2018 list of issues that Valani gave to Devitre, Altria's Gifford understood the second bullet to be a response from JLI to Altria's strike-through of the divest/contribute/cease to operate commitment in the August 9, 2018 term sheet, and that it was specifically referring to Altria's existing MarkTen brand products. (Gifford (Altria) Tr. 2,873-74; PX1303 (Altria) at 015; PX1012 (Altria) at 002).

922. Willard understood that the language "this is unacceptable to us" referred to Altria's retention of rights to compete with existing and future e-vapor products. (Willard (Altria) Tr. 1,206-07; PX1012 (Altria) at 002).

923. Willard understood that the JLI team must have thought that the issues in the list provided by Valani to Devitre were important enough to be worth sharing with Altria. (Willard (Altria) Tr. 1209).

924. The final bullet in the list of specific points that Valani provided to Devitre read: "There are other matters on which we have fundamental disagreement, but we believe we need clarity on the above matters if there is to be any hope of a productive discussion this weekend." (PX4171 (Altria) at 003).

3. Altria's Ability to Divest or Contribute Its E-cigarette Products Was Limited by Its Contractual Commitments to PMI

925. Altria was unsure if it was permitted to divest or contribute its e-cigarette products to a third party prior to the expiration of its agreement with PMI in July 2020. (*See* CCFF ¶¶ 926-43, below). During negotiations, Altria explained this concern to JLI. Altria and JLI reached a resolution by agreeing that Altria would have until July 2020 to file for HSR clearance, and would be required to contribute its e-cigarette assets to JLI upon antitrust clearance, or if necessary to obtain that clearance, divest the assets. (*See* CCFF ¶¶ 926-43, below). Altria never took any steps to explore a potential divestiture of its e-cigarette assets. (*See* CCFF ¶¶ 939-40, below). Altria discontinued its e-cigarette products completely on December 7, 2018. (*See* CCFF ¶ 942, below).

926. The final deal documents, dated December 20, 2018, no longer gave Altria through July 15, 2020 to make its HSR filing, but instead required both Altria and JLI to make their HSR filings within 90 days. (*See* CCFF ¶ 943, below).

927. Altria's Joint Research, Development, and Technology Sharing Agreement with PMI was set to (and did) expire in July 2020. (*See* CCFF ¶¶ 932, 1588-89, below; PX7036 (Garnick (Altria), Dep. at 156-59)). Altria was not sure if it was permitted to sell or contribute its e-cigarette products to a third party prior to the expiration of its agreement with PMI in July 2020. (Garnick (Altria) Tr. 1,586-87; PX7036 (Garnick (Altria), Dep. at 156-59)).

928. In June 2018, Altria put together talking points about Altria's relationship with PMI for Willard and Gifford to discuss with JLI. (PX1611 (Altria)).

929. On June 27, 2018, Altria's in-house attorney Reale emailed those talking points to Willard, Gifford, Crosthwaite, and others, writing "Howard and Billy – Attached are talking points for the 7/13 Tree meeting that cover the Vulcan [PMI] relationship." (PX1611 (Altria)). The document attached to Reale's email was entitled "Tree Talking Points re Vulcan with [Wachtell] and Altria comments." (PX1611 (Altria)). The attached document itself was withheld from production. (PX1611 (Altria)).

930. On July 9, 2018, Pritzker emailed Willard and Gifford to tell them that JLI had to cancel the planned July 13, 2018 meeting. (PX4390 (Altria)). Pritzker and Willard arranged to speak by phone the next day, with Valani joining as well. (PX4390 (Altria)).

931. Willard believes that during negotiations in 2018, he and JLI's negotiators did discuss Altria's relationship with PMI in terms of how it might impact the structure of a potential

deal between Altria and JLI. (PX7031 (Willard (Altria), Dep. at 156-57)). Altria would have had to consider how to do a divestiture or contribution of its e-vapor business in a way that was consistent with its PMI relationship. (PX7031 (Willard (Altria), Dep. at 242-44)). Given that, Altria may have explained its PMI relationship to JLI. (PX7031 (Willard (Altria), Dep. at 242-44)).

932. Altria's General Counsel Garnick testified that during negotiations, Altria raised with JLI that there was an issue about whether Altria could divest or contribute its e-cigarette products prior to the July 2020 expiration of its agreement with PMI. (Garnick (Altria) Tr. 1,587-88; PX7036 (Garnick (Altria), Dep. at 156-57)). The parties "took that into account in various term sheets to accommodate that concern." (Garnick (Altria) Tr. 1,587-88).

933. Because of the concerns about Altria's ability to divest or contribute its e-cigarette products before July 2020, the parties "agreed—by that I mean resolved in the context of the negotiation—that [Altria] could put off filing for HSR approval until July 2020, and in the meantime, compete up to that time." (Garnick (Altria) Tr. 1,591-92). Then, if HSR approval was granted, Altria would contribute its e-cigarette products to JLI, or if necessary to get HSR approval, divest them to a third party. (Garnick (Altria) Tr. 1,591-92).

934. The October 15, 2018 term sheet specified that Altria "shall elect the time (not to exceed two years from closing of the Purchase) when the parties initiate the HSR clearance process." (PX2147 (JLI) at 023); *see also* CCFF ¶ 799, above).

935. The October 30, 2018 final term sheet also stated that Altria "shall elect the time (no later than July 15, 2020) when the parties initiate the HSR clearance process." (PX1271 (Altria) at 022; *see also* CCFF ¶ 827, above).

936. Altria's understanding was that it could not take its board seats until it got HSR approval. (Garnick (Altria) Tr. 1,592).

937. Altria and JLI negotiated that Altria would not take its board seats until such time as it had divested or contributed its e-cigarette products and was no longer competing with JLI. (Garnick (Altria) Tr. 1,594-95). Garnick testified that "the reason we were willing to take our products off the market in the negotiations, is to get on the board and after we get HSR approval." (Garnick (Altria) Tr. 1,594-95; *see also* PX7000 (Garnick (Altria), IHT at 096-97) ("It was felt that if we were going to pay for a third of the company, we wanted to at least have a seat at the table. And even with a minority position, we wanted to be able to interact and understand the business and express our views.")).

938. Pritzker testified that Altria's edits to the divestiture and contribution language in the October 15, 2018 draft term sheet suggest that Altria might not have the legal right to divest or contribute its e-cigarette assets. (Pritzker (JLI) Tr. 867-69; (PX2147 (JLI) at 022-23); *see also* CCFF ¶¶ 799-803, above).

939. Garnick testified that Altria senior management discussed the potential divestiture of Altria's e-cigarette business, but that they never seriously pursued that or reached out to anyone about acquiring those products. (Garnick (Altria) Tr. 1,586; PX7036 (Garnick (Altria), Dep. at 12-14)). Part of the discussion among Altria management was whether

Altria was allowed to sell its e-cigarette products to a third party under its agreement with PMI. (PX7036 (Garnick (Altria), Dep. at 12-14)).

940. Altria's Gifford also testified that he is not aware of Altria taking any steps to divest its e-cigarette business. (Gifford (Altria) Tr. 2,877; PX7040 (Gifford (Altria), Dep. at 134-36)). Altria did not analyze or reach out to any potential divestiture buyers, nor did it prepare a confidential information memorandum for a potential divestiture. (PX7040 (Gifford (Altria), Dep. at 134-36)).

941. The December 5, 2018 draft purchase agreement stated that Altria must file for HSR clearance on or before July 15, 2020. (PX1500 (Altria) at 164-65 (Section 4.1(a) of draft Purchase Agreement); *see also* CCFF ¶ 843, above).

942. On December 7, 2018, Altria announced the discontinuation of all of its remaining e-cigarette products. (PX9080 at 001 (Altria press release); *see also* CCFF ¶ 848, above).

943. The final deal documents, executed on December 20, 2018, no longer gave Altria through July 15, 2020 to make its HSR filing, but instead required both Altria and JLI to make their HSR filings within 90 days. (PX2141 (JLI) at 034 (Altria/JLI Purchase Agreement, Section 4.1(a)); *see also* CCFF ¶ 865, above).

M. Altria Agreed to JLI's Demand to Exit the E-Cigarette Business

944. Altria repeatedly indicated that it would meet JLI's demand that it not compete in e-cigarettes, including getting rid of its existing e-cigarette products. (*See* CCFF ¶¶ 945-67, below). During negotiations, several options were discussed regarding how Altria could comply with JLI's demand that it not compete in e-cigarettes. (*See* CCFF ¶¶ 968-86, below). One of the options discussed was that Altria could cease to operate its e-cigarette business. (*See* CCFF ¶¶ 969-86, below). On several occasions, Altria indicated to JLI that it might meet JLI's noncompetition demand by ceasing to operate its e-cigarette business. (*See* CCFF ¶¶ 969-86, below). And that is what Altria did—in late October, 2018, Altria removed its pod-based e-cigarettes, as well as certain flavored cigalikes, from the market. (*See* CCFF ¶¶ 987-88, below). On December 7, 2018, Altria discontinued the production and distribution of all of its e-cigarettes. (*See* CCFF ¶¶ 989-94, below).

1. Altria Indicated That It Would Meet JLI's Demand to Exit E-Cigarettes

945. During negotiations, JLI made clear to Altria that a requirement of the transaction was that Altria could not compete in e-cigarettes with current or future products. (*See* CCFF ¶¶ 867-924, above). Altria repeatedly communicated to JLI that it would comply with JLI's demand that it stop competing in e-cigarettes, including getting rid of its existing e-cigarette products. (*See* CCFF ¶¶ 946-86, below). Other than the August 9, 2018 term sheet, every term sheet exchanged between Altria and JLI required Altria to exit e-cigarettes. (*See* CCFF ¶¶ 957, 965, 967, below; *see also* CCFF ¶¶ 893-97, above). Other than the August 9, 2018 term sheet, no term sheet permitted Altria to keep its e-cigarette products on the market indefinitely. (*See* CCFF ¶¶ 957, 965, 967, below).

946. Valani testified that he was not sure when Altria committed to not having any competitive e-cigarette products of their own, but that in "subsequent [to Burns' April 20, 2018 letter] paper that was exchanged between the companies it does show up." (PX7011 (Valani), IHT at 64)).

947. Garnick testified that in response JLI's July 30, 2018 term sheet, Altria proposed "a non-compete that carved out, on a permanent basis, our e-vapor products and all products currently in development." (PX7036 (Garnick (Altria), Dep. at 51-52); PX1303 (Altria) at 015, 017 (Altria's August 9, 2018 term sheet); *see also* CCFF ¶ 686, above).

948. Consistent with Garnick's testimony, in the August 9, 2018 term sheet, Altria struck out the entire provision requiring it to "divest (or if divestiture is not reasonably practicable, contribute at no cost to Jack [JLI] and if such a contribution is not reasonably practicable, then cease to operate), all Richard [Altria] assets relating to the Field in the U.S., including all electronic nicotine delivery systems and products it acquired, developed or has under development." (PX1303 (Altria) at 015; PX2313 (JLI) at 015 (JLI's copy of Aug. 9, 2018 term sheet); *see also* CCFF ¶¶ 704-07, above).

949. On August 15, 2018, in response to Altria's August 9, 2018 term sheet, JLI's Valani provided Altria's Devitre with JLI's "position on a number of specific points to make sure that [Altria] [] understand[s] where [JLI] will need to draw the line before finalizing a commitment to [meet on August 18.]" (PX2025 (JLI) at 001 (Aug. 14 2018 Pritzker Email telling Altria to expect specific points); PX4171 (Altria) at 002-03 (Valani Email to Devitre attaching specific points); *see also* CCFF ¶¶ 710-27, above).

950. In JLI's August 15, 2018 list of specific points, the second bullet point (of nine) stated:

> We understood that you (and your successors and current and future affiliates) would not compete against us in vapor in the US and that JUUL would be the vehicle for all vapor assets. You have retained the right under certain circumstances to compete not only with existing Mark Ten products, but also with products under development and future products. The commitment to divest Mark Ten has been stricken. This is not acceptable to us. (PX4171 (Altria) at 002; *see also* CCFF ¶ 722, above).

951. The August 15, 2018 list of bullets Valani gave to Devitre was meant to "communicate clearly that these were foundational concepts" such that JLI would only go ahead with the planned August 18, 2018 San Francisco meeting "if the Altria team agreed that they were clear on these points." (Valani (JLI) Tr. 930-31). Valani testified that there was "no point in meeting unless there's alignment" on the foundational concepts set forth in JLI's August 15, 2018 list. (Valani (JLI) Tr. 931-32).

952. Valani believes that he and Devitre discussed the list of JLI's specific points to "signal that [] we would want some verification from the Altria team that [] they were aligned with this prior to us sitting down" for the planned August 18, 2018 meeting. (Valani (JLI) Tr. 932); *see also* CCFF ¶ 724, above).

953. After JLI provided Altria with its list of "specific points," JLI went forward with meeting with Altria on August 18, 2018 in San Francisco. (Pritzker (JLI) Tr. 708-11; Valani (JLI) Tr. 924, 936; PX7032 (Valani (JLI), Dep. at 63-64); *see also* CCFF ¶ 728, above).

954. Valani thinks it is "likely" that the non-compete term was discussed at the August 18, 2018 meeting. (PX7011 (Valani (JLI), IHT at 102)).

955. Valani recalls Altria "acquiescing to a number of positions" during the August 18, 2018 meeting. (PX7011 (Valani (JLI), IHT at 99-100)).

956. In Altria's "Notes/Outline" for the August 18, 2018 meeting with JLI, Willard's opening remarks explain that Altria's removal of the term requiring it divest, contribute, or cease to operate its e-cigarette business was driven by antitrust concerns and not by substantive disagreement. (PX1493 (Altria) at 002). Willard's talking points then reaffirm that upon receiving antitrust approval, Altria will contribute MarkTen to JLI and become subject to a robust non-compete:

- Some of the points you flagged in the document sent Wednesday also seem to boil down to miscommunication rather than substantive disagreement
  - For example, our approach on MarkTen was driven by antitrust and for the protection of both companies. Upon receiving antitrust approval, we would contribute MarkTen to Jack and become subject to a robust non-compete that makes Jack our exclusive e-vapor play. We can't agree to these terms under antitrust laws prior to receiving HSR approval, which was driving our clarifications in the term sheet

(PX1493 (Altria) at 002).

957. The revised August 18, 2018 term sheet circulated by JLI after the August 18 meeting required Altria to contribute its e-cigarette assets to JLI upon antitrust clearance, and if antitrust clearance was not obtained by nine months after the purchase, to divest its e-cigarette assets within six months thereafter. (PX2185 (JLI) at 006); *see also* CCFF ¶ 733, above). The August 18, 2018 term sheet also included a non-competition term. (PX2185 (JLI) at 007-08; *see also* CCFF ¶ 734, above).

958. On August 21, 2018, on behalf of Altria's Crosthwaite, Altria's outside counsel sent JLI CEO Burns a Term Sheet Issues List based on the August 18, 2018 draft term sheet circulated by JLI. (PX2506 (JLI) at 001, 003). The issues list confirms that Altria agreed to exit its e-cigarette business—in that instance either by contribution to JLI or by divestiture:

No.	Topic	Jack Position	Richard Position
3.	**Antitrust Clearance Matters**	• Richard to grant worldwide IP license concurrently with closing. • Upon receipt of antitrust clearance, Richard to contribute to Jack all Richard e-vapor assets at no cost to Jack. • If antitrust clearance for contribution is not received within nine months, Richard to divest e-vapor assets within six months. • Parties to use reasonable best efforts to obtain antitrust clearance for at least nine months. • Richard to have information rights consistent with antitrust laws.	• In general, we do not see any material substantive difference on these antitrust points. As has been discussed with antitrust counsel, we have a few suggestions for how the process might be improved, as noted in the succeeding bullets. • Instead of granting IP license, Richard would irrevocably waive any claims that Jack has violated any Richard IP rights. • Efforts obligation should last at least 18 months. • Parties would agree on specific information and consultation rights in the definitive transaction documents.
4.	**Richard Support Obligations**	• Support obligations pre-antitrust clearance include assisting with direct marketing programs / inserts and onserts. • Services provided at actual cost.	• We are generally agreed with the scope of support obligations described in Jack's draft. Antitrust counsel advises that direct marketing should be a post-clearance service (and should not commence at closing). • Rather than being tied to antitrust clearance, ability to provide full suite of services would be triggered by completion of contribution / divestiture (this is more of an antitrust technical point than a substantive one). • Services to be provided at cost plus 5% (which is consistent with Altria intra-group services pricing)

(PX2506 (JLI) at 004).

959. The August 21, 2018 Issues List from Altria also noted that "Rather than being tied to antitrust clearance, ability to provide full suite of services would be triggered by completion of contribution/divestiture (this is more of an antitrust technical point than a substantive one)." (PX2508 (JLI) at 004).

960. On August 22, 2018, JLI's outside counsel sent to Altria a revised issues list reflecting JLI's updated positions. (PX1496 (Altria) at 001-02). Like the issues list circulated by Altria the prior day, JLI's list contains the statement that "If antitrust clearance for contribution is not received within nine months, Richard [Altria] to divest e-vapor assets within six months." (PX1496 (Altria) at 005). JLI's list also added a bullet stating "[p]arties to discuss relative advantage of divestiture v. contribution." (PX1496 (Altria), at 005-06).

961. Willard's October 5, 2018 letter to JLI reaffirmed Altria's commitment not to compete in e-cigarettes, with Term 6 of the letter stating:

> 6. Altria would agree that it and its current and future subsidiaries will not compete, in a manner consistent with our previous discussions, in the U.S. e-vapor market for any period, exclusive of the aforementioned transition period, during which it provides support services.

(PX2152 (JLI) at 003 (letter from Altria)); *see also* CCFF ¶ 782, above).

962. Willard testified that Term 6 of his October 5, 2018 letter was referring to a topic "which it sounds like we had come to prior agreement on [. . .] ." (Willard (Altria) Tr. 1214).

963. Valani viewed this Term 6 of Willard's October 5, 2018 letter "similarly to the other provisions in the previous term sheet, which is that their obligation to us was to not be competitive and that we assumed that they would find the legal means to do so and that we're prepared to give them [] any flexibility as long as the result was okay." (PX7011 (Valani (JLI), IHT at 118)).

964. Regarding Term 6 in Willard's October 5, 2018 letter, Pritzker testified that his prior conversations with Willard suggested that Altria was willing to divest if necessary, and that it had not "gotten to the point where there was any additional agreement required, as far as I was concerned, on that issue." (PX7021 (Pritzker (JLI), Dep. at 132-33)).

965. In Altria's October 15, 2018 term sheet, Altria continued to commit to exit e-cigarettes by contributing its existing e-cigarette business to JLI upon antitrust clearance, if it had not already divested the assets in order to achieve antitrust clearance. (PX2147 (JLI) at 022-23 (Altria term sheet sent to JLI); *see also* CCFF ¶ 798, above).

966. In the same October 15, 2018 term sheet, Altria added language referring to Altria "otherwise exiting the marketing and sale of products in the Field." (PX2147 (JLI) at 008 (redline version showing changes against August 18 term sheet), 024 (clean copy reflecting Altria's edits); *see also* CCFF ¶ 800, above).

967. The final term sheet, dated October 31, 2018, continued to require Altria to exit e-cigarettes via contribution or divestiture, and still contained the language referring to Altria "otherwise exiting the marketing and sale of products in the Field." (PX1271 (Altria) at 022-23); *see also* CCFF ¶¶ 826, 828, above).

2. Altria Indicated That It Might Comply with JLI's Demand by Ceasing to Operate Its E-Cigarette Business

968. During negotiations, several options were discussed regarding how Altria could comply with JLI's demand that it not compete in e-cigarettes. (*See* CCFF ¶¶ 969-86, below). One of the options discussed was that Altria could cease to operate its e-cigarette business. (*See* CCFF ¶¶ 969-86, below). On several occasions, Altria indicated to JLI that it might meet JLI's noncompetition demand by ceasing to operate its e-cigarette business. (*See* CCFF ¶¶ 969-86, below).

969. Peter Gross, JLI's transaction adviser at Goldman Sachs, had discussions directly with Altria's negotiators. (PX7043 (Gross (Goldman Sachs), Dep. at 17); *see also* CCFF ¶¶ 609-13, above).

970. On July 24, 2018, Altria's PWP adviser James Wappler sent an email to Altria CEO Willard, referring to a planned conversation between Willard and JLI adviser Gross. (PX3170 (PWP) at 001; *see also* CCFF ¶ 673, above).

971. On July 27, 2018, Gross told JLI's Pritzker via email that he was "under the impression that [Altria] would just shut down Mark 10." (PX2330 (JLI) at 001). Pritzker understood "Mark 10" to be referring generally to Altria's competitive products, and understood "shut

down" to mean the products would be gone and Altria no longer competing. (Pritzker (JLI) Tr. 678-81).

972. JLI's Pritzker testified that prior to Gross's July 27, 2018 email, there must have been conversations about what would happen to Altria's existing e-cigarette products if JLI insisted on a non-compete. (PX7021 (Pritzker (JLI), Dep. at 82-83)).

973. Pritzker acknowledged that Altria ceasing to operate its e-cigarette business "might have come up as an idea of one thing that they [] might be able to do." (PX7021 (Pritzker (JLI), Dep. at 86); *see also* Pritzker (JLI) Tr. 686 (although he didn't think cease to operate was a "likely candidate," it "might have come up in the course of thinking through various things that might be done with [Altria's] products."). Pritzker never thought that ceasing to operate would be viable, because he assumed that Altria would be required to divest its e-cigarette products. (PX7021 (Pritzker (JLI), Dep. at 86)).

974. When asked about Gross's comment about being under the impression that Altria would shut down MarkTen, Pritzker testified that "there were all kinds of ideas circulating about how we would deal with a lot of issues, and [Gross] must have pulled that one down." (PX7021 (Pritzker (JLI), Dep. at 83-84)).

975. On July 30, 2018, just three days after Gross wrote that he was under the impression Altria would shut down MarkTen, JLI sent Altria the first term sheet, which included "cease to operate" as one of the three paths by which Altria could exit the e-cigarette business. (PX1300 (Altria) at 005 (Altria copy of term sheet); PX2173 (JLI) at 005 (JLI copy of term sheet); *see also* CCFF ¶ 680, above).

976. In the revised term sheet that Pritzker sent Willard on August 4, 2018, the word "shutdown" was added to the term that reads "Richard [Altria] agrees, for so long as it owns at least 5% of Jack's [JLI's] outstanding shares, to refrain from competing anywhere in the world in the e-vapor business (other than with respect to MarkTen and MarkTen Elite prior to their divestiture, shutdown or contribution described above)." (PX2570 (JLI) at 007; Pritzker (JLI) Tr. 704-06; *see also* CCFF ¶ 694, above).

977. On August 6, 2018, Altria's Willard and Gifford spoke to JLI's Pritzker and Valani by phone. (PX2312 (JLI); *see also* PX3202 (PWP); CCFF ¶ 702, above).

978. Willard's talking points for the August 6, 2018 call with JLI stated: "If we establish this partnership, then we expect that Altria will: [. . .] potentially exit our own vapor business . . . ." (PX1390 (Altria) at 003; *see also* CCFF ¶¶ 698-701, above).

979. When asked about the draft script containing the "potentially exit our own vapor business" language, Willard confirmed that the script indicates that Altria exiting e-cigarettes was one outcome that was being considered. (PX7004 (Willard (Altria), IHT at 184-85)).

980. Altria's August 5, 2018 draft talking points for Willard's call with JLI also state: "I think you'll agree that Altria has come a long way to accommodate you in this process, including: . . . [Demonstrating flexibility with our existing vapor business, if necessary, in order to form the partnership.]" (PX1390 (Altria) at 003-04 (brackets in original)).

981. On August 6, 2018, Garnick circulated his comments to the draft talking points. (PX1304 (Altria) at 003). The version Garnick circulated also included the statement that "[i]f we establish this partnership, then we expect that Altria will: [. . .] potentially exit our own vapor business . . . ." (PX1304 (Altria) at 003).

982. [redacted]

983. In the October 15, 2018 term sheet that Altria sent to JLI, Altria added language referring to Altria "otherwise exiting the marketing and sale of products in the Field." (PX2147 (JLI) at 008 (redline version showing changes against August 18 term sheet), 024 (clean copy reflecting Altria's edits); Pritzker (JLI) Tr. 726-27).

984. The full sentence added by Altria in its October 15, 2018 term sheet states: "Services Provided upon earlier of (i) contribution described above or (ii) Richard [Altria] otherwise exiting the marketing and sale of products in the Field." (PX2147 (JLI) at 008 (redline version showing changes against August 18 term sheet), 024 (clean copy reflecting Altria's edits)). The services subject to this are the marketing and distribution services, including inserts and onserts. (PX2147 (JLI) at 008). [redacted] } (PX7042 (Danaher (JLI), Dep. at 155 (*in camera*)); PX4408 (Altria) ([redacted]) (*in camera*); PX2115 (JLI) (Burns Email to JLI stockholders describing transaction's benefits); PX7011 (Valani (JLI), IHT at 137-39 (testifying that Altria had "a huge customer database [] that they were offering to us that we thought had big benefit to us")).

985. [redacted] } (PX4408 (Altria) (Dec. 19, 2018 Email from JLI's Robbins) (*in camera*)). [redacted] (PX4408 (Altria) (Dec. 19, 2018 Email from JLI's Robbins) (*in camera*)). Shortly after closing on the transaction, Altria began providing JLI with enhanced services such as product inserts. (Garnick (Altria) Tr. 1,679; Willard (Altria) Tr. 1,232-33; PX7011 (Valani (JLI), IHT at 182-83)).

986. Only 10 days later, on October 25, 2018, Altria announced that it was pulling its pod-based e-cigarettes MarkTen Elite and Apex by MarkTen. (PX2022 (JLI) at 002-03 (Altria letter to FDA, as forwarded to JLI); *see also* CCFF ¶ 812, above).

3. On October 25, 2018, Altria Stopped Selling Its Pod-Based Products MarkTen Elite and Apex, and Its Non-Traditional Flavors of MarkTen Cigalikes

987. On October 25, 2018, Altria informed the FDA (and publicly announced) that it was removing its pod-based products MarkTen Elite and Apex by MarkTen from the market:

> "Based on the publicly available information from FDA and others, we believe that pod-based products significantly contribute to the rise in youth use of e-vapor products. Although we do not believe we have a current issue with youth access to or use of our pod-based products, we do not want to risk contributing to the issue. To avoid such a risk, **we will remove from the market our *MarkTen Elite* and *Apex by MarkTen* pod-based products until we receive a market order from FDA or the youth issue otherwise addressed.**"

> (PX2022 (JLI) at 003) (Altria letter to FDA, as forwarded to JLI) (emphasis in original); *see also* CCFF ¶ 812, above).

988. In its October 25, 2018 letter to the FDA, Altria also announced that it would discontinue sales of its non-traditional flavors of MarkTen cigalikes, leaving only tobacco, menthol, and mint flavors on the market. (PX2022 (JLI) at 002-03 (Altria letter to FDA, as forwarded to JLI)).

4. Altria Discontinued All of Its E-Cigarette Products in December 2018

989. On December 7, 2018, Altria announced the "discontinuation of production and distribution of all *MarkTen* and *Greensmoke* e-vapor products." (PX9080 at 001 (Altria press release) (italics in original); *see also* CCFF ¶ 848, above).

990. On December 7, 2018, Altria stated that it would "begin working with retailers, wholesalers, contract manufacturers and suppliers to ensure an orderly [wind down] process." (PX9080 at 001 (Altria press release); *see also* CCFF ¶ 848, above).

991. In Altria's press release, Willard remarked, "We remain committed to being the leader in providing adult smokers innovative alternative products that reduce risk, including e-vapor," adding, "We do not see a path to leadership with these particular products and believe that now is the time to refocus our resources." (PX9080 at 001 (Altria press release)).

992. In a December 10, 2018 email, Altria's Senior Director of e-Vapor Product Engineering, Bob Arents, remarked to one of Altria's e-cigarette development partners (Jabil) that Altria's December 7, 2018 announcement "clearly discontinues products already in retail and improvements to same [], but does not rule out development of future e-vapor products and technologies[]." (PX1026 (Altria) at 001).

993. By December 10, 2018, Nu Mark was working with its contract manufacturer to stop production of MarkTen cigalikes and to wind down the associated supply chain. (PX1530 (Altria) (Dec. 10, 2018 Email chain discussing procurement issues)).

994. When Altria's Garnick was asked at trial if Altria's outside counsel ever advised that Altria's course of action in removing its e-cigarette products might give rise to antitrust liability, Altria's counsel objected on privilege grounds and directed Garnick not to answer. (Garnick (Altria) Tr. 1815-16).

N. THE TRANSACTION INCLUDED A NON-COMPETE PROHIBITING ALTRIA FROM PARTICIPATING IN THE E-CIGARETTE BUSINESS EXCEPT THROUGH JLI

995. The December 20, 2018 final transaction documents do not include a term requiring Altria to divest or contribute (or cease to operate) its e-cigarette products. (*See* CCFF ¶¶ 862-64, above). By the time the final transaction was executed, Altria had already discontinued the production and distribution of all of its e-cigarette products. (*See* CCFF ¶¶ 848, 858, above). The final transaction documents did include a 6-year non-compete prohibiting Altria and its subsidiaries from any participation in the e-cigarette market, including research and development. (*See* CCFF ¶¶ 998-1001, below). The terms of the non-compete ensured that Altria would only be permitted to continue the wind-down of its e-cigarette business, and that it would not be able to otherwise compete through its existing MarkTen Elite, MarkTen cigalikes, or Green Smoke e-cigarettes. (*See* CCFF ¶¶ 1002-05, below). Because of the non-compete, Altria stopped all research and development work relating to e-cigarettes. (*See* CCFF ¶¶ 1006-15, below).

996. Even though Altria had discontinued its e-cigarette products prior to the December 20, 2018 close of the transaction, JLI still wanted Altria to commit to a non-compete as part of the transaction. (Pritzker (JLI) Tr. 752-53). JLI did not want Altria to develop or buy other e-vapor products after the transaction. (Pritzker (JLI) Tr. 752-53).

997. Pritzker explained that if the transaction "involved Altria's receiving proprietary information about Juul and its products and its technology, then the concern is they could develop other products or even release once again MarkTen and [] MarkTen Elite back into the market. So there were still concerns about competition that I think were ultimately reflected in the [final deal] documentation." (PX7021 (Pritzker (JLI), Dep. at 150-51)).

998. The final executed transaction documents include a non-compete barring Altria from participating in all aspects of the e-cigarette business, including R&D, for an initial term of 6 years. (PX1276 (Altria) at 025-27 (Dec. 20, 2018 Relationship Agreement); PX1275 (Altria) at 005, 014 (Dec. 20, 2018 Services Agreement)).

999. The non-compete is indefinitely extendable by three-year increments if not terminated by either party. (PX1276 (Altria) at 025-27 (Dec. 20, 2018 Relationship Agreement); PX1275 (Altria) at 005, 014 (Dec. 20, 2018 Services Agreement) (defining "Discretionary Termination Date" as including "every third anniversary" after the initial six-year term)).

1000. The non-compete "commits [Altria] to conduct e-vapor operations exclusively through [JLI]." (PX1181 (Altria) at 067 (Dec. 2018 slide deck on Project Tree)).

1001. The non-compete prohibits Altria from engaging in the following activities directly or indirectly:

> [Altria] shall not, and shall cause its Subsidiaries and controlled Affiliates not to, directly or indirectly: (1) own, manage, operate, control, engage in or assist others in engaging in, the e-Vapor Business; (2) take actions with the purpose of preparing to engage in the e-Vapor Business, including through engaging in or sponsoring research and development activities; or (3) Beneficially Own any equity interest in any Person, other than an aggregate of not more than four and nine-tenths percent (4.9%) of the equity interests of any Person which is publicly listed on a national stock exchange, that engages directly or indirectly in the e-Vapor Business . . . (all such actions set forth in clauses (1) through (3), to "**Compete**" or "**Competition**").

(PX1276 (Altria) at 025-26 (Dec. 20, 2018 Relationship Agreement) (emphasis in original)).

1. The Non-Compete Ensured That Altria Could Not Compete through Its MarkTen Elite and MarkTen E-Cigarettes

1002. The non-compete in the final executed transaction documents includes a provision that: "Notwithstanding the foregoing [prohibition of competition], (x) [Altria] and its Subsidiaries and Controlled Affiliates may engage in the business relating to (I) its Green Smoke, MarkTen [] and MarkTen Elite brands, in each case, as such business is presently conducted . . . ." (PX1276 (Altria) at 026 (Dec. 20, 2018 Relationship Agreement)).

1003. By the time the transaction was executed, Altria was not "presently conducting" any business relating to MarkTen Elite, which Altria had removed from the market in late October 2018. (Gifford (Altria) Tr. 2,876-77; PX9114 at 002 (Altria 2018 third-quarter press release) at 002); PX2022 (JLI) at 002-03 (JLI copy of Altria's October 25, 2018 letter to FDA)).

1004. By the time the transaction was executed, Altria had announced the discontinuation of MarkTen and Green Smoke cigalikes, was no longer distributing them to retailers, and was no longer selling them online. (Willard (Altria) Tr. 1,274; Gifford (Altria) Tr. 2,876-77; PX9080 at 001 (Altria press release); (PX2459 (JLI copy of Altria Email to MarkTen customers)). The only business being "presently conducted" with respect to MarkTen and Green Smoke e-cigarettes was for retailers to sell through any remaining inventory. (*See* PX9080 at 001 (Altria press release)).

1005. At the time the transaction was executed, Altria was already winding down its Nu Mark subsidiary. (Gifford (Altria) Tr. 2,876-77; PX9080 at 001 (Altria press release)).

2. Altria Discontinued All Research and Development Relating to E-Cigarettes, Including Collaborations with Third Parties

1006. On December 10, 2018, Altria's General Counsel Garnick sent an internal email stating that with the JLI deal, there will be no e-vapor research, product integrity work, or competitive analysis relating to e-cigarettes. (PX1265 (Altria) at 001).

1007. Altria's Richard Jupe testified that the terms of the JLI transaction required Altria to immediately stop doing work in e-cigarettes. (PX7016 (Jupe (Altria), Dep. at 284)).

1008. In a December 20, 2018 email, Jupe wrote that "[s]ubsequent to today's announcement [of the JLI transaction], it is important to convene a communications approach for internal and external recipients to ensure a rapid and comprehensive closure to product development work associated with e-vapor." (PX1022 (Altria)). "Internal" recipients referred to Altria team members, and "external" recipients referred to third-party partners. (PX7016 (Jupe (Altria), Dep. at 283-84)).

1009. [redacted] (PX4531 (Altria) at 002 (*in camera*)).

1010. Altria disbanded its e-cigarette growth teams upon closing the JLI transaction. (Garnick (Altria) Tr. 1,660; PX7026 (Gardner (Altria), Dep. at 176)). The e-cigarette growth teams were shut down because Altria ceased development work on e-cigarettes due to the JLI transaction. (PX7026 (Gardner (Altria), Dep. at 176)). If the JLI transaction had not occurred, Altria would have continued to fund the e-cigarette growth teams. (Garnick (Altria) Tr. 1,660).

1011. Gifford testified that Altria disbanded the growth teams "as we moved into December" 2018, although he doesn't recall the exact date. (Gifford (Altria) Tr. 2,877).

1012. [redacted] (PX3210 (PMI) at 002 ({[redacted]}) (*in camera*)); *see also* CCFF ¶¶ 515-22, above).

1013. The non-compete between Altria and JLI included a provision stating that Altria could engage in the e-cigarette business "for a period of sixty (60) days commencing on the date of this Agreement, certain research and development activities pursuant to existing agreements with third parties that are in the process of being discontinued . . . ." (PX1276 (Altria) at 026 (Dec. 20, 2018 Relationship Agreement)).

1014. {[redacted] (PX3210 (PMI) at 002 ({[redacted]}) (*in camera*)).

1015. Jupe could not think of any third-party development agreements relating to e-cigarettes that remained in place after the JLI transaction closed. (PX7016 (Jupe (Altria), Dep. at 285)).

O. Other Market Participants Were Surprised at Altria's Exit

1016. Ordinary course documents and testimony from market participants, demonstrate that market participants were surprised by Altria's exit from the closed-system e-cigarette market. (*See* CCFF ¶¶ 1017-27, below).

1017. Martin King of PMI testified that Altria's decision to exit the sale and development of e-cigarettes did not make sense to him because "investors and others were adamant that companies like PMI and Altria address the e-cigarette space and have some way to compete and make sure that they're not being disrupted, and it would have been, I think, unusual for a major tobacco company at the time not to have some initiative or way to deal with the growth of e-cigarettes." (King (PMI) Tr. 2379-80).

1018. Huckabee of Reynolds testified that he was "very surprised" by Altria's announcement that it would withdraw its MarkTen products because "Altria had committed a great deal of resources to the marketing and distribution of MarkTen product, and the brand features very prominently in its activities certainly from a marketing standpoint, throughout the industry, and at retail. So the removal of the products comprised a substantial strategic shift." (Huckabee (Reynolds) Tr. 391).

1019. Eldridge of ITG testified that he was "surprised" by Altria's announcement that it would withdraw its MarkTen products because he "heard it was a good product and felt that they had marketing power to drive the business in that space. And when I say 'space,' I meant the e-cigarette space." (PX7012 (Eldridge (ITG), Dep. at 180-81)).

1020. In an analyst report following Altria's December 7, 2018 announcement, Morgan Stanley expressed surprise that Altria would exit the e-cigarette market given the resources it had invested in the category and questioned whether its actions were made in anticipation of a JUUL deal, noting "JUUL has ~75% market share of e-cigs and a potential investment by MO [Altria] could raise anti-trust issues." (PX1293 (Altria) at 121-22 ("However, we are surprised to see the company forgo this business altogether, given the amount of investment it has already put into the category, shifting consumer preferences towards RRPs over the long-term, and a regulatory backdrop that aims to encourage a shift down 'the continuum of risk'. MO's decision to exit e-cigs suggests that it sees better growth prospects elsewhere and could reflect its intent to focus its efforts on IQOS (once it receives PMTA approval) and we question if it is related to a potential JUUL investment (note that JUUL has ~75% market share of e-cigs and a potential investment by MO could raise anti-trust issues).")).

1021. In an analyst report, Wells Fargo expressed surprise at the MarkTen and Green Smoke discontinuation announcement and immediately suspected that a JUUL deal was imminent. (PX1293 (Altria) at 141 ("In a surprise move, MO [Altria] also announced that it is discontinuing production & distribution of all *MarkTen* & *Green Smoke* e-vapor products as well as its newer *VERVE* oral nicotine product line. MO cites poor financial performance outlook & increased regulatory restrictions that will make it difficult to effect 'quick' improvements to the products. MO states that it will 'refocus' resources on 'more compelling' RRP tobacco opportunities, which we have to believe includes iQOS and, increasingly believe, JUUL. We wouldn't be surprised if an announcement to acquire JUUL is imminent and we continue to believe this would be very positive.") (italics in original)).

1022. On December 7, 2018, Deutsche Bank wrote that Altria "is discontinuing production/distribution of all existing MarkTen and Green Smoke e-vapor products . . . **potentially clearing the way to a similar minority-investment-with-a-path-to-**

ownership investment in JUUL in the coming weeks (also consistent with recent press coverage).” (PX1293 (Altria) at 098 (emphasis in original)).

1023. On December 7, 2018 following Altria’s “discontinuation of its MarkTen/Green Smoke vapor products,” Bank of America / Merrill Lynch published a report that stated, “We see this move as clearing the decks for [Altria’s] next possible investment in” JLI. (PX1293 (Altria) at 072).

1024. Cenkos Securities described the discontinuation as a “clearing of the decks of the old attempts at e-vapour,” which “seem[ed] to be a fairly clear pointer” towards Altria buying a stake in JLI. (PX1293 (Altria) at 080) (“Two announcements from Altria; one that it is chasing the dream in buying a stake in a Canadian cannabis company; the other that it is closing down its MarkTen, Green Smoke and VERVE businesses. There has been widespread speculation that the company has been pursuing a stake in Juul. The clearing of the decks of the old attempts at e-vapour seems to be a fairly clear pointer towards that announcement being the third to be made, presumably sometime soon.”).

1025. Barclays commented that the discontinuation of MarkTen “suggest[s] that Altria might be exploring strategic opportunities in its e-cig business . . . there has recently been heightened speculation around Altria potentially investing in JUUL.” (PX1293 (Altria) at 004).

1026. William Kloss, Category Manager for Tobacco and Alcohol products at Wawa, Inc., stated that he was surprised that Altria discontinued MarkTen because of the substantial investments in marketing and displaying MarkTen products that Altria had made. (PX8006 at 004-05 (¶ 18) (Kloss (Wawa), Decl.)).

1027. When Paul Crozier of Sheetz first heard about Altria’s exit from the e-cigarette category on December 7, 2018, he was “surprised they were exiting the category” because Altria had a leadership position in the other tobacco categories, such as combustible cigarettes, smokeless tobacco, and cigars, and Altria’s e-cigarettes were also Sheetz’s number two product in the category. (Crozier (Sheetz) Tr. 1501-02).

P. ALL OTHER MARKET PARTICIPANTS REMAINED COMMITTED TO E-CIGARETTES

1028. Altria’s, JLI’s, and Third parties’ ordinary course documents and their executives’ testimony confirm that other market participants remained committed to the closed-system e-cigarette market. (*See* CCFF ¶¶ 1029-33, below).

1029. According to a November 14, 2018 “Nu Mark Business Update,” MarkTen, Vuse, Blu, and Logic all faced substantial share declines in e-cigarettes sold in the MOC channel from Q4 2017 to Q4 2018-to-date as JLI’s share rose rapidly: while JLI’s share rose from 23.2 percent to 70.9 percent, MarkTen’s share fell from 12.4 percent to 5 percent, Vuse’s share fell from 30 percent to 11.5 percent, Blu’s share fell from 9 percent to 4.9 percent, and Logic’s share fell from 6.8 percent to 2.8 percent. (PX1109 (Altria) at 045-46, 048, 051, 058).

1030. Reynolds’ Vuse, ITG’s Blu, and JTI’s Logic all remained in the e-cigarette market. (*See* CCFF ¶¶ 163-87, above); *see also* PX2175 (JLI) at 019 (Email from Tim Danaher, Apr.

17, 2018 attaching a Citi Research analyst note) (noting that "all the large tobacco companies say their e-vapor businesses are loss-making"); PX1733 (Altria) at 005 (E-vapor Category Review, Mar. 2017) (noting that "[m]ajor manufacturers are still operating at sizable losses")).

1031. [redacted] (PX8008 at 011-12 (¶ 21) (Huckabee (Reynolds), Decl.) (*in camera*) ({[redacted]})).

1032. [redacted] (PX8011 at 007-08 (¶ 35) (Eldridge (ITG), Decl.) (*in camera*) ({[redacted]); *see also* PX7012 (Eldridge (ITG), Dep. at 189)).

1033. [redacted] (Farrell (NJOY) Tr. 336-37).

IX. ALTRIA'S ASSERTED JUSTIFICATIONS FOR DISCONTINUING ITS E-CIGARETTE PRODUCTS ARE PRETEXTUAL AND INCONSISTENT WITH THE EVIDENCE

A. ALTRIA'S CLAIM THAT IT EXITED THE E-CIGARETTE BUSINESS BECAUSE OF FINANCIAL CHALLENGES IS UNSUPPORTED AND PRETEXTUAL

1034. On December 7, 2018, Altria issued a press release announcing the discontinuation of its MarkTen and Green Smoke e-cigarette products and explained that "[t]his decision is based upon the current and expected financial performance of these products . . . ." (PX9080 (Altria) at 001).

1035. Ordinary course documents from Altria, JLI, and third-party market participants, along with testimony from executives, show that the claim that Altria left the closed-tank e-cigarette market due to the current and expected financial performance of its e-cigarette products is implausible. (*See* CCFF ¶¶ 1036-162, below).

1036. On August 14, 2018, Altria's Brian Quigley expressed concerns that Altria executives involved in the JLI transaction presented "only the bad news version of the" MarkTen story, and that "some of the points" in the Board presentation "are flat out incorrect (e.g.

mark ten cig a like platform is declining) [MarkTen] is growing volume [and] is the second fastest growing brand in terms of volume behind juul." (PX1008 (Altria) at 001).

1037. {[redacted]} (Gifford (Altria) Tr. 2889 (*in camera*) (discussing PX4237 (Altria) at 032) (*in camera*)).

1038. As of March 13, 2021, Altria wrote down its investment in JLI from $12.8 billion to $1.5 billion, a loss of $11.3 billion. (Gifford (Altria) Tr. 2849, 2879-80).

1039. Altria has not publicly announced any intention or desire to divest its interest in JLI. (Gifford (Altria) Tr. 2880-81).

1040. Gifford testified that it is important for Altria to continue to participate in the e-vapor space. (Gifford (Altria) Tr. 2880-81).

1. Altria's Discontinuation of Its E-Vapor Business Was Against Its Economic Interest

1041. Firms have economic incentives to invest in segments that are growing rather than shrinking. (PX5000 at 044-45 (¶ 94) (Rothman Expert Report)). Traditional cigarette sales have been declining for years, whereas sales of less harmful nicotine products like e-cigarettes have been increasing. (PX5000 at 044-45 (¶ 94) (Rothman Expert Report)).

Table 3
Projected Compound Annual Growth Rates

	2014–2017	2017–2020
Traditional Cigarettes	-2.2%	-4.5% to -5.0%
E-Vapor	4.4%	26.7%

Note: Compound annual growth rates for 2017–2020 projected as of May 2018.

(PX5000 at 044-45 (¶ 94) (Rothman Expert Report)).

1042. Altria viewed market leadership in the e-cigarette market as critically important to its long-term success. (*See* CCFF ¶¶ 92-108, 409-544, above).

1043. Altria's Brian Quigley wrote that in mid-August, he "had a discussion with Howard [Willard] this weekend where he agreed it doesn't make sense to close up shop while we build for the future. Hence, the gasket and continuing with PMTA." (PX1008 (Altria) at 001).

1044. Willard testified that it was Altria's "objective" to attain a leading position in the U.S. e-vapor market. (Willard (Altria) Tr. 1146-47).

1045. Altria also has a stated vision to "Responsibly lead the transition of adult smokers to a non-combustible future." (PX9121 (Altria) at 001-02). As part of that vision, Altria publicly committed to "Develop and expand our portfolio of FDA-authorized, non-combustible products and actively convert adult smokers to them." (PX9121 (Altria) at 001-02).

1046. Willard testified that one of the factors that made attaining a leading position in the e-cigarette market a strategic initiative for Altria was that traditional cigarettes were declining while the e-cigarette category was growing. (Willard (Altria) Tr. 1147).

1047. Begley testified that Altria saw a long-term opportunity in the e-cigarette category because "there is a significant consumer base that are interested in these products." (PX7022 (Begley (Altria), Dep. at 92-94)).

1048. Pascal Fernandez testified: "If I look at the time periods that, let's say 2017, '16, '18, you know, I was convinced, and I think many of my colleagues were convinced that we needed to compete in the e-vapor category, which is why we, you know, created an innovation company, Nu Mark, which in part was taking care of the e-vapor portion and working really hard at it. And I don't think there was many trends in the market that would tell you that's not a good idea, because we had millions of adult consumers who were using e-vapor product." (PX7023 (Fernandez (Altria), Dep. at 181-82)).

1049. King testified that PMI has a similar mission as Altria to transition adult smokers to less harmful products, and that e-cigarettes are a "very important" part of that mission. (King (PMI) Tr. 2371-72.

1050. King of PMI testified that traditional cigarettes companies, including Altria and Reynolds, reacted to the rapid growth of e-cigarettes by putting in "a great deal of effort . . . to have products that could compete." (King (PMI) Tr. 2379; *see also* PX7048 (Rothman, Trial Dep. at 13)).

1051. [redacted]} (Huckabee (Reynolds) Tr. 416-17 (*in camera*)).

1052. [redacted] (PX8011 at 007-08 (¶ 35) (Eldridge (ITG), Decl.) (*in camera*); *see also* PX7012 (Eldridge (ITG), Dep. at 189)).

1053. As early as 2016, Altria believed that e-cigarettes represented a "significant longer-term opportunity." (PX7022 (Begley (Altria), Dep. at 92-94 (discussing PX4040 (Altria), at 018 ("Nu Mark 2016-2018 Strategic Plan") ("E-Vapor Category Represents a Significant Longer-Term Opportunity"))).

1054. In 2016, there were already more adult vapers than adult dippers or adult large mass cigar smokers. (PX7022 (Begley (Altria), Dep. at 92-94 (discussing PX4040 (Altria) at 018 ("Nu Mark 2016-2018 Strategic Plan")))).

1055. In the first half of 2017, Altria assessed that the closed tank e-cigarette market was highly attractive because JUUL "was starting to demonstrate some strong growth." (PX7004 (Willard (Altria), IHT at 55-56)).

1056. Altria executives testified that they had an obligation to give truthful and accurate information to Altria's investors and board and that they did so. (Willard (Altria) Tr. 1142-43; Gifford (Altria) Tr. 2886 (*in camera*); PX7031 (Willard (Altria), Dep. at 18); PX7035 (Gifford (Altria), Dep. at 41-42, 66); PX7000 (Garnick (Altria), IHT at 14)).

1057. In November 2017, Altria's former Chairman and CEO, Marty Barrington, told investors "[s]o we'll be clear: We aspire to be the U.S. leader in authorized, non-combustible, reduced-risk products." (PX9000 (Altria) at 005).

1058. In January 2018, Altria's CEO Howard Willard wrote that the upcoming launch of MarkTen Elite "is a big step forward for our plan to compete vigorously for closed tank volume." (PX1647 (Altria) at 003).

1059. In 2018, the closed-system e-cigarette segment was "growing rapidly" while the decline in the traditional cigarette segment was "noticeably increasing." (Willard (Altria) Tr. 1146; PX7023 (Fernandez (Altria), Dep. at 59 ("In 2018, the evapor category was growing rapidly, to very rapidly."); PX7021 (Pritzker (JLI), Dep. at 49 ("[T]he decline in cigarette revenues in the United States was increasing, noticeably increasing.")).

1060. [redacted] (PX1124 (Altria), at 019 (*in camera*); *see also* PX1979 (Altria) at 008-11 ({[redacted]}) (*in camera*)).

1061. A January 2019 presentation prepared by Altria's Consumer & Marketplace Insights Group ("CMI") showed that tobacco users aged between the then-legal minimum to 20 years old were rapidly shifting from traditional cigarettes to e-cigarettes, with 51 percent of tobacco users in that age group using only traditional cigarettes in November 2016 and only 18 percent using only traditional cigarettes in November 2018. (PX4023 (Altria) at 019 (Altria presentation entitled "E-Vapor Business Review," Jan. 8, 2019)).

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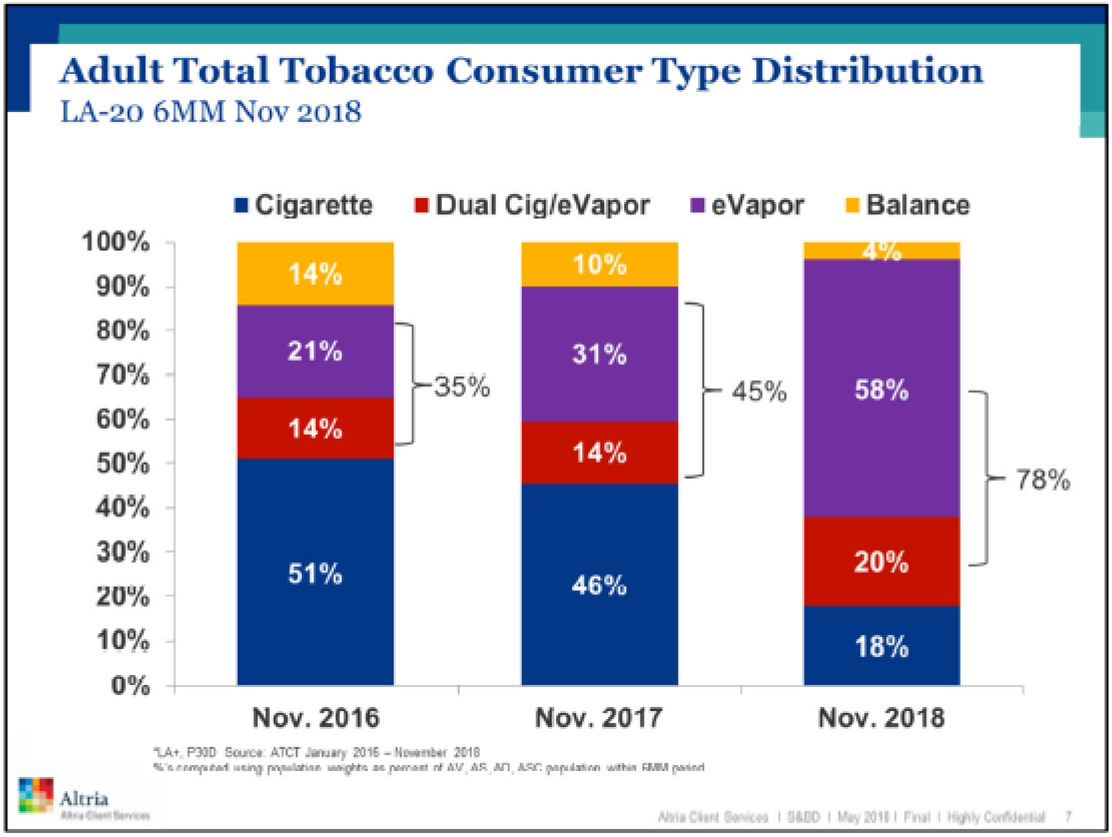


(PX4023 (Altria) at 019).

1062. In a 2019 interview with the *Wall Street Journal*, Willard stated: "At a time when e-vapor is going to grow rapidly and likely cannibalize the consumers we have in our core business, if you don't invest in the new areas you potentially put your ability to deliver that financial result at risk." (PX1172 (Altria) at 007).

1063. [redacted] (PX1443 (Altria) at 009 (*in camera*)).

2. Altria Was Willing to Sacrifice Short-Term Profits to Succeed in the Closed-System E-Cigarette Market

1064. [redacted]} (Willard (Altria) Tr. 1300) (*in camera*)).

1065. Willard testified that Altria "spent well over half a billion dollars, maybe up to a billion dollars, investing in the e-vapor category." (Willard (Altria) Tr. 1341).

1066. Craig Schwartz explained that when manufacturers first introduce e-cigarette products they typically "want to incent trial" with "a heavy up in your sales incentives" and Altria's management was aware that "when you are in the heavy up period, you are going to have depressed profits. The objective is that the investment will pay off." (PX7002 (Schwartz (Altria), IHT at 90-91)).

1067. [redacted]} (Begley (Altria) Tr. 1019-20) (*in camera*)).

1068. [redacted] (PX7022 (Begley (Altria), Dep. at 104-05) (*in camera*))).

1069. In its 2016 three-year strategic plan, Nu Mark estimated that its operating company income for 2016 would be negative $115 million. (PX4040 (Altria) at 012).

1070. [redacted] (Begley (Altria) Tr. 1019) (*in camera*)).

1071. [redacted] (Begley (Altria) Tr. 1015-19 (*in camera*) (discussing PX4073 (Altria) at 002) (*in camera*)).

1072. [redacted]} (Begley (Altria) Tr. 1025 (*in camera*)).

1073. [redacted] (Gifford (Altria) Tr. 2883-86 (*in camera*)).

1074. [redacted] (Gifford (Altria) Tr. 2886-87 (discussing PX4236 (Altria) at 022) (*in camera*) {[redacted]}).

1075. [redacted] (Gifford (Altria) Tr. 2888-89 (discussing PX4237 (Altria) at 057) (*in camera*) {[redacted]).

1076. [redacted]} (Gifford (Altria) Tr. 2889 (*in camera*) (discussing PX4237 (Altria) at 032) (*in camera*))).

1077. [redacted]} (Gifford (Altria) Tr. 2883 (*in camera*)).

1078. [redacted] (Gifford (Altria) Tr. 2890 (*in camera*)).

1079. {[redacted]} (PX7040 (Gifford (Altria), Dep. at 73-74) (*in camera*)).

1080. {[redacted]} (PX7040 (Gifford (Altria), Dep. at 74 (*in camera*)).

1081. [redacted] (PX4238 (Altria), at 013, 022 (*in camera*) {[redacted]}; *see also* Gifford (Altria) Tr. 2891 (*in camera*) {[redacted]}).

1082. Altria continues to sell, distribute, and market IQOS in the United States. (Gifford (Altria) Tr. 2709-10, 2717).

3. Altria Expected That Its Closed-System E-Cigarette Products Would Become Profitable

1083. A November 2, 2017, Nu Mark Investor Day presentation prepared for delivery by Jody Begley, included notes prompting Begley to say that he "fully expect[s] Nu Mark to achieve our long-term goal, which is to lead the U.S. e-vapor category through a portfolio of superior reduced risk products . . . that generate cigarette-like margins at scale." (PX1129 (Altria) at 007).

1084. On April 18, 2018, Altria's then-CEO Marty Barrington sent an email to Altria's board of directors informing them that Altria was investing in e-cigarettes because "e-vapor and/or other innovative products may increasingly attract cigarette smokers over time" and advised them that "[m]argin in them will build with time, and managing the transition from a core business to an evolving one is what successful companies like ours do." (PX1114 (Altria) at 001-02).

1085. [redacted]

1086. A February 28, 2018, Altria board presentation titled "Nu Mark 2018 Three Year Strategic Plan" projected that Nu Mark's marginal contribution would rise from positive $20 million in 2017 to positive $117 million in 2020 and that Nu Mark's adjusted OCI [Operating Company Income] would rise from negative $71 million in 2017 to positive $20 million in 2020. (PX1113 (Altria) at 010).

1087. A February 28, 2018, Altria board presentation titled "Nu Mark 2018 Three Year Strategic Plan" estimated that MarkTen Elite's marginal contribution would be around 48 percent in 2019, compared to actual 2017 Marlboro traditional cigarette margins of 62 percent and actual 2017 Nu Mark[MarkTen] cigalike margins of 30 percent. (PX1113 (Altria) at 031).

4. Nu Mark's Financial Performance Was Improving

1088. [redacted] (Begley (Altria) Tr. 1017 (discussing PX4073 (Altria), at 002 ({[redacted]})) (*in camera*)).

1089. [redacted] (Begley (Altria) Tr. 1018 (discussing PX4073 (Altria) at 002 ({[redacted]})) (*in camera*)).

1090. [redacted] (Begley (Altria) Tr. 1018 (discussing PX4073 (Altria) at 002 ({[redacted]})) (*in camera*)).

1091. [redacted]} (Begley (Altria) Tr. 1021-22 (discussing PX4042 (Altria), at 006 ({[redacted]})) [redacted]} (*in camera*)).

1092. [redacted]} (Begley (Altria) Tr. 1023 (discussing PX4042 (Altria) at 018) (*in camera*)).

1093. [redacted]} (Begley (Altria) Tr. 1024-25 (discussing PX4042 (Altria) at 018 ({[redacted]})) (*in camera*)).

1094. [redacted] (Begley (Altria) Tr. 1025 (discussing PX4042 (Altria) at 018 ({[redacted]})) (*in camera*)).

1095. [redacted] (PX7022 (Begley (Altria), Dep. at 51, 56, 149-50) (*in camera*)).

1096. On February 21, 2018, Willard stated at an Altria investor conference that in 2017, MarkTen cigalikes grew volume by "approximately 60%, far outpacing competitive cig-a-like brands." (PX9045 (Altria) at 006).

1097. Altria's e-cigarette unit sales and revenue were growing prior to its exit, [redacted]. (PX5000 at 068 (¶ 120) (Rothman Expert Report) (analyzing Nielsen and STARS data); *see also* PX7003 (Quigley (Altria), IHT at 152 ("[T]he cig-a-like platform was growing. Not declining. And that was the point that I thought I had convinced Howard of why we should keep the cig-a-like business, that we were actually growing 3-1/2 million units, and there was an opportunity to compete with Vuse in that space."); PX7040 (Gifford (Altria), Dep. at 62 ("Q. Meaning that [Nu Mark's] 2018 year to date actual volume was over 8.8 million units higher than the 2017 year to date actual volume? A. That is correct. . . . Q. For Nu Mark volume, the percent change between 2018 actual year to date and 2017 actual year to date was 20.7 percent; is that right? A. That's correct.")).

1098. From 2014 to 2017, Nu Mark reduced its variable production costs for MarkTen cigalike products from $1.17 to $0.70 for cartridges and from $5.02 to $2.95 for devices. (PX7002 (Schwartz (Altria), IHT at 078-79) (discussing PX1093 (Altria) at 008 (Nu Mark Operations Financial Results for September 2018 vs 2018 Operating Budget)).

1099. Schwartz estimated that, from 2015 to 2018, Nu Mark sales grew from $200 million to $500 million, with "maybe a third" of that growth attributable to MarkTen's cigalike products and MarkTen Elite. (Schwartz (Altria) Tr. 1864-65).

1100. A November 2, 2017, Nu Mark Investor Day presentation, prepared for delivery by Begley, contains notes prompting Begley to say: "*MarkTen* also has promising re-purchase rates, with cartridges comprising nearly 90% of *MarkTen* sales." (PX1129 (Altria) at 015).

1101. A November 2, 2017, Nu Mark Investor Day presentation, prepared for delivery by Begley, contains notes prompting Begley to say: "Nu Mark has made substantial progress in the cig-a-like segment, and we believe it has a solid runway for the future. While we continue to invest in growing brand awareness and equity, we've also made considerable progress reducing costs and have positive gross margins." (PX1129 (Altria) at 020).

1102. In November 2017, Altria told investors that MarkTen Bold had promising early results and those results led Nu Mark to plan to expand MarkTen Bold to an additional 15,000 stores by the end of 2017. (PX7022 (Begley (Altria), Dep. at 126-27 (discussing PX9000 (Altria) at 017))).

1103. From the first half of 2017 to the first half of 2018, MarkTen's sales volume growth in the closed-tank e-cigarette segment was 24 percent, second highest after JUUL. (PX7013 (Brace (Altria), Dep. at 126-27 (discussing PX1059 (Altria) at 006 ("Nu Mark Update" Sept. 2018)))).

1104. From July 1, 2017, to July 1, 2018, IRI data showed that the MarkTen brand's sales volume growth in the closed-tank e-cigarette segment was second place behind JUUL. (PX1056 (Altria), at 031 (Nu Mark Business Update, Aug. 2018); *see also* PX1008 (Altria) at 001 (email from Brian Quigley, Aug. 14, 2018) ("[M]arkTen] volume is the second fastest growing brand in terms of volume behind [JUUL]."); *see also* Quigley (Altria) Tr. 1973-74 (discussing PX1008 (Altria), at 001)).

YTD Change in Volume Sales vs. YAG

(IRI MOC – w/e 7/1/18)

Hybrids

Rank	Brand	Volume Sales Change vs YA
1	Juul	102,449,659
2	Vuse Vibe	4,840,344
3	my Blu	3,698,842
4	Logic	860,493
5	MarkTen Elite	413,559
6	NJOY Hybrid	380,370
7	PHIX	170,729
8	Cue	104,315
9	XFIRE	56,235
10	Bo	47,973
11	Vapin Plus	28,272
12	Mistic Hybrid	8,389
13	The Byrd	2,389
14	Fin	-131,996

Total E-Vapor

Rank	Brand	Volume Sales Change vs YA
1	Juul	102,449,659
2	MarkTen	3,881,654
3	blu	2,898,358
4	Vuse	1,088,791
5	NJOY	725,978
6	Vaporin	293,184
7	Space Jam	266,829
8	Phix	170,729
9	Clean Cig	136,339
10	Cosmic Fog	125,257
11	Cue	104,315
12	E Tron	69,756
13	Tsunami	64,082
14	XFIRE	56,235

NuMark

Source: IRI MOC Data Week Ending 07/01/18 as of 7/24/2018

(PX1056 (Altria) at 031).

1105. From July 1, 2017, to July 1, 2018, MarkTen's "e-commerce volume" grew 105 percent. (PX1056 (Altria) at 028 (Nu Mark Business Update, Aug. 2018)).

1106. As of September 2018, Nu Mark's year-to-date marginal contribution was positive $26 million, excluding spending on "trade programs." (PX7002 (Schwartz (Altria), IHT at 085-87) (discussing PX1127 (Altria) at 003) (Nu Mark Finance Update – September YTD, Oct. 15, 2018))).

1107. A September 7, 2018, Altria presentation circulated by Craig Schwartz showed that both MarkTen Elite and Altria's cigalike franchise had a positive marginal contribution, 21 percent and 42 percent respectively, and Schwartz stated that the information in the presentation "could support a decision to further invest in MarkTen Elite 1.0 – if that's what we decide to do . . . ." (PX4313 (Altria) at 001, 006) (MarkTen Elite Potential Investment Justification Information)).

1108. Altria's November 2018 year-to-date financial results showed that Nu Mark's sales volume from January to November 2018 improved by 20.7% as compared to the same period in 2017. (PX7040 (Gifford (Altria), Dep. at 61-62) (discussing PX4231 (Altria) at 003 (Altria Group, Inc. Operating Companies 2018 November YTD Financial Results))).

1109. [redacted]

(PX4366 (Altria) at 055 (*in camera*) {[redacted]}}).

1110. Paul Crozier testified that, in October 2018, Altria's e-cigarette products had around "8 to 10 percent of the share of [e-cigarette] sales" at Sheetz, which placed them in the "second position" behind JLI. (Crozier (Sheetz) Tr. 1499).

1111. Michelle Baculis testified that there were no headcount reductions or other indications of financial distress prior to the shutdown of Nu Mark. (PX7014 (Baculis (Altria), Dep. at 61, 289-90 ("Q. You didn't notice any significant decreases in personnel at Nu Mark at any other time? A. No. . . Did you go to work expecting to be told that your group was going to be shut down? A. No. Q. It was a surprise to you? A. Yes. . . Q. Had you heard that Nu Mark was in a bad financial situation such that you could kind of guess that cuts were coming? A. No.")); *see also* PX7016 (Jupe (Altria), Dep. at 251 ("And were you aware of any conversations happening at this point in time that discussed a potential just simple exit from the entire e-vapor market entirely? A. Not an exit from the entire market, no."))).

5. MarkTen Elite Sales Were Growing

1112. Altria executives consistently testified that MarkTen Elite sales were growing in 2018. (Schwartz (Altria) Tr. 1945 ("So Elite was growing sales volume . . ."); PX7038 (Myers (Altria), Dep. at 108-09 ("Q. And during this time of the initial wave of MarkTen Elite, were pod sales growing as well? . . . A. Yes. To my understanding, yes, they were.")); PX7003 (Quigley (Altria), IHT at 056 ("Elite was growing."), 072-73 ("Q. Despite the fact that Elite products, that some of them were leaking, Elite was growing in sales volume during your time as president, correct? A. Correct."))).

1113. On July 26, 2018, Willard stated to investors on an earnings call that "Nu Mark grew volume by approximately 16% in the quarter and 23% for the first half, primarily driven by expanded distribution" and that MarkTen Elite and MarkTen Bold were "[t]he drivers of the growth in second quarter and first half" and were "getting traction with consumers." (Willard (Altria) Tr. 1167-68 (discussing PX9047 (Altria) at 003, 009-10 (Altria's Q2 2018 Earnings Call))).

1114. MarkTen Elite's unit sales in the first 21 weeks following its launch were in a similar range as those of its competitors—6.8 pods per store per week on average compared to 4.6 pods per store per week for blu and 8.8 pods per store per week for JUUL. (PX1013 (Altria) at 009 (Email from Brian Quigley, Aug. 9, 2018) (showing average weekly volume per store selling by weeks after introduction date for MarkTen Elite, my blu, and Juul); PX7003 (Quigley (Altria), IHT at 136 ("Q. So at about a 21-week period post launch, this means that myblu was selling 4.6 -- A. Average pods per store per week. Q. And Elite was selling 6.8? A. And JUUL was selling 8.8. Q. Based on this slide, how would you characterize Elite's sale performance at about 21 weeks on the market compared to JUUL and myblu after the equivalent amount of time that they had been on the market? A. That we are doing okay."))).

1115. [redacted] (PX5000 at 066 (¶ 115) (Rothman Report) (citing PX2517 (JLI) (Excel worksheet "Metrics_Launch."))).

1116. [redacted] (PX5000 at 066 (¶ 115) (Rothman Report) (citing PX2517 (JLI) (Excel worksheet "AttachRates_Launch."))).

1117. MarkTen Elite's average sales per store also grew from May to July in major retail chains including Walgreens, 7-Eleven, Wawa, Speedway, and Sheetz. (PX1013 (Altria) at 007 (Email from Brian Quigley, Aug. 9, 2018) (showing "MarkTen Elite Average Sales / Store / Chain" in May and "Latest Week" as of July 29, 2019, by retail chain)).

1118. According to IRI data, from the week of May 20, 2018, to the week of June 24, 2018, MarkTen Elite's sales increased from $135K to $445K (or by 230 percent), and in one week alone in June 2018, MarkTen Elite's sales increased by 77.9 percent. (O'Hara (JLI) Tr. 558-60 (discussing PX2616 (JLI) at 009)).

1119. From the four weeks ending May 27, 2018, to the four weeks ending July 1, 2018, MarkTen Elite's sales volume grew 210 percent. (Schwartz (Altria) Tr. 1952-53 (discussing PX1194 (Altria) at 009)).

1120. As of July 1, 2018, Nu Mark reported that MarkTen Elite was "continuing to show week-over-week growth" with a marginal contribution of $1.5 million through June 2018. (PX1056 (Altria) at 028 (Nu Mark Brand Update, Aug. 2018)).

1121. As of July 2018, MarkTen Elite had a 38 percent year-to-date positive marginal contribution, excluding one-time marketing costs. (PX1056 (Altria) at 008 (Nu Mark Brand Update, Aug. 2018)).

1122. Between May 2018 and July 2018, MarkTen Elite's sales volume increased by 450 percent in the multioutlet convenience store channel, with average weekly volume in stores carrying Elite increasing by 56 percent over this period. (PX1056 (Altria) at 033 (Nu Mark Brand Update, Aug. 2018)).

1123. From July 2018 to September 2018, MarkTen Elite's same store sales grew 38 percent, with "[a]ccelerated development in stores with premium space/positioning." (Quigley (Altria) Tr. 1981 (discussing PX1072 (Altria) at 004) (Nu Mark "Brand Update," Oct. 2018)).

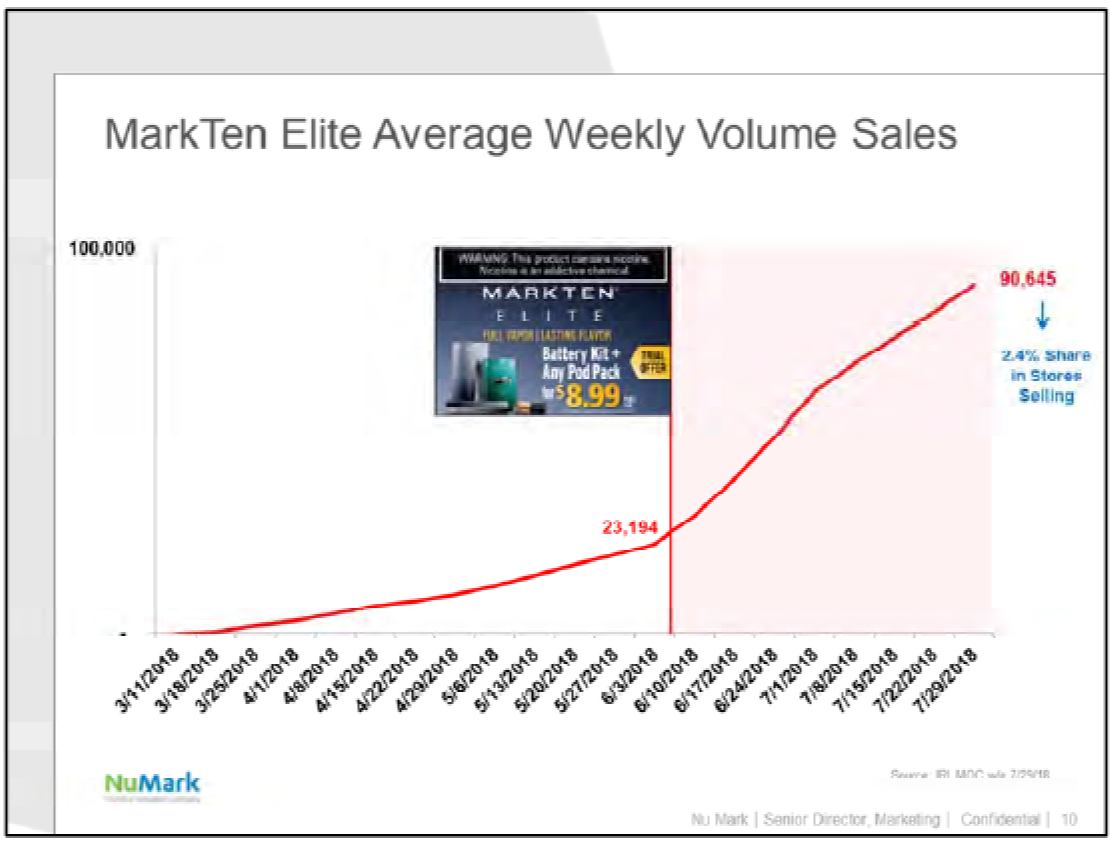
1124. Nu Mark was able to take Elite from zero retail stores to 25,000 retail stores between February and September of 2018. (PX4314 (Altria) at 006).

1125. Craig Schwartz stated in an August 4, 2018, email to Altria's former Chairman that MarkTen Elite was "Starting to gain traction" and was "showing promise" with "the best yet to come," including plans for marketing the product in casinos, on social media, and through affiliate programs later in the month. (PX1260 (Altria) at 002).

1126. By August 11, 2018, MarkTen Elite had expanded to around 20,000 stores with a planned expansion to more than 20,000 "additional stores by December 2018." (PX1149 (Altria) at 011 (Nu Mark 2018 Strategic Plan Review Q3 Update, Aug. 11, 2018)).

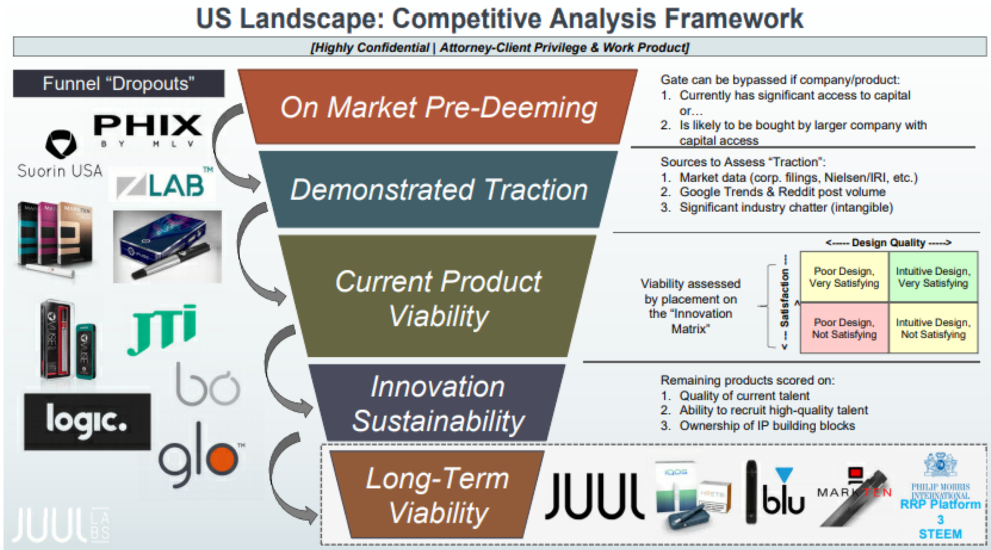
1127. In an August 15, 2018, email to Altria's former Chairman, Craig Schwartz stated that by July 2018, MarkTen Elite had generated $5 million in positive marginal contribution on $20 million in sales, despite the fact that it "took us 4 years to be Margin positive with our MarkTen cig-a-like franchise." (PX1601 (Altria) at 001).

1128. An August 2018 "Nu Mark Brand Update" showed that MarkTen Elite average weekly volume sales increased steadily from the product's launch in March 2018 through July 2018. (PX1056 (Altria) at 012 (Nu Mark Brand Update, Aug. 2018)).



(PX1056 (Altria) at 012).

1129. Joseph O'Hara, JLI's competitive intelligence expert, concluded that MarkTen Elite had "long-term viability." (PX2289 at 021 ("US Landscape: Competitive Analysis Framework"); PX7033 (O'Hara (JLI), Dep. at 80 ("And what are the brands under the long-term viability category in this slide? A. […] MarkTen […] Q. Do you know whether the logo for MarkTen there, is that referring to MarkTen Elite or the MarkTen brand as a whole or something else? A. That was referring to MarkTen Elite.”))).



(PX2289 (JLI) at 021).

1130. An Altria presentation attached to an August 27, 2018, email projected positive and growing margins and sales volume for MarkTen Elite for 2019 and 2020, as well as declining promotional spending. (PX1143 (Altria) at 28 (“Elite Business Case,” Aug. 27, 2018) (estimating that MarkTen Elite would sell 25.6 million pods and 2.8 million devices in 2019 and 43.5 million pods and 4.8 million devices in 2020, with a marginal contribution of $21.2 million in 2019 and $48.6 million in 2020)).

Elite Out-Year Estimates (2018 2RF)

Volume (in Millions)		
	2019	2020
Pod Packs	25.6	43.5
Devices	2.8	4.8
Total	**28.4**	**48.3**

Marginal Contribution ($ in Millions)		
	2019	2020
Pod Packs	$9.8	$26.0
Devices	$11.3	$22.6
Total	**$21.2**	**$48.6**

Altria
Altria Client Services

(PX1143 (Altria) at 28).

1131. Altria's own research showed that Elite performed well against JUUL on multiple dimensions and was "consistently preferred over…JUUL". (PX7034 (Mountjoy (Altria) Dep. at 50-53) (discussing PX4248 (Altria) at 014 (E-Vapor Category and Nu Mark and Business Update, May 2017)).

6. Other Competitors in the Closed-System E-Cigarette Market Experienced Commercial Challenges, But Remained in the Market

1132. MarkTen, Vuse, Blu, and Logic all faced substantial market share declines in the closed-tank e-cigarette market from Q4 2017 to Q4 2018 as JLI's market share rose rapidly: while JLI's share rose from 23.2 percent to 70.9 percent, MarkTen's share fell from 12.4 percent to 5 percent, Vuse's share fell from 30 percent to 11.5 percent, Blu's share fell from 9 percent to 4.9 percent, Logic's share fell from 6.8 percent to 2.8 percent. (PX1109 (Altria) at 045, 046, 048, 051, 058 (Nov. 14, 2018, "Nu Mark Business Update")).

1133. [redacted] and have not exited the closed system e-vapor market. (*See* CCFF ¶¶ 109-17, above; ¶¶ 1134-43, below).

1134. [redacted] (PX8008 at 011-12 (¶ 21) (Huckabee (Reynolds), Decl.) (*in camera*)).

1135. Nonetheless, Reynolds' Vuse, ITG's Blu, and JTI's Logic all remained in the e-cigarette market. (*See* CCFF ¶¶ 163-87, above).

1136. Other major e-cigarette competitors also face product design and regulatory hurdles, yet have not exited, even though they are also subject to the same PMTA requirements and deadlines. (*See* CCFF ¶¶ 197-207, above); [redacted]

1137. Other major e-cigarette competitors also face similar tradeoffs between short- and long-term profitability, yet have not exited. (PX2175 (JLI) at 019 (Email from Tim Danaher, Apr. 17, 2018 attaching a Citi Research analyst note) (Citi Research notes "all the large tobacco companies say their e-vapor businesses are loss-making"); PX1733 (Altria) at 005 (E-vapor Category Review, Mar. 2017) ("Major manufacturers are still operating at sizable losses"); Gifford (Altria) Tr. 2851-54 (discussing PX4040 (Altria) at 012 ("Nu Mark 2016-2018 Strategic Plan") (estimating Vuse's OCI in 2015 at between negative $160 and negative $180 million) and RX0746 (Altria) at 007 (estimating Vuse's OCI in 2016 at negative $120 million))). OCI stands for "operating company income." (PX7010 (Gifford (Altria), Dep. at 44)).

1138. [redacted] } (PX8008 at 011-12 (¶ 21) (Huckabee (Reynolds), Decl.) (*in camera*) [redacted]

[redacted]}).

1139. [redacted] (PX8011 at 007-08 (¶ 35) (Eldridge (ITG), Decl.) (*in camera*) ({[redacted]); *see also* PX7012 (Eldridge (ITG), Dep. at 189)).

1140. Dr. Rothman found that Altria's margins were within the range of its competitors from 2015 to 2018. (PX5000 at 073 (¶ 126) (Rothman Expert Report)).

1141. [redacted] (King (PMI) Tr. 2382) (*in camera*)).

1142. [redacted] (King (PMI) Tr. 2382) (*in camera*)).

1143. [redacted]} (King (PMI) Tr. 2383) (*in camera*)).

7. Altria Withdrew MarkTen Elite before It Had Time to Assess the Product's Long-Term Potential

1144. Altria launched MarkTen Elite on February 26, 2018. (O'Hara (JLI) Tr. 631-32 (discussing PX2086 (JLI) at 001); Willard (Altria) Tr. 1356-57).

1145. Altria announced that it would withdraw Elite from the U.S. market on October 25, 2018. (Willard (Altria) Tr. 1274).

1146. Altria planned a phased rollout of Elite, with 55 percent of volume coverage of accounts/stores not scheduled to occur until September 2018. (PX1298 (Altria) at 029) (Nu Mark 2018 Three Year Strategic Plan, Feb. 27, 2018)).

1147. As of September 28, 2018, Altria was planning new waves of MarkTen Elite expansion for October 8, October 29, and November 19, 2018, and two waves in Q1 2019. (PX7038 (Myers (Altria), Dep. at 255-56 (discussing PX1617 (Altria) at 005))).

1148. Quigley testified that Altria planned to expand MarkTen Elite to 37,000 stores by the end of 2018, and that Altria would have been able to do so if not for the discontinuation of the product. (Quigley (Altria) Tr. 1975 (discussing PX1320 (Altria), at 052)).

1149. Shortly before withdrawing MarkTen Elite from the market, Altria made a product change to Elite to address a leaking issue, leaving it little time to assess the impact of the change on Elite's sales performance. (*See* CCFF ¶¶ 1206-18, below; PX1567 (Altria) at 001 (email dated Oct. 22, 2018) ("As of today, the entire PW network has been converted over to the C1A gasket. Inventory durations are in a healthy position with additional production in transit.")).

1150. Willard testified that "typically monitoring market performance for a longer period of time is going to give you a more reliable measure of the performance of the product" and "typically a longer timeframe is better to measure the long-term success of a product." (PX7004 (Willard (Altria), IHT at 114-15)).

1151. When Quigley first learned that Altria executives were considering discontinuing MarkTen Elite, he was surprised and he considered it unusual that Altria launched product, saw it grow, and then withdrew it several months later. (PX7003 (Quigley (Altria), IHT at 133-34).

1152. Quigley testified that he was President of U.S. Smokeless Tobacco for more than six years, during which time he was able to turn around the business. (Quigley (Altria) Tr. 2000-01 ("[US Smokeless Tobacco] had a significant amount of challenges in my time there, structural challenges. The board was very unhappy with the financial performance of the business, the brand performance of the business, and in my time I grew the income of that business 50 percent, over my six-year tenure, well ahead of I believe what our plans were. I put a brand strategy in place to address some of the key business performance concerns, and also addressed some of our structural challenges and built new returns models, addressed out of stocks and built a new pricing model to help us be more efficient. So I felt like I had totally transformed that business.").

1153. Quigley testified that he was given significantly less time to turn around the Nu Mark business as CEO than he was given to turn around U.S. Smokeless Tobacco. (Quigley (Altria) Tr. 2087-88 (explaining he only had six to seven months as CEO of Nu Mark versus six years at U.S. Smokeless Tobacco)).

1154. In his remarks at the 2017 Investor Day, Barrington observed that Altria "had reversed the very significant downward decline in market share its leading premium brands were experiencing before [Altria] acquired them," and that "[c]learly USSTC's tremendous success in smokeless products is a testament to our ability to build profitable businesses other than combustible cigarettes and grow brands other than Marlboro." (PX9000 (Altria) at 006).

1155. Quigley testified that he "did not feel it made sense to walk away from the pod business." (PX7003 (Quigley (Altria), IHT at 120)). Quigley's recommendation to Willard, Gifford, Garnick, and Crosthwaite was that Nu Mark pursue a PMTA for Elite 1.0 and keep it on the market, while focusing on getting an improved Elite 2.0 product through the PMTA process:

> So again, my focus was I had a business with volume losing money. My operational view was grow more volume with what I have and then get more products in the future to build on that. So I did not feel it made sense to walk away from the pod business. So without executing an Elite 1.0 PMTA, that would mean that we would run the risk of losing our pod business if we only submitted a PMTA for the 2.0 product. If we did not get action back from FDA approving that product prior to the PMTA date in 2022, we would be out of the market. So it was like a contingency plan, like, well, let's be able to retain the product we have and really focus on getting the better product through the PMTA process.

(PX7003 (Quigley (Altria), IHT at 120); PX1174 (Altria) at 024 (Aug. 2, 2018 Nu Mark Current Situation and Near Term Strategic Options deck sent from Quigley to Willard, Gifford, Garnick, and Crosthwaite)).

1156. When asked about the performance of IQOS, Willard testified "I think it's probably too early. It's only been a few months, and I think it probably takes a year to get an assessment for how it's doing." (PX7004 (Willard (Altria), IHT at 113-14)).

1157. Paul Crozier, Sheetz's Category Manager, Cigarettes and Tobacco, acknowledged that it was not common for a vendor to Sheetz to remove a new product about roughly eight months after its launch. (Crozier (Sheetz) Tr. 1498).

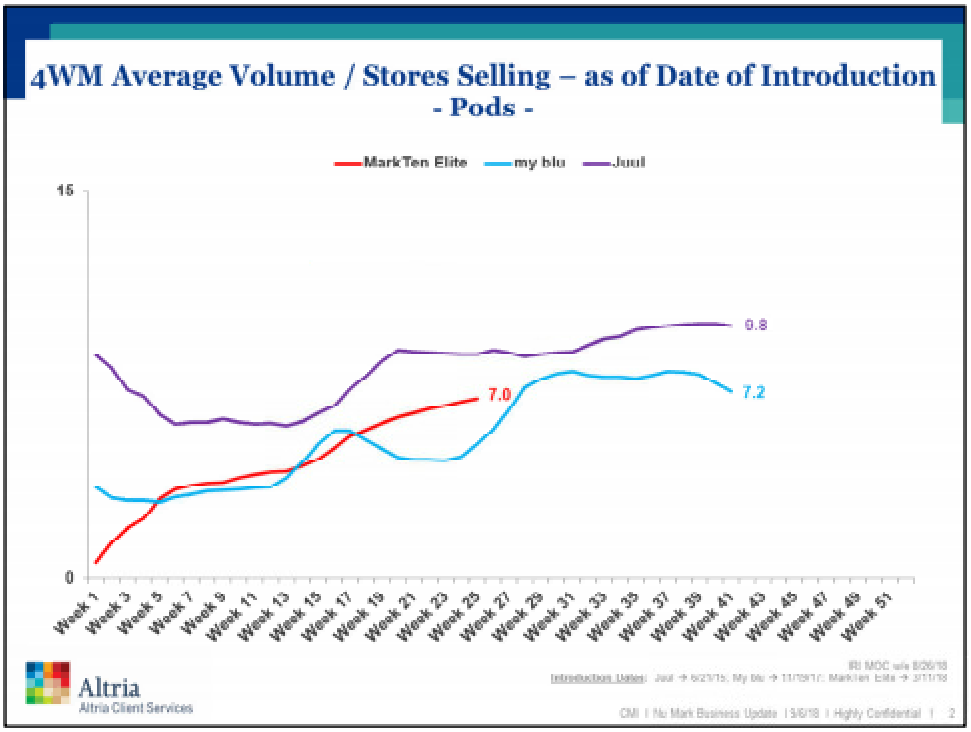
1158. Crozier testified that, in his view, Altria did not give MarkTen Elite "enough time . . . to prove itself out" before discontinuing the product in October 2018. (Crozier (Sheetz) Tr. 1498).

1159. Crozier testified that he was surprised that Altria would discontinue MarkTen Elite after only 8 months and could not recall any other e-cigarette product that had been discontinued in such a short time period. (PX7019 (Crozier (Sheetz), Dep. at 109) ("Q. Are you surprised that Altria would launch a product with MarkTen Elite and discontinue it eight months later? […] A. I was a little surprised that it hadn't even been on the market an entire year, especially since we kind of had it as an exclusive product launch in March but less than a year is a pretty short time. […] Q. Do you recall any other examples of e-cigarette suppliers discontinuing products in that short of a time period? A. I do not.")).

1160. Jeff Eldridge, ITG Brand's Vice President, Area Central, testified that he was "surprised" when Altria withdrew MarkTen Elite from the market and that he thought it was unusual for Altria to introduce a product and then announce they were pulling it off the market less than a year later. (PX7012 (Eldridge (ITG), Dep. at 180-81)).

1161. A September 7, 2018, Altria presentation circulated by Craig Schwartz included a chart showing that MarkTen Elite's average pod sales volume per store selling the product was comparable to JUUL's and *my*blu's at similar stages after their respective launches.

(PX4313 (Altria) at 001, 005) (MarkTen Elite Potential Investment Justification Information)).



(PX4313 (Altria) at 005).

1162. Marlboro cigarettes, an Altria brand, have been on the market for over 75 years. (Myers (Altria) Tr. 3391). In comparison, Altria's MarkTen Elite was only on the market for 8 months. (Myers (Altria) Tr. 3391).

B. Altria's Claim That Its E-Cigarettes Had Characteristics That Made Them Commercially Unviable Is Unsupported and Pretextual

1163. Willard testified that Altria "didn't think cigalikes were ever going to be a winning product or represent an opportunity for profit." (Willard (Altria) Tr. 1458).

1164. Begley testified "there appeared to be one format that was winning in the marketplace, which was a pod-based product with nicotine salts." (Begley (Altria) Tr. 1055). Altria's MarkTen Elite product did not have nicotine salts. (Begley (Altria) Tr. 1084).

1165. Altria's, JLI's, and third parties' ordinary course documents and their executives' testimony show that the claim that the product characteristics of Altria's e-cigarette products made them commercially unviable is implausible. (*See* CCFF ¶¶ 1166-91, below).

1. Other Manufacturers Continue to Market E-Cigarette Products without Nicotine Salts

1166. Eldridge testified that ITG still sells *my*blu freebase pods, which do not contain nicotine salts, and has submitted PMTAs for them. (PX7012 (Eldridge (ITG) Dep. at 207-08)). Eldridge testified that two of ITG's four *my*blu pod products currently on the market do not have nicotine sales, and none of Blu's cigalikes or disposable products have nicotine salts. (PX7012 (Eldridge (ITG), Dep. at 168)).

1167. {[redacted] (PX3005 (ITG) at 003, 007 (*in camera*)). [redacted]} (PX7012 Eldridge (ITG), Dep. at 207-08) (discussing PX3005 (ITG) at 007) (*in camera*))).

1168. In May 2018, Joseph O'Hara, JLI's competitive intelligence expert, prepared a document entitled "US Landscape: Competitive Analysis Framework" which depicted MarkTen Elite and *my*blu as having "long-term viability" and neither of those products had nicotine salts. (O'Hara (JLI) Tr. 546-47 (discussing PX2289 (JLI) at 021)).

1169. O'Hara testified that Vuse markets Vuse Ciro, Vuse Solo, and Vuse Vibe, which Vuse has inconsistently stated in marketing materials have nicotine salts, and he testified "from my personal experience using all of them and trying all of them, I -- it did not seem like there was nicotine salts in them." (O'Hara (JLI) Tr. 502-03).

1170. {[redacted] (Farrell (NJOY) Tr. 289-90 (*in camera*)).

1171. [redacted] (Huckabee (Reynolds) Tr. 449-50 (*in camera*)).

1172. O'Hara testified that "there are multiple different kinds of nicotine salts" and that "[n]icotine salts can be made with a variety of different organic acids, and some of them satisfy smokers materially better than others." (O'Hara (JLI) Tr. 503-04).

2. Other Manufacturers Continue to Market Cigalike Products

1173. NJOY continues to market the NJOY Daily, which is a cigalike product. (Farrell (NJOY) Tr. 364-67; [redacted] O'Hara (JLI) Tr. 505).

1174. Vuse continues to market cigalike products called Vuse Ciro, Vuse Solo, and Vuse Vibe. (Huckabee (Reynolds) Tr. 377-78). [redacted]} (Huckabee (Reynolds) Tr. 441-42 (*in camera*)).

1175. ITG's Blu "sells a lot of disposables in varying flavors. . . The blu disposables are cigalike products." (Farrell (NJOY) Tr. 360-61).

1176. ITG submitted PMTAs for its cigalike products (blu PLUS) in various nicotine strengths and flavors, and none of them contain nicotine salts, with ITG explaining in its PMTA that, "[t]he variety of available nicotine concentrations, including zero nicotine, and flavors provides optionality to current adult smokers, aiding their transition from combustible cigarettes to blu PLUS+ ENDS." (PX3025 (ITG) at 009).

3. Other Manufacturers Continue to Market E-Cigarette Products with Low-Nicotine Strength

1177. Gardner testified that some consumers prefer e-vapor products with lower nicotine strength. (Gardner (Altria) Tr. 2673-74).

1178. MarkTen Elite had a nicotine strength of 1.8 percent nicotine by weight ("NBW"). (PX4115 (Altria) at 010 (JUUL "Book of Knowledge" prepared by Altria in June 2018)).

1179. Altria's MarkTen cigalike products came in nicotine strengths (NBW) of 4.0 percent (MarkTen Bold Classic and Menthol), 3.5 percent (MarkTen Classic, Menthol, and Winter Mint), 2.5 percent (MarkTen Smooth Classic, Caribbean Oasis, Summer Fusion, Mardi Gras, Vineyard Blend, Harvest Blend, and Bourbon Blend), and 2.4 percent (MarkTen Smooth Cream and Smooth Menthol). (PX4357 (Altria) at 001 (MarkTen Actual Use Study, Final Report Date: Oct. 3, 2018); PX1298 (Altria) at 045 (Nu Mark 2018 Three Year Strategic Plan, Feb. 27, 2018, draft of Feb. 12, 2018)).

1180. Joseph O'Hara, JLI's competitive intelligence expert, testified that nicotine by weight measurements for e-cigarettes can be influenced by "other ingredients in the formula" and are not always directly comparable across products. (O'Hara (JLI) Tr. 521-23).

1181. In 2018, JLI "had three strengths that were offered in the US . . . 5 percent, 3 percent and 1 and a half percent." (PX7025 (Burns (JLI), Dep. at 40)).

1182. Kevin Burns, JLI's former CEO, testified that "The intent of the company [in offering a variety of nicotine strengths], which we could not certainly talk about because of the FDA limitations, was to allow people the ability to taper down their nicotine consumption by going to a lower strength and/or allowing people to enter into the product category that might have thought that a 5 percent, for example, was too strong, but they would have an alternative that was a lower nicotine strength." (PX7025 (Burns (JLI), Dep. at 40)).

1183. Burns testified that, with respect to its five percent nicotine strength product, "some of the feedback would be that the product could come across, for example, too harsh in terms of the flavor or the sensation that a consumer might perceive." (PX7025 (Burns (JLI), Dep. at 41)).

1184. Burns testified that, with respect to JLI's three percent and 1.5 nicotine strength products, "based on sales information, there was some volume that was being sold, which told us that, again, some set of consumers were preferring that product over either no alternative or the 5 percent alternative." (PX7025 (Burns (JLI), Dep. at 44)).

1185. During 2019, JLI was developing five PMTAs for versions of its JUUL product with 1.7 percent nicotine by weight. (Gardner (Altria) Tr. 2674-75).

1186. Reynolds continues to market its Vuse Alto in "three different nicotine strengths," 1.8, 2.4, and 5 percent, because consumers have "a range of desired product attributes." (Huckabee (Reynolds) Tr. 395).

1187. [redacted] (Farrell (NJOY) Tr. 341-42) (*in camera*)).

1188. [redacted] (PX3026 (ITG) at 024-25 (*in camera*) [redacted]).

4. Some MarkTen Products Had High Nicotine Strength

1189. Dr. Gardner testified that "MarkTen Elite delivered more aerosol than JUUL. MarkTen Elite had lower nicotine percentage compared to JUUL but lower -- Elite had more aerosol mass, so it delivered more nicotine per puff under machine puffing conditions than JUUL." (Gardner (Altria) Tr. 2669-70).

1190. An Altria board presentation, dated February 28, 2018, and titled "Nu Mark 2018 Three Year Strategic Plan," identified MarkTen Elite as having higher nicotine per puff than JUUL, "~0.17 mg/puff" compared to "~0.16 mg/puff", even though Elite had lower nicotine by volume compared to JUUL, "1.8% NBV" compared to "5% NBV." (PX1113 (Altria) at 001, 003, 022).

1191. A JUUL "Book of Knowledge" prepared by Altria in June 2018 for competitive intelligence purposes also identified MarkTen Elite as having higher nicotine per puff than JUUL. (Gardner (Altria) Tr. 2670-72 (discussing PX4115 (Altria) at 010)). Dr. Gardner testified that this presentation was prepared before Altria implemented the c1A gasket, which doubled MarkTen Elite's aerosol delivery in "machine puffing conditions." (Gardner (Altria) Tr. 2671-72).

C. ALTRIA'S CLAIM THAT IT COULD NOT IMPROVE ITS PRODUCTS OR INTRODUCE NEW ONES AFTER THE DEEMING DATE IS UNSUPPORTED AND PRETEXTUAL

1192. The FDA's deeming rule limits the ability of e-cigarette manufacturers to market e-cigarette products that were introduced to the U.S. market after September 16, 2016, (the "Deeming Date") or to modify products manufactured before the Deeming Date. (*See* CCFF ¶¶ 197-207, above).

1193. On December 7, 2018, Altria issued a press release announcing the discontinuation of its MarkTen and Green Smoke e-cigarette products and explained that "[t]his decision is based upon . . . regulatory restrictions that burden Altria's ability to quickly improve these products." (PX9080 (Altria) at 001).

1194. Altria's and JLI's ordinary course documents and their executives' testimony show that the claim that Altria left the closed-tank e-cigarette market due to regulatory restrictions that burdened Altria's ability to quickly improve its products is implausible. (*See* CCFF ¶¶ 1195-236, below).

1. Despite the Deeming Rule, Altria Commercialized a Product with Nicotine Salts and High Nicotine Strength as well as a Pod-Based Product

1195. On February 26, 2018, Altria launched MarkTen Elite, a pod-based product. (O'Hara (JLI) Tr. 631-32 (discussing PX2086 (JLI) at 001); Willard (Altria) Tr. 1356-57). {[redacted] (PX0015 (Altria) at 008 (*in camera*); *see also* CCFF ¶¶ 125-52, above).

1196. In 2017, Altria launched MarkTen Bold to the U.S. market, a product with four percent nicotine by weight and nicotine salts. (PX1129 (Altria), at 012; Gardner (Altria) Tr. 2656; PX9045 (Altria) at 006 (2018 CAGNY Conference Remarks, Feb. 21, 2018); Willard (Altria) Tr. 1166-67; *see also* CCFF ¶¶ 125-52, above).

1197. In November 2017, Altria told investors that its pharmacokinetic (or PK) studies showed that MarkTen Bold offered nicotine delivery at levels approaching that of cigarettes. (PX4015 (Altria) at 013; PX9000 (Altria) at 017).

2. Despite the Deeming Rule, Other Companies Launched New Products and/or Modified Existing Products

1198. In 2018, Vuse, NJOY, and blu commercialized pod-based products with nicotine salts and a variety of flavors and nicotine strengths. (*See* CCFF ¶¶ 163-96, above; ¶¶ 1199-1201, below; O'Hara (JLI) Tr. 501-06).

1199. Late in 2018, NJOY launched NJOY Ace, which has nicotine salts. (O'Hara (JLI) Tr. 506; PX7029 (Farrell (NJOY), Dep. at 109-10) (discussing how every NJOY device contains nicotine salts)).

1200. In 2018, Reynolds launched the Vuse Alto [redacted] and nicotine salts. (O'Hara (JLI) Tr. 501; [redacted]

1201. In 2017, ITG launched *my*blu, their first pod product, which did not have nicotine salts and had "lower nicotine strength, around 1.8 percent," and several months later ITG launched *my*blu intense, which contained nicotine salts and higher nicotine strength. (O'Hara (JLI) Tr. 504-05; PX7012 (Eldridge (ITG), Dep. at 169); PX8011 at 004-05 (¶ 19) (Eldridge (ITG), Decl.)).

1202. {[redacted]} (PX3069 (ITG) at 003, 004 (*in camera*)).

1203. Schwartz testified that from the leaking JUUL pods Nu Mark looked at, they could see that JLI experienced leaking with its pod products. (Schwartz (Altria) Tr. 1885 (discussing PX1198 (Altria) at 002-03 (Altria document containing copy of JLI email to JUUL community about customers experiencing leaky pods))).

1204. JLI made a product improvement its products to address the leaking. Quigley testified that between June and November 2018, JLI changed components in its JUUL device to address a leaking issue. (Quigley (Altria) Tr. 1949-50; PX7003 (Quigley (Altria), IHT at 9, 78-79 (describing how Altria scientists presented exploded JUUL devices to the leadership team while Quigley was head of Nu Mark and showed the changes to JUUL's devices); *see also* PX3088 (PMI) at 014).

1205. JLI publicly told its customers that it addressed the leaking issue in its products. (Quigley Altria)Tr. 1949-50 (discussing PX1198 (Altria) at 003 (Altria document containing copy of JLI email to JUUL community about customers experiencing leaky pods))).

3. Despite the Deeming Rule, Altria Successfully Designed and Implemented E-Cigarette Product Improvements

a) <u>Altria Implemented a New Gasket for MarkTen Elite Notwithstanding the FDA's Deeming Rule</u>

1206. Schwartz testified that Altria was aware of a problem with MarkTen Elite pods leaking when Altria launched the product. (Schwartz (Altria) Tr. 1881-82).

1207. Before Altria launched MarkTen Elite, Nu Mark's operations deemed MarkTen Elite's level of leaking "unacceptable," but Altria still launched the product on February 26, 2018. (Schwartz (Altria) Tr. 1881-83; O'Hara (JLI) Tr. 631-32 (discussing PX2086 (JLI) at 001)).

1208. MarkTen Elite's leaking problem "impacted [Altria's] expansion plans for MarkTen Elite, as long as Elite's pods were leaking it was hard for Altria to expand the product. (Schwartz (Altria) Tr. 1905-06).

1209. On March 1, 2018, Schwartz requested assistance from Altria's product development team and Nu Mark Israel ("NMI") to address the leaking problem and they began to work on the problem "immediately." (Schwartz (Altria) Tr. 1888-90 (discussing (PX1590 (Altria) at 001)).

1210. By June 8, 2018, Nu Mark fixed the leaking gasket associated with MarkTen Elite and began planning for "production [of] MarkTen Elite with the New Gasket." (Schwartz (Altria) Tr. 1895-96 (discussing PX1579 (Altria)).

1211. Altria maintained a "Change Management Team" or "CMT" to review proposed e-cigarette product changes and determine whether the changes compromised the status of the product under the FDA's Deeming Rules. (Schwartz (Altria) Tr. 1891-93).

1212. Garnick testified "The change management process was that it first goes through this committee, and if it's a risky issue, if it requires upper management, it then goes to the leadership team and goes to Howard [Willard, Altria's CEO]." (Garnick (Altria) Tr. 1802).

1213. Nu Mark submitted the MarkTen Elite gasket change to Altria's change management team. (PX7003 (Quigley (Altria), IHT at 77)).

1214. [redacted] (Willard (Altria) Tr. 1303 (*in camera*)).

1215. On August 10, 2018, Altria approved the production of MarkTen Elite with the c1A gasket. (Schwartz (Altria) Tr. 1904 (discussing PX1582 (Altria) at 002); PX7027 (Murillo (Altria/JLI), Dep. at 165-66); PX7036 (Garnick (Altria), Dep. at 142-43)).

1216. Units of MarkTen Elite with the c1A gasket were introduced to the U.S. market, "[f]irst through e-commerce . . . probably late August/early September [2018, and then in retail] probably . . . mid-September, late September [2018]." (Schwartz (Altria) Tr. 1910-11).

1217. As of October 22, 2018, Altria had converted its MarkTen Elite inventory network to the c1A gasket. (PX1567 (Altria) at 001 (Elite Inventory Update) ("As of today, the entire PW network has been converted over to the C1A gasket. Inventory durations are in a healthy position with additional production in transit.")).

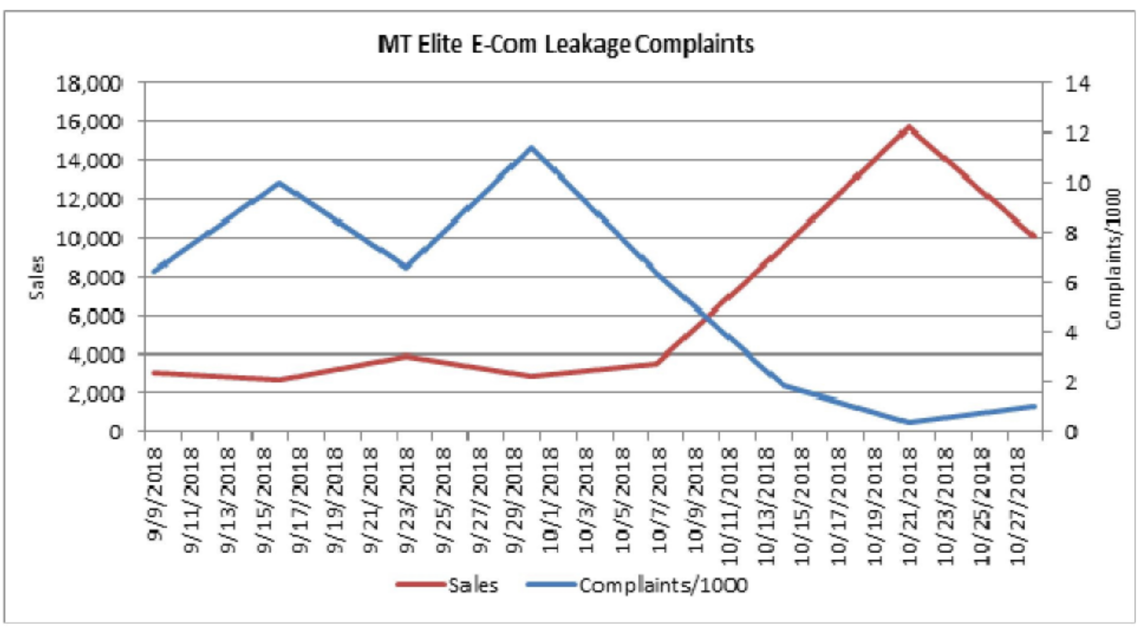
1218. Schwartz agreed that implementing the c1A gasket change in MarkTen Elite would have "enabled Nu Mark to continue to expand . . . the distribution of MarkTen Elite." (Schwartz (Altria) Tr. 1906).

(1) The New Gasket Reduced Leaking in MarkTen Elite

1219. Dr. Gardner testified that the c1A gasket was developed to reduce leaking in MarkTen Elite and that it did reduce, but not eliminate, leaking in MarkTen Elite. (Gardner (Altria) Tr. 2664).

1220. Schwartz agreed that "the c1A gasket was a success in reducing minimal and excessive leakage rate in the MarkTen Elite product," based on a report from Charles Epps, "a quality technician that worked within the quality team at Nu Mark." (Schwartz (Altria) Tr. 1907-10 (discussing PX1560 (Altria) at 001-02)). In an email dated October 22, 2018, and titled "MarkTen Elite Complaint Summary (October 2018)," Epps reported that MarkTen Elite pods produced before the gasket change had "~35% Minimal Leakage Rate" and "~6% Excessive Leakage Rate," while MarkTen Elite pods produced after the c1A gasket change had "~0.6% Minimal Leakage Rate" and "~0.2% Excessive Leakage Rate." (PX1560 (Altria) at 001-02).

1221. In October 2018, after Altria implemented the gasket fix, leakage complaints for MarkTen Elite plummeted at the same time that MarkTen Elite sales grew significantly from about 3,000 per day on October 1, 2018 to over 10,000 per day on October 25, 2018 when Altria announced the discontinuation of Elite. (PX1970 (Altria) at 002 (Email from Craig Schwartz).



(PX1970 (Altria) at 002).

1222. Leaking was a common problem for pod-based e-cigarettes. (PX7018 (Schwartz (Altria), Dep. at 104-07 ("[A]ll these pods leaked, David. They all did. You know all the competition. Leaking pods was not unique to us); PX1822 (Altria) at 002 ("[I]t's relatively normal in the pod-based space for leakage in pods."); PX7012 (Eldridge (ITG), Dep. at 154 (explaining that based on what he heard from retailers and customers, all pod-based systems leak) and 172-73 {[redacted]} (*in camera*); PX7033 (O'Hara (JLI) Dep. at 90-91 ("Q. In 2018, in your competitive intelligence role, did you consider leaking problems in e-vapor devices to be common to many devices or were they rare? […] A. They were common to many devices")).

1223. [redacted]} (Willard (Altria) Tr. 1299 (*in camera*)).

1224. Altria admitted that it submitted a White Paper, dated February 27, 2020, to FTC Staff, which stated that "Altria's pod-based product, Elite, had serious leaking problems and attempts to fix it in a way that did not require submitting a PMTA for new market authorization were unsuccessful," "[g]iven the seriousness of the issue and the potential consequences, Howard Willard changed direction and 'did not want to undertake that regulatory risk' of moving forward with the gasket change without FDA pre-approval," and "[a]lthough Nu Mark attempted to design a new gasket to alleviate the leaking, the gasket resulted in a number of unintended consequences and Altria concluded that the gasket change could not be made without receiving a market order from the FDA." (PX0019 (Altria) at 005-06 (Respondent Altria's Responses and Objections to CC's Requests for Admission to Respondent Altria, Response to Request No. 8)).

1225. Before June 15, 2020, Altria executives testified that Altria did not approve the c1A change and [redacted] (PX7003 (Quigley (Altria), IHT at 81-82) ("All I know is we didn't implement the gasket."); PX7004 (Willard (Altria), IHT at 206-10) (*in camera*) {[redacted]; PX7000 (Garnick (Altria), IHT at 113 ("[U]ltimately, Howard [Willard] made the decision [not to make the c1A gasket change in Elite], and he did not want to undertake that regulatory risk.")).

1226. Altria admitted that on June 15, 2020, Altria sent Complaint Counsel a letter stating that "[w]e have recently learned that Nu Mark ultimately incorporated a replacement gasket into Elite and that Nu Mark distributed Elite units with the replacement gasket to its customers for sale to consumers in the fall of 2018. The replacement gasket was known as the c1A gasket . . . ." (PX0019 (Altria) at 006 (Respondent Altria's Responses and Objections to Complaint Counsel's Requests for Admission to Respondent Altria, Response to Request No. 9)).

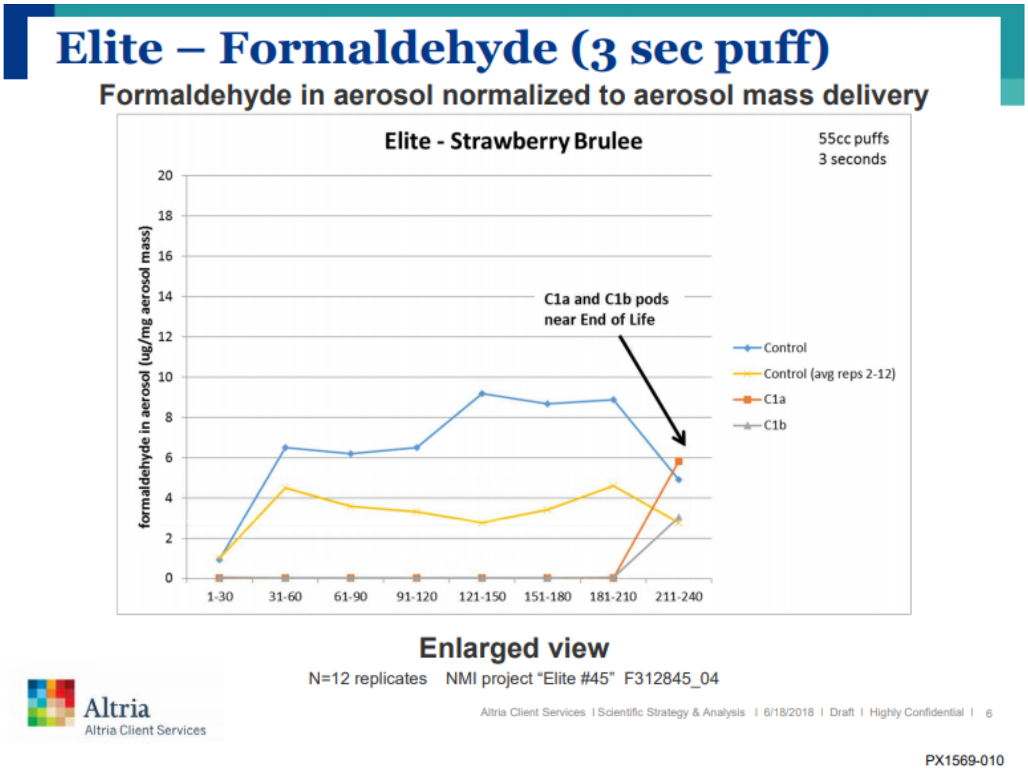
1227. [redacted] } (Willard (Altria) Tr. 1304, 1306 (*in camera*) { [redacted] }

(2) The New Gasket Reduced Formaldehyde Generation in MarkTen Elite

1228. Dr. Gardner testified that the c1A gasket reduced formaldehyde production in MarkTen Elite, under machine testing conditions, which Dr. Gardner characterized as "a good thing." (Gardner (Altria) Tr. 2665-66).

1229. In a June 18, 2018, email sent in advance of a CMT discussion on the MarkTen Elite c1A gasket change, Dr. Gardner stated: "the formaldehyde in aerosol is significantly lower with the modified gaskets. Normalized on a mg aerosol mass basis, the formaldehyde in aerosol is approximately 10-600 fold lower with the modified gaskets." (PX1569 (Altria) at 001).

1230. A presentation prepared by Dr. Gardner and Sean Eastwood, of Nu Mark Israel, titled "Elite aerosol characterization with alternative gaskets," which was circulated in advance of a CMT meeting on the MarkTen Elite c1A gasket change, included a slide showing that the c1A gasket reduced formaldehyde generation in MarkTen Elite until the "near End of Life" of the pods. (PX1569 (Altria) at 010).



(PX1569 (Altria) at 010).

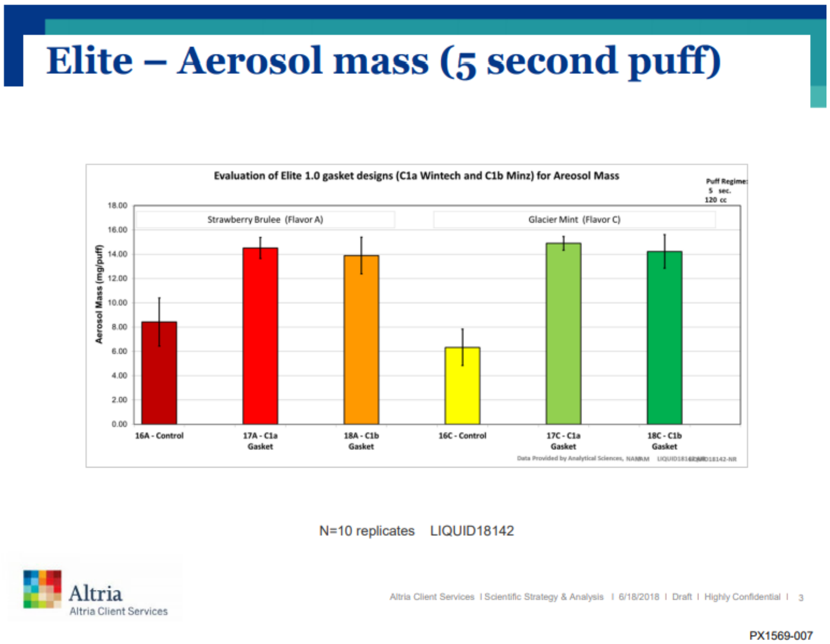
1231. In June 2018, Altria prepared a JUUL "Book of Knowledge," which identified JUUL as producing similar amounts of formaldehyde (per puff) as MarkTen in testing. (Gardner (Altria) Tr. 2672-73 (discussing PX4115 (Altria), at 053 ("Formaldehyde yields (per puff) are similar to MarkTen"))). Bill Gardner testified that this level of formaldehyde production was "good." (Gardner (Altria) Tr. 2672-73).

(3) The New Gasket Increased Aerosol Mass in MarkTen Elite

1232. Dr. Gardner testified that the c1A gasket doubled MarkTen Elite's aerosol delivery in "machine puffing conditions." (Gardner (Altria) Tr. 2672).

1233. In a June 18, 2018, email sent in advance of a CMT discussion on the MarkTen Elite c1A gasket change, Dr. Gardner stated: "In summary, while the aerosol mass with the modified gaskets are is [sic] ~2x higher than the control samples." (PX1569 (Altria) at 001).

1234. A presentation prepared by Dr. Gardner and Sean Eastwood, of Nu Mark Israel, titled "Elite aerosol characterization with alternative gaskets," which was circulated in advance of a CMT meeting on the MarkTen Elite c1A gasket change, included a slide showing that the c1A gasket nearly doubled aerosol mass in MarkTen Elite versus the control. (PX1569 (Altria) at 007).



(PX1569 (Altria) at 007).

b) <u>Despite the Deeming Rule, Altria Implemented or Was Planning to Implement Other Product Improvements</u>

1235. Altria developed a new mouthpiece for Apex and on August 30, 2018 was planning to implement the Apex mouthpiece without a PMTA. (PX1638 (Altria) at 001 (Email between Michael Brace and Michelle Baculis discussing new Apex plugs)).

1236. On September 27, 2018, Altria's Mark Bradby wrote in an email that Altria's Change Management Team will be recommending moving forward with a recommendation to change MarkTen Elite by adding a "Battery Seal Notch" to the product. (PX1599 (Altria) at 001).

D. ALTRIA'S CLAIM THAT IT WITHDREW MARKTEN ELITE AND APEX BECAUSE OF YOUTH VAPING CONCERNS IS UNSUPPORTED AND PRETEXTUAL

1237. Altria's and JLI's ordinary course documents and their executives' testimony show that the claim that Altria discontinued its MarkTen Elite and Apex products because of youth vaping concerns is implausible. (*See* CCFF ¶¶ 1238-53, below).

1. Altria Claimed That It Discontinued MarkTen Elite and Apex Because of Youth Vaping Concerns, But That Claim Made FDA Commissioner Scott Gottlieb and JLI Skeptical

1238. On October 18, Altria's executives met with FDA Commissioner Gottlieb and his staff to discuss steps Altria was considering taking to address youth vaping issues. (Willard (Altria) Tr. 1250, 1286-187).

1239. On October 25, 2018, Willard sent a letter to FDA Commissioner Scott Gottlieb in which he wrote, "[b]ased on the publicly available information from FDA and others, we believe that pod-based products significantly contribute to the rise in youth use of e-vapor products. Although we do not believe we have a current issue with youth access to or use of our pod-based products, we do not want to risk contributing to the issue. To avoid such a risk, **we will remove from the market our *MarkTen Elite* and *Apex by Markten* pod-based products until we receive a market order from the FDA or the youth issue is otherwise addressed**" (Willard (Altria) Tr. 1236 (discussing PX2022 (JLI) at 003) (emphasis in original).

1240. After Altria announced its transaction with JLI, FDA Commissioner Gottlieb wrote to Willard on February 6, 2019 requesting a meeting "regarding representations [Altria] made in a meeting with Food and Drug Administration (FDA) senior leadership on October 18, 2018, and in a written submission that followed, where [Altria] acknowledged that Altria Group, Inc. has an obligation to take action to help address the mounting epidemic of youth addiction to tobacco products." (PX9083 (FDA) at 001.)

1241. The February 6, 2019 letter from Commissioner Gottlieb also noted that "[a]fter Altria's acquisition of a 35 percent ownership interest in JUUL Labs, Inc., [Altria's] newly announced plans with JUUL contradict the commitments [Altria] made to the FDA." (PX9083 (FDA) at 001.)

1242. Willard testified that he understood Commissioner Gottlieb's references to "commitments" to encompass both the commitments that Altria had made at the October 18, 2018 meeting and in Willard's October 25, 2018 letter to the FDA announcing the discontinuation of MarkTen Elite and Apex by MarkTen. (Willard (Altria) Tr. 1289-90).

1243. When asked about Altria's rationale for withdrawing MarkTen Elite, JLI's then-CEO, Burns, testified "it seemed in conflict that you would write this statement and still want to have discussions about investing in a company whose primary product was a pod-based e-vapor product." (PX7025 (Burns (JLI), Dep. at 172)).

2. Altria Executives Viewed the Youth Vaping Explanation As a Pretext

1244. In a September 25, 2018 FDA Letter Response Team Recommendation, Altria admitted that [redacted] This was in stark contrast to the recommendation with respect to [redacted] (PX4203 (Altria) at 001, 002 (*in camera*)). This is consistent with the fact that all other closed-system e-cigarette suppliers withdrew their flavored products, but none withdrew their pod-based products for youth concerns. (*See* CCFF ¶¶ 153-96, 207, 1132-43, 1198-201, above).

{ [redacted] }

(PX4203 (Altria) at 002 (*in camera*)).

1245. { [redacted] } (PX4204 (Altria) at 001) (*in camera*)).

{ [redacted] }

(PX4204 (Altria) at 001 (*in camera*)).

1246. [redacted] (PX1010 (Altria) at 001, 003).

1247. Altria employees consistently testified that Altria's e-cigarette products did not have a youth initiation issue. (*See* CCFF ¶¶ 1345-52, below).

3. Altria Executives were Aware that JUUL Had Appealed to Non-Tobacco Users, Particularly Youth, Prior to the Transaction

1248. At the time that Altria withdrew MarkTen Elite and at the time Altria and JLI entered into the transaction, JLI sold pod-based e-cigarette products. (Quigley (Altria) Tr. 1984-85).

1249. Craig Schwartz stated in an August 15, 2018 email to Altria's former chairman that "40%" of Juul's sales were to consumers aged between the legal age at the time and 21, with a "significant initiation component" which he anticipated would "present problems with the FDA when it seeks Market Authorization to continue selling beyond 2022." (PX1260 (Altria) at 001). Schwartz added that the "big issue" for JLI was "clearing FDA by 2022," adding that "cleaning [Juul] up to do so would be dilutive." (PX1260 (Altria) at 001).

1250. Paige Magness testified: "At the time of the transaction, I remember being concerned about, based on my understanding of PMTAs, that the youth usage issue would be very difficult for JUUL in a PMTA context." (PX7017 (Magness (Altria), Dep. at 232-33)). Ms. Magness also testified that she was aware of articles and news reports linking JUUL's discrete form factor to potential youth usage of the product. PX7017 (Magness (Altria), Dep. at 268-69)).

1251. Willard testified that the JUUL product's ability to convert adult smokers "came with a negative in that as more adults chose e-vapor, more youth were choosing e-vapor." (Willard (Altria) Tr. 1360). Willard testified that around October 25, 2018, "the evidence pointed to the fact that it [JUUL] was also the number one product that was being utilized by youth." (Willard (Altria) Tr. 1240-42).

1252. Draft talking points prepared for Howard Willard for an Altria "Town Hall" event state: "JUUL is a radically disruptive e-vapor product. It took 10 years to develop JUUL as a product that could convert adult smokers. At the same time JUUL has created a youth usage epidemic. We cannot allow that to continue." (PX1184 (Altria) at 005).

1253. [redacted] (RX0950 (Altria) at 022 (*in camera*)).

E. Altria's Claim That It Exited the E-Cigarette Market Because Its Products Could Not Achieve PMTA Approval Is Unsupported and Pretextual

1254. Altria claims that it "concluded that Elite, as well as Nu Mark's preexisting MarkTen products, could not obtain PMTA approval in their current form. . ." (PX0027 at 004 (Altria's Answers and Defenses)).

1255. Altria's and JLI's ordinary course documents and their executives' testimony show that the claim that Altria concluded it could not obtain PMTA approval for its e-cigarette products is implausible. (*See* CCFF ¶¶ 1256-352, below).

1. Altria's Efforts to Achieve PMTA Approval Were Well Advanced at the Time of the Transaction

1256. The FDA's Deeming Rules require manufacturers to submit a PMTA before marketing an e-cigarette product or to keep a predicate product on the market after the Deeming Deadline. (*See* CCFF ¶¶ 197-207, above).

1257. In 2018, Altria would not have needed to submit PMTAs for its e-cigarette products until almost four years later in August 2022. (Murillo (Altria/JLI) Tr. 2944-45; Garnick (Altria) Tr. 1796, 1800; PX0017 (Altria) at 23 (Altria's Minority Investment in JUUL Labs, Apr. 2, 2019)).

a) Altria's PMTA Plans and Progress for MarkTen Were Well Advanced at the Time of the Transaction

1258. In November 2017, Altria's former Chairman and CEO, Marty Barrington, told investors "We firmly believe that Altria has assembled the best talent, skills and capability in the industry, equipped them with the resources they need and set them in the right direction: to introduce new, FDA-authorized, reduced-risk products as the next leg of our commercial success." (PX9000 (Altria) at 005 (Nov. 2017 Investor Day remarks)).

1259. [redacted] (Begley (Altria) Tr. 1022-23 (discussing PX4042 (Altria) at 006) (*in camera*); *see also* PX4042 (Altria) at 007 [redacted]

1260. A November 2, 2017, Nu Mark Investor Day presentation prepared for delivery by Begley prompted him to say "we plan to file PMTAs for our *MarkTen* products in 2018 with MRTP applications to follow." (PX1129 (Altria) at 018).

1261. A February 21, 2018, public Altria investor presentation stated that Altria planned "to file PMTAs" for its MarkTen cigalike products "with MRTPAs to follow." (PX9044 (Altria) at 044 (Altria Presentation: 2018 Consumer Analyst Group of New York (CAGNY) Investor Presentation)).

1262. On February 21, 2018, Willard stated at an Altria investor conference that Altria was planning "to file PMTAs for MarkTen [in 2018]." (PX9045 (Altria) at 006 ("We plan to file PMTAs for MarkTen this year, with MRTP applications to follow. In those applications, we expect to submit robust scientific evidence to demonstrate MarkTen's harm reduction potential compared to cigarettes.")).

1263. An August 10, 2018, presentation entitled "Nu Mark Brand Update," which was submitted by Quigley to Willard, Gifford, Garnick, and Crosthwaite ahead of a meeting on "Elite performance & distribution and the MarkTen PMTA" recommended "completing the MarkTen PMTA as is. . ." and completing "a thorough business case review for long-term Elite investment." (Quigley (Altria) Tr. 1967-68 (discussing PX1013 (Altria) at 017, 020)).

1264. An August 10, 2018, presentation entitled "MarkTen Regulatory Strategy Update," which was submitted by Quigley to Willard, Gifford, Garnick, and Crosthwaite ahead of a meeting on Nu Mark's regulatory strategy stated "MarkTen PMTA application is 75% complete." (PX1013 (Altria) at 019; PX4136 (Altria) at 003; PX7036 (Garnick (Altria), Dep. at 114-15); *see also* PX1013 (Altria) at 020 (recommending that Altria "[m]aintain current MarkTen PMTA approach with all 14 SKUs")).

1265. Dr. Gardner testified that Altria continued to work on PMTAs for its MarkTen cigalike products until Altria announced that it would discontinue the products in December 2018. (Gardner (Altria) Tr. 2685).

1266. [redacted]} (PX1104 (Altria) at 046 (*in camera*) (Regulatory Affairs Town Hall, Dec. 2018) (*emphasis in original*); *see also* PX7003 (Quigley (Altria), IHT at 30-31)).

b) Altria Thought That MarkTen Elite Could Achieve PMTA Approval

1267. An April 26, 2018, Altria presentation, entitled "Elite 2.0 Gate 2 Presentation" and circulated to Richard Jupe, Dr. William Gardner, and Jody Begley, states that at a meeting dated March 15, 2018, "Decision was made to PMTA MarkTen Elite." (PX1930 (Altria) at 009) (Nu Mark NPC Meeting, Apr. 26, 2018).

1268. As of August 30, 2018, Altria planned to submit a PMTA for MarkTen Elite at the then-PMTA deadline in August 2022. (PX4318 (Altria) at 015 (Nu Mark NPC Meeting)).

1269. As of August 30, 2018, Altria assessed that MarkTen Elite "achieved overall satisfaction primarily due to perceptions of 'fullness' throughout the overall inhale/exhale experience." (PX4318 (Altria) at 006 (Nu Mark NPC Meeting)).

1270. Quigley testified that, in 2018, Altria was "doing 'work planning' for a PMTA for Elite," meaning that Altria was "Determining what studies needed to be done, how long it would take, how many people." (PX7003 (Quigley (Altria), IHT at 30)).

1271. Altria was aware of the toxicological and product issues associated with MarkTen Elite when it introduced the product to the market in 2018. (Gardner (Altria) Tr. 2660-61).

1272. Quigley testified that MarkTen Elite had design issue, but Altria "had the PMTA plan to try to solve those." (PX7003 (Quigley (Altria), IHT at 153 ("[T]here were lots of issues with the product, including chemicals, including formaldehyde, the way it was designed, but we had the PMTA plan to try to solve those."); *see also* PX7014 (Baculis (Altria), Dep. at 162-63) (("Q. The plan was to launch Elite as soon as possible with the knowledge that Elite could be improved in future generations, correct? . . . A. Yes.")).

1273. Dr. Gardner testified that Bob Arents, Altria's "Senior Director of E-Vapor Product Development" and a "mechanical engineer" by training, held the view that Altria's "product integrity requirements were too strict" and that MarkTen Elite had "generally acceptable materials" in connection with "PMTA viability." (Gardner (Altria) Tr. 2661-64 (discussing PX4109 (Altria), at 002, 010)).

1274. Dr. Gardner testified that Arents questioned the characterization of MarkTen Elite as "red for materials," meaning that the product "contains materials of concern," in an August 2018 presentation that Dr. Gardner prepared for Willard for a board of directors meeting. (Gardner (Altria) Tr. 2661-64 (discussing PX4109 (Altria) at 002, 003, 010)).

2. Altria had a Contingency Plan in Place for Addressing Any Potential Delays in the PMTA Process

a) <u>Altria Was Developing an Improved Version of Its MarkTen Cigalike Product, MarkTen BVR 2.8</u>

1275. The FDA has not provided a formaldehyde-production level for e-cigarette products seeking PMTA approval and will assess formaldehyde production and other toxicological risks holistically. (Gardner (Altria) Tr. 2666-68).

1276. In "late 2017, we [Altria] learned how the adult smokers used the MarkTen cigalike product, and in chemistry studies, under those conditions, we demonstrated formaldehyde yields were higher than expected and higher than other products in the market, and those levels for MarkTen cigalike under those conditions were similar to a cigarette" which "posed a risk to the PMTA filing" for the product. (Gardner (Altria) Tr. 2570).

1277. Altria developed a replacement battery for its MarkTen cigalike products, the BVR 2.8, which used "dry puff prevention" to address the products' formaldehyde generation issue. (Gardner (Altria) Tr. 2569-71, 2684-85; Murillo (Altria/JLI) Tr. 3057-61; PX7016 (Jupe (Altria), Dep. at 114-15); PX1407 (Altria) at 004)).

1278. Studies showed that the BVR 2.8 was successful at reducing formaldehyde in the MarkTen cigalike. PX7017 (Magness (Altria), Dep. at 155); PX7027 (Murillo (Altria/JLI), Dep. at 118); PX7036 (Garnick (Altria), Dep. at 73-74); PX1407 (Altria) at 004)).

1279. On March 19, 2018, Garnick sent an email to Willard and Gifford informing them that Altria's "timeline [for PMTA submissions] presented at investor day will have to be modified" because "both MarkTen and Elite, both the current version and the future version, need to be modified and redesigned, resulting in a delay in PMTA work and filing." (Garnick (Altria) Tr. 1600-01 (discussing RX0270 (Altria) at 001)). The March 19, 2018 email that Garnick sent to Willard and Gifford included information indicating that the required MarkTen modification involved the installation of a new battery, the BVR 2.8, to address a "dry puffing formaldehyde issue." (Garnick (Altria) Tr. 1601-02 (discussing RX0270 (Altria) at 005)).

1280. Dr. Gardner testified that Altria continued to work on developing the BVR 2.8 until Altria announced that it would discontinue its cigalike products in December 2018. (Gardner (Altria) Tr. 2684-85).

b) Altria Was Developing an Improved Version of MarkTen Elite, MarkTen Elite 2.0

1281. [redacted] (Willard (Altria) Tr. 1302-03) (*in camera*).

1282. Jupe wrote in a June 9, 2018, email to Crosthwaite that he had "a plan for [MarkTen] Elite 2.0 (design for PMTA)" and Jupe testified that by "design for PMTA" he meant "the PMTA approval process for e-cigarettes." (Jupe (Altria) Tr. 2157 (discussing PX1086 (Altria) at 001)).

1283. An Altria presentation titled "Product Portfolio Review" and dated June 26, 2018, was presented to Altria's leadership team and described plans for an improved version of MarkTen Elite called MarkTen Elite 2.0, stating "This product will be greatly improved by material changes, electronic upgrades, and additional flavor offerings. The product enhancements are meant to improve the likelihood of PMTA success." (PX4063 (Altria) at 019).

1284. At or around the summer of 2018, the Altria product development team had concluded that a general 4:3 percent nicotine to acid ratio was approximately the right ratio needed to achieve nicotine satisfaction. (Jupe (Altria) Tr. 2144-45).

1285. At the time that Altria's flavorists were developing advanced nicotine salt formulas for testing in MarkTen Elite 2.0, Altria's engineers were working on improvements to the Elite 2.0 device itself. (Jupe (Altria) Tr. 2148 ("there was a litany of issues with the device that our engineers were working on, as well as you've rightfully identified, not having the right nicotine to salt mix in the product.")).

1286. As of August 2018, Altria was planning three studies in September 2018 to support MarkTen Elite 2.0 development, all of which involved qualitatively assessing the performance of MarkTen Elite 2.0 prototypes by having adult tobacco consumers sample the product. (PX1671 (Altria) at 008 (MarkTen Elite, Aug. 2018)).

1287. Altria's August 2018 initial test results indicated that MarkTen's 4.5 percent nicotine-by-weight and 3 percent salt formulation achieved results similar to JUUL. (PX1985 (Altria), at 002, 011).

1288. In August 2018, Altria was planning a study in December 2018 to support MarkTen Elite 2.0 development, the objective of which was "[t]o qualitatively assess the performance of the MarkTen Elite prototypes final formulations prior to design freeze." (PX1671 (Altria) at 008 (MarkTen Elite, Aug. 2018)).

1289. As of August 2018, Altria planned for MarkTen Elite 2.0 to have nicotine salts, toxicologically acceptable materials, reduced pod leakage (the c1A gasket), limited carbonyl formation, a battery life LED indicator, new flavors, and nicotine strengths of 1.8 percent and 2.5 to 4 percent. (PX1671 (Altria) at 006 (MarkTen Elite, Aug. 2018); PX4318 (Altria) at 008 (Nu Mark NPC Meeting).

1290. Jupe testified that Altria was planning a September 2018 study involved testing a prototype MarkTen Elite 2.0 on adult smoker consumers with an e-liquid containing four percent nicotine by weight and three percent acids, which Jupe testified "was the ratio that our sensory and flavorists would say this will give you, if you will, the best satisfaction, closest to a cigarette." (PX7016 (Jupe (Altria), Dep. at 38 (discussing PX1941 (Altria) at 001); *see also* Jupe (Altria) Tr. 2149 ("Q. So consumers would actually have the opportunity to sample these ratios of Sweet Original flavor here, in this example, with these reformulated acid formulas and provide feedback. Is that correct? A. That was the plan.")).

1291. Altria sponsored a four-day consumer research study between October 1 and October 4, 2018 with the goal of gaining insight from participants' use of MarkTen Elite 2.0 prototypes with different nicotine salt levels and mixes. (PX4512 (Altria) at 004).

1292. In the October Elite 2.0 consumer research study, participants described one Elite 2.0 prototype mix as having a "smooth but not too smooth draw," with "a full and consistent volume of vapor upon inhale and exhale that was reminiscent of a cigarette experience," and "immediate nicotine satisfaction achieved within 3-4 puffs." (PX4512 (Altria) at 006).

1293. Altria had plans to introduce a new battery system for MarkTen Elite 2.0 to address formaldehyde generation in MarkTen Elite, leveraging learnings from addressing a similar problem with MarkTen's cigalike products. (PX7016 (Jupe (Altria), Dep. at 89-90 ("Q. Mr. Jupe was there a similar project underway relating to battery work or any other projects designed to reduce carbonyl levels in the MarkTen Elite line? A. When Nu Mark acquired Elite, we didn't have this type of mechanism built in. So we were looking at a project to incorporate the same type of approach into the Elite as what we were looking for – looking towards for the MarkTen cigalike."); *see also* PX7016 (Jupe (Altria), Dep. at 115) ("[I]f we figured it out for one product, we should have been able to implement it for another product.")).

1294. Altria expected designs for MarkTen Elite 2.0 to be locked by the second quarter of 2020. (PX1316 (Altria) at 030 (Sept. 22, 2018 draft [Reduced Harm Products] presentation "Elite 2.0 development timeline — 2Q '18 to 2Q '20")).

c) <u>Altria Was Planning to Submit PMTAs for Improved Versions of Its Products in Case Its Commercialized Products Could Not Achieve PMTA Approval</u>

1295. An August 10, 2018, presentation entitled "MarkTen Regulatory Strategy Update," which was submitted by Quigley to Willard, Gifford, Garnick, and Crosthwaite ahead of a meeting on Nu Mark's regulatory strategy stated "Transitioning application from BVR 2.3 to BVR 2.8 will be accomplished primarily by bridging." (PX1011 (Altria) at 020

(MarkTen Regulatory Strategy Update, Aug. 10, 2018); *see also* PX1930 (Altria) at 013-14, 022 (Nu Mark NPC Meeting, Apr. 26, 2018)).

1296. Dr. Gardner explained "Bridging is an approach that's allowed" meaning that "[t]he FDA accepts it in the pharmaceutical industry and has mentioned it's appropriate for use in tobacco products, too -- also. So bridging is literally bridging -- building a bridge from the prior data to a new product. So for this application [meaning MarkTen cigalike], it would be using the existing data for BVR 2.3, the cigalike product that was in the market, and then bridge it to the new product. So we would -- we wouldn't have to repeat every single study that we had already completed. So we would be able to use existing science, but not all of it." (Gardner (Altria) Tr. 2572).

1297. Quigley testified that Altria developed a "bridge plan" to address the risk relating to the PMTA process for MarkTen Elite: "So as part of the bridge plain, to keep Elite on the market, we would need to -- we had to submit just the base PMTA to stay on the market. The, I think, advice I had been given was there was very low confidence that we could actually generate the science to get a PMTA authorized. So at the same time we would have to develop a new PMTA for an Elite product that was called 2.0 and hope that Elite 2.0 would get authorized before Elite 1.0 got turned down by FDA." (Quigley (Altria) Tr. 2065)).

1298. With regard to Altria's PMTA plans for MarkTen Elite, Murillo testified: "Well, the idea of the strategy was to -- assuming we could cobble together a PMTA for Elite and we -- we were allowed to continue selling Elite, we would file for Elite 1.0, continue preparing 2.0, and quickly follow. Hopefully, by the time they were adjudicating what would be some very thorny issues, at least by this time, with respect to Elite 1.0, we would have amended with 2.0 and said, We hear you, and please let us pursue this improvement and let us, you know, explain to you what we've done." (PX7027 (Murillo (Altria/JLI), Dep. at 161)).

1299. As of August 30, 2018, Altria planned to submit a PMTA for MarkTen Elite 2.0 in January 2022, while waiting until the then-PMTA deadline in August 2022, seven months later, to submit a PMTA for MarkTen Elite 2.0. (PX4318 (Altria) at 015 (Nu Mark NPC Meeting)).

1300. Filing a PMTA for MarkTen Elite 1.0 could buy time for the FDA to review and approve MarkTen Elite 2.0's PMTA and thereby help Altria avoid a scenario where it did not have a product on the shelf. (PX7016 (Jupe (Altria), Dep. at 116-17) ("At this point in time, Elite 1.0 also had to go through the application process, okay, because we didn't think we could sequence things in a timely manner in accordance with the requirements to get Elite 2.0 into the agency and out of the agency. We thought we would run into a period of time where we would have no product on the market.")).

3. Altria's Claim That Its E-Cigarette Products Did Not Have Sufficient Conversion Potential to Achieve PMTA Approval Is Unsupported

1301. Altria executives suggested that MarkTen Elite's low sales figures and market share relative to JUUL indicated that the product did not have sufficient conversion potential to achieve PMTA approval. (PX7026 (Gardner (Altria), Dep. at 24-26); [redacted]

1302. However, Dr. Gardner testified that he was "not aware of the [e-vapor] industry getting a consensus together on e-vapor conversion" and "I don't think we [Altria] understood what drove conversion to e-vapor products." (Gardner (Altria) Tr. 2649, 2651; PX7026 (Gardner (Altria), Dep. at 59)).

1303. Dr. Gardner also testified the FDA has not specified a particular level of sales or particular trend in market share that a product must demonstrate in order to show conversion potential or achieve PMTA approval. (Altria (Gardner) Tr. 2660).

1304. Quigley testified that, as of September 19, 2018, the following statement in an Altria presentation was accurate: "We can't/haven't measured conversion potential of any of our products to effectively know what is working, what isn't and why." (Quigley (Altria) Tr. 2095 (discussing RX1175 (Altria), at 010); *see also* PX1323 (Altria) at 013 ("Innovative Products Game Plan Input, Altria Game Plan")).

1305. Quigley testified that he never reviewed any conversion studies for MarkTen Elite. (Quigley (Altria) Tr. 2094-95).

1306. Murillo testified that he could not recall any quantitative research on MarkTen Elite's conversion potential, and pointed to Pascal Fernandez's group as the source of any such research. (PX7027 (Murillo (Altria/JLI), Dep. at 187-88)).

1307. Pascal Fernandez, the former SVP of Altria's Consumer and Market Insights Group testified that Altria never conducted any studies to evaluate the conversion potential of MarkTen Elite. (PX7023 (Fernandez (Altria), Dep. at 88-90)).

1308. On August 14, 2018, Murillo commented on a draft presentation to Altria's board of directors that "in fairness to Nu Mark, the 'x' for conversion potential is an opinion based on current performance and comparison to Juul. It would be fair to have an x with a ?, especially if this encompasses possible Elite 2.0." (PX1600 (Altria) at 001; *see also* PX1625 (Altria) at 033).

1309. Conversion rates are a measure of the rate at which consumers that use an e-cigarette product stop smoking, whereas market share is a measure of sales percentage relative to competitors. (Altria (Gardner) Tr. 2645).

4. Altria Had Evidence That Its E-Cigarette Products Had Conversion Potential

1310. A November 2, 2017, Nu Mark Investor Day presentation prepared for delivery by Jody Begley, Altria's current EVP and COO and former President of Nu Mark, prompts him to say "we expect to demonstrate that *MarkTen* e-vapor products can facilitate switching from conventional cigarettes without materially impacting cessation efforts or tobacco initiation among non-users." (PX1129 (Altria) at 019).

1311. A January 19, 2018, Altria presentation reported the results of a HUT study performed by Altria comparing MarkTen Elite, CYNC, and JUUL and indicated that "By 3 weeks of testing, Elite begins to demonstrate its propensity to replace cigarette occasions among" adult users of both e-cigarettes and traditional cigarettes. (PX1225 (Altria) at 008).

1312. According to an email written by Craig Schwartz on May 1, 2018, Altria's HUT study results "confirm[ed] we [Altria] have a good horse in the race that truly merits incenting Trial at all levels / channels." (PX1225 (Altria) at 001). Craig Schwartz wrote that the HUT study indicated that MarkTen Elite "could thrive." (PX4129 (Altria) at 001).

1313. Dr. Gardner testified that some Altria employees thought that Elite had long-term conversion potential in 2018. (Gardner (Altria) Tr. 2675).

1314. A July 2018 presentation prepared by employees of Nu Mark's brand organization identified MarkTen Elite as having "high conversion potential" for certain consumers (PX4060 (Altria) at 010); Gardner (Altria) Tr. 2676-77 (discussing PX4060)). Dr. Gardner testified that Altria's brand organization viewed MarkTen Elite as having high conversion potential at the time. (Gardner (Altria) Tr. 2676-77).

1315. On August 8, 2018, Baculis stated in an email that the results of Altria Home Use Tests ("HUTs") indicate that MarkTen "Elite has a role to play" in that it "should be able to peel off some of the folks that are using Juul but would really rather have something else" even though Elite could not compete "head to head with Juul where Juul is strong (immediate nicotine satisfaction)" because Elite and Juul have "different opportunities and strengths." (PX1141 (Altria) at 001).

1316. Baculis testified that Elite 1.0 could appeal to JUUL consumers that "would be willing to trade off a little bit of nicotine satisfaction" for "a better inhale/exhale experience" and "better-tasting flavors." (PX7014 (Baculis (Altria) Dep. at 164-65)).

1317. In 2018, Altria was developing low-nicotine strength flavors for MarkTen Elite 2.0 to keep those flavors available for consumers that wanted them. (PX7016 (Jupe (Altria), at 129) ("[I]f we saw some traction over the next couple of years in Elite in the market with those pre-existing flavors, we didn't want to extract them from the market.")).

1318. Baculis testified that her "assumption was that the cigalike category would remain viable for a niche group of consumers." (PX7014 (Baculis (Altria) Dep. at 158-59)).

1319. Because "MarkTen cigalikes was [sic] meeting the needs of a small niche of consumers," Baculis "didn't see any reason why [Altria] should stop selling them." (PX7014 (Baculis (Altria) Dep. at 161)).

1320. On September 7, 2018, Craig Schwartz sent several Altria colleagues a presentation titled "MarkTen Elite Potential Investment Justification Information" which included the results of a HUT study that showed that MarkTen Elite produced conversion rates comparable to or better than JUUL under certain circumstances, and he stated that the results "could support a decision to further invest in MarkTen Elite 1.0 – if that's what we decide to do." (PX4313 (Altria) at 001, 004).

1321. In 2018, Altria published an "Actual Use Study" that involved giving MarkTen cigalike products to a sample of adult smokers over an eight-week period. (PX4357 (Altria) at 094-95) ("A Longitudinal Study to Assess the Actual Use of E-Vapor Products Currently Marketed as MarkTen | MarkTen Actual Use Study, Oct. 3, 2018).

1322. None of the participants in Altria's "Actual Use Study" for MarkTen reported plans to quit smoking at the outset of the study, but "[b]y the end of the study, 77% of the Total Sample indicated that they would like to quit smoking. Of those, 39% reported plans to quit in the next 30 days, and of those, 89% reported currently trying to quit." (PX4357 (Altria), at 97).

5. An E-Cigarette's Impact on Youth Initiation Is an Important Factor in the FDA's PMTA Process, and Altria's E-Cigarettes Did Not Raise Youth Initiation Concerns

1323. Altria's, JLI's, and third parties' ordinary course documents and their executives' testimony show that a relationship between an e-cigarette and youth initiation is a PMTA risk factor, but that Altria's products did not have a youth initiation problem and were not subject to that PMTA risk factor. (*See* CCFF ¶¶ 1324-52, below).

1324. Initiation refers to "a non-tobacco consumer, of any age, starting to use a tobacco nicotine product." (Quigley (Altria) Tr. 1987).

1325. Quigley testified that "as part of a PMTA, the -- the measure for whether a product is appropriate for the protection of public health . . . there's a calculation that needs to be supported by science, and that calculation is what is the product form the tobacco consumer was using, what product did they move to, what was the relative risk reduction that those users were exposed to, and if studies demonstrated initiation, that would be an offset to the -- to the reduction of constituents. So that was a -- if you think about reduction in constituents was a positive, initiation was a negative." (Quigley (Altria) Tr. 1986).

1326. Altria's goal was to have e-cigarette products that did not cause initiation. (Quigley (Altria) Tr. 1986).

1327. Willard testified that "a potential risk of youth usage is a relevant factor in a tobacco applicant's chances of getting a PMTA approval." (Willard (Altria) Tr. 1247). Willard testified that the FDA was "executing against this delicate balance that they were trying to achieve," which weighed e-cigarettes "promise to improve public health amongst adults . . . against the concern they [the FDA] had about increased levels of youth usage of e-cigarette or ENDS products." (Willard (Altria) Tr. 1362-63 (discussing RX0155 (FDA) at 004 (FDA Press Release, dated April 23, 2018)); *see also* Gardner (Altria) Tr. 2655).

a) Cigalikes Do Not Raise the Same Youth Vaping Concerns as Pod-Based Products, Which Can Be an Advantage in the PMTA Process

1328. On October 25, 2018, Willard sent a letter to FDA Commissioner Scott Gottlieb in which he wrote: "Based on the publicly available information from FDA and others, we believe that pod-based products significantly contribute to the rise in youth use of e-vapor products." (Willard (Altria) Tr. 1240 (discussing PX2022 (Altria) at 003).

1329. An April 2020 FDA guidance document entitled "Enforcement Priorities for Electronic Nicotine Delivery Systems (ENDS) and Other Deemed Products on the Market Without Premarket Authorization (Revised)" states that "Of particular concern are the design features that appear to make the cartridge-based products so popular with young people. Attributes typically present in cartridge-based products include a relatively small size that allows for easy concealability, and intuitive and convenient features that facilitate ease of use, including draw activation, prefilled cartridges or pods, and USB rechargeability. Small products may allow youth to use the product in circumstances where use of tobacco products is prohibited, such as a school. . . . Additionally, depending on the size and shape of the product, it may also blend in with other equipment that is expected in that setting (*e.g.* , if the ENDS is shaped like a flash drive, for example, next to a computer, where an actual flash drive would be used), or it may otherwise go undetected because parents, teachers, or coaches do not recognize the product as an ENDS." (PX9112 (FDA) at 001, 017).

1330. JUUL is shaped like a USB or flash drive. (Crozier (Sheetz) Tr. 1555-56; Farrell (NJOY) Tr. 210-11); Begley (Altria) Tr. 1095.

1331. Altria's MarkTen and MarkTen Bold were cigalikes, meaning that they were narrow and tubular in nature, and they look similar to a cigarette. (Huckabee (Reynolds) Tr. 385; Farrell (NJOY) Tr. 210-211, 213-214; PX4029 (Altria) at 007; PX7026 (Gardner (Altria), Dep. at 48)).

b) Low-Nicotine Strength E-Cigarettes Do Not Raise the Same Youth Vaping Concerns as High-Nicotine Strength E-Cigarettes, Which Can Be an Advantage in the PMTA Process

1332. [redacted] } (PX3026 [redacted] at 001, 019) (*in camera*). { [redacted] (PX3026 [redacted] at 019) (*in camera*).

1333. [redacted] (PX3026 [redacted] at 025) (*in camera*).

1334. MarkTen Elite had a nicotine strength of 1.8 percent (PX4115 (Altria) at 010 (JUUL "Book of Knowledge" prepared by Altria in June 2018)).

1335. Altria's MarkTen cigalike products included nicotine strengths of 2.5 percent and 2.4 percent. (PX4357 (Altria) at 001 (MarkTen Actual Use Study)).

c) <u>E-Liquids Lacking Nicotine Salts Do Not Raise the Same Youth Vaping Concerns as E-Liquids With Nicotine Salts, Which Can Be an Advantage in the PMTA Process</u>

1336. An April 2020 FDA guidance document entitled "Enforcement Priorities for Electronic Nicotine Delivery Systems (ENDS) and Other Deemed Products on the Market Without Premarket Authorization (Revised)" states that "[P]reliminary research indicates that certain effects of nicotine salts in ENDS products (e.g., higher nicotine exposure and faster rate of absorption) may increase the abuse liability of ENDS with nicotine salts, which raises concerns of addiction in youth, particularly due to the vulnerability of the developing adolescent brain." PX9112 (FDA) at 001, 021, 042).

1337. Dr. Gardner testified that nicotine salts in e-cigarettes create unique toxicological risks that have to be analyzed in the PMTA process. (Gardner (Altria) Tr. 2657-59).

1338. MarkTen Elite did not have nicotine salts. (Begley (Altria) Tr. 1084).

1339. Other than MarkTen Bold Classic and MarkTen Bold Menthol, Altria's cigalike products did not have nicotine salts. (PX7013 (Brace (Altria), Dep. at 181)).

d) <u>Non-Flavored E-Cigarette Products Do Not Raise the Same Youth Vaping Concerns as Flavored Ones, and Altria's Sales Were Mainly Non-Flavored</u>

1340. On October 25, 2018, Willard sent a letter to FDA Commissioner Scott Gottlieb in which he wrote: "We believe underage use of e-vapor products is further compounded by flavors in these products that go beyond traditional tobacco flavors. This presents a challenge from a tobacco harm reduction perspective." (PX2022 (Altria) at 003).

1341. On October 25, 2018, Altria withdrew its flavored e-cigarette products, claiming that its actions were in response to the FDA's youth vaping concerns. (PX2172 (JLI), at 001, 019) (Altria's 2018 3Q Earnings Call Transcript).

1342. Dr. Rothman assessed that Altria's e-cigarette sales of consumables were mainly non-flavored. (PX5000 at 064 (¶ 119) (Rothman Expert Report)).

1343. [redacted]

[redacted]

(PX5000 at 068 (Table 6) (Rothman Expert Report)).

1344. After Altria withdrew its flavored products, "approximately 80% of Nu Mark's e-vapor volume in the third-quarter of 2018 [remained] on the market." (PX2172 (JLI) at 019 (Altria's 2018 3Q Earnings Call Transcript)).

e) <u>Altria Executives Consistently Testified That Altria Did Not Have a Youth Vaping Issue</u>

1345. In May 2018, the FDA sent a letter to a number of e-cigarette manufacturers requiring them "to provide critical information so the agency can better examine youth use and product appeal" and to "tak[e] a hard look whether certain design features and product marketing practices are fueling the youth use of such products." (RX0156 (FDA) at 001)).

1346. The FDA's press release explained that the manufacturers that received the May 2018 letter were chosen because their products had "product attributes that overlap with those of JUUL, including . . . the use of e-liquids that contain nicotine salts with corresponding high nicotine concentration, [a] small size which makes these products easily concealable; and [p]roduct design features that are intuitive, even for novice users." (RX0156 (FDA) at 002).

1347. Willard testified that Altria did not receive the May 2018 FDA letter because MarkTen Elite "did not have those components." (Willard (Altria) Tr. 1368-69 (discussing RX0156 (FDA) at 002) ("Q. Your Elite pod product did not have those components, right? A. No. Unfortunately, it did not.")).

1348. On October 25, 2018, Willard sent a letter to FDA Commissioner Scott Gottlieb in which he wrote "we do not believe we have a current issue with youth access to or use of our pod-based products." (Willard (Altria) Tr. 1240-41 (discussing PX2022 (Altria) at 3).

1349. When asked whether Altria had any data that suggested that Elite was contributing to the youth vaping epidemic, Magness testified "No, we did not with regard to Elite. Frankly, I think our statement was pretty clear too, that we didn't necessarily attribute the problem to our own products, but we didn't want to really have a risk of contributing to the issue." (PX7017 (Magness (Altria), at 194-95)).

1350. Pascal Fernandez testified that Altria had no evidence that its e-vapor products were used by minors. (PX7023 (Fernandez (Altria), Dep. at 77-78)).

1351. [redacted]} (PX4274 (Altria) at 001, 003) (*in camera*)).

1352. Willard testified that Altria had no reason to believe youth were using MarkTen Elite. (Willard (Altria) Tr. 1423, 1426 ("Q. Now, did you have reason to believe that youth were using your product [MarkTen Elite]? A. We did not.")).

F. Altria's Claim That Its Decision to Exit the E-Cigarette Market Merely Coincided with the Transaction is Implausible

1353. Altria claims that it "did not withdraw its own products to facilitate a JLI deal. . ." (PX0027 (Altria) at 1 (Altria's Answers and Defenses)).

1354. Altria's and JLI's ordinary course documents and their executives' testimony show that Altria's claim it did not withdraw its products to facilitate a JLI deal is implausible. (*See* CCFF ¶¶ 1355-407, below).

1. Altria Executives Were Committed to Competing in the Closed-System E-Cigarette Market until JLI Indicated a Non-Compete Was Necessary for a Deal

1355. Altria executives involved in transaction negotiations began to deprecate Altria's e-cigarette products and to discuss discontinuing them after JLI indicated it wanted a non-compete, which surprised and confused Altria employees that were not involved in transaction negotiations. (*See* CCFF ¶¶ 1356-78, below).

1356. Garnick testified that he believed that Altria should remove its e-cigarette products from the market as early as June 2018, but that others at Altria did not share his view at the time. (Garnick (Altria) Tr. 1583, 1603). Garnick testified that MarkTen's leadership had no plans to stop selling MarkTen or MarkTen Elite as of June 2018. (Garnick (Altria) Tr. 1584-85).

1357. In July 2018, a team of Altria employees met to establish a consensus on plans for Altria's e-cigarette portfolio and recommended that Altria continue marketing its MarkTen cigalike products and MarkTen Elite while preparing PMTAs for improved versions of its cigalikes and MarkTen Elite 2.0. (PX1144 (Altria) at 001, 004).

1358. During a July 2018 meeting between Scott Myers and major e-cigarette retailers, there was no discussion "of Altria exiting the e-vapor market" and no indication that Altria "wasn't willing to pursue PMTAs for e-vapor products." (Myers (Altria) Tr. 3397).

2. Altria Began to Take Steps to Discontinue Its E-Cigarette Business after JLI Indicated It Wanted a Non-Compete

1359. On July 30, JLI sent a term sheet to Altria asking Altria to commit to "divest," "contribute," or "cease to operate" its e-cigarette business as a condition to the transaction. (*See* CCFF ¶ 684, above).

1360. On August 2, 2018, Quigley wrote to a group of Nu Mark colleagues: "I did tell Howard [Willard] tonight we are going to build the [E]lite business and he agreed we should do that work." (PX1174 (Altria) at 001.

1361. On August 3, 2018, Quigley met with Willard, Gifford, Garnick, and Crosthwaite to provide a business update on Nu Mark. (PX7003 (Quigley (Altria), IHT at 123)). At that meeting, Gifford suggested the possibility of withdrawing MarkTen Elite from the market. (PX7003 (Quigley (Altria), IHT at 132-34 ("Q. When is the first time that you heard any of these four people [Howard, Gifford, Crosthwaite, Garnick] express that they might be interested in pulling Elite from distribution? A. The meeting that we discussed on the 3rd of August."))).

1362. Quigley testified that he was surprised by Gifford's suggestion at the August 3 meeting to discontinue Elite because "we had just launched it." (PX7003 (Quigley (Altria), IHT at 133-34)).

1363. Willard, Gifford, Garnick, and Crosthwaite were involved in transaction negotiations, while Quigley was not. (*See* CCFF ¶¶ 578-88, above).

1364. On August 10, 2018, Altria executives Willard, Gifford, Garnick, and Crosthwaite met with Quigley and members of his team. (Quigley (Altria) Tr. 1965-66). At that meeting, Willard, Gifford, Garnick, and Crosthwaite agreed to follow the recommendation of the Nu Mark team and move forward with implementing a new gasket for MarkTen Elite in order to fix issues with leaking pods. (PX1607 (Altria) at 001; PX7003 (Quigley (Altria) IHT at 145); PX1560 (Altria) at 002 (new gasket reduced percentage of pods leaking to less than 1%)).

1365. At the August 10, 2018 meeting between the Nu Mark team and Altria leadership, Willard, Gifford, Garnick and Crosthwaite decided to move forward with plans to submit PMTAs for MarkTen cigalikes. (Quigley (Altria) Tr. 1967-68; PX1607 (Altria) at 001; PX7003 (Quigley (Altria) IHT at 146)).

1366. On August 11, 2018, Willard called Quigley and said he understood and agreed to Quigley's position that Altria should have an e-vapor platform on the market that Altria can grow from. (PX7003 (Quigley (Altria), IHT at 144-45)).

1367. On August 14, 2018, Quigley expressed concerns to Crosthwaite regarding a draft presentation for Altria's board of directors concerning Altria's e-cigarette portfolio prepared under Crosthwaite's direction. (Quigley (Altria) Tr. 1970-73 (discussing PX1008 (Altria), at 001)). Quigley informed Crosthwaite that while he understood why Crosthwaite was "telling the story" to the Board of Directors, the presentation was "clearly only the bad news version of the story" and that it contained some points that were "flat out incorrect." (Quigley (Altria) Tr. 1972-73 (discussing PX1008 (Altria), at 001))

1368. In his August 14, 2018 critique of the draft presentation to the Altria Board of Directors, Mr. Quigley reminded Crosthwaite that the MarkTen cigalike was "growing in volume" and was the "second fastest growing brand in terms of volume behind juul." (Quigley (Altria) Tr. 1973-74 (discussing PX1008 (Altria), at 001)).

1369. In his August 14, 2018 critique of the draft presentation to the Altria Board of Directors Quigley wrote to Crosthwaite: "I also have a few concerns about what I am hearing from your organization about vapor. What I am hearing sounds very disconnected from the latest discussions we've been having. I am hearing that 'the decision has been made to stop Nu Mark' and I know that decision has not been made." (PX1008 (Altria) at 001)).

1370. Quigley explained that he "thought K.C. [Crosthwaite] was playing a political game to advance his agenda [to do a deal with JLI] in the eyes of the board. So what I was pointing to here is, hey, I know that you're trying to kind of one-up me, and -- for your own gain, and I was very unhappy about it." (Quigley (Altria) Tr. 1973).

1371. On August 14, 2018, Murillo provided comments to Garnick on a draft presentation to the Altria Board of Directors, and included, with respect to Elite, the comment that "in fairness to Nu Mark, the "x" for conversion potential is an opinion based on current performance and comparison to Juul. It would be fair to have an x with a ?, especially if this encompasses possible Elite 2.0." (PX1600 (Altria) at 001-02 (email from Joe Murillo to Murray Garnick, Aug. 14, 2018)).

1372. On [redacted], Altria senior leadership held meetings with the Altria board at Altria's [redacted]. (PX1344 (Altria) at 001, 003-04). Quigley and other Altria executives were at the Ranch during these meetings, but only Willard, Gifford, Garnick, and Crosthwaite were allowed into the meetings with the board, which was unusual. (Quigley (Altria) Tr. 1974; PX7003 (Quigley (Altria), IHT at 150-51)). Even though he was at the Ranch, Quigley was not permitted to participate in the board meeting in which Nu Mark was discussed. (PX7003 (Quigley (Altria), IHT at 150)).

1373. On September 11, 2018, Garnick requested a complete review and summary of all ongoing Nu Mark scientific activity as part of a broad review of Nu Mark's operations. PX1645 (Altria), at 1 (email from Bill Gardner, Sept. 11, 2018) ("I have been tasked with compiling all current work in the Regulation organization (specifically SS&A and RS) associated with reduced risk product efforts like e-vapor and heat not burn products. At a high level, [Garnick] et. al. want to understand how our resources are being utilized across the many reduced risk product projects, for example e-vapor, oral tobacco, due diligence, commercial product support (e.g. PPCMS), foundational science, etc."); PX1646 (Altria) at 001-02 (email from Murray Garnick, Sept. 12, 2018)).

1374. On September 22, 2018, Crosthwaite sent Quigley a draft "RHP [Reduced Harm Product] Ranch Presentation" for Altria's board of directors, which had a slide titled "Nu Mark – 2019 work realignment" which included a column "Continues" with entries for "Optimized MarkTen Support," "MarkTen cig-a-like PMTA," and "Elite 2.0 HUT [Home Use Test]," and a column titled "Stops/Changes" with entries for "Apex," "VIM," "Cync," and "Hudson" development, but made no mention of ceasing commercialization or PMTA development for MarkTen's cigalike products or MarkTen Elite. (PX1316 (Altria) at 001, 042).

1375. In October 2018, Dr. Gardner testified that Altria's leadership team developed growth teams "to focus on the development of long-term e-vapor products that would be more successful in converting adult smokers" and also announced "that all current efforts on e-vapor products development were to stop, excluding the MarkTen PMTA program, which included the BVR 2.8, and that was to free up resources, so that the resources available could react quickly to the growth team requests." (PX7026 (Gardner (Altria), Dep. at 164-65)).

1376. Richard Jupe testified that Altria's creation of growth teams prompted mixed reactions among its employees, with some Altria employees expressing surprise that years' worth of work was being discarded. (PX7016 Jupe (Altria), Dep. at 261-62) ("I would say it was mixed. I think any change is going to bring mixed reviews. There were some folks that I recall that were happy about the fact that we were changing our approach to PD [product development] . . . And there were those that were immensely disappointed as far as this is the work I've been doing for the last X number of years. I thought we were doing well. What the heck is going on.")).

1377. On October 5, 2018, Murray Garnick stopped an attempt by Altria employees to resume MarkTen Elite 2.0 high nicotine research and expand MarkTen Bold flavors. (PX1951 (Altria) at 001 ("We just killed it. Brian [Quigley] said ok. Lets [sic] not resurrect it."); PX1954 (Altria) at 001-03 ("We are not expanding MarkTen Bold flavors. That should stop. And it should stop forever.")).

1378. Gardner testified that, as of October 10, 2018, Altria was performing stability studies on MarkTen Elite that it viewed as necessary to for the product "to remain in the market" even though Altria "had decided sometime in September to stop working on the PMTA for Elite." (PX7026 (Gardner (Altria), Dep. at 167-70); PX4197 (Altria) at 001-02).

3. Altria's Decision to Suspend MarkTen Elite Was Announced after Transaction Negotiations Were Well Advanced

1379. Altria and JLI's transaction negotiations were well advanced on October 25, 2018, when Altria announced its decision to suspend MarkTen Elite. (*See* CCFF ¶¶ 788-824, above).

1380. In October 2018, Altria and JLI executives had several in-person meetings to discuss the proposed transaction. (*See* CCFF ¶¶ 788-824, above).

1381. On October 25, 2018, Willard stated to investors on an earnings call that even though Altria had suspended MarkTen Elite and Apex, "we fully intend to offer a compelling portfolio of e-vapor products for adult smokers and vapors, through the FDA's product review pathways or when under age use of vapor is addressed" and emphasized that approximately 80% of Altria's e-cigarette volume would remain on the market. (PX9082 (Altria) at 003 (Altria 3Q 2018 Earnings Call Transcript)).

1382. Days later, on October 29, 2018, Altria and JLI exchanged a final transaction term sheet and substantially agreed on transaction terms. (*See* CCFF ¶¶ 820-25, above).

4. Altria's Announcement That It Would Discontinue Commercialization of MarkTen Came Only Days before the Parties Announced the Transaction

1383. A December 1, 2018, draft Altria presentation prepared by Altria management for Altria's board indicates that "management recommends ceasing support for all MarkTen and Green Smoke cig-a-like products," and also informed the board that Altria was continuing negotiations with JLI on a potential acquisition and that the parties had agreed to "selected transaction terms," including "Altria commits to conduct e-vapor operations exclusively through Tree [JLI]." (PX4234 (Altria) at 004, 016, 017).

1384. As early as December 4, 2018, Altria and JLI were working on a joint press release to announce the transaction. (PX7011 (Valani (JLI), IHT at 133 (discussing PX2130 (JLI), at 002); *see also* CCFF ¶ 841, above).

1385. Altria announced that it would discontinue its e-cigarette business on December 7, 2018. (*See* CCFF ¶ 848, above).

1386. On December 18, 2018, 2018 at 11:59 p.m. Altria stopped selling its MarkTen e-vapor products online, though they remained in stores while supplies were available. PX2459 (JLI) at 001 (email from markten@mktg.markten.com, Dec. 13, 2018); PX7033 (O'Hara (JLI), Dep. at 177-178) (authenticating PX2459); *see also* CCFF ¶ 858, above).

1387. {[redacted]} (PX1347 (Altria) at 001-17 (*in camera*) (Minutes of Meeting of the Board of Directors of Altria Group, Inc., Dec. 19, 2018); PX2604 (JLI) at 001-8 (Minutes of a Meeting of the Board of Directors of JUUL Labs, Inc., Dec. 19, 2018); *see also* CCFF ¶ 859, above).

1388. [redacted] (PX1347 (Altria) at 017-18) (Minutes of Meeting of the Board of Directors of Altria Group, Inc., Dec. 19, 2018); *see also* CCFF ¶ 860, above).

1389. Altria and JLI announced their transaction on December 20, 2018. (PX2134 (JLI) at 001 (email from Kevin Burns, Dec. 20, 2018) ("Today, we have been joined by an unlikely - and seemingly counterintuitive - investor in our journey. Altria today announced a minority investment of $12.8 billion into JUUL for a 35% ownership in the company along with services to accelerate our mission."); *see also* CCFF ¶ 861, above).

5. Altria Executives Explicitly Linked the Discontinuation of MarkTen's Products to the Transaction

1390. Altria's and JLI's ordinary course documents and their executives' testimony confirm the relationship between Altria's decision to withdraw its products and the JLI deal. (*See* CCFF ¶¶ 1391-407, below).

1391. On June 9, 2018, Jupe wrote an email to Crosthwaite in which he stated: "I know you raised the question as to the role of [MarkTen] Elite going forward. I too question its role in the portfolio especially considering a successful outcome with project Tree." (PX1086 (Altria) at 001 (email from Richard Jupe to K.C. Crosthwaite, June 9, 2018)).

1392. Jupe testified that he assumed as of June 2018 that if Altria acquired JLI, Elite would not be "a necessary product" and that he viewed Elite as having a "role as a contingency plan for Project Tree." (PX7016 Jupe (Altria), Dep. at 247-49 (discussing PX1086 (Altria) at 001)).

1393. On July 27, 2018, in an email exchange between Gross and Pritzker, Gross indicated that he "was under the impression that [Altria] would just shut down Mark 10." (PX2330 (JLI) at 001 (email from Nicholas Pritzker to Peter Gross, July 27, 2018)).

1394. [redacted] PX1491 (Altria) at 001-03) (*in camera*) (Summary of Potential Options and Recommendations, Sept. 25, 2018); (Garnick (Altria) Tr. 1820-21) (*in camera*); *see also* PX1062 (Altria) at 001-02 (*in camera*) [redacted]

1395. On October 2, 2018, Garnick sent to Crosthwaite and Gifford a series of proposed discussion points for a meeting with FDA Commissioner Gottlieb, including a commitment to discontinue MarkTen Elite, but he stated that the discussion points were predicated on the assumption the JLI deal would not go forward: "In light of our discussion today, I thought you should see what we propose to be our talking points for the Gottlieb meeting. Obviously, this assumes we do not receive a satisfactory response from Tree [JLI]." (PX4274 (Altria) at 001).

1396. On November 15, Garnick sent an email to Willard, Gifford and Crosthwaite concerning the transaction in which he stated: "[I]f [the transaction] goes forward, we need to consider canceling Mark Ten now. . .” (PX4353 (Altria) at (Email from Murray Garnick to Howard Willard, Nov. 15, 2018).

1397. Murray Garnick testified that Altria “had to have cost savings in the alternative to pay for the growth teams, but certainly for the Tree [JLI] deal, in order to pay for it” and proposed that Altria should consider canceling MarkTen as a cost saving measure. (PX7036 (Garnick (Altria), Dep. at 212-214)).

1398. On November 18, 2018, Elizabeth Mountjoy sent an email to Crosthwaite in which she indicated that Altria’s internal product development efforts would depend on getting “more clarity on Tree.” (PX4242 (Altria) at 001) (“The over-arching voiceover I would give is that the deck assumes we are going with Plan B, to continue to drive innovation engine internally. If we decide that's an unlikely path, there may be pieces of this system we want to keep, depending the size of the potential shift. . . Anyhow, until we get more clarity on Tree, we will continue to push ahead with this work- unless you advise otherwise.”).

1399. On December 1, 2018, Garnick stated in an email, “I do think that the larger LT [Leadership Team] still does not understand that we are recasting the company as a core products [traditional cigarette] company after tree.” (PX4275 (Altria) at 001).

1400. On December 1, 2018, Garnick sent an email to Murillo telling him that Altria would announce that it would stop making e-cigarettes later that week and that Gifford would want Altria’s leadership “to start preparing for the post Tree Altria.” (PX4277 (Altria) at 001 (“Howard/Billy have decided to announce the decision to stop making all evapor products. . . . Billy [Gifford] is going to want the LT [Leadership Team] to start preparing for the post Tree Altria.”)).

1401. On December 4, 2018, Garnick commented on a draft presentation to Altria’s board and emphasized the need to restructure the order of the presentation in order to give the Board the impression that Altria’s MarkTen discontinuation was not linked to the transaction. (PX1169 (Altria) at 001 (“Important point: my understanding is that our cease selling MarkTen and Verve has nothing to do with Tree [the transaction]. Thus, we should discuss this in a separate section and not under the ‘Tree’ section. Can we please make this fix BEFORE we send anything to any director?”); PX7000 (Garnick (Altria), IHT at 144-45)).

1402. Maria Gogova, Altria’s Vice President of Regulatory Sciences, was asked when she heard that MarkTen would be discontinued and responded that “it was when we finalized the deal with JUUL because we had to remove our own activity in the e-vapor category.” (PX7015 (Gogova (Altria), Dep. at 269)).

1403. Pascal Fernandez, a Managing Director for Altria Client Services, was asked what rationale was given to him for discontinuing Altria's e-vapor products and stated, “I forgot what was said that day, so, you know, I forgot what was said. But as you stated before, if we made an agreement to no longer compete, that might be the extent of the rationale.” (PX7023 (Fernandez (Altria), Dep. at 192)).

1404. [redacted]

[redacted] (PX1067 (Altria) at 011) (*in camera*).

1405. On December 8, 2018, at 1:50AM, David Moore (then a corporate associate at Cleary, Gottlieb, Steen & Hamilton, LLP ("Cleary"), representing JLI in connection with the transaction) sent an email to Zachary Podolsky (a corporate partner at WLRK representing Altria in connection with the transaction) that referenced the discontinuation announcement along with an "expedited schedule for obtaining antitrust clearance." (PX2605 (JLI) at 008-09) ("[G]iven Richard's [Altria's] press release this morning and the expedited schedule for obtaining antitrust clearance, we would suggest that the period in which Richard [Altria] can commence making confidential buyout offers to Jack's [JLI's] board begin 4 years following the closing (instead of the earlier of 5 years following the closing or 2 years after obtaining antitrust clearance))."

1406. On December 9, 2018, Garnick emailed Masoudi in response to Masoudi's inquiry about whether Altria would agree to a non-compete that would go into effect prior to antitrust clearance, and Mr. Garnick reassured him that "[t]his is of course a nonissue, since we are not in the market anymore." (PX1162 (Altria) at 001 ("Pre antitrust do not compete – How about if we agree to file within 90 days (we intend to file within 30 days, but I would like a cushion for unforeseen events). Would that resolve this? Alternatively, if the businesses want to start enhanced services right way, the do not compete provision could start running based on when providing enhanced services begins and tied to that. This is of course a nonsissue, since we are not in the market anymore and we can't get back into the market without getting a PMTA. But do not compete cannot start simply with closing for antitrust reasons -- section 1 issue.")).

1407. [redacted] (PX1268 (Altria) at 005 (Draft Altria 2018 Incentive Compensation Memo); *see also* Willard (Altria) Tr. 1255-56 (discussing PX1274 (Altria) at 005 (Altria Remarks at 2019 CAGNY Conference))).

X. THE TRANSACTION HAS CAUSED HARM

1408. Based on his review of the documents, data, and testimony, Dr. Rothman concluded that: "The transaction has harmed and will harm consumers. Altria exited due to the transaction. Altria had strong incentives to compete, and it had the ability to compete. Altria's exit eliminates products that were and would have been attractive to consumers. This harms consumers. Altria's exit also eliminates a competitive constraint on all other competitors, which reduces their incentives to offer lower prices and invest in developing better products. This also harms consumers." (PX5000 at 043 (¶ 91) (Rothman Expert Report); *see also* PX5000 at 075-83 (¶¶ 130-45) (Rothman Expert Report); PX5001 at 016 (¶ 24), 030-31 (¶¶ 45-48) (Rothman Rebuttal Report); PX7048 (Rothman, Trial Dep. at 9-11, 29-30, 51, 91-92)).

1409. Dr. Rothman calibrated an economic model of e-cigarette competition to estimate the loss of consumer surplus from Altria's exit. Dr. Rothman also estimated the efficiencies that would be required to offset the harm caused by Altria's exit. (PX5000 at 043-44 (¶ 92) (Rothman Expert Report)).

1410. Dr. Rothman evaluated Altria's incentive and ability to compete absent the transaction in order to determine whether Altria would have been a significant competitor if it had not entered into the transaction with JLI. (PX5000 at 044-57 (¶¶ 93-107) (Rothman Expert Report)).

1411. Dr. Rothman concluded that Altria had a strong incentive to compete absent the transaction, as reflected in industry trends, testimony of Altria executives, internal financial analyses, and the long-run strategies and investment decisions of Altria and its competitors. (PX5000 at 044-53 (¶¶ 93-102) (Rothman Expert Report); *see also* PX7048 (Rothman, Trial Dep. at 31)).

1412. Based on his review of the documents, data, and testimony, Dr. Rothman concluded that Altria had the ability to compete in closed-system e-cigarettes absent the transaction. (PX5000 at 053-57 (¶¶ 103-07) (Rothman Expert Report)). In order to compete in closed-system e-cigarettes, Altria needed to develop or acquire products; regulatory approval; distribution; shelf space; manufacturing; and marketing. (PX7048 (Rothman, Trial Dep. at 31-32)). Altria had the ability—and was well-situated—to compete in all of those respects. Altria has significant experience, distribution, infrastructure, a large sales team, valuable shelf space in retail stores, and, prior to exiting, had multiple products in the market and product development initiatives in the pipeline. (PX5000 at 053-57 (¶¶ 103-07) (Rothman Expert Report); *see also* PX7048 (Rothman, Trial Dep. at 31-32)).

1413. Dr. Rothman evaluated the effects of the transaction on competition by comparing the actual world before Altria and JLI entered into the transaction with the but-for world if the transaction had not happened. (PX7048 (Rothman, Trial Dep. at 30-31)).

1414. Based on his review of the documents and testimony, Dr. Rothman concluded that Altria would have been a significant competitor in e-cigarettes if it had not entered into the transaction. (PX5000 at 075-77 (¶¶ 131-33) (Rothman Expert Report)). Altria was already a significant competitor in 2018 with the third largest share behind JLI and Reynolds. (PX5000 at 067 (¶ 118) (Rothman Expert Report); PX7048 (Rothman, Trial Dep. at 33)). In response to JLI's rapid growth, Altria introduced MarkTen Elite in 2018, and in July 2018, Altria's CEO stated that Elite was gaining traction with consumers. (Begley (Altria) Tr. 985, 990-81; PX9047 (Altria) at 009-10 (Altria's Q2 2018 Earnings Call); *see also* PX7048 (Rothman, Trial Dep. at 33-34)). Altria was actively working to improve Elite, introducing the gasket fix in 2018 to prevent leaking and working on incorporating nicotine salts and other improvements in Elite 2.0. (*See* CCFF ¶¶ 1206-34, 1281-94, above; *see also* PX7048 (Rothman, Trial Dep. at 34)). Altria was also collaborating with PMI to introduce VEEV in the United States, and had introduced an earlier version of VEEV called Apex in

September 2018. (*See* CCFF ¶¶ 1620-93, below; *see also* PX7048 (Rothman, Trial Dep. at 34)). Overall, Altria was pushing a number of competitive initiatives, and it had strong incentives and significant ability to continue doing so. (PX7048 (Rothman, Trial Dep. at 34)).

1415. Because Altria would have been a significant competitor if it had not entered into the transaction, Dr. Rothman concluded that the transaction harmed competition. (PX5000 at 043 (¶ 91), 075-83 (¶¶ 130-45) (Rothman Expert Report); PX5001 at 016 (¶ 24), 030-31 (¶¶ 45-48) (Rothman Rebuttal Report); PX7048 (Rothman, Trial Dep. at 34-35)).

1416. Dr. Rothman analyzed two sources of harm from the transaction—higher prices and loss of consumer choice—by applying the Antitrust Logit Model ("ALM") and Compensating Marginal Cost Reduction ("CMCR"). (PX5000 at 081-83 (¶¶ 141-45) (Rothman Expert Report)). One harm is not more important than the other, and the ALM takes into account both sources of harm. (PX7048 (Rothman, Trial Dep. at 210-11)).

A. Respondents Engaged in Head-to-Head Competition

1417. Altria competed with JLI and other closed-system e-cigarette producers on price and non-price dimensions. (PX5000 at 077-81 (¶¶ 134-40) (Rothman Expert Report)).

1. Respondents Engaged in Head-to-Head Price Competition

1418. Altria and JLI directly competed with each other and other e-cigarette producers on price. (PX5000 at 077-78 (¶¶ 134-36) (Rothman Expert Report)).

a) Altria

1419. Prior to the transaction, Altria had been heavily promoting its e-cigarettes with retailers to compete with the dominant supplier, JLI. (PX1013 (Altria) at 013 ("Nu Mark Brand Update, MarkTen Elite" dated August 10, 2018) (Elite's launch plan envisioned significant price promotions from April through October 2018); PX8000 at 004 (¶ 22) [redacted] (*in camera*) [redacted]

1420. Altria closely tracked pricing and promotions by JLI. (*See, e.g.*, PX1321 (Altria) at 095, 280-81 ("NuMark Business Update")).

1421. Jody Begley, the former President and General Manager of Nu Mark, testified that Nu Mark took into account the price of JUUL in setting MarkTen Elite's launch price. (Begley (Altria) Tr. 991; *see also* PX7022 (Begley (Altria), Dep. at 210) (testifying that JUUL "certainly influenced how [Nu Mark] priced [MarkTen Elite] in the marketplace")).

1422. When Altria was preparing to launch MarkTen Elite in early 2018, Altria's CEO Howard Willard congratulated the team and wrote that "This is a big step forward for our plan to compete vigorously for closed tank volume." (PX1647 (Altria) at 003).

1423. When MarkTen Elite launched, JUUL's kit was priced at approximately $45. Nu Mark thought that pricing Elite at $19.99 would incentivize trial of the product on an ongoing basis. (Begley (Altria) Tr. 991; *see also* PX4012 (Altria) at 029 ("Nu Mark 2018 Three Year Strategic Plan") ("e-vapor pricing ladder" comparing Elite's device and cartridge pricing at launch with JUUL, Vuse Solo, and MarkTen cigalikes)).

1424. Shortly after the launch of Elite, Altria observed an increase in "competitive value spending" by its competitors. (PX4035 (Altria) at 012 ("Nu Mark E-Vapor Update to the ELT" dated April 24, 2018)). JLI began to offer $20 off a JUUL starter kit or $15 off of a device, while *my*blu offered a $1 starter kit or $25 off a device/pod bundle. At the time, Elite was offering a free pod pack with a battery purchase. (PX4035 (Altria) at 013).

1425. In June 2018, Altria launched additional promotional enhancements for Elite, including a new $8.99 trial offer bundle. (PX7022 (Begley (Altria), Dep. at 252; PX1229 (Altria) at 021 (Board of Directors Presentation, May 2018); *see also* PX1617 (Altria) at 006 ("Demand Review Meeting, October 3, 2018")).

1426. Altria offered the $8.99 Elite bundle to compete with JLI's $20 starter kit discount as well as *my*blu's $1 starter kit promotion. (PX1820 (Altria) at 002 (draft "expansion update story" dated July 30, 2018); PX1070 (Altria) at 003 (revised draft "expansion update story" dated August 2, 2018)). Altria concluded that "The move worked. Following the [$8.99] bundle offer, the team saw an uptick in retail sales" of MarkTen Elite. (PX1820 (Altria) at 002; PX1070 (Altria) at 003).

1427. During the expansion of Elite in the months after its launch, Altria provided "additional support and promotional offers to make [Elite] competitive against competitors like JUUL and MyBlu." (PX1820 (Altria) at 002; PX1070 (Altria) at 003; *see also* PX7013 (Brace (Altria), Dep. at 102-03)).

1428. Altria's Senior Director for Vapor Products, Michael Brace, testified that Altria purposely priced MarkTen Elite at a discount to its largest competitor, JUUL. (PX7013 (Brace (Altria), Dep. at 44-45)). Altria also started a "30 days of pods for $30" offer in an effort to improve smoker conversion and get more adult tobacco consumers to stick with Elite. (PX1820 (Altria) at 002; PX1070 (Altria) at 003).

1429. [redacted] (PX3004 (ITG) at 058 ([redacted]) (*in camera*)).

1430. An Altria "Demand Review Meeting" presentation from October 2018 summarized the promotions that Altria implemented on its e-cigarette products. (PX1617 (Altria) at 006, 011, 020, 026, 027). For MarkTen Elite, Altria had a number of active promotions, including $8.99 battery and pod packs, $8 off coupons, a casino program, and retail intercepts. (PX1617 (Altria) at 006). Altria had additional website promotions and direct mail offers planned for Elite. (PX1617 (Altria) at 011). For MarkTen cigalikes, Altria had additional retail, website, and direct mail promotions. (PX1617 (Altria) at 020, 026).

1431. Altria continued promoting its e-cigarette products right up until they were discontinued. On October 15, 2018, an Altria sales representative received approval to distribute additional coupons for $8 off a pod pack as part of "an aggressive plan to connect . . . two big accounts . . . with MarkTen Elite," just 10 days before Altria pulled Elite from sale. (PX1060 (Altria) at 001); *see also* PX2022 (Altria) at 002).

b) JLI

1432. JLI's Joseph O'Hara testified that Altria competed aggressively on price in the e-vapor space in 2018, and that he expected them to continue to do so in the future. (PX7033 (O'Hara (JLI), Dep. at 134-35); PX2450 (JLI) at 002 (email from O'Hara reacting to an IRI "convenience report" for the four weeks ending April 22, 2018) ("*At risk of stating the obvious, we should continue to expect our competitors with large balance sheets, high-margin legacy businesses, and large/existing distribution networks to continue discounting their product even further.*") (emphasis in original)).

1433. In February 2018, soon after MarkTen Elite launched, JLI's Bob Robbins wrote to his colleagues that Elite was priced "for share-gain mode." (PX2269 (JLI) at 003; *see also* PX7039 (Robbins (JLI), Dep. at 20-21) (explaining Elite was "priced pretty aggressively")). JLI's Joseph O'Hara added that Elite was "shockingly cheap." (PX2269 (JLI) at 002).

1434. In March 2018, JLI launched its first device promotion by dropping JUUL starter kit price by $20 (57% off from its previous price). (PX2599 (JLI) at 014-15; PX2062 (JLI) at 016). Altria personnel perceived that JLI had launched its own promotion shortly after its MarkTen Elite launch. (PX1098 (Altria) at 042 (slide entitled "Price Discounts for Juul" discussing a Juul "starter kit" promotion that started in March 2018); PX7002 (Schwartz (Altria), IHT at 89-90) ("Q. And these sales incentives were, to your knowledge, something that not only Nu Mark was doing with their Mark Ten and Mark Ten Elite products, but what their competitors in the market were doing with theirs as well? A. [. . .] JUUL, as soon as we came out, they knocked 20 bucks off their price. [. . .] Q. As soon as you came out with the Mark Ten Elite product. A. Um-hum, yep.")).

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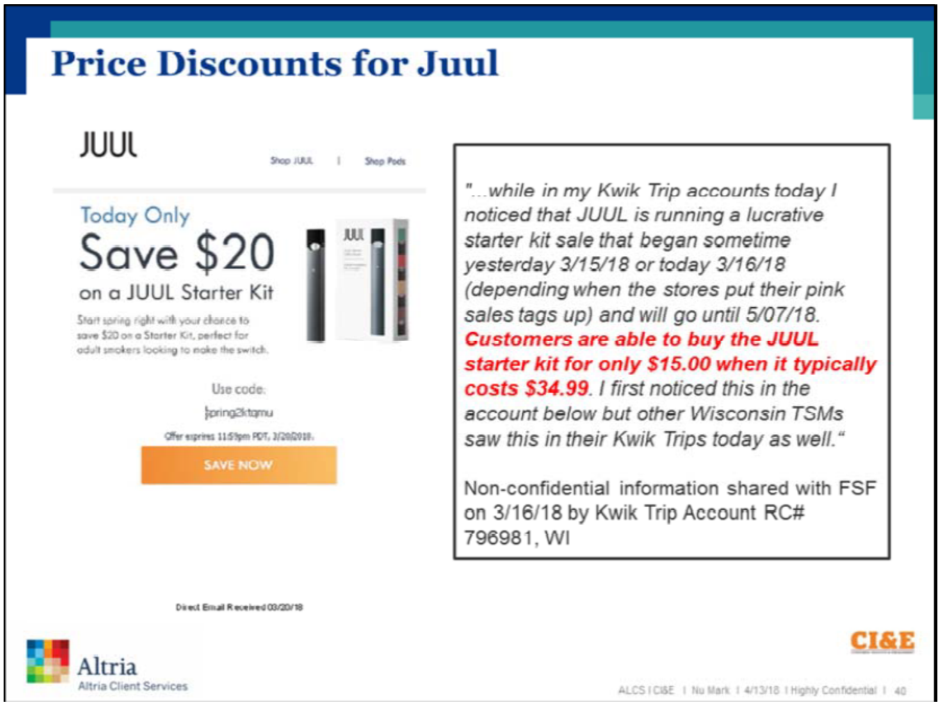


(PX1098 (Altria) at 042).

1435. [redacted]} (PX2252 (JLI) at 006 (*in camera*); *see also* PX2252 (JLI) at 048-49 [redacted]}

1436. [redacted]} (PX2252 (JLI) at 012 (*in camera*)).

1437. [redacted] (PX2252 (JLI) at 048-49 (*in camera*)).

1438. JLI closely tracked pricing and promotions by Altria. For example, in June 2018, JLI's Bob Robbins shared pricing and retail margin information about MarkTen Elite with JLI's "Competition" listserv, which he obtained from Altria at a trade show. (PX2477 (JLI) at 001 ("M10 Elite is running a 'buy a pack of pods for $8.99, get the device kit ($19.99 msrp) for free'. Plus, they are including an escalating retail clerk incentive of $100-$500 based on number of battery kits sold, which is a significant amount of $$ for a retail clerk. The trade flyer has retail margin expectations of 34% on pod packs and 28% on devices.")).

1439. In 2017, JLI noted that Altria was able to grow MarkTen's share in part by utilizing its smoker database to mail coupons. (PX2109 (JLI) at 001-02).

1440. JLI regularly provided updates to its board regarding the pricing of competitive e-cigarette products, including MarkTen. (*See, e.g.*, PX2588 (JLI) at 019 ("Board Dashboard, September 2017") ("competitive analysis" comparing JUUL's starter kit and refill kit pricing to MarkTen, Vuse, blu, and Logic)).

2. Respondents Engaged in Head-to-Head Non-Price Competition

1441. Altria and JLI competed head-to-head along many non-price dimensions to innovate and improve products, including shelf space, product features, and other aspects of non-price competition. (PX5000 at 078-81 (¶¶ 137-40) (Rothman Expert Report)).

a) Shelf Space Competition

1442. E-vapor companies compete for shelf space behind the counter at convenience stores and other retail outlets. (Begley (Altria) Tr. 1007).

1443. Altria's Jody Begley testified that it is "certainly beneficial" for e-vapor companies "to have the best space you can at retail stores to communicate your brand messaging." (Begley (Altria) Tr. 1007).

1444. Andrew Farrell, NJOY's Chief Revenue Officer, testified that Altria, JLI, and Reynolds were the e-cigarette competitors who most often occupied the top shelf space at retail stores in 2018. (Farrell (NJOY) Tr. 257).

1445. In 2018, Altria established an Innovative Tobacco Products ("ITP") program with its retail partners. (Begley (Altria) Tr. 1005-07; PX7013 (Brace (Altria), Dep. at 81-82); *see also* PX4304 (Altria) at 002-25 (April 2018 presentation to 7-Eleven on ITP program); PX4331 (Altria) at 003-17 (August 2018 presentation to Toot'n Totum on ITP program)).

1446. Prior to the creation of the ITP program, Nu Mark had received feedback from its retailer partners that they were interested in establishing an innovative products category. Given the growth of e-vapor, retailers were looking for solutions to merchandise the category in a more consistent manner. (Begley (Altria) Tr. 1006).

1447. Altria launched the ITP program with its retailer partners because it wanted shelf space to display its e-vapor products to generate both trial awareness and repeat purchase. (Begley (Altria) Tr. 1006). Though the ITP program, Nu Mark hoped to gain better visibility for its brands and the promotions they were offering. (PX7022 (Begley (Altria), Dep. at 216); *see also* PX7013 (Brace (Altria), Dep. at 82 ("ITP was an investment that we made with trade partners to upgrade their merchandising infrastructure, essentially their back bar where they merchandise products, to establish visibility for innovative tobacco products in their stores.")).

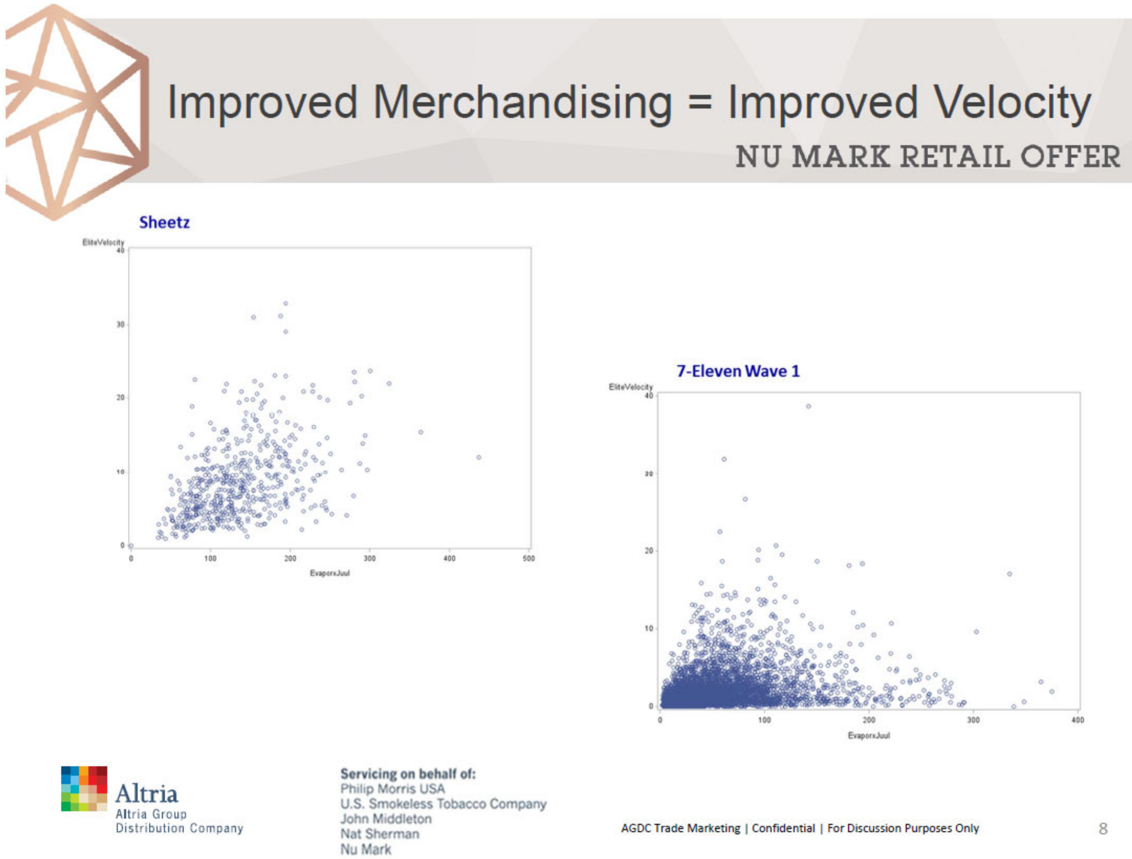
1448. Altria dedicated approximately $100 million in 2018 to its ITP program over a three-year period to obtain premier shelf space for e-cigarettes at retailers. (Begley (Altria) Tr. 1007; *see also* Quigley (Altria) Tr. 1951).

1449. At the same time that Altria was entering into ITP contracts with retailers, JLI was also competing aggressively for shelf space at convenience stores. In April 2018, for example, JLI considered it "a huge opportunity for JUUL to replace VUSE/MarkTen shelf space with a higher-selling/higher-margin product that is far easier for a retailer to understand." (PX2450 (JLI) at 002 (email from Joseph O'Hara reacting to an IRI "convenience report" for the four weeks ending April 22, 2018) (emphasis in original)).

1450. JLI considered Altria's efforts to secure e-cigarette shelf space via the ITP program to be an "urgent" threat. (PX2001 (JLI)). In a May 2018 email to JLI's CEO, Kevin Burns, and JLI's CFO, Tim Danaher, with the subject line "Altria shelf set competitive response," Bob Robbins expressed "urgent" concern regarding Altria's three-year ITP shelf space contracts. (PX2001 (JLI)). According to Robbins, "If [JLI] can't find a strategy around this, we will be severely restricted on shelf in a considerable part of the c-store universe for the next 3 years." (PX2001 (JLI); *see also* PX2475 (JLI) at 001 (Email from Bob Robbins, May 14, 2018) ("Top 5 on the commercial agenda right now: . . . 5. Altria counter-strategy (to address shelf space issues")).

1451. A May 2018 JLI presentation entitled "Altria Threat Competitive Response" and sent to JLI's CEO, Kevin Burns, and JLI's CFO, Tim Danaher, explained that "Altria has entered into [a] contract with ampm and is in discussions with Kum & Go to invest $8,000 per door for preferential shelf placement (50% of the vapor category) over the next three years. As part of the contract, Altria has also increased their retailer rebate across all products by 150% ($5,400k per door per year). This is likely the first bid to foreclose shelf-space for their vapor products at the expense of JUUL." (PX2005 (JLI) at 003). In response to Altria's retail contracts, JLI proposed "immediately committing to a 2019 $2M investment in ampm and Kum & Go for incremental shelf-space." (PX2005 (JLI) at 003).

1452. In September 2018, Altria concluded that its ITP program had in fact resulted in "Improved Velocity" when comparing sales of MarkTen Elite at 7-Eleven and Sheetz to sales of JUUL. (PX1618 (Altria) at 010 ("Nu Mark Retail Offer, Update 9/12/18")).



(PX1618 (Altria) at 010).

1453. By September 2018, Altria had signed ITP shelf space contracts with 60 retailers representing 50% of its e-cigarette volume and 41,000 stores. (PX1618 (Altria) at 005); *see also* PX1056 (Altria) at 024 ("Nu Mark Brand Update, MarkTen Elite, 8/10/18") (reflecting that Altria had signed or was in the process of signing ITP contracts with retailers comprising 19,000 locations to go into effect between September 2018 and January 2019)). Altria secured the #1 shelf position for three years at each of those retailers, with space for current and future e-cigarette products. (PX1618 (Altria) at 005).

1454. [redacted] (PX1618 (Altria) at 009 (*in camera*)). [redacted] } (PX1618 (Altria) at 009 (*in camera*); Begley (Altria) Tr. 1007).

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(PX1618 (Altria) at 009 (*in camera*)).

1455. [redacted] (Crozier (Sheetz) Tr. 1507 (*in camera*); *see also* PX3116 (Sheetz) at 001 [redacted] {[redacted]} (Crozier (Sheetz) Tr. 1507 (*in camera*); PX3116 (Sheetz) at 001 [redacted]

1456. [redacted]

1457. [redacted] (PX8000 at 004 (¶ 22) (Crozier (Sheetz), Decl.) (*in camera*)).

1458. [redacted]

1459. [redacted]} (PX8000 at 004 (¶ 22) (Crozier (Sheetz), Decl.) (*in camera*)).

1460. Jack Stout, Senior Vice President for Merchandising and Demand Chain at 7-Eleven, stated in a declaration that Altria paid 7-Eleven to construct new displays for e-cigarettes. (PX8001 at 003 (¶ 15) (Stout (7-Eleven), Decl.)). The agreement that Altria signed with 7-Eleven allocated premium placement for Altria's e-cigarettes. (PX8001 at 003 (¶ 15) (Stout (7-Eleven), Decl.)).

1461. Bill Kloss, Category Manager for Tobacco and Alcohol products at Wawa, stated in a declaration that, as with combustible cigarettes, display position is important for e-cigarettes, and Altria competed and paid for "premier placement" for its MarkTen e-cigarettes through 2021 before they were discontinued. (PX8006 at 004 (¶ 16) (Kloss (Wawa), Decl.)). [redacted] (PX8006 at 004 (¶ 17) (Kloss (Wawa), Decl.) (*in camera*)).

1462. After Altria discontinued the MarkTen brand and exited the sale of e-cigarettes, Altria required Wawa to display JUUL products in the space that Altria had previously contracted for MarkTen. (PX8006 at 005 (¶ 19) (Kloss (Wawa), Decl.)). Wawa was reticent to display JUUL products because of their association with youth vaping, but, after Altria and JLI insisted, Wawa agreed to display empty packs of JUUL in order to deter underage theft. (PX8006 at 005 (¶ 19) (Kloss (Wawa), Decl.)).

b) Product Features

1463. Prior to the transaction with JLI, Altria engaged in product development efforts that benefited consumers. Altria released new products, including MarkTen Bold, which included 4% nicotine by weight and used a "proprietary recipe" for nicotine salts, and MarkTen Elite, a pod-based e-cigarette. (PX9000 (Altria) at 017 (Nov. 2017 Investor Day remarks); Begley (Altria) Tr. 984, 990).

1464. In a presentation sent to Howard Willard in May 2017, Altria sought "To explore the relative performance of . . . potential 'JUUL Fighters,'" and conducted "research to look at potential products to compete with Juul and potentially hamper their momentum." (PX1171 (Altria) at 003 ("JUUL Fighter" summary slides)). After conducting a trial among adult smokers, Altria observed that "Elite was consistently preferred over . . . other devices, including JUUL." (PX1171 (Altria) at 004).

1465. In June 2018, Altria's Richard Jupe wrote that "as a contingency" in case the JLI transaction did not come to fruition, Altria would continue "to invest in [the Elite] platform going forward." (PX1086 (Altria) at 001). Jupe planned to incorporate work performed on prior R&D projects into the Elite platform. (PX1086 (Altria) at 001).

(1) Flavors

1466. Altria and JLI competed head-to-head by offering closed-system e-cigarettes in different flavors to consumers. (*See* CCFF ¶¶ 1467-71, below).

1467. Altria was developing a number of different flavors to reach a wide range of consumers and to better compete with JLI and other e-cigarette competitors. (*See, e.g.*, PX1704 (Altria) at 007 ("RD&S Innovation Progress" presentation dated February 2018) (noting that Altria was working on "Flavor development incorporating Sensomics, sensory science, and artisan flavor creation"); PX1686 (Altria) at 001 (Project Panama meeting minutes dated September 27, 2017) (asking "What are JUUL's best-selling flavors?" and noting that Altria wanted to develop flavors "better than JUUL"); PX8000 at 004 (¶¶ 23-24) (Crozier (Sheetz), Decl.); *see also* PX9000 (Altria) at 016 (Nov. 2017 Investor Day remarks) ("Our product development is informed by a deep understanding of adult smokers and vapers. We know that different segments of adult smokers and vapers are looking for a range of different product formats, flavors, nicotine levels and vapor volumes.")).

1468. Paul Crozier, Category Manager for Cigarettes and Tobacco at Sheetz, stated in a declaration that, before Altria's investment in JLI, Altria tested new and semi-exclusive flavors for MarkTen at Sheetz stores before they were made more widely available at other retailers. (PX8000 at 004 (¶ 23) (Crozier (Sheetz), Decl.); *see also* PX8000 at 004 (¶ 24) (Crozier (Sheetz), Decl. (noting the wide variety of MarkTen flavors offered at Sheetz)).

1469. In an email to JLI's CEO dated January 2018, JLI's Bob Robbins characterized the development of new flavors as "a super-priority" for JLI. (PX2350 (JLI) at 001) ("It is imperative for us to get better fruit and dessert flavors on market.")).

1470. An April 2018 JLI presentation sent to JLI's CEO and entitled "Competitive Flavor & Nicotine Benchmarking" compared the flavors offered by JUUL with other closed-system e-cigarette competitors, including MarkTen Elite and the MarkTen cigalikes. (PX2344 (JLI) at 004 (listing the number of "flavors available" for various closed-system competitors and identifying JUUL's "coverage" percentage for each); *see also* PX2344 (JLI) at 007 (slide entitled "Flavors with No Coverage" and identifying four flavors offered by Elite and the MarkTen cigalikes but not by JLI)).

1471. A May 2018 JLI presentation stated that "JUUL offers fewer flavors than many top competitors," including the MarkTen cigalike, thus providing JLI with an "opportunity to expand our portfolio." (PX2090 (JLI) at 009 ("Flavor Competitive Landscape"); *see also* PX2090 (JLI) at 005 ("JUUL dominates both the flavor and mint categories in terms of sales, but has opportunity to expand reach with better indulgent and tobacco flavors")). That same JLI flavor presentation highlighted the wide variety of e-cigarette flavors that Altria had developed and sold. (PX2090 (JLI) at 009, 014).

(2) Nicotine Strength

1472. Altria and JLI competed head-to-head by offering closed-system e-cigarettes in different nicotine strengths in response to different consumer preferences. (*See* CCFF ¶¶ 1473-76, below; *see also* Huckabee (Reynolds) Tr. 395 (testifying that Vuse Alto comes in three different nicotine strengths because Reynolds has found that there are a range of consumers who prefer different nicotine strengths)).

1473. Altria offered e-vapor products with different levels of nicotine to meet consumer needs and preferences. (*See, e.g.*, PX2344 (JLI) at 004 (JLI presentation dated April 2018 noting that MarkTen cigalikes came in four different nicotine strengths with a range of 2.4% to 4%); *see also* PX9000 (Altria) at 016 (Nov. 2017 Investor Day remarks) ("Our product development is informed by a deep understanding of adult smokers and vapers. We know that different segments of adult smokers and vapers are looking for a range of different product formats, flavors, nicotine levels and vapor volumes.")).

1474. In January 2018, Bob Robbins observed to JLI's CEO that "All viable competitors . . . offer variable Nic Strengths . . . . We should too." (PX2350 (JLI) at 001).

1475. An April 2018 JLI presentation sent to JLI's CEO and entitled "Competitive Flavor & Nicotine Benchmarking" compared the nicotine content of JUUL with other closed-system e-cigarette competitors, including MarkTen Elite and the MarkTen cigalikes. (PX2344 (JLI) at 004 (comparing the minimum nicotine content, maximum nicotine content, and number of nicotine "percentages available" across closed-system competitors)).

1476. JLI ultimately released its JUUL product in 5%, 3%, and 1.5% nicotine strengths in order to respond to consumers who wanted a lower nicotine strength or to taper down their usage level. (PX7025 (Burns (JLI), Dep. at 39-41, 43-44)).

(3) Other Product Features

1477. Altria and JLI also competed closely on other product design features, including pod insertion technology. (*See* CCFF ¶¶ 1478-81, below; *see also* PX1657 (Altria) at 001 (internal Altria email discussing a JLI patent application for Bluetooth-enabled technology that JLI was releasing internationally)).

1478. MarkTen Elite offered an innovative magnetic pod insertion, as compared to JUUL, which required customers to push pods into the device. (PX4012 (Altria) at 022 ("Nu Mark 2018 Three Year Strategic Plan") (comparing Elite and JUUL across several dimensions, including pod insertion)).

1479. Altria's Jody Begley characterized Elite's magnetic pods as "clearly a differentiator" vis-a-vis JUUL. (PX7022 (Begley (Altria), Dep. at 190-92)).

1480. Altria's Howard Willard highlighted many of the innovative features of MarkTen Elite at the CAGNY investor conference in February 2018, including its "magnetic click pods," as well as its "premium sleek battery design" and "large vapor volume" that contains "over twice the liquid volumes of JUUL's." (PX2253 (Altria) at 008 (transcript of Altria presentation)).

1481. One of the product improvements and new features that JLI was considering for its next generation devices were magnetic pods, similar to those in MarkTen Elite. (PX2012 (JLI) at 024 ("Executive Offsite: Product" presentation dated January 2018) ("Significantly improve pod connection - magnetic?")).

c) Competition to Improve Products

1482. Altria and JLI competed head-to-head to improve their closed-system e-cigarette products in other ways. (*See* CCFF ¶¶ 1483-92, below).

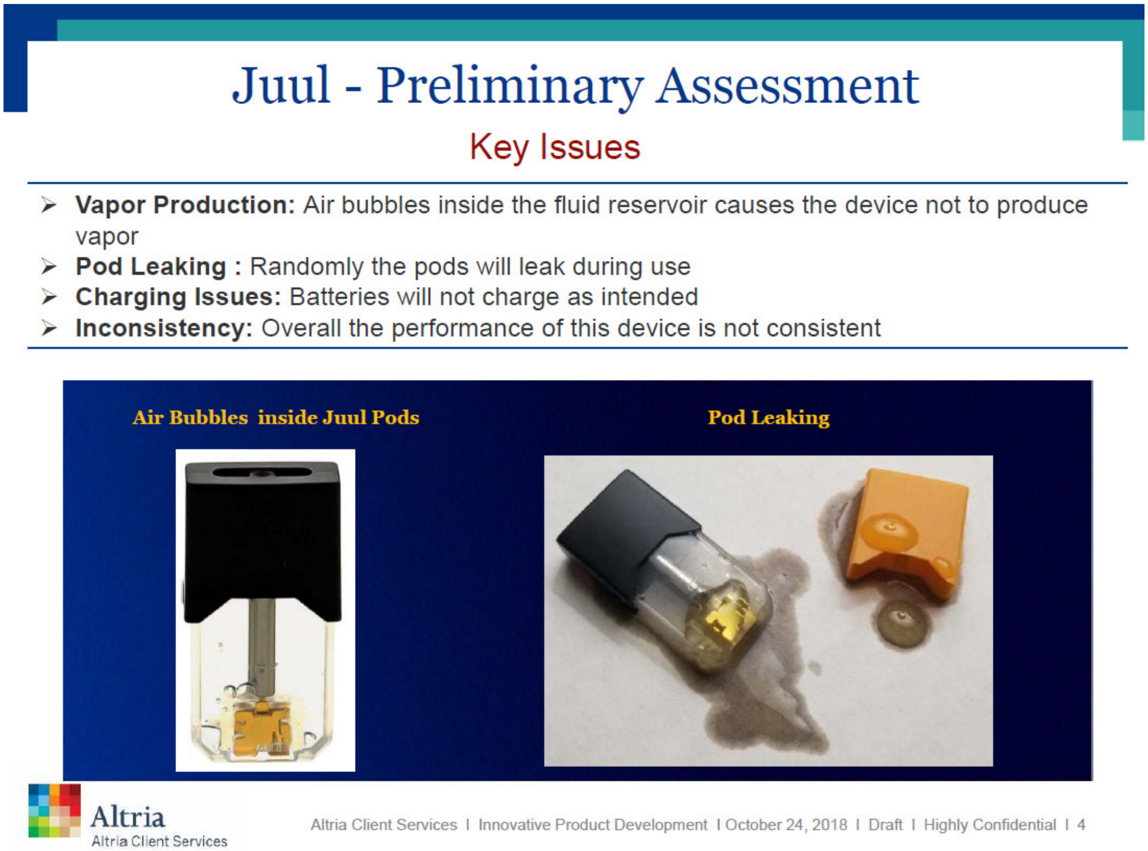
1483. A JLI presentation dated December 2017 included survey results of former JUUL users that listed their "reasons for churn," including the fact that "JUUL pods leaked." (PX2356 (JLI) at 006 (presentation entitled "What Keeps Us Up at Night") (stating that 10 percent of survey respondents no longer used JUUL because its pods leaked)). The same presentation included a customer complaint from "JUUL Reddit" that raised "leaking issues (and spitting for the first few puffs)" with JUUL's "v1 pods." (PX2356 (JLI) at 007)).

1484. In an email to JLI's CEO in January 2018, Bob Robbins characterized "stopping leaky pods" as "a super-priority" for JLI. (PX2350 (JLI) at 001).

1485. JLI's Bob Robbins testified in his deposition that leaking pods is a problem, and that he was aware of leaking and spitting issues with JUUL products. (PX7039 (Robbins (JLI), Dep. at 71-72, 74)).

1486. In an email to the "JUUL community," JLI acknowledged that some customers "have experienced leaky pods," but touted the fact that it had recently invested "millions of dollars" to address the issue. (PX1198 (Altria) at 003 (Altria presentation dated July 2018 including a direct email from JLI's CEO, Kevin Burns, to JLI's customers) ("To those who have had to send in devices for service or have experienced leaky pods; hopefully you are noticing a difference in recent months, as we have invested millions of dollars in manufacturing scaling and quality this year alone.")).

1487. Despite JLI's claims that it had fixed its leaking pods, an Altria assessment of JUUL pods dated October 2018 found that "Randomly the [JUUL] pods will leak during use." (PX1395 (Altria) at 006 (presentation entitled "E-Vapor Products Analytical Assessments") (including a picture of a leaking JUUL pods)).



PX1395-006

(PX1395 (Altria) at 006).

1488. A JLI presentation dated December 2018 compared JUUL and competing products on the basis of how much each leaked. (PX2087 (JLI) at 013 ("Competitor Product Performance Evaluation")). Of the products evaluated, the mean leakage percentage was about 35 percent. (PX2087 (JLI) at 013 (showing total leakage based on the percent of pod liquid leaking); *see also* O'Hara (JLI) Tr. 567-68). JUUL's leakage percentage was between 20 and 30 percent. (PX2087 (JLI) at 013; O'Hara (JLI) Tr. 568).

1489. Like JLI, Altria also had to address leaking issues with its pod product, MarkTen Elite. (*See* CCFF ¶¶ 1206-34, above).

1490. Altria told customers that "it's relatively normal in the pod-based space for leakage in pods. We are looking in to ways to resolve this issue." (PX1822 (Altria) at 002).

1491. In March 2018, Altria's Craig Schwartz wrote to his Nu Mark colleagues that "now that MarkTen Elite is in the Market - we want to ensure that its Quality is unrivaled, especially as we embark on upending Juul. With this stated Objective, we are concerned with MarkTen Elite Pods leaking." (PX1590 (Altria) at 001).

1492. In the months following the launch of MarkTen Elite in February 2018, Nu Mark developed and implemented a new gasket to address the leaking issue with Elite's pods. (*See* CCFF ¶¶ 1206-34, above).

3. The Transaction Eliminated Products That Appealed to Consumers

1493. The transaction eliminated products that consumers valued and would have valued, which harms consumers. (PX5000 at 075-83 (¶¶ 130-45) (Rothman Expert Report); PX5001 at 016 (¶ 24), 030-31 (¶¶ 45-48) (Rothman Rebuttal Report); PX7048 (Rothman, Trial Dep. at 34-35, 49-50)).

1494. Because closed-system e-cigarettes are differentiated products, removal of Altria's e-cigarette products will harm consumers that preferred Altria's e-cigarettes and purchased those products prior to their removal. (PX7048 (Rothman, Trial Dep. at 210); *see also* PX5000 at 082 (¶ 142) (Rothman Expert Report)).

1495. Based on his review of the documents and testimony, Dr. Rothman concluded that it would not have made business sense for Altria to shut Nu Mark down when it did, or to stop selling MarkTen Elite, MarkTen, or Apex absent the transaction. (PX5000 at 057-74 (¶¶ 108-29) (Rothman Expert Report); PX7048 (Rothman, Trial Dep. at 35-36)).

1496. Dr. Murphy's claims that MarkTen Elite was a failure are inaccurate. (*See* CCFF ¶¶ 1497-526, below; *see also* PX7048 (Rothman, Trial Dep. at 76-77)).

1497. Altria's Craig Schwartz wrote Michael Brace, Altria's Senior Director for Vapor Products, on July 15, 2018 that "MarkTen Elite is already Margin Positive, setting aside one-time investments" in ITP store fixtures. (PX1194 (Altria) at 001).

1498. [redacted]} (PX5000 at 066 (¶ 116) (Rothman Expert Report) (*in camera*); PX7048 (Rothman, Trial Dep. at 76-77)).

[redacted] }

(PX5000 at 067 (Table 4) (Rothman Expert Report) (*in camera*)).

1499. Altria's CEO, Howard Willard, told investors on a July 26, 2018 earnings call that MarkTen Bold and Elite were driving growth for Nu Mark and "getting traction with consumers." (PX9047 (Altria) at 009-10 (Altria's Q2 2018 Earnings Call) ("The drivers of the growth in second quarter and first half was MarkTen Bold and MarkTen Elite. So those products are getting traction with consumers, albeit in the shadow of a product that's growing much more quickly.")).

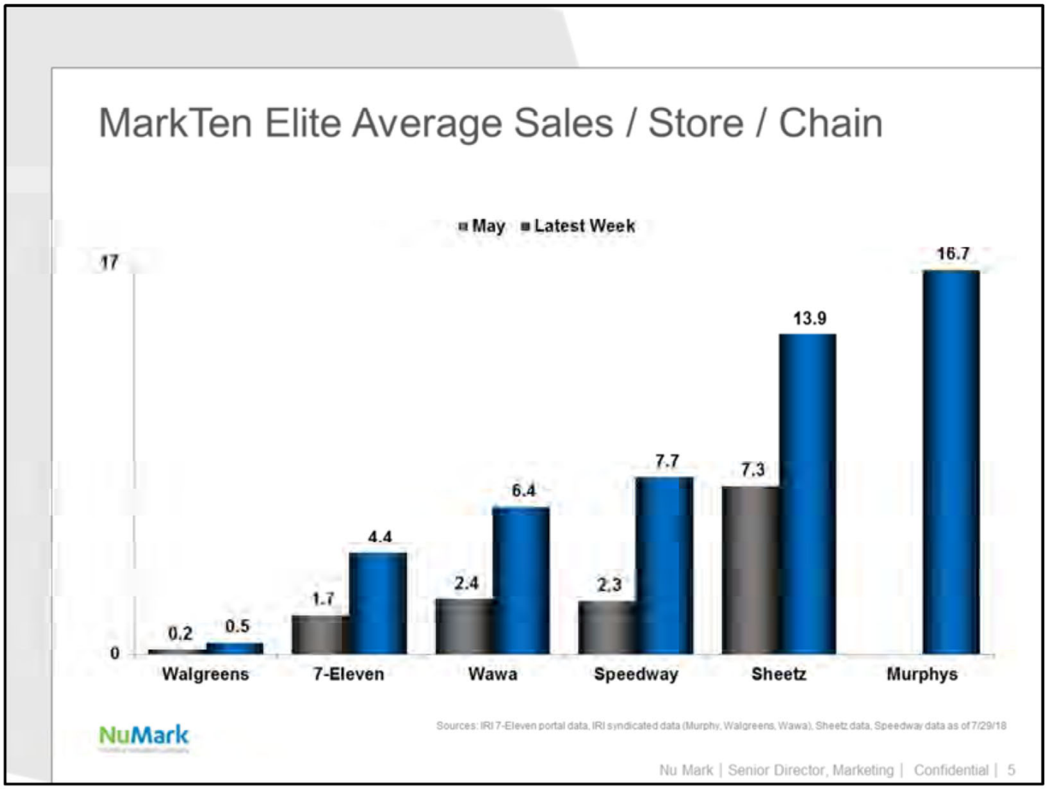
1500. On August 4, 2018, Craig Schwartz wrote to Geoffrey Bible, Altria's former Chairman, that Altria faced a "Tall task against Juul - but MarkTen Elite can hunt . . . so again, best yet to come." (PX1260 (Altria) at 002).

1501. Approximately twenty-one weeks after its launch, MarkTen Elite's sales were similar to the sales of its competitors following their introductions to the market. (PX1056 (Altria) at 009 ("Nu Mark Brand Update, MarkTen Elite" dated August 10, 2018) (showing that Elite sold 6.8 pods per store per week on average as compared to 8.8 pods per store per week for JUUL and 4.6 pods per store per week for *my*blu); PX7003 (Quigley (Altria), IHT at 136) (testifying that twenty-one weeks after its launch, Elite was "doing okay"); *see also* PX5000 at 066 (¶ 115) (Rothman Expert Report)).

1502. MarkTen Elite's dollar sales per store were in a similar range as its competitors: $142 per store per week on average compared to $162 for JUUL, $123 for *my*blu, and $147 for Logic Pro. (PX2517 (JLI) (Excel worksheet "Metrics_Launch"); *see also* PX5000 at 066 (¶ 115) (Rothman Expert Report)).

1503. MarkTen Elite's "attach rate" (pod units sold measured in milliliters divided by device units sold) was higher than other competitors: 3.4 milliliters per device on average compared to 2.5 for *my*blu and 1.0 for VUSE Ciro. (PX2517 (JLI) (Excel worksheet "AttachRates_Launch"); *see also* PX5000 at 066 (¶ 115) (Rothman Expert Report)).

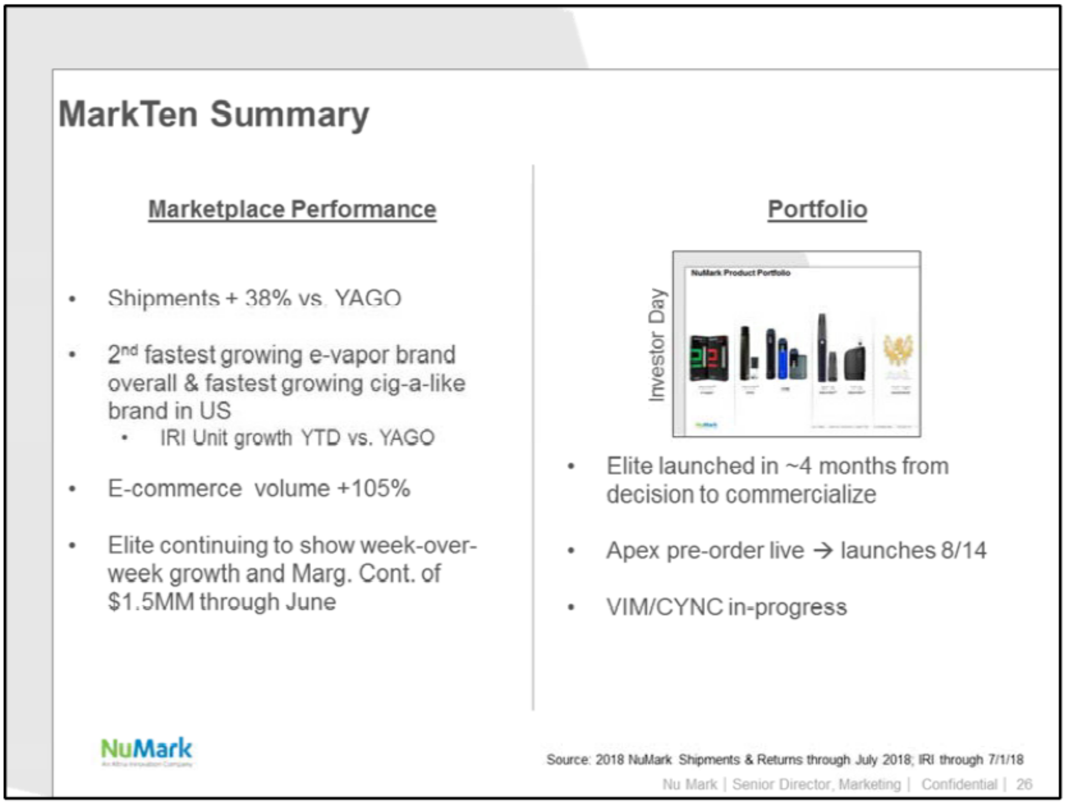
1504. MarkTen Elite's average sales per store grew from May 2018 to July 2018 in major retail chains including Walgreens, 7-Eleven, Wawa, Speedway, and Sheetz. (PX1056 (Altria) at 007 ("Nu Mark Brand Update, MarkTen Elite" dated August 10, 2018); *see also* PX5000 at 066 (¶ 115) (Rothman Expert Report)).



(PX1056 (Altria) at 007).

1505. In an August 2018 Nu Mark Brand Update, Altria highlighted the fact that MarkTen (including both cigalikes and Elite) was the "2nd fastest growing e-vapor brand overall & fastest growing cig-a-like brand in US." (PX1056 (Altria) at 028).

1506. The August 2018 Nu Mark Brand Update also noted that MarkTen shipments grew 38 percent year-over-year, with e-commerce volume up 105 percent and "Elite continuing to show week-over-week growth" with a positive marginal contribution of $1.5 million through June 2018. (PX1056 (Altria) at 028).



(PX1056 (Altria) at 028).

1507. The August 2018 Nu Mark Brand Update highlighted the fact that MarkTen was the second-fastest growing e-cigarette brand in terms of volume sales from July 1, 2017 to July 1, 2018, second only to JUUL, but ahead of *my*blu, Vuse, NJOY, and all other closed-system e-cigarette competitors. (PX1056 (Altria) at 031; *see also* PX1008 (Altria) at 001 (MarkTen "is growing volume [and] is the second fastest growing brand in terms of volume behind juul.")).

1508. The August 2018 Nu Mark Brand Update also noted that MarkTen Elite was the fifth fastest growing pod-based product from July 1, 2017 to July 1, 2018, even though Elite had only been on the market since late February 2018. (PX1056 (Altria) at 031); *see also* Begley (Altria) Tr. 1059).

YTD Change in Volume Sales vs. YAG

(IRI MOC – w/e 7/1/18)

Hybrids

Rank	Brand	Volume Sales Change vs YA
1	Juul	102,449,659
2	Vuse Vibe	4,840,344
3	my Blu	3,698,842
4	Logic	860,493
5	MarkTen Elite	413,559
6	NJOY Hybrid	380,370
7	PHIX	170,729
8	Cue	104,315
9	XFIRE	56,235
10	Bo	47,973
11	Vapin Plus	28,272
12	Mistic Hybrid	8,389
13	The Byrd	2,389
14	Fin	-131,996

Total E-Vapor

Rank	Brand	Volume Sales Change vs YA
1	Juul	102,449,659
2	MarkTen	3,881,654
3	blu	2,898,358
4	Vuse	1,088,791
5	NJOY	725,978
6	Vaporin	293,184
7	Space Jam	266,829
8	Phix	170,729
9	Clean Cig	136,339
10	Cosmic Fog	125,257
11	Cue	104,315
12	E Tron	69,756
13	Tsunami	64,082
14	XFIRE	56,235

NuMark

Source: IRI MOC Data Week Ending 07/01/18, as of 7/24/2018

(PX1056 (Altria) at 031).

1509. In the eight months that MarkTen Elite was on the market, its share was about 1 percent, which was greater than JUUL's share in its first year in the market. (PX7048 (Rothman, Trial Dep. at 76-77)).

1510. In the twelve months from October 2017 to September 2018, Altria's share of closed-system e-cigarettes was the third highest after JLI and Reynolds. (PX5000 at 067 (Table 5) (Rothman Expert Report)).

Table 5
Shares of Closed-System E-Cigarettes
October 2017–September 2018

Altria	10.1%
ITG	6.6%
JTI	3.7%
JLI	51.0%
NJOY	1.8%
Reynolds	22.7%
Other	4.1%

Note: Shares are based on units of closed-system consumables, including cartridges, pods, and disposables.

(PX5000 at 067 (Table 5) (Rothman Expert Report)).

1511. In his investigational hearing, Altria's Brian Quigley testified that he was surprised that Altria was even considering pulling MarkTen Elite given its very recent launch and growth. (PX7003 (Quigley (Altria), IHT at 133-34) ("Q. Were you surprised that this leadership group was even considering the option of pulling Elite? A. Yes. Q. Why did you find that surprising? A. Because we had just launched it. Q. In your business experience, would this be unusual to launch a product, have it grow and then pull it several months later? A. Yes.")).

1512. Sheetz's Paul Crozier testified that he was "surprised" that Altria was exiting the e-cigarette business because Altria had a leadership position in combustible cigarettes, smokeless tobacco, and other tobacco categories. (Crozier (Sheetz) Tr. 1501-02). Crozier was also surprised at Altria's exit because Altria had the number two e-cigarette brand at Sheetz. (Crozier (Sheetz) Tr. 1501-02).

1513. Paul Crozier testified that MarkTen Elite "was only widely [available] in the market for six months," which "isn't enough time for [an e-cigarette product] to prove itself out." (Crozier (Sheetz) Tr. 1498).

1514. Paul Crozier testified that Sheetz had no plans to stop selling MarkTen Elite in 2019 if Altria had not discontinued the product. (Crozier (Sheetz) Tr. 1497-98). According to Crozier, the sales of MarkTen Elite were good enough that Sheetz would have continued selling the product. (Crozier (Sheetz) Tr. 1497-98).

1515. Paul Crozier testified that even after Altria discontinued Elite, Sheetz planned to continue to sell Altria's cigalike products, and "had no plans of cutting [those] product[s]." (Crozier (Sheetz) Tr. 1500).

1516. JLI's Joseph O'Hara developed a "competitive analysis framework" to evaluate the long-term viability of e-cigarette products. (PX2289 (JLI) at 001 (O'Hara email dated May 2018) (stating that the competitive analysis framework "is essentially the process I use to determine the long-term viability of a brand/product"); O'Hara (JLI) Tr. 527).

1517. Joseph O'Hara described JLI's "competitive analysis framework" as a funnel with four gates. (O'Hara (JLI) Tr. 537). Those gates are "on market pre-deeming," "demonstrated traction," "current product viability," and "innovation sustainability." (PX2289 (JLI) at 021 ("US Landscape: Competitive Analysis Framework")). JLI considered a product to have "long-term viability" if it bypassed all four of these gates. (PX2289 (JLI) at 021).

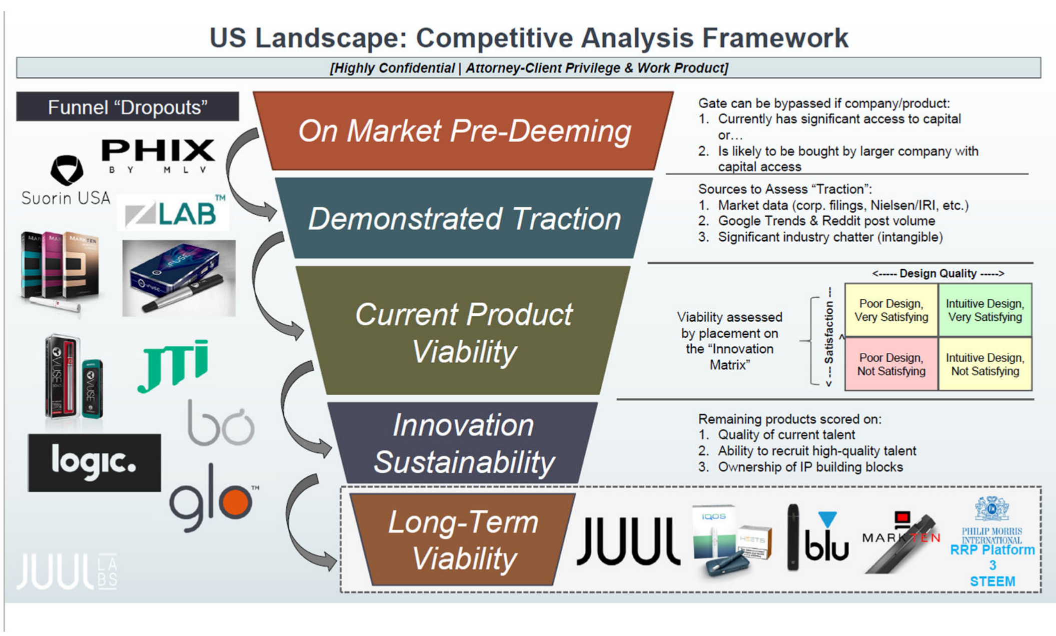
1518. Under JLI's "competitive analysis framework," the "on-market pre-deeming" gate can be bypassed if the company has sufficient access to capital or is likely to be bought by a larger company. (PX2289 (JLI) at 021; O'Hara (JLI) Tr. 537-38).

1519. Under JLI's "competitive analysis framework," to determine whether a product has "demonstrated traction," JLI evaluates market data, Google trends and Reddit post volume, and "significant" industry chatter. (PX2289 (JLI) at 021; O'Hara (JLI) Tr. 538-41).

1520. Under JLI's "competitive analysis framework," a product's current "viability" is assessed "by placement on the 'Innovation Matrix,'' which takes into account both design quality and nicotine satisfaction. (PX2289 (JLI) at 021; O'Hara (JLI) Tr. 541-42).

1521. Under JLI's "competitive analysis framework," a product's "innovation sustainability" is assessed by scoring the quality of current talent, the ability to recruit high-quality talent, and ownership of intellectual property building blocks. (PX2289 (JLI) at 021; O'Hara (JLI) Tr. 543-46).

1522. Applying its "competitive analysis framework," JLI concluded in May 2018 that MarkTen Elite was one of only four products besides JUUL with "long-term viability." (PX2289 (JLI) at 021; O'Hara (JLI) Tr. 530-31).



(PX2289 (JLI) at 021).

1523. An Altria presentation from July 2018 identified Elite (low and high nicotine) and other Altria e-cigarette products as having "Long-Term Conversion Potential." (PX4563 (Altria) at 022 (Nu Mark "Product Innovation" slides); *see also* CCFF ¶¶ 1310-22, above).

1524. Given that e-cigarettes are differentiated products, the elimination of Altria's e-cigarette products necessarily results in consumer harm. (PX7048 (Rothman, Trial Dep. at 125) ("In a market with differentiated products, the removal of a product from the market will be harmful. It will reduce consumer choice, and it will eliminate competitive constraint on the other products that remain in the market.")).

1525. Dr. Rothman uses an ALM to estimate the loss of consumer surplus from Altria's exit. (PX5000 at 082 (¶ 143) (Rothman Expert Report)). Assuming Altria would have maintained a 10 percent share, the loss of consumer surplus from Altria's exit is approximately $33.6 million per year. (PX5000 at 082 (¶ 144) (Rothman Expert Report)). For the sake of completeness, Dr. Rothman also estimated the loss of consumer surplus from the partial acquisition alone, absent the non-compete, and concluded that even in that situation, both Altria and JLI's incentives would be changed and the companies would compete less vigorously by, among other things, increasing their prices. (PX5000 at 082 (¶ 143 n.358) (Rothman Expert Report)).

1526. When Dr. Murphy estimates harm in a hypothetical pod-only product market, he ignores the harm from Altria's withdrawal of its cigalike products. (*See* PX5001 at 030 (¶ 48), 047-48 (¶ 87) (Rothman Rebuttal Report); PX7048 (Rothman, Trial Dep. at 23)). Dr. Rothman estimates that the harm associated with Altria's withdrawal of its cigalike products is about $25.5 million. (PX5001 at 030 (¶ 48), 047-48 (¶ 87) (Rothman Rebuttal Report); PX7048 (Rothman, Trial Dep. at 23)).

B. The Transaction Foreclosed Future Competition between Respondents

1527. Based on a review of the documents, testimony, and data, Dr. Rothman concluded that the transaction harmed future competition in e-cigarettes. Altria was actively working to improve its existing e-cigarette products, including introducing the MarkTen Elite gasket fix in 2018 to prevent leaking, and was working on incorporating nicotine salts and other improvements in Elite 2.0. Altria was also collaborating with PMI to introduce VEEV in the U.S., and started selling an earlier version of VEEV called APEX in September 2018. Overall, Altria was pushing a number of competitive initiatives, and it had strong incentives and significant ability to continue doing so. (PX5000 at 053-57 (¶¶ 103-07) (Rothman Expert Report); (PX7048 (Rothman, Trial Dep. at 33-34)).

1528. According to Dr. Rothman, to compete in closed-system e-cigarettes, Altria needed to develop or acquire new products; regulatory approval; distribution; shelf space; manufacturing; and marketing. (PX5000 at 053-57 (¶¶ 103-07) (Rothman Expert Report)). Altria had the ability and was well-situated to compete in all of those respects. Altria had the incentive to invest in closed-system e-cigarettes since sales were growing rapidly and the traditional cigarette market was shrinking. (PX7048 (Rothman, Trial Dep. at 31-32)). Altria has significant experience, distribution, infrastructure, a large sales team, valuable shelf space in retail stores, and prior to exiting, it had multiple products in the market and product development initiatives in the pipeline. (PX5000 at 053-54 (¶¶ 103-05 (Rothman Expert Report); PX7048 (Rothman, Trial Dep. at 31-32)).

1529. Although it is impossible to know precisely which future products Altria would have developed or commercialized in the but-for world absent the transaction, economists commonly evaluate such counterfactuals by focusing on incentives and ability. (PX7048 (Rothman, Trial Dep. at 36)). Altria was pushing a number of competitive initiatives in closed-system e-cigarettes, and it had strong incentives and significant ability to continue doing so absent the transaction with JLI. (PX5000 at 054-57 (¶¶ 106-07) (Rothman Expert Report); PX7048 (Rothman, Trial Dep. at 35-36)).

1530. Dr. Murphy is incorrect that, because the e-cigarette market continued to evolve after Altria's exit, that Altria's exit did not harm competition. As Dr. Rothman noted, the e-cigarette market is a dynamic market. Competition plays out over time, and competitive outcomes in 2019-2020 reflect competitive initiatives from prior to 2019 when Altria was still competing, and when competitors made long-term investments to compete in part with Altria. (PX5001 at 014-15 (¶¶ 20-21) (Rothman Rebuttal Report); PX7048 (Rothman, Trial Dep. at 40)).

1531. In remarks its 2017 Investor Day presentation, Altria admitted that: "[W]e recognize that innovation can be achieved in multiple ways - through organic product development, through strategic partnerships and acquisitions . . . . We have an existing portfolio of products in multiple formats to meet the expectations of a range of adult smokers and vapers. And we have a promising pipeline of future e-vapor products in development." (PX9000 (Altria) at 019 (Nov. 2017 Investor Day remarks); PX1129 (Altria) at 027 (Altria Investor Day presentation, Nov. 2017)).

1. Altria Planned to Continue Discounting Its E-Cigarette Products

1532. The transaction directly eliminated discounts that Altria would have implemented but for the transaction. (*See* PX1617 (Altria) at 006, 011 ("Demand Review Meeting, October 3, 2018")). This reduced competition not just with respect to JLI but with all e-cigarette competitors, who reacted to Altria's price promotions and exit. (PX5000 at 078 (¶ 136), (Rothman Expert Report); [redacted]

1533. Prior to the transaction, for MarkTen Elite, Altria had budgeted for an $8.99 battery and pod pack promotion at retailers that would first begin distributing Elite in October and November 2018, as well as $2 off any pod pack for customers at Speedway in November and December 2018. (PX1617 (Altria) at 006 (Altria October 2018 "Demand Review Meeting" presentation)). For MarkTen Elite, Altria had also budgeted for website promotions for Black Friday through Christmas Eve in 2018, as well as direct mail offers for November 2018. (PX1617 (Altria) at 011).

(PX1617 (Altria) at 011).

1534. The transaction also eliminated longer term competition and discounting by Altria. In a presentation from August 2018, Altria had planned to continue significant promotions on MarkTen Elite in 2019 and 2020, with a 6% reduction in spending from 2018 and 5% reduction in spending from 2019, but the transaction precluded those promotional opportunities. (PX1143 (Altria) at 028 (October 2018 Elite Business Case Presentation)).

1535. . When JLI's Joseph O'Hara was summarizing the competitive performance of MarkTen Elite on April 30, 2018, he wrote, "At risk of stating the obvious, we should continue to expect our competitors with large balance sheets, high-margin legacy businesses, and large/existing distribution networks to continue discounting their product even further." (PX2450 (JLI) at 002)).

1536. JLI's Joseph O'Hara testified that he expected Altria to continue discounting their e-cigarette products absent the transaction because Altria along with Reynolds "were able to compete on price and offer a lower price to consumers as they continue to do so." (PX7033 (O'Hara (JLI), Dep. at 134-35)).

1537. [redacted] (PX3005 (ITG) at 007 (*in camera*); *see also* PX7012 (Eldridge (ITG), Dep. at 207-08)).

2. Altria Ceased Efforts to Improve Its Existing Products

1538. Prior to the transaction, Altria had been working to improve its existing e-cigarette products, such as with its successful fix for leaking pods in MarkTen Elite. (*See* CCFF ¶¶ 1206-36, 1281-94, above). The transaction put a stop to those efforts. (PX7026 (Gardner (Altria), Dep. at 175-76)).

1539. Prior to the transaction, Altria had 40-50 people focused on e-cigarette product development. (PX7018 (Schwartz (Altria), Dep. at 25)).

1540. In June 2018, Altria's Richard Jupe told K.C. Crosthwaite that he would continue to invest in MarkTen Elite as a "contingency plan for project tree," while suggesting that MarkTen Elite could be scrapped if Altria were to successfully acquire JLI (PX1086 (Altria) at 001). Richard Jupe assumed that Elite's "Improved flavor/aerosol systems provide an enhanced experience over Juul" and that "Elite will ascertain a reasonable market share and presence." (PX1086 (Altria) at 001).

1541. Dr. Gogova testified that Altria's growth teams had the freedom to incorporate earlier Nu Mark e-vapor products into their work if they so chose. (PX7015 (Gogova (Altria), Dep. at 265-66)).

1542. Altria was working on adding nicotine salts to its existing e-cigarette products. (PX4541 (Altria) at 008 ("Objective: Rapidly screen potential e-vapor liquids (w/ salts) for the potential to enhance the Nu Mark portfolio of e-vapor products")). Michelle Baculis discussed some of the ongoing nicotine salt research that Altria was conducting in a June 2018 email. (PX4507 (Altria) at 001-03).

1543. According to an August 2018 Altria "MT Elite Summary of Projects" presentation concerning projects relating to MarkTen Elite, Nu Mark proposed to launch a qualitative assessment of the performance of a MarkTen Elite Bold product with nicotine salts at 4% NBW and 3% Acid formulations by November 2018. (PX1671 (Altria) at 008).

1544. As of September 10, 2018, Altria was continuing to invest in research & development to find the right mix of salts, flavors, and nicotine strength to satisfy consumers. (PX7015 (Gogova (Altria), Dep. at 323)).

1545. Dr. Maria Gogova explained that Altria developed three nicotine salt formulations for its e-cigarette products containing different acids, which Altria referred to as RK2 technologies. (PX7015 (Gogova (Altria), Dep. at 152-56); PX4006 (Altria)). October 2018 emails between Maria Gogova, Bill Gardner, and others indicate that Altria undertook a series of R&D efforts regarding nicotine salts, and that Altria's nicotine salt research continued into late 2018. (PX4006 (Altria); PX4519 (Altria) at 001-02). The R&D efforts included comparing Altria's nicotine salt formulas specifically with JLI's products. (PX4006 (Altria)).

1546. Altria was testing a version of MarkTen Elite with nicotine salts in trials with consumers as of October 2018. (PX7015 (Gogova (Altria), Dep. at 159-62); PX4006 (Altria)). The study noted that Nu Mark "currently markets MarkTen® Elite, an e-vapor product, in market. New prototypes with different nicotine salt levels and mixes for two nicotine levels . . . have been developed for the portfolio of this brand." (PX4512 (Altria) at 001, 003; *see also* PX4513 (Altria) at 001, 003).

1547. Altria was working to improve its existing nicotine salt e-cigarette products sold under the brand name MarkTen Bold. (PX4509 (Altria) at 011-12, 017 (SPR Update Presentation, July 25, 2018)).

1548. In October 2018, Altria was continuing to conduct research into nicotine salts. (PX1711 (Altria) at 005-06). Altria also continued research on e-cigarette flavors, where Altria had a large toolbox of flavors to integrate into products. (PX1711 (Altria) at 007-08).

1549. On October 5, the same day that Altria's CEO Howard Willard sent JLI a letter restarting talks, Altria's executive team (Murray Garnick and K.C. Crosthwaite) ordered Brian Quigley to halt all research on nicotine salts for Nu Mark's products. (PX4494 (Altria) at 001). On the same day, Murray Garnick pushed against research into high nicotine and nicotine salt formulations of MarkTen Elite scheduled for October 2018 by the growth teams in a series of emails to Joe Murillo, Maria Gogova, and Richard Jupe. (PX1952 (Altria) at 001-02; PX1954 (Altria) at 001-03).

1550. Prior to the transaction with JLI, Altria was pursuing a potential transaction with a foreign supplier that had pod-based nicotine salt e-cigarettes that were sold prior to the August 8, 2016 FDA deeming rule. (PX1942 (Altria) (July 2018 email string regarding the acquisition of the pod-based product "Purilum")).

1551. As of December 10, 2018, Altria was discussing testing versions of MarkTen Elite and its cigalike products with higher nicotine strengths and nicotine salts as part of its planned growth team work, even though Elite had already been pulled from sale. (PX7015 (Gogova (Altria), Dep. at 168-73); PX4006 (Altria) PX4006 (Altria)). October 2018 emails between Maria Gogova, Bill Gardner, and others indicate that Altria undertook a series of R&D efforts regarding nicotine salts, and that Altria's nicotine salt research continued into late 2018); PX1975 (Altria) at 001(December 2018 email string discussing nicotine content consumer research)).

1552. Prior to the transaction, Altria was working on other improvements to existing products, such as packaging optimization for MarkTen Elite by removing the pod cap and switching to an improved foil bag. (PX1671 (Altria) at 005 (MarkTen® Elite Presentation, August 2018)).

3. Altria Ceased Developing Next Generation E-Cigarette Products As Part of Its Agreement with JLI

1553. Innovation competition includes efforts to develop better products to respond to rivals developing and introducing better products. Based on a review of the documents and testimony, Dr. Rothman concluded that Altria's transaction with JLI reduces innovation competition. Altria had strong incentives and significant capabilities to develop and introduce better products. Altria was in fact investing aggressively to develop and bring new products to the market, and Altria's exit deprives the market of those efforts. (PX5000 at 053-57 (¶¶ 103-07) (Rothman Expert Report); PX7048 (Rothman, Trial Dep. at 35)).

1554. According to Dr. Rothman, it is not necessary to know exactly which products Altria would have had on the market, or precisely when they would have been released, to evaluate if Altria would have been a significant competitor. The proper way to evaluate whether Altria would have been a significant competitor is to evaluate Altria's incentives and ability to compete, innovate, and commercialize new and improved e-cigarette products. (PX5000 at 043 (¶ 91), 044 (¶ 93), 053-57 (¶¶ 103-07) (Rothman Expert Report); PX7048 (Rothman, Trial Dep. at 38)).

1555. Altria was working to develop and commercialize new products, including Elite 2.0 with nicotine salts, and PMI's VEEV product with MESH technology. More generally, Altria was continuing to invest in innovation and planned to compete in e-cigarettes for the long-run. (PX5000 at 049 (¶ 98), 054-57 (¶¶ 106-07), 60-62 (¶ 112) (Rothman Expert Report); PX7048 (Rothman, Trial Dep. at 48)).

1556. Jupe testified that "learnings from consumer studies provided continuous feedback to [his] team's efforts to conduct product development with e-cigarettes." (Jupe (Altria) Tr. 2150).

1557. Altria's product development team used feedback from consumer research to inform the next round of product development efforts. (Jupe (Altria) Tr. 2150-51).

1558. Jupe testified that this process of "figur[ing] out what consumers wanted" was an "Edisonian approach" of "trial and error" and that approach "is how we get a light bulb." (Jupe (Altria) Tr. 2151-2152).

1559. Describing the nature of innovation, Jupe testified that "any textbook would teach us that . . . [i]f you're pushing and pushing hard, you are going to fail the lion's share of the times. (Jupe (Altria) Tr. 2182-83); *see also* PX7016 (Jupe (Altria), Dep at 215) ("Well, look, it's been my experience, and I think anybody that has been sitting in my type of seat over the years, that innovation, you are more ripe to fail than you are to succeed. For every nine things that fail, hopefully, you get one success.")).

1560. Because some R&D projects are going to fail, innovation is about placing multiple bets. (Jupe (Altria) Tr. 2183; PX7016 (Jupe (Altria), Dep. at 215) ("And, you know, the stories, Thomas Edison failed many more times than he succeeded. So innovation is like that. You've got to have a lot of different bets.")).

1561. "Preceding e-vapor, [Altria] had bets that [it] placed on different products, on different processes," and that "[m]ore failed than worked." (PX7016 (Jupe (Altria), Dep. at 216)).

1562. When projects involving tobacco products other than e-cigarettes failed, Altria "restructured" and "reset" rather than shutting down its product development group. (Jupe (Altria) Tr. 2183-84).

1563. Failed research and development efforts inform future product research. (Jupe (Altria) Tr. 2184); PX7016 (Jupe (Altria), Dep. at 63-64)).

1564. Altria was actively developing new innovations and leapfrog technologies that would have surpassed the existing products on the market. In June 2018, Altria's Richard Jupe wrote that if Altria's acquisition of JLI were not successful, that he had "a plan for Elite 2.0 (design for PMTA)," and was "currently scoping - what comes after that in Elite 3.0 (leapfrog)." (PX1086 (Altria) at 001).

1565. Richard Jupe described Elite as Altria's platform going forward for small pod devices, which would consume and incorporate all of Altria's other internal R&D projects and innovations, like Project Panama. (PX1086 (Altria) at 001). Altria incorporated "relevant learnings" from Project Panama into plans for an "optimized version of MarkTen Elite." (PX4241 (Altria) at 010 (Email from Elizabeth Mountjoy, August 8, 2018)).

1566. Prior to the transaction, Altria had already begun developing Elite 2.0 and planning for Elite 3.0. (PX1671 (Altria) at 006-07 (MarkTen® Elite Presentation, August 2018)). As of August 2018, Altria set a deadline for a design freeze on Elite 2.0 by December 2018, with a number of improvements over Elite 1.0, including reduction in harmful chemicals, LED battery indicator, temperature limits, voltage/current protection, new flavor systems, and new designs. (PX1671 (Altria) at 006). Altria had also targeted a design freeze of September 2019 for Elite 3.0, with additional flavor systems, improved industrial design, a new heater/wick design, and more efficient assembly. (PX1671 (Altria) at 007).

1567. An Elite Business Case Elements presentation noted that Elite 2.0 would have "higher aerosol mass + flavor + immediate nicotine satisfaction + pod-based/discreet product," and that there was "[n]o product that is all of these things today." (PX4370 (Altria) at 008).

1568. Altria had been researching flavor formulations for Elite 2.0 with nicotine salts. In an email to Richard Jupe from August 2018, an Altria employee noted that "With the current schedule for Elite 2.0, we plan to have all formulations, at all desired nicotine levels complete by Design Freeze in December 2018." (PX4537 (Altria) at 001-02 (August 2018 email string with Richard Jupe and others discussing Elite 2.0 formulation development)).

1569. Michelle Baculis, the former Director of Strategy and Brand Development at Nu Mark, testified that Altria had been working on Project Panama, whose purpose "was to leapfrog everything that was already in the marketplace." (PX7014 (Baculis (Altria), Dep. at 100). Nu Mark's goal with Project Panama was to achieve a product that delivered on the vast majority of consumer desires in the e-cigarette category and fulfill consumers' unmet needs in a way that none of the products currently in the marketplace were doing. (PX7014 (Baculis (Altria), Dep. at 100)).

1570. Altria was conducting sensory technology R&D to explore various generations of nicotine salt formulas for e-cigarettes. (PX7016 (Jupe (Altria), Dep. at 218-20)). Altria was researching flavor sensates that could take some of the sting out of nicotine, reducing the chance that consumers would reject the e-cigarette product. (PX7016 (Jupe (Altria), Dep. at 221-22); PX1673 at 005-08 (Altria) (New Product Development and Commercialization Readiness of Acquired Products presentation for Nu Mark's August 2018 Game Plan meeting)).

1571. In 2018, Altria was also working on flavor development incorporating "sensomics," which combines "sensory science and artisan flavor creation." (PX1704 (Altria) at 007 (Richard Jupe's June 2018 R&D Innovation Progress draft presentation); Quigley (Altria) Tr. 2005 ("Sensomics was kind of the study of kind of the senses and interaction with our products.")). According to Altria, its sensory innovations would have resulted in

"Enhanced aerosol creation, characterization, stability and deposition to provide a similar level of satisfaction." (PX1704 (Altria) at 007).

1572. Altria was researching ways to incorporate Bluetooth technology into e-cigarettes that would enable the devices to work with consumers' cell phones to provide information about their e-cigarettes' battery life and e-liquid level. (Jupe (Altria) Tr. 2161-62).

1573. Bluetooth technology could also potentially allow users to lock their e-cigarettes in order to ensure that only they could use it, which could prevent children from picking up their parents' devices and using them. (PX7016 (Jupe (Altria), Dep. at 48-49)).

1574. Altria was also researching "Smart-Pod" technology that could enable an e-cigarette's pods to adapt to a consumer's puffing preferences and ensure that the device would not work with knock-off pods. (Jupe (Altria) Tr. 2163-64).

1575. [redacted]} (PX1715 (Altria) at 001 [redacted] (*in camera*); (PX7016 (Jupe (Altria), Dep. at 146-47)).

1576. A July 2018 presentation entitled "Level Setting Scenarios" sent by Elizabeth Mountjoy to Brian Quigley indicated that Altria's strategic options for becoming reduced risk product leader included internal development, acquisitions, and third-party development, but obviously did not include abandoning the category. Altria planned to have a leapfrog product in 3-5 years, either through internal efforts or acquisition/third party approach. (PX1319 (Altria) at 006).

1577. In October 2018, Altria formed two independent growth teams to develop next generation e-cigarette products. (Quigley (Altria) Tr. 1979-80; PX4010 (Altria) at 010 (Howard Willard's October 2018 Growth Strategy Update). The growth teams were comprised of Altria's top performers across different disciplines, such as science, regulatory affairs, finance, and marketing. (PX7010 (Gifford (Altria), IHT at 189-90)).

1578. The growth teams were formed to augment Altria's product development capabilities by mimicking the faster design cycles of software firms. (PX7016 (Jupe (Altria), Dep. at 203-05)). The growth teams could have also continued R&D efforts on any of Altria's existing or discontinued products if the growth teams thought that those efforts would be worthwhile. (PX7016 (Jupe (Altria), Dep. at 213-14)).

1579. Altria's CEO, Billy Gifford, told the growth teams that budget would not be a constraint, and that they could retain any third parties or hire any new talent that they needed to develop new e-cigarette products. (PX7010 (Gifford (Altria), IHT at 192-93) ("I met with each of the growth teams and told them do not let the budget be a constraint on any of your efforts.")).

1580. Altria's Murray Garnick testified that Altria was prepared to invest $100 million in the growth teams if the teams could justify the budget. (PX7000 (Garnick (Altria), IHT at 130)).

1581. An internal Altria email and presentation assumed that Altria's growth teams would have a new product ready by 2020, and acknowledged the possibility that a new platform or acquired products could be in place in 2019. (PX7015 (Gogova (Altria), Dep. at 263-65); PX1989 (Altria) at 001 (December 2018 email between several Altria employees with 3 Year Estimated Spend document attached)).

1582. Altria was continuing to work on research and development of next generation technologies and e-cigarette products through the end of 2018, and recommended that nicotine salts be incorporated into all of Altria's e-cigarette products, regardless of nicotine strength. (PX1711 (Altria) at 003-08 (October 2018 "Tox Forum" presentation)). For example, Richard Jupe testified that, towards the end of 2018, Altria had brought on a number of superior technology partners for its e-cigarette business. (PX7016 (Jupe (Altria), Dep. at 190-91)). Altria's technology partnerships gave it access to R&D capabilities that it did not possess in-house. (PX7016 (Jupe (Altria) at 44-45, 50-53)).

1583. A November 18, 2018 email from Altria's Elizabeth Mountjoy to K.C. Crosthwaite indicated that Altria would have continued to drive e-cigarette innovation internally pending the outcome of JLI (Tree) negotiations: "The over-arching voiceover I would give is that the deck assumes we are going . . . to continue to drive innovation engine internally. . . . Anyhow, until we get more clarity on Tree, we will continue to push ahead with this work- unless you advise otherwise." (PX4242 (Altria) at 001).

1584. Altria's CEO and former CFO, Billy Gifford, testified that Altria's plan as of December 6, 2018 was to free up money and spend it either on the e-cigarette growth teams or on financing a JUUL deal. (PX7010 (Gifford (Altria), IHT at 188-89)).

1585. Altria's Billy Gifford testified that [redacted] } (PX7010 (Gifford (Altria), IHT at 216) [redacted] (*in camera*)).

1586. All of Altria's efforts to develop and compete in e-cigarettes ceased after Altria entered into the transaction and non-compete agreement with JLI, and work on the growth teams ceased. (PX7026 (Gardner (Altria), Dep. at 175-76)).

1587. Based on Altria's documents and testimony, Dr. Rothman concluded that absent the transaction, Altria would have continued to invest in e-cigarette innovation and planned to compete in e-cigarettes for the long-run. Altria understood that the e-cigarette market was dynamic, and Altria's significant resources and ability to make large upfront investments was a competitive advantage for Altria. (PX5000 at 053-57 (¶¶ 103-07); (Rothman Expert Report); PX7048 (Rothman, Trial Dep. at 48-49)).

C. The Transaction Foreclosed Collaboration between Altria and PMI, Including the Opportunity to Participate in the Launch of a Promising Nicotine Salt Pod Device, VEEV

1. Altria and PMI Collaborated on E-Cigarettes Through a Joint Research, Development, and Technology Sharing Agreement

1588. Altria and PMI entered into an E-Vapor Joint Research, Development, and Technology Sharing Agreement ("JRDTA") {[redacted]} (RX0873 (Altria) at 001 (JRDTA) (*in camera*); King (PMI) Tr. 2407 (*in camera*)).

1589. [redacted]} (RX0873 (Altria) at 027 (*in camera*)).

1590. Martin King, CEO of PMI America, testified that PMI and Altria entered into the JRDTA to pool e-cigarette resources, technology, and intellectual property for Altria to use in the U.S. and for PMI to use outside of the U.S. (King (PMI) Tr. 2359).

1591. Altria and PMI used the term "Project Vulcan" to refer to their strategic partnership, which included the JRDTA in e-vapor. (Begley (Altria) Tr. 983-84; King (PMI) Tr. 2360; PX7020 (King (PMI), Dep. at 32)).

a) <u>Information Sharing</u>

1592. [redacted]} (RX0873 (Altria) at 007-08 (*in camera*)).

1593. [redacted] (RX0873 (Altria) at 007 (*in camera*)).

b) <u>Development Activities</u>

1594. {[redacted]} (RX0873 (Altria) at 008 ([redacted]) (*in camera*)).

1595. [redacted] (RX0873 (Altria) at 008-10 (*in camera*)).

c) <u>Regulatory Responsibilities</u>

1596. [redacted]

[redacted]} (RX0873 (Altria) at 012-16 (*in camera*); King (PMI) Tr. 2409 (*in camera*)).

1597. [redacted] (RX0873 (Altria) at 012-16 (*in camera*)).

d) Intellectual Property Ownership

1598. [redacted]} (RX0873 (Altria) at 016-18 (*in camera*); King (PMI) Tr. 2394-95, 2409-10 (*in camera*); PX7020 (King (PMI), Dep. at 34 (*in camera*)).

1599. [redacted]} (RX0873 (Altria) at 016-18 (*in camera*); King (PMI) Tr. 2394-95, 2409-10 (*in camera*)); PX7020 (King (PMI), Dep. at 34) (*in camera*)).

e) Commercialization

1600. [redacted]} (RX0873 (Altria) at 019-20 (*in camera*)).

1601. [redacted]} (RX0873 (Altria) at 018-19 (*in camera*)).

f) Manufacturing

1602. [redacted] (RX0873 (Altria) at 018-20 (*in camera*)).

2. The Joint Research, Development, and Technology Sharing Agreement Between Altria and PMI Fostered Valuable Collaboration in the Closed-System E-Cigarette Market

1603. In its 2016 three-year strategic plan, Nu Mark wrote that it was "leveraging [the] PMI agreement to accelerate product development." (PX4040 (Altria) at 040). The plan also noted that Altria and PMI resources were "collaboratively focused" on cigalike platform enhancements, pod-based systems development, e-liquid portfolio expansion, and other initiatives. (PX4040 (Altria) at 040).

1604. Altria evaluated the strengths and opportunities of various reduced harm product competitors in March 2017. (PX1633 (Altria) at 005-06 (presentation entitled "Reduced Harm Products, Scorecard Summary")). Based on an assessment of R&D investment, portfolio strength, capabilities, and attractive economics, Altria ranked PMI as the number one reduced harm product supplier at the time. (PX1633 (Altria) at 006).

1605. Altria evaluated its own reduced harm product capabilities in March 2017. (PX1633 (Altria) at 005-06). In doing so, Altria noted that its partnership with PMI provided it access to IQOS—PMI's heat-not-burn product—and other innovative product platforms. (PX1633 (Altria) at 006); *see also* Begley (Altria) Tr. 1051).

1606. In an e-vapor category review dated March 2017, Altria evaluated the portfolios of all the major tobacco manufacturers. (PX1733 (Altria) at 043-52). In its analysis, Altria combined its own portfolio with that of PMI, citing the JRDTA. (PX1733 (Altria) at 052).

1607. Altria met regularly with PMI as part of their e-cigarette collaboration. (*See* CCFF ¶¶ 1608-19, below; *see also* RX0873 (Altria) at 007 (*in camera*)).

1608. [redacted] (PX7016 (Jupe (Altria), Dep. at 297-98) (*in camera*)).

1609. [redacted]}

1610. In August 2017, Altria and PMI representatives met in Richmond, VA. (PX1963 (Altria) at 002 (meeting minutes from PMI's visit to ALCS)). The parties provided updates on e-cigarette development efforts, including PMI's next-gen e-vapor product, called MESH 2.0; PMTA timing; and Altria's e-vapor developmental products that were "aiming at competing with JUUL." (PX1963 (Altria) at 004-05).

1611. In the fall of 2017, Altria and PMI shared intelligence about JUUL and discussed how to best compete against JLI. (PX1916 (Altria) at 001 (email from PMI to Altria's Richard Jupe providing information on JUUL products sold in China); PX1916 (Altria) at 001 (email from Jupe to PMI) ("We will be ready to discuss what we know about Juul when we visit at the end of November, and our plans to compete against it in the USA.")).

1612. In December 2017, PMI provided Altria with a 42-page presentation discussing a "reverse engineering" teardown that PMI performed on JUUL devices and pods. (PX1971 (Altria) at 003-044); *see also* PX7016 (Jupe (Altria), Dep. at 289-90) (testifying that PMI and Altria would share product breakdowns)). Altria's Richard Jupe shared the presentation internally with Howard Willard. (PX1971 (Altria) at 001).

1613. [redacted]

1614. [redacted]

[redacted]}

1615. [redacted]} (PX4528 (Altria) at 050 (*in camera*)).

1616. [redacted] (PX1715 (Altria) at 002 (*in camera*)).

1617. Altria and PMI worked on developing new e-liquids, including through the study of "sensomics." (PX1963 (Altria) at 003, 005 (meeting minutes from PMI's visit to ALCS in August 2017); *see also* Quigley (Altria) Tr. 2005 ("Sensomics was kind of the study of kind of the senses and interaction with our products.")).

1618. [redacted] PX7016 (Jupe (Altria), Dep. at 301-02) (*in camera*)).

1619. [redacted] (PX7016 (Jupe (Altria), Dep. at 303-04) (*in camera*)).

3. APEX

a) <u>Altria Had the U.S. Rights to APEX</u>

1620. APEX was an early generation closed-system pod e-cigarette product developed by PMI. (Begley (Altria) Tr. 983; Willard (Altria) Tr. 1240; *see also* PX2022 (Altria) at 002 (letter to FDA Commissioner Gottlieb)).

1621. APEX consisted "of a closed tank of e-liquid that [was] heated through a mesh-like metal plate, rather than the traditional wick and coil method." (PX9000 (Altria) at 018 (Nov. 2017 Investor Day remarks)).

1622. The JRDTA granted Altria the right to commercialize PMI's APEX product in the U.S. (PX9000 (Altria) at 018 (Nov. 2017 Investor Day remarks) ("Through our joint development agreement with PMI, Nu Mark has exclusive rights to commercialize [PMI's] "MESH" technology, which we put in the U.S. market before the FDA's August 8, 2016 deeming deadline."); PX4014 (Altria) at 044 (November 2017 Investor Day Presentation) (slide entitled "APEX by MarkTen"); PX7026 (Gardner (Altria), Dep. at 219); *see also* RX0873 (Altria) at 019-20 (JRDTA) (*in camera*)).

b) Altria Sold Apex in E-Commerce

1623. Altria sold APEX in the U.S. without first needing to obtain a PMTA because the APEX product had been introduced prior to the FDA's August 2016 deeming deadline. (PX9000 (Altria) at 018 (Nov. 2017 Investor Day remarks); PX7027 (Murillo (Altria/JLI), Dep. at 188-89)).

1624. Around August 2018, Altria began selling APEX in the U.S. through e-commerce (Murillo (Altria/JLI) Tr. 3053; Begley (Altria) Tr. 984; PX4012 (Altria) at 038 ("Nu Mark 2018 Three Year Strategic Plan")).

1625. [redacted] (PX4528 (Altria) at 049 (*in camera*)).

c) Apex Was a Promising Product

1626. In November 2017 Investor Day remarks, Altria's Jody Begley stated that: "We've received positive results from our initial consumer research, and as a result, we plan to further test [PMI's MESH technology] – called APEX in the U.S. – as a line extension under the MarkTen brand." (PX9000 (Altria) at 018).

1627. In August 2018, Altria's Craig Schwartz wrote that BP "expressed interest in APEX" and that Altria had "the opportunity to introduce APEX in BP on the West Coast … unique to Nu Mark." (PX1650 (Altria) at 001-02).

1628. In a consumer study conducted by Altria on APEX, the results showed that "Apex was well received by AS&V [adult smokers and vapers] due to its ease of inhale/exhale experience and good tasting flavors." (PX4012 (Altria) at 036 ("Nu Mark 2018 Three Year Strategic Plan")). The study identified other benefits to APEX, including "form that cued performance" and long battery life. (PX4012 (Altria) at 036).

1629. In July 2018, a Nu Mark analysis of APEX noted that APEX had a "Potentially favorable device design from [an] FDA perspective", "strong IP", and an "Effortless inhale/exhale experience." (PX1144 (Altria) at 013).

1630. In comments on a draft of the August 2018 e-vapor update to Altria's Board, Jose Murillo told Murray Garnick that he expected APEX would do well in terms of product integrity and risk reduction assessment, both of which are relevant to the FDA's PMTA analysis. (PX1600 (Altria) at 001 (email from Murillo to Garnick dated August 14, 2018) (commenting on slide 36 of the draft e-vapor update); PX7027 (Murillo (Altria/JLI), Dep. at 191)).

1631. Joe Murillo testified that Altria's regulatory team was of the opinion that APEX could meet the relevant manufacturing requirements for a PMTA submission. (PX7027 (Murillo

(Altria/JLI), Dep. at 18); *see also* PX1600 (Altria) at 001 (noting that APEX was designed by PMI "to meet strict CMC requirements")).

1632. In comments on a draft of the August 2018 e-vapor update to Altria's Board, Jose Murillo pushed back on the draft's poor characterization of APEX. (PX1600 (Altria) at 001 (email from Murillo to Garnick dated August 14, 2018) (commenting on slide 36 of the draft e-vapor update) ("This is voice over commentary, but on the page, it looks like we think [APEX is] a loser. That is not true-it should be good, but we don't know."); *see also* Murillo (Altria/JLI) Tr. 3056 (testifying that APEX "should be good . . . because it is designed by people who . . . know what they're doing")).

1633. PMI's Martin King testified that when PMI sold APEX in the U.K., PMI verified that the MESH aerosolization technology worked well and the engine worked successfully. (King (PMI) Tr. 2545-46). King also testified that PMI received good feedback from consumers on how APEX tasted and the way that APEX delivered a very consistent aerosol. (PMI) Tr. 2545-46).

1634. Martin King testified that PMI never considered exiting the sale of e-cigarettes because of the performance of APEX. (King (PMI) Tr. 2547). According to King, the sale of APEX "reassured us that we had something reliable and that we needed to continue with finishing the improvements and get it on the market as soon as possible." (King (PMI) Tr. 2547).

1635. A February 2019 presentation by PMI's CEO Andre Calantzopoulos at the CAGNY investor conference noted that PMI "Successfully Introduced IQOS MESH [APEX] in the U.K. on a Limited Scale," and that the PMI received "Positive adult consumer reception." (PX1635 (PMI) at 031). The presentation stated that consumers viewed APEX "as addressing the fundamental requirements of consistency, reliability and convenience," and "Appreciate our range of superior flavors which offer sensorial satisfaction." (PX1635 (PMI) at 031).

d) <u>PMI Was Working to Improve APEX</u>

1636. PMI learned from what worked well with APEX and took the feedback it received to make improvements in the form factor, e-liquids, and other aspects. (King (PMI) Tr. 2545-47; PX1635 (PMI) at 031 (February 2019 CAGNY Presentation) (stating that "Learnings instructed further product improvements")).

1637. While there were initially some leakage issues with APEX, adding a mouthpiece plug cut the leakage rates. (PX1557 (Altria) at 011 ("Domestic Shipping Study Results – MarkTen Elite and APEX"); PX1650 (Altria) at 002 (internal email from Altria's Craig Schwartz on APEX expansion opportunities dated August 2018)).

4. VEEV

1638. VEEV is a pod-based e-cigarette product sold by PMI. (King (PMI) Tr. 2343-44, 2346; *see also* PX9120 (VEEV stock photo)).

(PX9120 (VEEV stock photo)).

a) VEEV is a Later Version of APEX

1639. VEEV is a later version of APEX and PMI's MESH technology. (King (PMI) Tr. 2343-44, 2355, 2545-46) (explaining that VEEV is the brand name of PMI's product and that the proprietary technology that VEEV uses is called MESH)).

1640. PMI learned from the positive and negative feedback that it received on APEX and incorporated improvements into a new product using its MESH technology, which it branded as VEEV. (King (PMI) Tr. 2545-46).

1641. PMI improved the form factor in VEEV compared to APEX, "making it something that people could carry comfortably." (King (PMI) Tr. 2547). VEEV is smaller, fits the hand better, and has a more appealing shape. (King (PMI) Tr. 2547).

1642. PMI also made improvements to the e-liquids by adding nicotine salts to VEEV, and made other improvements compared to APEX such as the ability to have two power settings. (King (PMI) Tr. 2346, 2545-47).

1643. [redacted]}

b) Altria Had the U.S. Rights to VEEV and the MESH Technology

1644. [redacted]} (PX7020 (King (PMI), Dep. at 34 (*in camera*); RX0873 (Altria) at 019-20 (JRDTA) (*in camera*)).

1645. [redacted] (RX0873 (Altria) at 016-020 (JRDTA) (*in camera*)).

1646. PMI's Martin King testified that when PMI and Altria entered into the JRDTA, the intention was for Altria to commercialize PMI's e-cigarette products in the U.S., including VEEV. (King (PMI) Tr. 2357-59; *see also* King (PMI) Tr. 2365 ("[U]nder the JRDTA . . . [Altria] would have been able to launch VEEV on their own with the technology that was shared in that agreement. They owned the technology, the IP, during the term of the agreement. They owned that in the United States."); PX7020 (King (PMI), Dep. at 44-45) ("That was our plan, for VEEV Mesh to be commercialized in the U.S. via Altria.")).

c) PMI Currently Sells VEEV Abroad

1647. PMI started selling VEEV internationally in late 2020. (King (PMI) Tr. 2355).

1648. PMI currently sells VEEV in several countries, including the U.K., Finland, Italy, and New Zealand. (King (PMI) Tr. 2354-55).

1649. PMI does not currently sell VEEV in the U.S. (King (PMI) Tr. 2355).

1650. PMI's Martin King testified that PMI has committed to selling VEEV in twenty countries by the end of 2021. (King (PMI) Tr. 2354-55).

d) VEEV is An Objectively Good Product

(1) MESH Technology

1651. Traditional e-cigarettes use a wick and coil that heats an e-liquid to create an aerosol. (King (PMI) Tr. 2350). PMI invented and patented a unique MESH technology, used in its VEEV e-cigarette, that uses a fine-wire mesh screen that creates an aerosol using electricity. (King (PMI) Tr. 2350-51).

1652. The MESH technology has some advantages over the traditional wick and coil heater, including a more even aerosolization; more energy efficiency, which results in longer battery life; and a more palatable aerosol. (King (PMI) Tr. 2350-51).

1653. Altria's Richard Jupe testified that a benefit of the MESH heater was that it lent itself to more automation compared with manufacturing a wick and coil. (Jupe (Altria) Tr. 2173-74; PX7016 (Jupe (Altria), Dep. at 297)).

(2) Nicotine Salts

1654. PMI incorporated nicotine salts into VEEV's e-liquid pods. (King (PMI) Tr. 2346).

(3) Flavors

1655. VEEV's flavors are primarily tobacco and menthol, although VEEV also comes in additional flavors in countries where additional flavors are permitted to be sold. (King (PMI) Tr. 2346-47).

1656. PMI has conducted consumer testing and has real-life consumer data, which shows that consumers like PMI's flavors. (King (PMI) Tr. 2347-49).

1657. According to Martin King, PMI has tested VEEV in consumer panels, which have shown that "consumers find [the VEEV e-liquids] to be equal or superior to other e-cigarette products". (King (PMI) Tr. 2347-48).

(4) Satisfaction / Conversion

1658. VEEV has performed well in terms of nicotine satisfaction and conversion. (King (PMI) Tr. 2347-49).

1659. PMI conducted consumer testing, which showed that consumers are able to convert to VEEV from smoking, and that VEEV "performs well" in terms of nicotine satisfaction. (King (PMI) Tr. 2347-49).

(5) Overheating / Formaldehyde Prevention

1660. VEEV comes with dry puff prevention, which means that the device knows to shut down when the e-liquid is running out. (King (PMI) Tr. 2351).

1661. Dry puff prevention is important because previous generation e-cigarettes would not sense when the wick was running out, which meant that the wick could be cooked and release formaldehyde and other toxic chemicals. (King (PMI) Tr. 2351).

1662. VEEV's technology prevents dry puff from happening, which has an added benefit of allowing the device to be used at different tilt angles without having it run dry. (King (PMI) Tr. 2351-52).

1663. VEEV's MESH technology prevents the formation of formaldehyde in the aerosol. (PX1635 (PMI) at 030 (February 2019 CAGNY Presentation)). In addition, PMI's testing did not detect any toxic metals in VEEV's aerosol. (PX1635 (PMI) at 030).

1664. [redacted]}

(6) Form Factor and Materials / Finish

1665. VEEV comes in a metallic case that is shaped to fit in hand. (King (PMI) Tr. 2353; *see also* PX9120 (VEEV stock photo)). According to Martin King, VEEV also has a nice fit and finish. (King (PMI) Tr. 2353).

(7) Long Battery Life

1666. VEEV has a longer battery life than competing e-cigarettes because PMI invested in better battery technology and the MESH technology is more energy efficient. (King (PMI) Tr. 2352).

1667. VEEV's MESH technology is "Approximately 30% more efficient vs. coil and wick systems at the same power level or at the same size." (PX1635 (PMI) at 030 (February 2019 CAGNY Presentation)).

(8) Other Innovative Features

1668. VEEV has two different power settings, which gives the consumer the ability to select more or less of a plume when vaping. (King (PMI) Tr. 2352).

1669. VEEV comes with a battery indicator, which is a series of lights on the side of the device that indicate when the battery is running. (King (PMI) Tr. 2352-53). The battery indicator helps consumers easily know whether they need to recharge the device before going out. (King (PMI) Tr. 2353).

e) <u>PMI, Altria, and JLI Viewed VEEV as a Good Product</u>

1670. {[redacted]} (King (PMI) Tr. 2502 (*in camera*)). [redacted]} (King (PMI) Tr. 2504) (*in camera*)).

1671. Martin King testified that so far in the countries in which VEEV has been released, "the consumer feedback has been very good, and we've been encouraged by the results and, therefore, continue with the expansion as we had planned." (King (PMI) Tr. 2356). King also testified that international consumers so far have been "very happy with" VEEV. (PX7020 (King (PMI), Dep. at 78-79)).

1672. Martin King believes that VEEV is a "very competitive product, superior product" to other closed-system e-cigarettes sold in the U.S. (King (PMI) Tr. 2352). Compared to other e-cigarettes sold in the U.S., VEEV has a more efficient aerosolization engine, dry puff prevention, two different puff settings, and a nice form factor. (King (PMI) Tr. 2352-53).

1673. Martin King believes that VEEV "will compete well with JUUL." (King (PMI) Tr. 2354). According to King, VEEV is better shaped for the hand than JUUL, has a longer battery life, and provides nicotine satisfaction as effectively as any other e-cigarette product. (King (PMI) Tr. 2353-54).

1674. Martin King testified that there were "several aspects to the product superiority" of VEEV, including "the Mesh technology, which is more energy efficient, and therefore would allow for longer battery life"; "The flavors developed . . . were very good and consumers appreciated them"; "The form factor, the way it felt in the hand"; and "the way [VEEV has] performed overall." (PX7020 (King (PMI), Dep. at 108)).

1675. [redacted] (PX3106 (PMI) at 001) (*in camera*)).

1676. [redacted]

1677. [redacted]}

1678. [redacted]}; [redacted]

1679. {[redacted]}

1680. [redacted]

[redacted]}

1681. [redacted]

1682. {[redacted]

1683. JLI's Joseph O'Hara testified that PMI and JUUL competed in foreign markets, and that PMI's IQOS MESH, also known as VEEV, was a high-quality e-cigarette product. (O'Hara (JLI) Tr. 612-21; PX7033 (O'Hara (JLI), Dep. at 113) ("Yes, I thought [VEEV] was a high quality product. Yeah, it was a high quality product. It performed well in all of our performance characteristic analysis.")).

1684. Joseph O'Hara testified that from time to time in his competitive intelligence role that he worked with an third-party vendor called Cambridge Consultants. (O'Hara (JLI) Tr. 614). O'Hara further testified that Cambridge Consultants "did good work" and was "reliable." (O'Hara (JLI) Tr. 614).

1685. An analysis of JUUL competitor product performance prepared by Cambridge Consultants dated November 2018 stated that "The Iqos Mesh [VEEV] pods did not leak when subjected to three consecutive negative pressure events when full." (PX2449 (JLI) at 058 (draft report entitled "Competitive Device Testing")).

1686. Cambridge Consultants characterized PMI's e-cigarette as the "Rolls Royce" of e-vapor products. (O'Hara (JLI) Tr. 616).

f) <u>Altria Was Familiar With the Development of VEEV and the MESH Technology Prior to Entering Into the Transaction with JLI</u>

1687. Prior to Altria entering into the transaction with JLI in December 2018, PMI knew that, with VEEV, it had good technology and "a product which could succeed in the e-cigarette space in any market that had e-cigarettes." (King (PMI) Tr. 2363-64).

1688. PMI's Martin King testified that, prior to Altria's transaction with JLI in December 2018, PMI provided Altria with updates through the JRDTA regarding the development of VEEV and what PMI thought about the product. (King (PMI) Tr. 2364).

1689. [redacted]

g) Altria Would Likely Have Introduced VEEV if Not for the Transaction

1690. Prior to Altria's transaction with JLI, PMI intended and expected that Altria would commercialize VEEV in the U.S. (King (PMI) Tr. 2357; PX7020 (King (PMI), Dep. at 37, 44-45, 79, 96-97).

1691. [redacted] *see also* PX7020 (King (PMI), Dep. at 34) (*in camera*); (RX0873 (Altria) at 008 (JRDTA) (*in camera*)).

h) Altria Could Submit a PMTA Quickly For VEEV and Obtain Regulatory Approval

1692. [redacted]} *see also* King (PMI) Tr. 2515-16 (*in camera*)).

1693. PMI entered into the JRDTA with Altria because PMI believed that Altria would help speed up the commercialization of IQOS and VEEV and make the success of PMI's products in the U.S. much more likely and faster. (PX7020 (King (PMI), Dep. at 47-48) ("[We] felt that with Altria's footprint, outstanding sales force, access to retail shops, all of their other supporting abilities, including government affairs, etcetera, would help commercialization of both IQOS heat not burn and [VEEV], and it would speed the commercialization and make the success much more likely and faster.")).

5. The Non-Compete Agreement Prevented Altria from Selling VEEV and Ended E-Cigarette Collaboration Between Altria and PMI

1694. {[redacted] PX7020 (King (PMI), Dep. at 37-39) (*in camera*)).

1695. [redacted]}

1696. {[redacted]} PX7020 (King (PMI), Dep. at 38-39 (*in camera*)).

6. Project Universe

a) <u>PMI and Altria Engaged in Merger Negotiations</u>

1697. [redacted] (King (PMI) Tr. 2507; PX7022 (Begley (Altria), Dep. at 48); (PX7028 (Wappler (PWP), Dep. at 22-23); *see also* {[redacted]

b) <u>The Non-Compete Had An Exception if PMI Acquired Altria</u>

1698. The non-compete agreement between Altria and JLI had an exception that allowed Altria to compete in e-cigarettes in the U.S. if it merged with PMI. (PX1276 (Altria) at 020, 027-029 ("Relationship Agreement" between Altria and dated December 20, 2018); [redacted]

[redacted]}

1699. Under the non-compete agreement between Altria and JLI, if Altria merged with PMI, then Altria would have to give up its voting rights in JLI, but not its economic interest in JLI. (PX1276 (Altria) at 020, 027-029 ("Relationship Agreement" between Altria and dated December 20, 2018); PX3055 (Altria/PMI) at 108 [redacted]; *see also* PX1471 (Altria) at 030 (*in camera*)).

1700. [redacted]

1701. [redacted]

1702. [redacted]}

1703. James Wappler of PWP, which advised Altria in its negotiations with PMI, testified that if Altria merged with PMI, it had the option of either distributing PMI's MESH e-cigarette globally, including in the U.S., or continuing to focus on its investment in JLI. (PX7028 (Wappler (PWP), Dep. at 20-22)).

c) <u>Altria and PMI Contemplated Introducing VEEV in U.S. if They Merged</u>

1704. [redacted]

1705. [redacted]

1706. [redacted]}

1707. [redacted] (PX3107 (PMI) at 072, 076) (*in camera*)).

d) Altria and PMI Contemplated Submitting a PMTA for VEEV by April 2020

1708. [redacted]}

1709. [redacted]

1710. [redacted] (PX1440 (Altria) at 003) (*in camera*); *see also* PX3055 (Altria/PMI) at 115 [redacted]

e) [redacted]}

1711. {[redacted]

[redacted]

f) Altria Could Not Agree to a Joint Venture with PMI to Distribute VEEV in the United States Because of the Non-Compete Agreement with JLI

1712. [redacted]} (King (PMI) Tr. 2504-05 (*in camera*); PX3100 (PMI) at 028 [redacted]

1713. {[redacted]} (King (PMI) Tr. 2506-07 (*in camera*); PX7020 (King (PMI), Dep. at 112-13) (*in camera*)).

1714. [redacted]

1715. [redacted] (PX1470 (Altria) (*in camera*)).

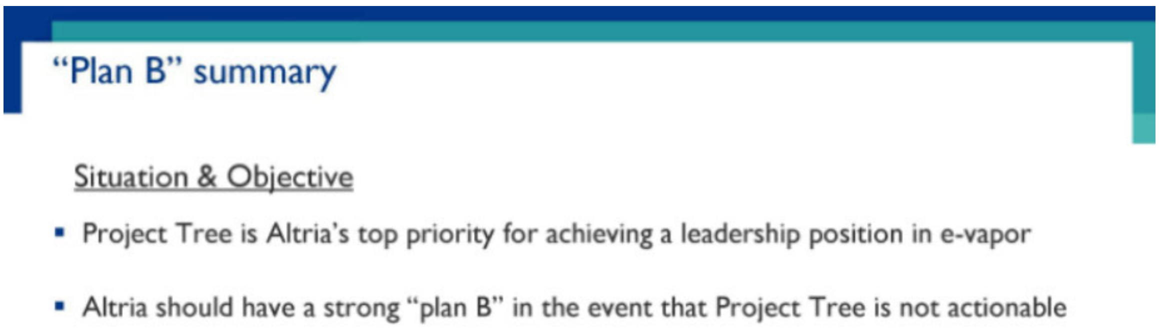
1716. {[redacted]} (PX1470 (Altria) (*in camera*)).

D. The Transaction Prevented Altria From Collaborating With or Acquiring Other E-Cigarette Companies

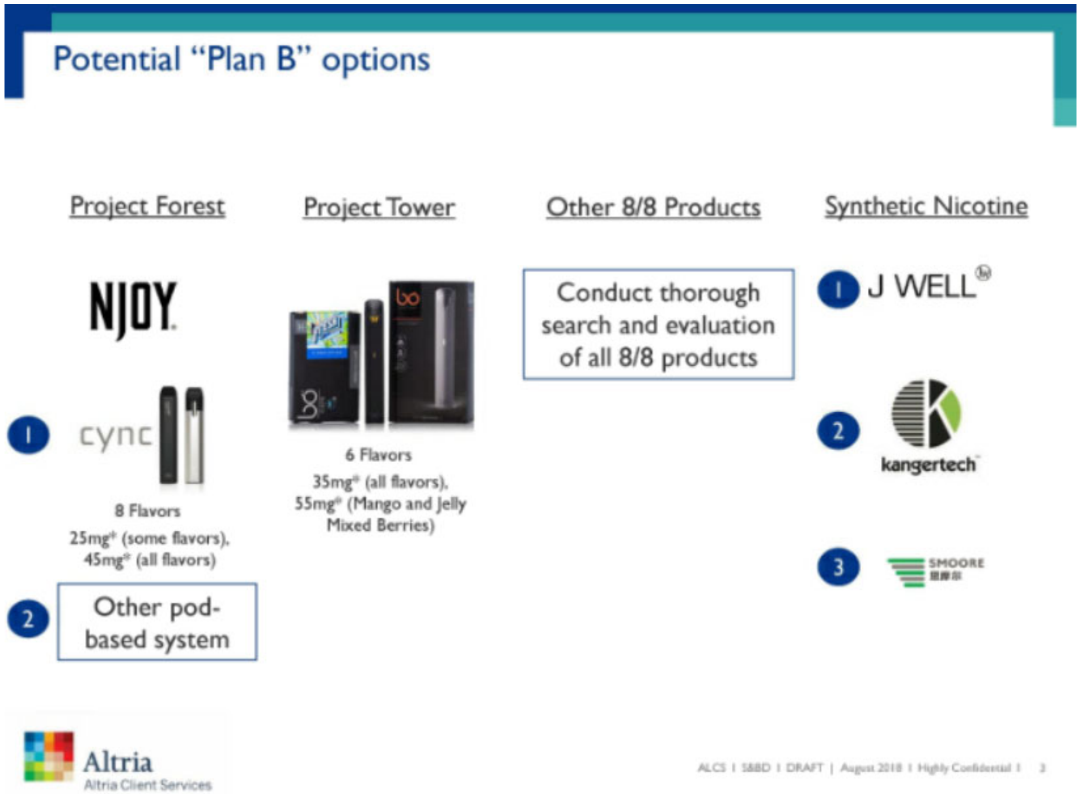
1717. JLI perceived a risk of competition from large tobacco companies like Altria buying small competitors like Phix and scaling them up quickly, but that threat was eliminated after Altria entered into the transaction and non-compete agreement with JLI. (PX2126 (JLI) at 001).

1718. When Quigley became President and CEO of Nu Mark around June 2018, Altria CEO Willard told Quigley and Crosthwaite that a transaction with JLI was "Plan A" for Altria's e-cigarette business, and that "Plan B" would be Altria's e-cigarette business without a JLI transaction. (PX7003 (Quigley (Altria), IHT at 160-61)).

1719. In August 2018, Altria's K.C. Crosthwaite forwarded a presentation to senior executives, including Billy Gifford and Murray Garnick, summarizing Altria's "Plan B" options in the event that the JLI transaction did not work out. (PX1317 (Altria) at 001 (August 2018 Alternative Pod-Based Systems draft presentation)). The presentation noted that "Project Tree is Altria's top priority for achieving a leadership position in e-vapor," and that "Altria should have a strong 'plan B' in the event that Project Tree is not actionable." (PX1317 (Altria) at 003). Some of the "Plan B" options included NJOY with CYNC or other pod-based systems, Bo ("Project Tower"), synthetic nicotine (J WELL, Kangertech, and Smoore), or other 8/8/2016 products. (PX1317 (Altria) at 004). According to Altria, NJOY's "Management is open to a transaction with Altria." (PX1317 (Altria) at 007). K.C. Crosthwaite wrote that "I also spoke with the J Well (Bo product) management team today and the Bo asset is still a viable option for us." (PX1317 (Altria) at 001).



(PX1317 (Altria) at 003).



(PX1317 (Altria) at 004).

1720. Altria was reviewing potential pod-based alternative acquisition targets as early as May 2018 as part of its "Plan B" strategy if it could not acquire JLI. Some of the potential targets included NJOY, Five Pawns, J WELL, Bo, Avail, Kangertech, and Byrd. (PX1631 (Altria) at 001, 003-06 (Altria May 2018 Pod-based System Alternatives draft presentation)).

1721. If JLI ("Tree") were to remain independent or be acquired by another competitor, as of July 2018, { [redacted] (PX1701 (Altria) at 002 [redacted]

{[redacted]}

(PX1701 (Altria) at 002 (*in camera*)).

1722. Altria partnered with Next Generation Labs to produce and research synthetic nicotine products. (PX4501 (Altria) at 001 (Email discussing Altria's agreement with Next Generation Labs)). Next Generation Labs also had a pod-based product ("Obot") in development. (PX4498 (Altria) at 004 (Altria January 2018 Project Torrey presentation)).

1723. In June 2018, Nu Mark's Brian Quigley highlighted Altria's potential to unlock synthetic nicotine as a means of improving its ability to compete. (PX1669 (Altria) at 001).

1724. Altria's innovation partnership with Next Generation Labs fell apart following the non-compete agreement with JLI. (PX4501 (Altria) at 001-02 (Email discussing Altria terminating their agreement with Next Generation Labs)). On December 19, 2018, Next Generation Labs wrote to Altria "As you know [Next Generation Labs] worked extremely hard on the initial production and with all the news going around regarding your discontinuing your e-cig brands and possible investment into JUUL we are concerned about future business with Altria and TFN." (PX4501 (Altria) at 002). On January 4, 2019, Altria's Steven Schroder wrote back, "I was planning to call [Next Generation Labs] and tell [them] we are out of the evapor business and no longer need synthetic nicotine and see where the conversation goes without making any monetary commitment on terminating the agreement." (PX4501 (Altria) at 001).

1725. In May 2019, Altria [redacted] (PX4543 (Altria) at 00 [redacted] (*in camera*)). Following the transaction, [redacted] } (PX4543 (Altria) at 005 (*in camera*)

1726. In September-October 2018, Altria's Eric Hawes wrote to Altria's VP of Product Design and Development, Richard Jupe, that "Ayr Labs [is] suddenly very interested" in a potential transaction for their e-cigarette technology and platform. (PX1654 (Altria) at 001). Eric Hawes supported a transaction with Ayr, telling Richard Jupe that "I see a lot of value here, and an easy lift on our side with respect to resource time/commitment. I'm inclined to lean into this." (PX1654 (Altria) at 001). However, Richard Jupe declined to pursue the opportunity, telling Eric Hawes, "At this time make no commitment I will explain." (PX1654 (Altria) at 001).

1727. In October 2018, Altria had partnered with Molex (Phillips / Medisize), Jabil, and Flex to address e-cigarette procurement and R&D needs. (PX4497 (Altria) at,\ 009 (September 2018 Altria EMA Strategy presentation); PX4558 (Altria) at 001 (Nu Mark Supply Chain Perspective May '18); PX4547 (Altria) at 008, 010 (Altria June Product Portfolio Review); PX4548 (Altria) at 005-06 (Altria June 2018 Project Cloud RFP Decision Making presentation).

1728. As of September 2018, Altria was continuing to explore new product concepts with partners including Bressler, Avail, and Kangertech, and Avail also suggested that Altria partner with Jwell, Davinci, Pax 3, or Glow. (PX4560 (Altria) at 001-02 (September 2018 email between Altria employees Ryan Bailey and Eric Hawes regarding Project AKA)).

1729. In July 2018, Altria was pursuing a deal with Purilum, a Chinese manufacturer that had access to 8/8/16 pod-based e-cigarette products with nicotine salts that could be sold in the U.S. immediately prior to obtaining a PMTA. (PX1942 (Altria) (email regarding Purilum between Altria employees, including Altria's VP of Product Design and Development, Richard Jupe)).

1730. In a February 2018 draft of its 2018 three-year plan, Altria wrote that it was evaluating "additional investment opportunities to address other product platform gaps with a focus on closed tank products." (PX1251 (Altria) at 050).

XI. RESPONDENTS HAVE NOT DEMONSTRATED PRO-COMPETITIVE BENEFITS OR THAT THE TRANSACTION IS NECESSARY TO ACHIEVE THEM

1731. As a pro-competitive justification for their agreement not to compete in the U.S. e-cigarette market, Respondents point to services that Altria has provided to JLI pursuant to the Services Agreement. (*See* CCFF ¶¶ 1873-79, below).

1732. In January 2020, Respondents amended the terms of the Services Agreement, halting all services other than regulatory services in support of JLI's PMTA and MRTP filings. (*See* CCFF ¶¶ 1880-83, below).

1733. Respondents have not demonstrated how Altria's services to JLI have benefitted consumers or competition. (*See* CCFF ¶¶ 1891-917, 1956-95, below).

1734. Even if Respondents could demonstrate pro-competitive justifications, the agreement not to compete was not necessary to achieve them. (*See* CCFF ¶¶ 1918-55, 1965-66, 1972-75, 1984, 1992-94, below).

XII. THE TRANSACTION IS PRESUMPTIVELY ANTICOMPETITIVE, AND THE EVIDENCE BOLSTERS THAT PRESUMPTION

A. THE TRANSACTION IS PRESUMPTIVELY ANTICOMPETITIVE

1735. The transaction is presumptively anticompetitive because market shares, both from ordinary-course documents and Dr. Rothman's calculations, establish that the market was highly concentrated before and after the transaction. (*See* CCFF ¶¶ 1736-63, below).

1736. Dr. Rothman's analyses establish that in this highly-concentrated market and with a large increase in the HHI due to the transaction, the transaction is presumed likely to enhance market power under the thresholds laid out in the Horizontal Merger Guidelines. (*See* CCFF ¶¶ 1749-61, below).

1. Ordinary Course Market Share Estimates Show That the E-Cigarette Market Was Highly Concentrated before and after the Transaction

1737. Ordinary course documents from Altria, JLI, and other e-cigarette competitors show that the e-cigarette market was highly concentrated before the transaction. (*See* CCFF ¶¶ 1738-47, below).

1738. In an internal JLI document titled "JUUL Business Overview" and dated December 15, 2017, JLI reports market shares for e-cigarettes sold at U.S. convenience stores. (PX2597 (JLI) at 005). The market shares for e-cigarettes sold at U.S. convince stores are as follows: JUUL (JLI) at 43.2%; Vuse (Reynolds) at 25.0%, MarkTen (Altria) at 14.5%, Blu (ITG) at 8.5%, Logic (JTI) at 6.1%, and all others at 2.7%. (PX2597 (JLI) at 005).

1739. Altria's (Nu Mark's) BOD Orientation materials dated April 11, 2018, include the top brands' shares of e-vapor for 2017. (PX4029 (Altria) at 013). For FY 2017, Vuse

(Reynolds) held a 33.3% share, MarkTen (Altria) was 12.5%, JUUL (JLI) was 12.3%, Blu (ITG) was 10% and Logic (JTI) was 8.1%. (PX4029 (Altria) at 013).

1740. Altria's E-Vapor Business Update, circulated by email on April 13, 2018, reports shares by brand for the total e-vapor marketplace. (PX1098 (Altria) at 012). The data show that as of April 13, 2018, JUUL (JLI) held a 42.7% share, followed by Vuse (Reynolds) at 22.7%, MarkTen (Altria) at 9.4%, at Blu (ITG) at 7.2%, Logic (JTI) at 5.6%, and all others at 12.3%. (PX1098 (Altria) at 012).

1741. [redacted]}

(PX3218 (Reynolds) at 002 (*in camera*)).

1742. [redacted]}

(PX3223 (Reynolds) at 034 (*in camera*)).

1743. In an email dated April 30, 2018, JLI executive O'Hara presents market shares prepared by IRI for vapor companies selling product in convenience stores for the four weeks ending April 22, 2018. (PX2085 (JLI) at 003). The shares reported in the email are as follows: JUUL (JLI) at 51.3%, Vuse (Reynolds) at 23%, Blu (ITG) at 8.7%, and Logic (JTI) at 5%; MarkTen's share was not reported in the email. (PX2085 (JLI) at 003).

1744. In a JUUL Labs document titled "Q1 2018 Unaudited Investor Information" and dated May 2018, JLI reported 2017 and 2018 retail market shares for JUUL and its competitors. (PX2345 (JLI) at 004). The shares were reported as follows:

Rank	Brand	April 2017 Share
1	VUSE	37.3%
2	blu	12.4%
3	MarkTen	16.8%
4	Logic	11.6%
5	JUUL	17.2%
Rest	All Others	4.8%

Rank	Brand	April 2018 Share
1	JUUL	63.0%
2	VUSE	17.0%
3	MarkTen	8.7%
4	blu	5.9%
5	Logic	3.7%
Rest	All Others	1.7%

(PX2345 (JLI) at 004).

1745. A MarkTen Monthly Share and Volume Report, circulated by email on August 6, 2018, reports shares by brand of e-vapor products. (PX1236 (Altria) at 004). The data show that for the four weeks ending on July 29, 2018, JUUL (JLI) held a 71.39% share, followed by Vuse (Reynolds) at 16.21%, Logic (JTI) at 9.83%, MarkTen (Altria) at 8.63%, at Blu (ITG) at 7.41%, and balance at 13.47%. (PX1236 (Altria) at 004). The report also includes current year shares for 2018, as of July 29, as follows: JUUL (JLI) held a 62.27% share, followed by Vuse (Reynolds) at 20.91%, Logic (JTI) at 11.03%, MarkTen (Altria) at 10.53%, at blu (ITG) at 8.14%, and balance at 12.88%. (PX1236 (Altria) at 004).

1746. [redacted] (PX3225 (Reynolds) at 032 (*in camera*)).

1747. A JLI Sales and Marketing document dated November 15, 2018, contains U.S. vapor market share data for convenience stores. (PX2052 (JLI) at 012. The market shares reported in the document are JUUL (JLI) at 74.4%, Vuse (Reynolds) at 9.9%, blu (ITG) at 6.3%, MarkTen (Altria) at 4.7%, Logic (JTI) at 2.5%, NJOY at 1.1%, and others at 1.0%. (PX2052 (JLI) at 012; *see also* PX2336 (JLI) at 002-008 (document contains IRI retail sales data for six weeks in November and December 2018 showing similar shares to PX2052)).

1748. Ordinary course documents show that the e-cigarette market remains highly concentrated after the transaction. A JUUL Investor Update for 2020, contains "Closed Pod and Disposable" dollar shares for January 2019 through April 2020. (PX2782 (JLI) at 008). As of April 2020, JUUL (JLI) held a 60% share of closed pods and disposables, Vuse Alto (Reynolds) was at 17%, Disposable (blu/ITG) were 9%, NJOY Ace was at 5%, *my*blu (ITG) was at 2%, and others comprised 8%. (PX2782 (JLI) at 008).

2. The E-Cigarette Market Remains Highly Concentrated

1749. Dr. Rothman concluded that Altria's exit from e-cigarettes increased concentration in the market for closed-system e-cigarettes sold in the United States. (PX7048 (Rothman, Trial Dep. at 24); PX5000 at 042 (¶ 85) (Rothman Expert Report)).

1750. Dr. Rothman measured concentration in the market for closed-system e-cigarettes sold in the United States using the Herfindahl–Hirschman Index ("HHI") as described in the Horizontal Merger Guidelines. (PX7048 (Rothman, Trial Dep. at 24-25); PX5000 at 042-43 (¶¶ 86-89) (Rothman Expert Report); PX9098 (Horizontal Merger Guidelines) § 5.3 at 021-22)).

1751. To calculate the HHI and measure concentration before the transaction between Altria and JLI, Dr. Rothman used shares of Altria, JLI, ITG, JTI, NJOY, and Reynolds in the 12-month period from October 2017 to September 2018, before Altria began to remove its e-cigarette products from the market. (PX7048 (Rothman, Trial Dep. at 24-26); PX5000 at 042 (¶ 87) (Rothman Expert Report)).

1752. To calculate the HHI and measure concentration after the transaction, Dr. Rothman assumed Altria's share is reallocated to the remaining competitors in proportion to their shares. (PX7048 (Rothman, Trial Dep. at 26-27); PX5000 at 042 (¶ 88) (Rothman Expert Report)). He then calculated the change in HHI as the difference between the HHI after the transaction and the HHI before the transaction. (PX7048 (Rothman, Trial Dep. at 27); PX5000 at 042 (¶ 88) (Rothman Expert Report)).

1753. Dr. Rothman's market shares are based on unit sales of closed-system consumables in pods, cartridges, and disposables. (PX7048 (Rothman, Trial Dep. at 25)). Dr. Rothman used STARS data, which covers shipments from wholesalers to retailers, to calculate market shares. (PX7048 (Rothman, Trial Dep. at 25); *see* PX5000 at 108 (Ex. 3a) (Rothman Expert Report)). Dr. Rothman also used Nielsen Syndicated Major Market data to calculate market shares. (*See* PX5000 at 109 (Ex. 3b) (Rothman Expert Report)).

1754. Dr. Rothman calculated that the transaction resulted in an HHI of 3,929 and an increase in HHI of 652. (PX7048 (Rothman, Trial Dep. at 27); PX5000 at 043 (¶ 89) (Rothman Expert Report)). Dr. Rothman's specific results, as reported in Table 2 of his expert report, are as follows:

Table 2
Change in HHI

	Pre-Transaction	Post-Transaction
Shares		
Altria	10.1%	–
ITG	6.6%	7.3%
JTI	3.7%	4.1%
JLI	51.0%	56.7%
NJOY	1.8%	2.0%
Reynolds	22.7%	25.3%
HHI	**3,276**	**3,929**
Change in HHI		**652**

Note: Shares are based on units of closed-system consumables, including cartridges, pods, and disposables, and are calculated using data from October 2017 to September 2018.

(PX5000 at 043 (Table 2) (Rothman Expert Report)).

1755. Under the Horizontal Merger Guidelines, a market is highly concentrated if the HHI is greater than 2,500. (PX7048 (Rothman, Trial Dep. at 25-26); PX5000 at 042 (¶ 86) (Rothman Expert Report) (citing classification of market types in Horizontal Merger Guidelines (PX9098 (Horizontal Merger Guidelines) at 022 (§ 5.3)). Also, if the market is highly concentrated and the change in HHI is greater than 200, the transaction is presumed to be likely to enhance market power. (PX7048 (Rothman, Trial Dep. at 25-26); PX5000 at 042 (¶ 86) (Rothman Expert Report) (citing PX9098 (Horizontal Merger Guidelines) at 022 (§ 5.3)).

1756. Dr. Rothman concluded that, under the thresholds in the Horizontal Merger Guidelines, the post-transaction HHI of 3,929 indicates that the market for closed-system e-cigarettes is highly concentrated. (PX5000 at 043 (¶ 90) (Rothman Expert Report)). Dr. Rothman also concluded that, combined with the large increase in HHI of 652 and under the thresholds in the Horizontal Merger Guidelines, the transaction is presumed likely to enhance market power. (PX7048 (Rothman, Trial Dep. at 28); *see also* PX5000 at 043 (¶ 90) (Rothman Expert Report)).

1757. Dr. Rothman testified and described in this rebuttal report that Dr. Murphy's critiques of Dr. Rothman's concentration analysis are misguided and wrong in many ways. (PX7048 (Rothman, Trial Dep. at 28-29); PX5001 at 040-041 (¶¶ 71-72) (Rothman Rebuttal Report)).

1758. Dr. Rothman concluded that Dr. Murphy's before and after comparisons of market concentration violate basic principles of economic analysis by not controlling for confounding factors. (PX5001 at 040-041 (¶ 72), *see also* 031-032 (¶ 50) (Rothman Rebuttal Report)). Dr. Murphy's before-and-after comparisons of market concentration do not identify the effect of the transaction on concentration because Dr. Murphy's analysis confuses correlation with causation. (PX7048 (Rothman, Trial Dep. at 28-29, 39-41); *see also* PX5001 at 040-041 (¶¶ 71-72) (Rothman Rebuttal Report)). Dr. Murphy admits that he did not control for confounding factors in his analysis of the transaction. (*See* CCFF ¶¶ 2094-124, below).

1759. Dr. Rothman testified that the appropriate way to evaluate the effect of the transaction on competition is to analyze "the difference between competition in the actual world and competition in the but-for-world. . . . In the actual world, Altria and JLI enter into the transaction. . . . In the but-for-world, the transaction doesn't happen." PX7048 (Rothman, Trial Dep. at 30); PX5001 at 8-9, n.26 (¶ 14) (Rothman Rebuttal Report)).

1760. Dr. Rothman concluded that Dr. Murphy's critique of Dr. Rothman's re-allocation of Altria's share to the remaining market participants in in proportion to their share is invalid because Dr. Murphy ignores confounding factors that influence market shares and confuses correlation with causation. (PX7048 (Rothman, Trial Dep. at 28-29); PX5001 at 040-43 (¶¶ 71-78) (Rothman Expert Report)). In his report, Dr. Rothman also showed that the transaction increased concentration even if reallocation of Altria's sales would have been different from one proportional to pre-transaction shares. (PX5001 at 040-41, n.174 (¶ 72) (Rothman Rebuttal Report) ("For example, if all of Altria's share goes to Reynolds, the change in HHI would be 460."))

1761. Dr. Murphy's claim that Dr. Rothman should have accounted for differences in cartridge volumes across brands is not supported by any economic rationale and in any case, an alternative calculation does not change the conclusion that the transaction is presumptively anticompetitive based on the concentration statistics. (PX5001 at 40-41 (¶ 72) (Rothman Rebuttal Report)). Dr. Rothman calculated HHIs using Dr. Murphy's alternative shares based on cartridge volumes and found that the market for closed-system e-cigarettes would be highly concentrated and Altria's exit would increase concentration. (PX5001 at 40-41, n.175 (¶ 72) (Rothman Rebuttal Report)). Using Dr. Murphy's alternative shares, Dr. Rothman calculated that the HHI with Altria competing would be 2,850, the HHI without Altria competing would be 3,368, and the change in HHI would be 519. (PX5001 at 40-41, n.175 (¶ 72) (Rothman Rebuttal Report)).

3. Share of Device Sales Are Not a Reliable Metric to Assess Competition in the Relevant Market

1762. Dr. Rothman calculated market shares by using unit data on closed-system consumables, or the pods, cartridges, and disposables. (PX7048 (Rothman, Trial Dep. at 69)). Dr. Rothman did not use device shares in his models or his conclusions. (PX7048 (Rothman, Trial Dep. at 69)).

1763. Dr. Rothman used shares of consumables rather than of devices because "[c]onsumables better reflect the extent to which consumers are purchasing the products repeatedly. . . . -- devices are often heavily discounted to encourage consumers to try products." (PX7048 (Rothman, Trial Dep. at 69)).

B. Evidence of Competitive Harm Bolsters the Presumption

1764. The transaction eliminated head-to-head competition between Altria and JLI, both in terms of price and non-price competition, and eliminated products that appealed to consumers. (*See* CCFF ¶¶ 1417-526, above). The transaction also foreclosed future competition between Altria and JLI. (*See* CCFF ¶¶ 1527-87, above). Moreover, it foreclosed collaboration between Altria and PMI (*see* CCFF ¶¶ 1588-716, above), and prevented Altria from collaborating with or acquiring other e-cigarette companies (*see* CCFF ¶¶ 1717-30, above).

XIII. ENTRY AND EXPANSION DO NOT REBUT THE PRESUMPTION OF COMPETITIVE HARM

1765. The qualitative and quantitative evidence demonstrate that entry and expansion would not be timely, likely, and sufficient to offset harm from Altria's exit. (PX7048 (Rothman, Trial Dep. at 009-010, 088-091); *see also* CCFF ¶¶ 1767-870, below).

1766. Dr. Rothman concluded that entry and expansion would not be timely, likely, and sufficient to offset harm from Altria's exit. (PX7048 (Rothman, Trial Dep. at 88-89); PX5000 at 097-102 (¶¶ 177-86) (Rothman Expert Report)).

A. THE RELEVANT MARKET HAS HIGH BARRIERS TO DE NOVO ENTRY AND EXPANSION

1767. De novo entry can occur by development of a closed-system e-cigarette or acquiring the technology. De novo entry is expensive, time consuming, requires specialized personnel and significant personnel, and requires significant sales and marketing capability. (*See* CCFF ¶¶ 1768-78, below). The PMTA process is also time intensive and costly, and there are barriers relating to shelf space and marketing. (*See* CCFF ¶¶ 1784-802, below). Open tank e-cigarettes face even more challenges to receive PMTA approval than closed-system e-cigarettes. (*See* CCFF ¶¶ 1803-04, below).

1768. "To enter de novo into either combustible cigarettes or Electronic Cigarettes, a company would generally need to: 1) develop or acquire a product, 2) manufacture the product, 3) develop a sales force or alternative method to sell the product, and 4) develop, use, or contract for an established distribution system. . . . With the FDA regulation of combustible cigarettes and more recently, Electronic Cigarettes, entrants also would need to satisfy FDA regulatory requirements to bring a product to market." (PX0007 (Altria) at 010-11 (Narrative Response to Request for Additional Information and Documentary Materials issued to Altria Group, Inc., Specification 20)).

1769. {[redacted]} (Huckabee (Reynolds) Tr. 445 (*in camera*); Willard (Altria) Tr. 1344-45; PX8008 at 007-10 (¶ 18) (Huckabee (Reynolds), Decl.) (*in camera*); *see also* PX0007 (Altria) at 010-11 (Narrative Response to Specifications 4, 20, 26 and 27 of the Second Request, October 15, 2019)).

1770. [redacted]} (King (PMI) Tr. 2382 (*in camera*); *see also* PX7020 (King (PMI), Dep. at 29-31 (*in camera*)); PX3106 (PMI) at 001 (*in camera*) ([redacted]})).

1771. [redacted]} (PX7020 (King (PMI), Dep. at 30-31) (*in camera*) ({[redacted])); King (PMI) Tr. 2343-44 [redacted]

1772. Altria's Willard testified that Altria "spent well over half a billion dollars, maybe up to a billion dollars, investing in the e-vapor category." (Willard (Altria) Tr. 1341).

1773. E-cigarette businesses require personnel with knowledge and skill-sets specific to e-cigarettes. (King (PMI) Tr. 2375-76 ("[T]here were individuals hired specifically for their knowledge around the technology and the skill-sets required for e-cigarettes . . . [Y]ou need certain strengths in technology and know-how around the liquids, around how to create the aerosolization engine, and, of course, the device itself has some differences, although the battery technology and some of the aspects can be shared with the other developments we had made."); Jupe (Altria) Tr. 2116-20 (Mr. Jupe testified that within the product development organization he worked on at Altria, Altria had a group of developers and engineers working on Altria's e-cigarette products, a technology scoping team researching new components for future generations of e-cigarettes, a group called sensory sciences that was predominantly made up of flavor scientists and chemists, and a group focused on consumer wants and needs)).

1774. E-cigarette businesses require a significant number of personnel focused e-cigarette development. (PX7018 (Schwartz (Altria), Dep. at 28) (estimating that Altria had 40 to 50 people focused exclusively on e-cigarette development); PX7009 (Burns (JLI), IHT at 150) ("[B]etween December of 2017 and December of 2018, I think we grew from 225 people to 2200. So we were growing the resources in the company functions such as scientific affairs. We were growing the quality organization. We grew our legal organization. We grew almost all the backbone capabilities. So the premise was you can drive the business and make the numbers, but if you are not building up the infrastructure, we are not going to create the ability to continue to grow and add capability into the company.")).

1775. Altria's Quigley testified that when he was president and CEO of Nu Mark, it had roughly 145 employees. (Quigley (Altria) Tr. 1938).

1776. Nu Mark had headquarters in Richmond, Virginia at Altria headquarters, manufacturing operations in Shenzhen, China, product development and e-commerce support in Beit Shemesh, Israel, and a fulfillment center in Miami. (Schwartz (Altria) Tr. 1857). Altria worked with "at least" two contract manufacturers in China, Samco and Smoore. (Schwartz (Altria) Tr. 1862).

1777. Altria's Schwartz testified, "We felt it was important to have a presence in our factories every day to ensure that quality was what we needed it to be, that compliance was what we needed it to be. We would audit these facilities as well, audit the suppliers. So we were -- we had a full -- full staff. We felt it was a small price to pay to ensure integrity." (Schwartz (Altria) Tr. 1860). Schwartz described that Nu Mark had 20 employees in Shenzhen, China handling "quality technicians to purchasing agents to engineers to export/import logistics folks." (Schwartz (Altria) Tr. 1859-60). Nu Mark also had an organization in Israel called NMI. (Quigley (Altria) Tr. 1938-39).

1778. Altria's Quigley testified that Nu Mark spent $76 million in 2018 for marketing and sales expenditures, in addition to $100 million on the ITP program. (Quigley (Altria) Tr. 1982; *see* PX9045 (Altria) at 007 (2018 CAGNY Conference Remarks by Howard Willard, Feb. 21, 2018) ("Of course, the e-vapor category continues to evolve, and leadership has changed hands numerous times over the past seven years. Sustained, long-term leadership won't be achieved overnight. Nu Mark has a diverse product portfolio and a pipeline of promising products in development. We believe it is well positioned to achieve long-term leadership in the category, bolstered by our companies' world-class marketing, sales and distribution and regulatory capabilities."); *see also* Huckabee (Reynolds) Tr. 391 (*in camera*) ({[redacted]}).

1. The PMTA Process Is a Barrier to Entry and Expansion

1779. The PMTA process is a barrier to entry or expansion. (*See* CCFF ¶¶ 1780-802, below).

1780. The PMTA process is "very expensive and time-consuming." (Garnick (Altria) Tr. 1699; *see* Schwartz (Altria) Tr. 1866; [redacted]

1781. "PMTAs are costly applications, and [a] startup would need access to the resources required to put together an application like that . . . ." (PX7033 (O'Hara (JLI), Dep. at 31)).

1782. The PMTA applications are "very involved," "challenging," and present "a very high bar" for new entrants. (PX7017 (Magness (Altria), Dep. at 87-90)).

1783. Successful completion of the PMTA process is a requirement to introduce a new e-cigarette product to the United States. (*See* CCFF ¶¶ 197-207, above).

a) FDA Regulations Limit Market Entry and Expansion

(1) FDA Regulations Limit the Products That Can Be Sold on the Market

1784. A new entrant would need to acquire a product sold in the U.S. prior to August 8, 2016, to sell the product immediately, or it would need to wait to market its product until it was developed and obtained PMTA approval. (*See* CCFF ¶¶ 197-207, above).

1785. After September 2020, no one can introduce a new e-vapor product without PMTA approval. (Garnick (Altria) Tr. 1698-1699) ("Q. Mr. Garnick, just to follow up on that, so as of September 2020, no one can introduce a new e-vapor product without PMTA approval? A. Right. After that date, they cannot."). In discussing the September 2020 deadline, Reynolds observed, [redacted] (PX3212 (Reynolds) at 002 (*in camera*).

1786. [redacted]} (PX3191 (NJOY) at 013, 023) (*in camera*)).

1787. Danaher (JLI) said the PMTA process was "an existential threat" to JLI's business. (PX7042 (Danaher (JLI), Dep. at 132)).

1788. Turning Point COO said in the Q3 2020 earnings call, that "Ultimately, [the PMTA process] will consolidate the vape market and create significant barriers to entry with several of our competitors already exiting ahead of the deadline given the expense and work needed to go through this process." (PX9086 (Turning Point) at 006).

(2) PMTA Applications Are Costly and Time-Intensive

(a) PMTA Applications Are Intensive

1789. "The PMTA process requires substantial time and resources. Indeed, proof of this is found in RAI's extensive efforts to complete and submit its PMTAs, which generally included the following steps: develop research and application plans for its ENDS portfolio; conduct, or contract with third parties to conduct, the research; monitor and evaluate the research results; prepare extensive narratives regarding the research results; and draft and finalize the PMTAs. . . . . And the resources required to satisfy these standards include the use of certified laboratories, rigorous safeguards to provide for well-controlled investigations (those that are designed and conducted in such a way that minimizes or controls for bias, confounding variables, and other factors that may render the results unreliable), as well as extensive review of available scientific literature." (PX8009 at 014 (¶ 43) (Garner (Reynolds), Decl.); *see also* PX8005 at 004 (¶¶ 20, 23) (Graham (NJOY), Decl.)).

1790. Studies submitted with PMTAs per FDA guidance can take from six months to three (3) years to complete. (Garnick (Altria) Tr. 1661 ("it takes the FDA a long time to review a PMTA for an e-vapor product . . . . I know that some of the studies, before you can even file a PMTA, can take months and months. And then I know that before you can even begin those studies, you need to have a prototype that you know you can mass-produce."); PX8009 at 015 (¶ 45) (Garner (Reynolds), Decl.) ("[B]ased on my understanding, the studies that we believe are expected to be submitted in a PMTA pursuant to FDA guidance can take from one (1) year to three (3) years to complete, which includes planning, protocol development, securing a contract laboratory to perform work, sample generation, testing conducted by the laboratory, data evaluation, and generation of the final reports."); PX8005 at 005 (¶ 28) (Graham (NJOY), Decl.) (describing product studies can take 6-12 months or longer); (PX8002 at 003 (¶ 13) (Cushman (Turning Point), Decl.) ("It is almost impossible for us to complete all of the necessary testing in 12 months [to meet PMTA deadlines].")).

1791. PMTA applications for new products take 18 months to 3 years to complete. (Schwartz (Altria) Tr. 2038 ("And I think from what I can recall, it was, you know, in essence minimum of two years to get a new product PMTA together . . ."); PX7016 (Jupe (Altria), Dep. at 341) ("You then go into your commercial phase and write all your specifications. Once you've defined the product lock, as we call it, then you go into your science gathering phase, which is generating the science evidence that the Food and Drug Administration requires for a PMTA application. That process, on the data gathering, is at least a year, if not closer to two, depending on the complexity of the project."); PX8005 at 005 (¶ 28) (Graham (NJOY), Decl.); PX7022 (Begley (Altria), Dep. at 121)) (Begley said it took Altria about 18 months to prepare a "compelling" PMTA application); PX8009 at 018 (¶ 57) (Garner (Reynolds), Decl.) (noting that {[redacted]}) (*in camera*)); PX8010 at 002 (¶ 8) (Folmar (ITG), Decl.) ("[I]t would take at least 18 months to 2 years to prepare a PMTA for a new product.")).

1792. PMTAs require numerous scientific tests, and labs capable of performing these tests are limited. (PX7017 (Magness (Altria), Dep. at 72-76); PX8009 at 009-011, 015 (¶¶ 30-35, 44) Garner (Reynolds), Decl.)); (PX8002 at 002-003 (¶¶ 10-11) (Cushman (Turning Point), Decl.); PX8005 at 004 (¶ 26) (Graham (NJOY), Decl.)).

1793. "PMTAs are very involved and one cannot underestimate the depth of information FDA wants." (PX1785 (Altria) at 001 (Sept. 8, 2018 email from Paige Magness)).

(b) PMTA Applications Are Costly

1794. [redacted] (PX8009 at 016-17 (¶ 50) (Garner (Reynolds), Decl.) (*in camera*)). [redacted] (PX8009 at 016-17 (¶ 50) (Garner (Reynolds), Decl.) (*in camera*)).

1795. Altria estimates PMTA costs of $131 million to $154 million for Elite 1.0, Elite 2.0, Project Hudson, MarkTen Bold, and MarkTen Bold flavors. (PX1400 (Altria) at 005-011 (May, 30, 2018 E-Vapor Product One Pagers); *see also* PX7015 (Gogova (Altria), Dep. at 65) (third-party spending on a PMTA application "depends on the number of products filed within the same PMTA – it can be anywhere between 10 to 30, 40 millions [sic] easily"); *see also* PX4505 (Altria) at 005 (July 19, 2018 Vapor Products To Assess)).

1796. [redacted] (PX7027 (Murillo (Altria/JLI), Dep. at 73-74) (*in camera*)); PX7007 (Murillo (JLI), IHT at 095) (noting that in 2019 alone, JLI had over 100 employees working on PMTA applications)).

1797. NJOY believes that JUUL "expected to spend more than $125 million by the end of 2019 on its PMTA effort." (PX8005 at 004 (¶ 20) (Graham (NJOY), Decl.)).

1798. Turning Point's "PMTA cost estimate for the bare minimum of products we need to remain viable could be up to $20 million over the next two years. We do not know the final cost for the application because the requirements and timeline are constantly shifting." (PX8002 at 004 (¶ 18) (Cushman (Turning Point), Decl.); *see also* PX9086 at 006) (Turning Point Brands 2020Q3 Earnings Call)).

1799. [redacted] (PX8010 at 002 (¶ 7) (Folmar (ITG), Decl.) (*in camera*)).

1800. "The two biggest challenges facing an ENDS manufacturer in the PMTA process are time and resources. A PMTA is a very substantial undertaking, likely to cost at least tens of millions of dollars." (PX8005 at 004 (¶ 20) (Graham (NJOY), Decl.)).

1801. Magness (Altria) believed that small or inexperienced players would struggle with the FDA pathway and would need to invest a lot. (PX7017 (Magness (Altria), Dep. at 89-91) ("Q. Would you say that PMTA is a significant hurtle [sic] in entering the e-vapor space? A. It is a very high bar, yes. Q. Are you convinced that small or inexperienced players would struggle with the PMTA pathway? A. Yes, I am. … Q. Why is that? A. Because of the scope of the resources it requires. You know, it requires significant investment. It also requires, to our learning, it requires a really integrated perspective. So a small player would need to have the right set of disciplines giving them advice and in an integrative way. That's a big investment. Q. It's your understanding that even experienced manufacturers have to invest a lot to be successful in the PMTA process? A. Absolutely.); PX1785 (Altria) at 001-02) (Sept. 8, 2018 email from Paige Magness)).

1802. Graham (NJOY) said that "many small ENDS manufacturers lack this level of capital to devote to a PMTA and/or the regulatory experience to oversee the production of a PMTA that is ultimately likely to be favorably acted upon by the FDA." (PX8005 at 004 (¶ 20) (Graham (NJOY), Decl.)).

b) <u>Open Systems and Smaller E-Cigarette Competitors Are Especially Likely to Have Difficulty Navigating the PMTA Process</u>

1803. Begley testified that he continues to believe that open system products "will be challenged" to get PMTA approval because the FDA looks at product performance and whether a product performs consistently, and the "consumer's ability to continue to change" open-systems will make it "hard" for the FDA to assess open system product performance, e.g., open systems devices have "a wide range of settings" that users can change to use a variety of different e-liquids from "hundreds of open system e-vapor or e-liquid manufacturers," and users can buy "certain coils . . . to customize the [open tank] device." (PX7022 (Begley (Altria), Dep. at 135-37); *see* PX7020 (King (PMI), Dep. at 105-07) [redacted]

1804. Open tank systems are "likely to face some regulatory hurdles" because they have the "potential to be tampered with or misused, and the use of interchangeable elements can vary device performance and vapor chemistry in unknown ways." (PX9000 (Altria) at 019 (Nov. 2017 Investor Day remarks)).

2. Access to Shelf Space Is a Barrier to Entry and Expansion

1805. Dr. Rothman concluded that because advertising of nicotine products is restricted in the US, shelf space is an important way for e-cigarette suppliers to reach consumers. (PX7048 (Rothman, Trial Dep. at 013); *see also* CCFF ¶ 1818, below); PX7004 (Willard (Altria), IHT at 31-33 ("I think over the last many years, I think, given the harm caused by tobacco products, there has been a series of rules that have been created that limit the advertising vehicles that tobacco companies can use to reach consumers. . . . Q. Mr. Willard, is the restriction on sort of the mass media advertising, is that one reason why shelf space is so important? A. Yeah, I would say that shelf space is a more important vehicle because of the restrictions around some of the other communication vehicles."); PX7005 (Danaher (JLI), IHT at 137-38) ("[W]e believe that we need to be placed where cigarettes are available […] [M]ost cigarette smokers are used to their weekly or maybe even daily habit of going into their local convenience store, their local place where they purchase their tobacco . . ."); PX7025 (Burns (JLI), Dep. at 28) ("[A]mount of shelf space and location of that shelf space was perceived to be important."); PX7022 (Begley (Altria), Dep. at 215)).

1806. Closed-system e-cigarettes are typically sold in convenience stores. (*See* CCFF ¶¶ 368-78, above).

1807. [redacted] (Farrell (NJOY) Tr. 253, 278-80 ({[redacted]}) (*in camera*); Myers (Altria) Tr. 3355; PX7003 (Quigley (Altria), IHT at 49-50) ("[R]etailers have . . . metal racks, we call them fixtures, and that's where you store the product and where you merchandise the price and you hang a piece of signage."); PX7009 (Burns (JLI), IHT at 191) ("[T]he header is not shelf space, but it's actually where you put your brand logo up above . . .")).

1808. Higher placement of the header on the fixture is "best visible space in a store." (PX7003 (Quigley (Altria), IHT at 53); PX7038 (Myers (Altria), Dep. at 198) ("Q. Can you explain what it means to be the number one position at the top of the fixture? A. It varies by account what we consider number one, but in this case, in their stores, based on their category size, we choose where we would like to have our products located and where the signage would go for them. In this case, it's at the top of the fixture . . . . we had signage in a position that it could be easily seen, so that the trial offers could be communicated, communicate price, those reasons.")).

1809. "Convenience stores typically display tobacco products on dedicated shelves behind the cash register, also referred to as the fixture or the back bar." (PX8011 at 003 (¶ 13) (Eldridge (ITG), Decl.); Farrell (NJOY) Tr. 252-53 ("all e-cigarette products and tobacco products in general, they are sold either behind the counter, on shelving fixtures, or in restricted access counter displays that are on the counter that customers approach. . . . Q. And the shelves behind the counter you referred to, are those also known by the term "back bar"? A. Yes."); PX7044 (Stout (7-Eleven), Dep. at 43); PX7004 (Willard (Altria), IHT at 23-24)).

1810. Shelving units where e-cigarettes are placed can be called "innovative tobacco sets" or "ITP fixtures" or other tobacco product fixtures ("OTP fixtures"). (PX7029 (Farrell (NJOY), Dep. at 169)).

1811. Shelf space in convenience stores in an important marketing tool for e-cigarettes. (King (PMI) Tr. 2362-63 (". . . [T]he majority of all nicotine products are sold through convenience stores in the U.S. . . . [T]he convenience store universe is the biggest source for e-cigarettes . . . . [G]etting distribution and being able to put it on the shelves can greatly facilitate the success of a product. I mean, obviously you have to have consumers know that the product is there, and so having the visibility and the ability to put it on the shelves is one aspect that would enhance success in any commercialization of e-cigarette or otherwise."); Begley (Altria) Tr. 1007 (*in camera*); PX7016 (Jupe (Altria), Dep. at 118-19) (testifying that "I do believe it's common sense to say, if your brand is not on the shelf, it doesn't do very well for you, right?"); PX7025 (Burns (JLI), Dep. at 28-30); PX1618 (Altria) 001-05 (Nu Mark Retail Offer); PX8008 at 024 (¶ 46) (Huckabee (Reynolds), Decl.); PX8003 at 004 (¶ 24) (Wexler (Turning Point), Decl.)).

1812. [redacted] (Farrell (NJOY) Tr. 254-56, 273, 319 (*in camera*); Huckabee (Reynolds) Tr. 392 ("[T]he brand would have the primary positioning in a convenience store, significant square footage, and typically the -- the top of a fixture in an outlet."); PX7025 (Burns (JLI), Dep. at 76-78 ("Depending on the store format, there's a perception that . . . there is certain shelf space that is going to be more attractive based on how consumers look at the shelf. For example, if you're at eye level looking behind the cashier, that's where your eyes would focus. If you're on the bottom level behind the cashier, in fact, from the counter, you might not even be able to see your product if it's in the bottom shelving section of the shelf."); *see also* PX7022 (Begley (Altria), Dep. at 214-16); Begley (Altria) Tr. 1007) (*in camera*)).

1813. [redacted] (Farrell (NJOY) Tr. 265-270, 273 (*in camera*); Crozier (Sheetz) Tr. 1507 (*in camera*); PX1618 (Altria) at 005, 009) ({[redacted]}) (*in camera*); *see also* Begley (Altria) Tr. 1006-07) (*in camera*)).

1814. Altria offered retailers the opportunity to join its "ITP" (Innovative Tobacco Product) program. (Schwartz (Altria) Tr. 1951; PX7013 (Brace (Altria), Dep. at 81-82)). As part of the program, retailers would agree to Nu Mark receiving dedicated retail space and Altria would fund the new shelf space. (PX7009 (Burns (JLI), IHT 036-37); PX7003 (Quigley (Altria), IHT at 50-51); PX8001 at 003 (¶ 15) (Stout (7-Eleven), Decl.) (*in camera*)). Altria advertised the ITP program to retailers with a three-year commitment. (PX4304 (Altria) 001-53)). {[redacted] (Begley (Altria) Tr. 1006-07) (*in camera*); Quigley (Altria) Tr. 1982).

1815. Altria had access to premier shelf space. (Farrell (NJOY) Tr. 275-276 ({[redacted]}) (*in camera*)); Crozier (Sheetz) Tr. 1507 ({[redacted]) (*in camera*)); PX7029 (Farrell (NJOY), Dep. at 127-28); PX7029 (Farrell (NJOY), Dep. at 167-70); PX2010 (JLI) at 004 ("Altria's premier retail shelf space. That space is allocated on multi-year exclusive contracts which Altria — and other tobacco companies — own. There is no substitute for this premium placement — particularly as we work to broaden the reach of our products nationwide.") (Talking Points for Analyst Call, Dec. 20, 2018)); PX8006 at 004 (¶¶ 16-17) (Kloss (Wawa), Decl.) ({[redacted]}) (*in camera*); *see also* PX7004 (Willard (Altria), IHT at 023 ("And given the strength of some of our brands, we typically get quite good display space.")).

1816. [redacted]} (Farrell (NJOY) Tr. 272-73, 276 (*in camera*); PX8003 at 005 ((¶ 028) (Wexler (Turning Point), Decl.) ("[W]e do face an uphill battle in this channel"); PX7029 (Farrell (NJOY), Dep. at 127-28, 167-69); PX8004 at 005 (¶ 26) (Farrell (NJOY), Decl.)).

1817. Tobacco companies benefit in e-cigarettes due to brand awareness. (PX7004 (Willard (Altria), IHT at 023) ("And given the strength of some of our brands, we typically get quite good display space."); PX7004 (Willard (Altria) IHT at 24, 26-27); PX8003 at 005 (¶¶ 28-29) (Wexler (Turning Point), Decl.)).

3. Advertising Restrictions Are a Barrier to Entry and Expansion

1818. "[R]ules that have been created that limit the advertising vehicles that tobacco companies can use to reach consumer . . . . the focus has been to restrict the use of mass communication vehicles that would reach significantly more than probably the 15 percent of adult consumers that use cigarettes. . . ." (PX7004 (Willard (Altria), IHT at 31-33); PX2233 (JLI) at 004 (Juul Employee Letter, Sept. 22, 2019) ("In this industry mass marketing is not a responsible option . . ."); PX7014 (Baculis (Altria), Dep. at 64)).

4. Retail Contracts Are Barriers to Entry and Expansion

1819. [redacted]} (Begley (Altria) Tr. 1006-07 (*in camera*); Farrell (NJOY) Tr. 273, 275 ({[redacted]}) (*in camera*); [redacted] (*in camera*); PX7029 (Farrell (NJOY), Dep. at 127-28); PX8008 at 020 (¶ 40) (Huckabee (Reynolds), Decl.)).

1820. [redacted]. (Farrell (NJOY) Tr. 265-73, 275 (*in camera*); PX7012 (Eldridge (ITG), Dep. at 199-200 (*in camera*)); PX2001 (JLI) at 001 (email discussing Altria's 3 year contracts for shelf space); PX2010 (JLI) at 004 (Talking Points for Analyst Call, Dec. 20, 2018) ("That space is allocated on multi-year exclusive contracts which Altria — and other tobacco companies — own.")).

1821. Cigarette companies are able to negotiate top shelf space for e-cigarettes by offering promotions or rebates on cigarettes. (PX7033 (O'Hara (JLI), Dep. at 130-32; PX7012 (Eldridge (ITG), Dep. at 185-87); PX2051 (JLI) at 024 (McKinsey & Company Core Team Working Session) ("Big tobacco retail incentive programs are structured to communicate to consumers via shelf space arrangement and pricing consistency."); PX2000 (JLI) at 001 (Cover Email for Primer on Altria/RAI's Promo Plans)); PX8006 at 004 (¶ 17) (Kloss (Wawa), Decl.) (*in camera*); [redacted]; PX8004 at 003 (¶ 14) (Farrell (NJOY), Decl.); *see also* PX8008 at 023 (¶ 45) (Huckabee (Reynolds,), Decl.); PX2455 (JLI) at 001 (July 10, 2018 Email on Competitive Intel.); PX2108 (JLI) at 001 (Apr. 27, 2017 Email on Altria/RGRT Vapor Contracts)).

1822. "Combustible products are a large foot traffic driver with convenience retailers . . ." (PX7033 (O'Hara (JLI), Dep. at 131-32); King (PMI) Tr. 2363 ("[T]he majority of all nicotine products are sold through convenience stores in the U.S."); *see also* PX7004 (Willard (Altria), IHT at 26-27)).

B. Pre-existing Competition from Other E-Cigarette Rivals Has Not Replaced the Competition Lost Due to Altria's Exit

1823. Altria's and JLI's pre-existing competitors have not replaced the competition that was lost when Altria exited the market because Altria was well situated to compete in e-cigarettes, and Altria's exit did not prompt more aggressive competition on the part of competitors. (*See* CCFF ¶¶ 1830-41, below).

1824. At the time of the transaction, Altria's products were among the lowest priced e-cigarette products on the market. (*See* CCFF ¶¶ 1419-38, above). For example, when Altria launched its MarkTen Elite product, it significantly discounted Elite below JUUL. (*See* CCFF ¶¶ 1423-33, above; PX2175 (JLI) at 018 (comparing prices of JUUL, *my*blu, and MarkTen Elite)). After the transaction, consumers lost the price competition that Altria offered. (*See* CCFF ¶¶ 1532-37, above).

1. Reynolds, JTI, ITG, and NJOY Competed in the E-Cigarette Market Prior to Altria's Exit

1825. E-cigarette companies, including Reynolds, JTI, ITG, and NJOY, competed in the marketplace for years prior to Altria's exit. (PX4040 (Altria) at 015 ("Nu Mark 2016-2018 Strategic Plan") (listing fiscal year 2015 volume share of e-vapor market and including competing products Vuse (Reynolds), Blu (ITG), Logic (JTI), and NJOY, among others); *see also* CCFF ¶¶ 1737-48, above (describing market shares for several vapor competitors prior to Altria's exit)).

1826. Reynolds has four closed-system vapor products on the market, all sold under the brand name Vuse. (Huckabee (Reynolds) Tr. 377, 384). {[redacted]} (PX8008 at 007-10 (¶ 18) (Huckabee (Reynolds), Decl.)) (*in camera*). Prior to December 2018, and prior to Altria's exit, when setting prices for its Vuse closed-system products, Reynolds considered JUUL, MarkTen, NJOY, Logic, {[redacted]} to be its competitors. (Huckabee (Reynolds) Tr. 390, 408 (*in camera*)).

1827. Logic is a closed-system brand of e-cigarettes sold by JTI. (Begley (Altria) Tr. 977). Logic competed in the e-cigarette market at least by 2016. (Crozier (Sheetz) Tr. 1485-86 (when Crozier became category manager in 2016, Sheetz carried the Logic brand of e-cigarettes)).

1828. The Imperial Tobacco Group or ITG sells multiple closed-system e-vapor products under the brand name blu. (PX7012 (Eldridge (ITG), Dep. at 19, 26)). Blu is one of the oldest and most established e-vapor brands. (PX7012 (Eldridge (ITG), Dep. at 39)). ITG introduced its *my*blu device and *my*blu pods in 2017. (PX8011 at 004-05 (¶ 19) (Eldridge (ITG), Decl.)).

1829. NJOY was founded in 2007 and was one of the first U.S. companies to sell e-cigarettes. (PX8004 at 001 (¶ 5) (Farrell (NJOY), Decl.)). NJOY currently sells two e-cigarette products: a closed-system, rechargeable pod-based system called the NJOY Ace and a closed-system disposable product called the NJOY Daily. (Farrell (NJOY) Tr. 206-07). The product now known as Ace was on the market prior to August 8, 2016. (PX7029 (Farrell (NJOY), Dep. at 45-46)). NJOY's Daily product was also on the market prior to August 8, 2016. (PX7029 (Farrell (NJOY), Dep. at 52)).

2. Altria's Exit Did Not Prompt Any Rival to Compete More Aggressively or Effectively

1830. Dr. Murphy's before-and-after analyses of closed-system e-cigarette prices, volumes, shares, and HHIs before and after Altria's exit are flawed because Dr. Murphy does not account for confounding factors (or factors other than Altria's exit) that may explain the data. (PX5001 at 031-55 (¶¶ 49-62) (Rothman Expert Report); *see also* CCFF ¶¶ 2094-2136, below).

1831. Dr. Murphy's before-and-after analyses ignore confounding factors that may have influenced the prices and sales of e-cigarettes, including negative press surrounding vaping, changes in the minimum age to purchase nicotine, and the FDA's flavor ban. (*See* CCFF ¶¶ 2099-111, below).

3. Altria Was One of a Few Firms Well-Positioned to Compete in the E-Cigarette Market

1832. Prior to the transaction, Altria was a significant competitor in e-cigarettes and recognized the importance of e-cigarettes to its future. (*See* CCFF ¶¶ 411-94, above).

1833. Prior to the transaction, Altria was well-positioned to compete on e-cigarettes now and in the future. (*See* CCFF ¶¶ 493-531, above).

1834. Altria is uniquely positioned to compete in the e-cigarette market because there are few other companies that possess Altria's resources and FDA expertise, including distribution, shelf space, marketing, and R&D capabilities. (*See* CCFF ¶¶ 493-531, above).

1835. Altria's CEO, Howard Willard, recognized that "long-term leadership won't be achieved overnight" but stated that Nu Mark had "a diverse product portfolio and a pipeline of promising products in development" and was "well positioned to achieve long-term leadership in the category, bolstered by our company's world-class marketing, sales and distribution[,] and regulatory capabilities." (PX9045 (Altria) at 007 (2018 CAGNY Conference Remarks by Howard Willard, Feb. 21, 2018)).

1836. Other market participants viewed Altria as a formidable competitor in the e-cigarettes market. (*See* CCFF ¶¶ 497-98, above).

1837. According to a third-party survey of the e-vapor intellectual property ("IP") landscape, Altria is ranked 2nd in terms of patents with high ratings. (PX1608 (Altria) at 002 ("E-Vapor IP Landscape Review," Presented to Altria Client Services, dated Sept. 2018, and prepared by yet2)). Also, according to the same survey of IP in the e-vapor space, Altria had the 4th largest patent portfolio. (PX1608 (Altria) at 002 ("E-Vapor IP Landscape Review," Presented to Altria Client Services, dated Sept. 2018, and prepared by yet2)).

1838. According to a third-party survey of the e-vapor IP landscape, Altria enjoys a relatively strong e-vapor patent portfolio in devices, liquid, and packaging when compared to big tobacco companies and JUUL. (PX1608 (Altria) at 011 ("E-Vapor IP Landscape Review," Presented to Altria Client Services, dated Sept. 2018, and prepared by yet2)).

1839. A third-party survey of the e-vapor IP landscape in terms of issued patents indicates that Altria may have the 2nd strongest portfolio. (PX1608 (Altria) at 015 ("E-Vapor IP Landscape Review," Presented to Altria Client Services, dated Sept. 2018, and prepared by yet2)). The same survey indicated that JUUL is the weakest in issued patents, but JUUL is catching up and may have some good patent applications. (PX1608 (Altria) at 015 ("E-Vapor IP Landscape Review," Presented to Altria Client Services, dated Sept. 2018, and prepared by yet2)).

1840. Based on a third-party survey, Altria appears to have a strong e-cigarette patent portfolio related to data communications in devices, including in a claim from one of the patents of "an interface connected with the electrical hardware and operable to establish a communications link with a remote host, as well as to download software from the host or download information from the host to the system." (PX1608 (Altria) at 024 ("E-Vapor IP Landscape Review," Presented to Altria Client Services, dated Sept. 2018, and prepared by yet2)).

1841. A third party consultant, who surveyed the e-vapor IP landscape, recommended that Altria continue to invest in R&D to maintain its lead in the e-liquid patent world. (PX1608 (Altria) at 035 ("E-Vapor IP Landscape Review," Presented to Altria Client Services, dated Sept. 2018, and prepared by yet2)).

4. Having Altria in the Market Would Have Resulted in a More Competitive But-For World

1842. A But-For-World in which Altria continued to sell e-cigarettes would have been more competitive than the world in which Altria exited the market. (*See* CCFF ¶¶ 1408-16, above).

1843. Altria was an aggressive discounter in e-cigarettes before the transaction. (*See* CCFF ¶¶ 1419-35, above). Altria would have continued to discount its e-cigarettes but for the transaction. (*See* CCFF ¶¶ 1532-37, above).

1844. Prior to the transaction, Altria pursued significant research and development efforts to improve its existing e-cigarette products and launch new products. (*See* CCFF ¶¶ 1538-696, above). Without the transaction, Altria would have continued to improve its existing products and develop new products. (*See* CCFF ¶¶ 444-54, above; *cf.* CCFF ¶¶ 1538-87, above). Without the transaction, Altria would have continued to collaborate with PMI to develop and launch new products. (*See* CCFF ¶¶ 515-21, above; *cf.* CCFF ¶¶ 1694-96, above).

1845. Dr. Rothman evaluated the incentives and abilities of Altria to continue competing in the e-cigarette market and concluded that Altria would have been a significant competitor in the e-cigarettes market absent the transaction. (PX7048 (Rothman, Trial Dep. at 29-34); PX5000 at 043-75 (¶¶ 91-129), 075-77 (¶¶ 131-33) (Rothman Expert Report)).

1846. Dr. Rothman calibrated a model of e-cigarette competition to estimate the loss of consumer surplus from Altria's exit for two scenarios. (PX7048 (Rothman, Trial Dep. at 68-70); PX5000 at 043-044 (¶ 92), 146-150 (Appendix E) (Rothman Expert Report)). In the first scenario, Dr. Rothman assumes Altria would have maintained its 10 percent share, and in the second scenario, he assumes Altria would have grown its share to 20 percent by 2020. (PX7048 (Rothman, Trial Dep. at 68-69; PX5000 at 043-044 (¶ 92) (Rothman Expert Report)). Dr. Rothman also estimated the efficiencies that would be required to offset the harm caused by Altria's exit. (PX7048 (Rothman, Trial Dep. at 69-70; PX5000 at 043-044 (¶ 92) (Rothman Expert Report)). He estimated that efficiencies of 13.3 percent would be required if Altria otherwise would have maintained a 10 percent share and that efficiencies of 26.5 percent would be required if Altria otherwise would have grown to its share to 20 percent. (PX5000 at 043-44 (¶ 92) (Rothman Expert Report)); *see also* CCFF ¶ 1409, above).

C. Entry by PMI Will Not Replace the Lost Competition

1847. {[redacted] (King (PMI) Tr. 2412-13 ({[redacted]}), 2499-2500 ({[redacted]) (*in camera*); PX7020 (King (PMI), Dep. at 82-83) (*in camera*); PX3106 (PMI) (*in camera*) ([redacted]}); PX3210 (PMI) (*in camera*) ({[redacted]}).

1. IP Entanglements Present Obstacles to PMI's Entry

1848. [redacted] (RX0873 (Altria) at 016-18 (*in camera*) ({[redacted]}); King (PMI) Tr. 2390-91, 2409-10). {[redacted]} (King (PMI) Tr. 2390-91, 2394-95, 2409-10, 2412-13, 2499-2500 (*in camera*); PX7020 (King (PMI), Dep. at 34-35, 81-82) (*in camera*)).

1849. [redacted] (PX7020 (King (PMI), Dep. at 34-35) (*in camera*)). {[redacted]} (PX7020 (King (PMI), Dep. at 34-35) (*in camera*)).

1850. [redacted] (PX7020 (King (PMI), Dep. at 81-82) (*in camera*)).

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1851. [redacted] (PX7020 (King (PMI), Dep. at 82-83) (*in camera*); *see also* King (PMI) Tr. 2499-2500 (*in camera*)). [redacted] (PX7020 (King (PMI), Dep. at 82-83) (*in camera*); *see also* King (PMI) Tr. 2499-2500 (*in camera*)).

1852. [redacted] (PX3106 (PMI) (*in camera*) ([redacted] }); PX3210 (PMI) (*in camera*) ({ [redacted] }). { [redacted] } (King (PMI) Tr. 2391-92 (*in camera*)).

1853. { [redacted] } (PX3106 (PMI) at 002) (*in camera*).

1854. [redacted] } (PX3106 (PMI) at 003 (*in camera*)).

1855. [redacted] } (King (PMI) Tr. 2398 (*in camera*); PX7040 (Gifford (Altria), Dep. at 179)). { [redacted] } (PX3210 (PMI) at 001 (*in camera*)).

1856. [redacted] (PX3210 (PMI) at 002 (*in camera*)). [redacted]

[redacted]} (PX3210 (PMI) at 002 (*in camera*)).

1857. [redacted] (King (PMI) Tr. 2398, 2413, 2499-2500 (*in camera*); *see also* PX7040 (Gifford (Altria), Dep. at 179-180); PX7020 (King (PMI), Dep. at 81-82) (*in camera*); PX3106 (PMI) (*in camera*) ({[redacted]}); PX3210 (PMI) (*in camera*) ({[redacted]})).

2. Altria Took Steps to Block PMI From Filing a PMTA for VEEV

1858. [redacted] (PX3106 (PMI) at 002 (*in camera*) ([redacted]} (PX3106 (PMI) at 002 (*in camera*) ({[redacted]}); *see also* King (PMI) Tr. 2391-92, 2399-2400 (*in camera*)).

1859. [redacted] (RX0873 (Altria) at 012-13 (*in camera*); PX3049 (PMI) at 001 (*in camera*) ([redacted]}); King (PMI) Tr. 2388-89 (*in camera*).)

1860. [redacted]} (PX3044 (PMI) at 001-02 (*in camera*)). [redacted]

[redacted]} (*See* CCFF ¶¶ 1694-96, above).

1861. [redacted] (PX3044 (PMI) at 001-02 (*in camera*); *see also* PX7020 (King (PMI), Dep. at 52) (*in camera*)).

1862. {[redacted] (PX3049 (Altria) at 001 (*in camera*); *see also* PX7020 (King (PMI), Dep. at 52) (*in camera*)).

1863. [redacted] (PX3210 (PMI) at 001-02 (*in camera*)). {[redacted] (PX3210 (PMI) at 001-02 (*in camera*); King (PMI) Tr. 2391-92 (*in camera*)).

3. PMI's "Go It Alone" Strategy Is Inferior to Collaboration with Altria

1864. [redacted]} (King (PMI) Tr. 2412-13 (*in camera*) ([redacted]}).

1865. PMI entered into the JRDTA to commercialize VEEV with Altria rather than going it alone because of Altria's many strengths in the U.S., including Altria's sales force, relationships with retailers, and regulatory affairs. (PX7020 (King (PMI), Dep. at 47-48)). According to PMI's King, having Altria commercialize VEEV in the U.S. would have sped the commercialization and make the success much more likely and faster." (PX7020 (King (PMI), Dep. at 47-48) ("we felt that with Altria's footprint, outstanding sales force, access to retail shops, all of their other supporting abilities, including government affairs, etcetera, would help commercialization of [VEEV], and it would speed the commercialization and make the success much more likely and faster.")).

1866. While Altria has "decades of experience and a large, well-resourced sales function that bar none, [is] the best," PMI does not have a sales force or well-established relationships with convenience store chains in the U.S. (King (PMI) Tr. 2362). As a result, Altria "would have much more ability to work with retailers and others to commercialize" VEEV in the U.S. than PMI does. (King (PMI) Tr. 2362, *see also* 2384 (*in camera*)).

1867. [redacted] } (King (PMI) Tr. 2384 (*in camera*) ([redacted] }).

1868. [redacted] (King (PMI) Tr. 2385 (*in camera*) ({ [redacted]); *see also* PX7020 (King (PMI), Dep. at 173) (*in camera*)).

1869. [redacted] } (King (PMI) Tr. 2385 (*in camera*) ({ [redacted] }). { [redacted] } (King (PMI) Tr. 2385 (*in camera*)).

1870. [redacted] (King (PMI) Tr. 2386-88 (*in camera*) ([redacted]); PX7020 (King (PMI), Dep. at 63-64) ("Altria has had a number of different solutions to the FDA under the tobacco area, and they have a great deal of expertise on what it would take to get authorization for e-cigarettes. . . . PMI has now a great deal of expertise on the heat not burn area . . . However, in other areas, other products like e-cigarettes, Altria has more experience than PMI.")).

XIV. RESPONDENTS' ASSERTED EFFICIENCIES DO NOT REBUT THE PRESUMPTION OF COMPETITIVE HARM

1871. Respondents claim efficiencies based on certain services that Altria agreed to provide to JLI pursuant to the Services Agreement. (*See* CCFF ¶¶ 1873-79, below). The January 2020 amendment to the Services Agreement eliminated all services other than regulatory services related to JLI's PMTA and MRTP applications. (*See* CCFF ¶¶ 1880-83, below).

1872. Respondents have not substantiated their efficiencies claims, and the evidence makes clear that JLI likely could have achieved comparable benefits without those services. (*See* CCFF ¶¶ 1884-995, below).

A. Respondents Assert Efficiencies Based on the Services Agreement

1873. From Altria's perspective, "the cost savings, economies, and other efficiencies anticipated as a result of the Proposed Transaction . . . are derived mainly from the Services Agreement." (PX0007 (Altria) at 025 (Altria Second Request Narrative Response)).

1874. The Services Agreement set forth categories of services available to JLI, but JLI "could make the decision of whether to hire Altria for that service or find another source." (PX7010 (Gifford (Altria), IHT at 55)).

1875. The Services Agreement set forth categories of services available to JLI, but "the terms of any specific services are subject to negotiation of a statement of work between [Altria and JLI]." (PX0007 (Altria) at 026 (Altria Second Request Narrative Response)).

1876. Even after agreeing to a statement of work, JLI could choose to cancel services that were being provided. (PX7010 (Gifford (Altria), IHT at 56)).

1877. Under the Services Agreement, the "time and cost of each service is set forth in each statement of work and calculated based on Altria's cost plus 3 percent." (PX0007 (Altria) at 026 (Altria Second Request Narrative Response)).

1878. In a pair of submissions to the FTC in the fall of 2019, Altria and JLI asserted efficiencies associated with the following categories of services under the Services Agreement: government and regulatory support, distribution support, fixture services, database access and direct marketing, and sales services. (PX0007 (Altria) at 029-32 (Altria Second Request Narrative Response); PX2160 (JLI) at 082-98 (JLI Second Request Narrative Response)). Respondents did not identify any statements of work for mission support or legal services at that time. (PX0007 (Altria) at 029-32; PX2160 (JLI) at 097-98).

1879. Ultimately, Respondents did not execute any statements of work related to mission support or legal services. (PX7010 (Gifford (Altria), IHT at 65-66)).

B. The Amended Agreement Narrowed Available Regulatory Services and Halted All Non-Regulatory Services

1880. On January 28, 2020, Altria and JLI executed an amendment to the Services Agreement. (PX0012 (Altria/JLI) at 002).

1881. In its Form 8-K filed with the Securities and Exchange Commission on January 28, 2020, Altria explained that "[u]nder the amended terms of the Services Agreement, Altria's obligation to provide services to JUUL is limited to (i) regulatory affairs support for JUUL's pursuit of its pre-market tobacco applications (PMTA) and/or its modified risk tobacco products authorization (MRTP) and (ii) retail shelf space through March 31, 2020." (PX9028 (Altria) at 002).

1882. As a consequence of the amendments to the Services Agreement, Altria has not provided any services to JLI since January 2020 other than regulatory services and retail shelf space. (PX7040 (Gifford (Altria), Dep. at 36)).

1883. As a consequence of the amendments to the Services Agreement, Altria's regulatory support to JLI was in fact limited to JLI's PMTA and MRTP. (PX7040 (Gifford (Altria), Dep. at 34-35)).

C. Respondents' Claimed Efficiencies Are Not Cognizable

1884. Altria noted that "JLI is the best source" for a quantification of the benefits of the services to JLI. (PX0007 (Altria) at 032 (Altria Second Request Narrative Response)).

1885. JLI did not attempt to estimate projected savings in connection with any of the services before entering into the transaction. (PX7008 (Cullen (JLI), IHT at 20)).

1886. As of January 2020, JLI had not estimated a bottom-line, consolidated number for all the cost savings it claimed it had achieved as a result of the transaction, nor had it attempted to do so. (PX7008 (Cullen (JLI), IHT at 19)).

1887. O'Hara, Director of Regulatory Strategy at JLI, is not aware of anyone at JLI ever trying to estimate the value of the services provided by Altria to JLI in whole or in part, and acknowledged that "if anybody did, it would have been super speculative." (PX7033 (O'Hara (JLI), Dep. at 187-88)).

1888. Dr. Rothman's modeling predicted that "substantial efficiencies would be required to offset the loss of consumer surplus from Altria's exit," but that ultimately "transaction-specific efficiencies . . . don't offset the—the loss of Altria." (PX7048 (Rothman, Trial Dep. at 91-92); PX5000 at 081-83 (¶¶ 141-45, 148-49) (Rothman Expert Report)).

1. Regulatory Services Are Not Cognizable

1889. JLI claimed that Altria's regulatory services would "accelerate JLI's FDA application process and advance the sophistication of JLI's science programs." (PX2160 (JLI) at 088 (JLI Second Request Narrative Response)). Specifically, it estimated that its PMTA application timeline would "improve by 17-28 months," and it expected to save "$1.5 to 2 million in regulatory-related expenses." (PX2160 (JLI) at 088). It expected to achieve these benefits by leveraging Altria's regulatory expertise, research facilities and methods, and literature review work. (PX2160 (JLI) at 088-89).

1890. Altria has pointed to an internal estimate presented in an April 2018 slide deck on Project Tree that a partnership between Altria and JLI would improve JLI's PMTA chances from 50% to 70%. (PX0007 (Altria) at 033 (Altria Second Request Narrative Response) (citing PX1409 at 003 (slide deck on Project Tree))).

a) Regulatory Services Are Not Verifiable

(1) Respondents' Regulatory Claims Are Unsubstantiated

1891. Based on his review of testimony and ordinary-course documents, Dr. Rothman concluded that Respondents "have not substantiated the claim that Altria helping JLI with its PMTA application enabled [JLI] to submit its PMTA application earlier." (PX7048 (Rothman, Trial Dep. at 83); PX5000 at 085-88 (¶¶ 150-56) (Rothman Expert Report)).

1892. The document JLI cites as the source of its estimated [redacted]} (PX2193 (JLI) at 006 (*in camera*)). Cullen, Director of Strategic Finance at JLI and JLI's corporate designee to testify about transaction efficiencies, acknowledged that the slide deck "preceded a lot of the PMTA work with Altria" and the ensuing regulatory statements of work. (PX7008 (Cullen (JLI), IHT at 127)). {[redacted]} (PX2193 (JLI) at 006 [redacted]

1893. [redacted] (PX2193 (JLI) at 006 [redacted] (*in camera*)). [redacted]

1894. [redacted] but Cullen could provide no further detail on the basis of the estimate. (PX7008 (Cullen (JLI), IHT at 122) (*in camera*)).

1895. The draft slide deck JLI cites as the source of its estimated {[redacted]} but provides no explanation of how those estimates were generated or the extent to which such savings would benefit consumers. (PX2193 (JLI) at 006 (*in camera*)).

1896. Cullen could not identify the support for JLI's estimate of {[redacted] (PX7008 (Cullen (JLI), IHT at 127-28) (*in camera*)).

1897. Altria's estimate that a partnership between Altria and JLI would improve JLI's PMTA chances by 20 percentage is dated April 2018 (PX1409 (Altria) at 003 (Altria slide deck on Project Tree)), at least six months before Altria performed any due diligence in connection with the transaction (*see* Garnick (Altria) Tr. 1776 (testifying that Altria "began due diligence in November, and we had no idea what due diligence would have uncovered")). The estimate was based on the judgment of Altria executives, who "didn't have a detailed assessment of [JLI's] regulatory capability." (PX7010 (Gifford (Altria), IHT at 126-27)).

(2) Predictions about JLI's Likelihood of PMTA Success Are Speculative

(a) Respondents Have Little Insight into FDA's Internal Deliberations and Face a Range of Potential Outcomes

1898. As Murillo, Chief Regulatory Officer at JLI, testified, it is "difficult for anybody" to predict whether a PMTA submission will be successful. (PX7027 (Murillo (Altria/JLI), Dep. at 42)).

1899. The FDA has yet to approve any e-vapor PMTA. (PX7027 (Murillo (Altria/JLI), Dep. at 43); PX7009 (Burns (JLI), IHT at 235)).

1900. Regarding the PMTA process in 2019, Burns, former CEO of JLI, testified that "given, frankly, the lack of clarity, [JLI] had to interpret the PMTA requirement and design a program which we hoped would satisfy the PMTA. But the company was in uncharted territory. And frankly, outside of the IQOS product, which is a slightly different product, there was no certainty about what the requirements were going to be." (PX7009 (Burns (JLI), IHT at 234-35)).

1901. [redacted] (PX7007 (Murillo (Altria/JLI), IHT at 80-81) (testifying that [redacted]) (*in camera*); PX7008 (Cullen (JLI), IHT at 132) ("I don't think we have a house view on a specific number."); PX7027 (Murillo (Altria/JLI), Dep. at 65-66)).

1902. In terms of the potential for FDA approval of JLI's PMTA submission, Murillo thinks of that potential in qualitative terms rather than quantitative terms. (PX7027 (Murillo (Altria/JLI), Dep. at 65-66)).

1903. As O'Hara testified, it would be speculative to attach a dollar value to a qualitative performance indicator, such as an improvement in lab testing due to Altria's regulatory services. (PX7033 (O'Hara (JLI), Dep. at 185-87)).

1904. The FDA has not given JLI any indication as to its ultimate decision with respect to any of the products in JLI's PMTA submission. (PX7027 (Murillo (Altria/JLI), Dep. at 40)).

1905. The FDA has not given JLI any indication as to whether any JLI products are more or less likely than others to receive PMTA approval. (PX7027 (Murillo (Altria/JLI), Dep. at 40)).

1906. The FDA indicated that JLI would receive a "deficiency letter" requesting further information in connection with JLI's PMTA submission. (PX7027 (Murillo (Altria/JLI), Dep. at 34-35); *see* PX0032 (Altria) at 056 (Altria Response to Interrogatory No. 13)).

1907. JLI may need to amend its PMTA submission depending on the questions it receives from the FDA. (PX7027 (Murillo (Altria/JLI), Dep. at 38); *see* PX0032 (Altria) at 056 (Altria Response to Interrogatory No. 13)).

1908. Receiving a deficiency letter from the FDA can toll the PMTA review timeframe. (PX7027 (Murillo (Altria/JLI), Dep. at 39)).

1909. Ultimately, the FDA is able to adjust within its discretion the deadline for it to reach a final decision on JLI's PMTA submission. (PX7027 (Murillo (Altria/JLI), Dep. at 38-39)).

1910. Even if FDA were to approve an e-vapor product, Murillo believes the agency has made clear that such approval would likely be subject to a number of marketing restrictions. (PX7027 (Murillo (Altria/JLI), Dep. at 66-67)).

1911. In late-September, around the time he was considering leaving Altria for JLI, Murillo felt that the regulatory services that Altria was providing were not going to be sufficient to address JLI's challenges in securing a PMTA. (PX7007 (Murillo (Altria/JLI), IHT at 86-87)). Despite the services Altria had been providing, he had "significant concerns" that were "still deeply troubling." (PX7007 (Murillo (Altria/JLI), IHT at 86-87)).

(b) The Prevalence of Youth Vaping Poses a Particular Risk to JLI's PMTA Submission

1912. Youth use of an e-vapor product is an example of an unintended consequence, making it relevant to the FDA's PMTA analysis, and the prevalence of youth use poses a significant risk to JLI's PMTA submission. (*See* CCFF ¶¶ 1913-17, below).

1913. Altria still does not know exactly how much weight the FDA will put on the PMTA factors "adult smoker conversion" and "no unintended consequences." (Garnick (Altria) Tr. 1734).

1914. As Murillo testified, "Certainly you would want to see as limited unintended consequences as possible" in assessing a product's likelihood of receiving PMTA approval. (Murillo (Altria/JLI) Tr. 3031).

1915. In the context of an e-vapor PMTA, youth use is an example of an unintended consequence. (Murillo (Altria/JLI) Tr. 3032). Accordingly, the risk of youth use is relevant to the PMTA analysis for an e-vapor product. (Murillo (Altria/JLI) Tr. 3032).

1916. Murillo has seen the prevalence of youth vaping "as a very significant risk" to JLI's receiving PMTA approval for the in-market Juul device. (PX7027 (Murillo (Altria/JLI), Dep. at 70-71). In fact, he testified that [redacted] (PX7007 (Murillo (Altria/JLI), IHT at 80) (*in camera*)).

1917. A December 2018 due diligence report prepared by the regulatory consulting firm, Greenleaf Health, noted that "[t]he major hurdle Tree will face in seeking approval of a PMTA for its current ENDS product is likely to be their ability to successfully address the issue of youth use and initiation." (PX1552 (Altria) at 018).

b) Regulatory Services Are Not Merger Specific

1918. JLI has acknowledged that it "did not formally analyze alternatives to using Altria's [regulatory] services." (PX0031 (JLI) at 031 (JLI Response to Interrogatory No. 11)).

1919. JLI's Danaher did not recall any discussions at JLI in 2018 about potentially using an information firewall instead of a non-compete agreement in connection with Altria's provision of support services to JLI. (PX7042 (Danaher (JLI), Dep. at 154-55)).

1920. Based on his review of testimony, and ordinary-course documents, Dr. Rothman concluded that "JLI's incentives to do whatever it could do to maximize the likelihood of obtaining PMTA approval were very, very high. This was an existential issue for JLI." (PX7048 (Rothman, Trial Dep. at 78-79); PX5000 at 087-88 (¶ 156) (Rothman Expert Report)).

1921. As Cullen acknowledged, even if JLI had not entered the Services Agreement, it "would have [had] to in a way" move its internal timeline forward once the PMTA deadline moved forward. (PX7008 (Cullen, IHT at 124)).

1922. By the time Altria began providing JLI with regulatory services, {[redacted]} (PX7007 (Murillo (Altria/JLI), IHT at 79) (*in camera*)).

1923. In response to the PMTA deadline moving to May 2020, JLI accelerated many aspects of studies, accelerated spending, and hired extra people, consultants, and vendors. (PX7007 (Murillo (Altria/JLI), IHT at 96)).

1924. In 2019, JLI undertook "a very broad and deep effort to very quickly shore up the [PMTA] work that was required." (PX7027 (Murillo (Altria/JLI), Dep. at 49-50)).

(1) Other Companies Successfully Submitted PMTAs by the September 2020 Deadline

1925. To Murillo's recollection, there are at least half a million PMTA applications pending before the FDA. (Murillo (Altria/JLI) Tr. 2932). This includes PMTAs from "a lot of small companies" that have partnered together and "pooled their resources to try to put lots of applications bundled together." (Murillo (Altria/JLI) Tr. 3018-19).

1926. [redacted]

1927. Reynolds filed an e-vapor PMTA submission in 2019 that subsequently proceeded to scientific review at the FDA. (PX7007 (Murillo (Altria/JLI), IHT at 24-25)). It also filed another e-vapor PMTA submission prior to the September 9, 2020 deadline. (RX1998

(Reynolds) at 001 (press release on PMTA submissions); PX7037 (Huckabee (Reynolds), Dep. at 91-92)).

1928. Imperial filed at least one e-vapor PMTA submission prior to the September 2020 deadline (PX7012 (Eldridge (ITG), Dep. at 90)).

(2) JLI Took Numerous Stand-Alone Measures to Accelerate and Improve Its PMTA Submission

1929. During Burns tenure as CEO of JLI, the company "[h]ired a lot of people" and expanded its scientific affairs department from three to 100 people, and "put in a group of 12 to 15 people that just conducted all of [JLI's] external behavioral studies." (PX7009 (Burns (JLI), IHT at 113-16)). Never having conducted a formalized behavioral study before, JLI had conducted over 20 by the time Burns left the company. (PX7009 (Burns (JLI), IHT at 113-16)).

1930. Before engaging Altria, JLI had already done some work toward compiling a literature review for use in its PMTA submission. (PX7027 (Murillo (Altria/JLI), Dep. at 109)).

1931. During Burns' tenure as CEO of JLI, the company had "[l]iterally hundreds" of people involved in the preparation of its PMTA. (PX7009 (Burns (JLI), IHT at 70-71); *see* PX7007 (Murillo (Altria/JLI), IHT at 95 (testifying that, as of December 2019, over 100 JLI employees were working on the company's PMTA submission)).

1932. During his tenure as CEO Burns felt that JLI's Board of Directors was "incredibly supportive . . . on any resources I needed to run the company adequately," and never "pushed back in terms of allocating resources to make the company more successful." (PX7009 (Burns (JLI), IHT at 235)).

1933. One JLI stand-alone hire is Ryan Wick, a former PMI employee who had worked on the IQOS PMTA (Murillo (Altria/JLI) Tr. 3065-66), and who now works on JLI's PMTAs. (PX7027 (Murillo (Altria/JLI), Dep. at 87-88)).

1934. JLI has hired former Altria employees, including people who performed work related to JLI's PMTA submissions. (Murillo (Altria/JLI) Tr. 3063-65).

1935. JLI hired Murillo to serve as its Chief Regulatory Officer. (Murillo (Altria/JLI) Tr. 2896; PX7027 (Murillo (Altria/JLI), Dep. at 12)). Prior to joining JLI, Murillo, as SVP of Regulatory Affairs at Altria, had performed work related to Altria's PMTA services for JLI. (Murillo (Altria/JLI) Tr. 3064; PX7027 (Murillo (Altria/JLI), Dep. at 17)). In 2019, Murillo left Altria to join JLI, where he oversaw the preparation of JLI's PMTA submission. (PX7027 (Murillo (Altria/JLI), Dep. at 12-13)).

1936. During his time at Altria in 2019, Murillo brought his regulatory expertise to bear on his work related to Altria's PMTA services for JLI. (Murillo (Altria/JLI) Tr. 3064; PX7027 (Murillo (Altria/JLI), Dep. at 21)). Since joining JLI, he has used that same regulatory expertise as CRO. (Murillo (Altria/JLI) Tr. 3065; PX7027 (Murillo (Altria/JLI), Dep. at 21)).

1937. As CRO of JLI, Murillo reorganized JLI's Regulatory Department, which, in his view, helped the company meet the tight PMTA deadlines. (PX7027 (Murillo (Altria/JLI), Dep. at 45-46)).

1938. As CRO of JLI, Murillo believes that he helped facilitate and accelerate the preparation of JLI's PMTA submission. (Murillo (Altria/JLI) Tr. 3065; PX7027 (Murillo (Altria/JLI), Dep. at 24-25)).

1939. JLI also hired Elizabeth Copeland, who had worked in Altria's regulatory affairs department. (Murillo (Altria/JLI) Tr. 3063-64; PX7027 (Murillo (Altria/JLI), Dep. at 13-14). In 2019, while still at Altria, Ms. Copeland performed work related to Altria's PMTA services to JLI. (Murillo (Altria/JLI) Tr. 3064; PX7027 (Murillo (Altria/JLI), Dep. at 58)). In 2020, Ms. Copeland left Altria to join JLI, where she is now in charge of the company's regulatory submissions in the United States, including PMTAs. (Murillo (Altria/JLI) Tr. 3064; PX7027 (Murillo (Altria/JLI), Dep. at 13-14)).

1940. JLI also hired Dr. Willie McKinney, a toxicologist who left Altria to work at JLI (Murillo (Altria/JLI) Tr. 3063; PX7027 (Murillo (Altria/JLI), Dep. at 59)). In an October 2018 email, a senior director at JLI noted that Dr. McKinney "would be a most amazing asset" and that hiring him would "make a huge difference in our capabilities." (PX1084 (Altria) at 001).

1941. In the past, Altria, too, has relied on external hiring to fill gaps in PMTA capabilities. (PX7017 (Magness (Altria), Dep. at 21-23) (describing a "pretty quick ramp" of "maybe a matter of six months or so" where Altria expanded a PMTA team from eight to 22 people, relying in part on external hiring)).

(3) Altria Was One of Many Parties That Contributed to JLI's PMTA

1942. In 2019, JLI engaged a number of outside consultants to work on its PMTA. (Murillo (Altria/JLI) Tr. 3066; Gardner (Altria) Tr. 2693-94; PX7027 (Murillo (Altria/JLI), Dep. at 49) ("Q: Okay, in 2019, what consultants did JLI bring on to work on its PMTAs? A: I mean, many.")).

1943. JLI had a broad agreement with consultancy Pinney Associates, which included help with JLI's PMTA. (Murillo (Altria/JLI) Tr. 3066; Gardner (Altria) Tr. 2693-94; PX7027 (Murillo (Altria/JLI), Dep. at 51); *see also* PX0031 (JLI) at 011 (JLI Response to Interrogatory No. 2) (*in camera*)). By the time JLI engaged Pinney Associates in October of 2019, the consultancy had worked on harm reduction matters for other companies for some time and had significant expertise. (PX7027 (Murillo (Altria/JLI) Dep. at 49-50)).

1944. Pinney Associates contributed significantly to JLI's PMTA. (Murillo (Altria/JLI) Tr. 3066; PX7027 (Murillo (Altria/JLI), Dep. at 53)).

1945. Pinney Associates assisted JLI with work related to population modeling in connection with JLI's PMTA submission. (Murillo (Altria/JLI) Tr. 3066; PX7027 (Murillo (Altria/JLI), Dep. at 52)). For example, it was involved with preparing some of the inputs to the population model in connection with JLI's PMTA submission. (Murillo (Altria/JLI) Tr. 3067; PX7027 (Murillo (Altria/JLI), Dep. at 52)). It was also involved with an assessment of the literature. (PX7027 (Murillo (Altria/JLI), Dep. at 52)).

1946. JLI engaged clinical research organizations in connection with preparing its PMTA submission. (Murillo (Altria/JLI) Tr. 3067).

1947. JLI engaged CSUR, a contract research organization that focuses on behavioral research, to conduct a number of behavioral studies for JLI's PMTA (Gardner (Altria) Tr. 2694; PX7027 (Murillo (Altria/JLI), Dep. at 55-56)), including consumer switching studies that were incorporated into JLI's PMTA (PX7027 (Murillo (Altria/JLI), Dep. at 69-70)).

1948. JLI had a broad relationship with third party Cambridge Associates, which included assisting JLI's product engineering group with part of its PMTA work. (PX7027 (Murillo (Altria/JLI), Dep. at 55); PX0031 (JLI) at 013 (JLI Response to Interrogatory No. 2) (*in camera*)).

1949. JLI engaged other individual consultants with specific expertise in connection with preparing its PMTA submission. (Murillo (Altria/JLI) Tr. 3067; PX7027 (Murillo (Altria/JLI), Dep. at 49-50)).

1950. JLI engaged toxicologists as individual consultants in connection with preparing its PMTA submission. (Murillo (Altria/JLI) Tr. 3067; PX7027 (Murillo (Altria/JLI), Dep. at 49-50)).

1951. Not only did JLI directly engage third parties to support its PMTA preparation, but Altria also engaged third parties to assist with the regulatory services it provided to JLI pursuant to the Services Agreement. (Murillo (Altria/JLI) Tr. 3068; PX7010 (Gifford, IHT at 123)).

1952. For example, Altria engaged an external chemistry laboratory called Enthalpy Analytics in connection with {[redacted]}. (PX7027 (Murillo (Altria/JLI), Dep. at 79-80 (*in camera*)); PX2209 (JLI) at 003-04 (Statement of Work #15)). Enthalpy Analytics is capable of performing validated methods with respect to vapor products. (PX7027 (Murillo (Altria/JLI), Dep. at 80-81)). In the past, JLI has directly engaged Enthalpy Analytics for other work. (PX7027 (Murillo (Altria/JLI), Dep. at 80)).

1953. Altria also engaged a contract research organization called Battelle in connection with {[redacted]}. (PX7027 (Murillo (Altria/JLI), Dep. at 90 (*in camera*); PX4067 at 003 (Statement of Work #20)). Battelle is capable of performing studies of various sorts, including toxicology, chemistry, and other types of product characterization. (PX7027 (Murillo (Altria/JLI), Dep. at 90-91)). {[redacted]} (PX7027 (Murillo (Altria/JLI), Dep. at 92) (*in camera*)).

1954. Altria also engaged a third party called Eurofins Lancaster in connection with {[redacted]} (PX7027 (Murillo

(Altria/JLI), Dep. at 99-100 (*in camera*)); PX4069 (Statement of Work #22)). Eurofins Lancaster is a staffing agency that provides laboratory technicians to companies so that the companies can "staff up and down depending on project requirements." (PX7027 (Murillo (Altria/JLI), Dep. at 99-100)). In essence, it provided "temporary help but with the expertise to run the machines that were used for this activity." (PX7027 (Murillo (Altria/JLI), Dep. at 99-100)).

1955. The population model that Altria used in support of JLI's PMTA submission was developed not by Altria scientists alone but in collaboration with external public health scientists. (Murillo (Altria/JLI) Tr. 3006; *see also* PX7027 (Murillo (Altria/JLI), Dep. at 104) (testifying in reference to Altria's agent-based model that "Altria didn't develop it by itself. I mean, there were—it was a collaboration.")).

2. Non-Regulatory Services Are Not Cognizable

1956. Based on his review of submissions, testimony, and ordinary-course documents, Dr. Rothman concluded that Respondents have not provided information to substantiate their claimed non-regulatory efficiencies. (PX7048 (Rothman, Trial Dep. at 84-85); PX5000 at 088-96 (¶¶ 157-75) (Rothman Expert Report)).

a) <u>Fixture Services Are Not Cognizable</u>

1957. Before the amended Services Agreement terminated all non-regulatory services, Altria had agreed to make its ITP shelf space available to JLI for lease, and to support JLI's efforts to improve point-of-sale prominence, such as higher shelf placement and more facings. (PX2160 (JLI) at 086-87). JLI claimed that Altria's fixture services would increase sales volume of JLI's products. (PX2160 (JLI) at 086-87).

1958. Altria provided shelf space to JLI that had been allocated in part to Nu Mark's e-vapor products. (PX7010 (Gifford, IHT at 77-78)).

1959. A June 2019 internal JLI status update on Altria's fixture services indicated that "ITP Resets are behind the original schedule," and projected finishing 2019 at roughly 55% of its expectations in terms of facings. (PX2197 (JLI) at 004, 009; *see also* PX2203 (JLI) at 001 (Jul. 28, 2019 Email update on Altria services) (noting "fixture progress delays" and that ITP effort "slowed down and remains flat."); PX7008 (Cullen (JLI), IHT at 98-99) ("The Altria shelving resets were occurring at a pace slower than had originally been projected.")).

1960. JLI claimed that as of July 2019, approximately 17,900 ITP stores had been reset with JLI products (PX2160 (JLI) at 086 (JLI Second Request Narrative Response)), but the document cited for support was withheld for privilege (PX2203 (JLI) at 008; PX7008 (Cullen (JLI), IHT at 96-97) (*in camera*)).

1961. JLI estimated a revenue increase of $100 million per year due to Altria's ITP space "along with other investments in JUUL-only chains and other channels" (PX2160 (JLI) at 86 (JLI Second Request Narrative Response)), but the document cited for support was withheld for privilege (PX2203 (JLI) at 008; PX7008 (Cullen (JLI), IHT at 108-09). Moreover, the projection includes retail chains that were not covered by Altria's fixture services. (PX7008 (Cullen (JLI), IHT at 109)).

1962. JLI's claim that "[s]hifts in back bar placement from bottom to top shelf alone could result in an estimated 10% life in sales volume" (PX2160 (JLI) at 086 (JLI Second Request Narrative Response)) was based on "very preliminary interviews of some chains" (PX2188 (JLI) at 007 (draft McKinsey deck on fixture services), and Cullen was unable to identify further support (PX7008 (Cullen (JLI), IHT at 112-13)).

1963. JLI claimed that "moving from less than eight to more than eight facings in retail locations could result in an estimated sales lift of 2-3%" (PX2160 (JLI) at 086-87 (JLI Second Request Narrative Response)), but the document cited lists the source for that estimate simply as "[e]xpert interviews" (PX2188 (JLI) at 014 (draft McKinsey deck), and Cullen was unable to provide further support (PX7008 (Cullen (JLI), IHT at 113-14)).

1964. JLI claimed that utilizing Altria's field sales team for fixture services would represent approximately 16-20% in cost savings (PX2160 (JLI) at 087 (JLI Second Request Narrative Response)), but the document it cited for support is unrelated to fixture services (PX2186 (JLI) (flash report on sales)), and Cullen could not provide further detail (PX7008 (Cullen (JLI), IHT at 114-15)).

1965. As of March 2018, JLI was planning stand-alone investments in in-store fixtures and placement to drive sales. (PX2040 (JLI) at 004 (March 2018 presentation script); PX7005 (Danaher, IHT at 74-76)).

1966. JLI grew its sales on a stand-alone basis from September 2017 through November 2018 (PX2062 (JLI) at 006 (sales and marketing deck dated November 2018); *see also* PX7005 (Burns (JLI), IHT at 191-92) (noting that JLI "would have had other space that would . . . allow us to compete incredibly well," and that JLI was "doing that through 2018")).

b) <u>Sales Services Are Not Cognizable</u>

1967. Before the amended Services Agreement terminated all non-regulatory services, Altria had agreed to a range of sales services, from making Altria salespeople available to assist JLI on out-of-stock distribution gaps, "light merchandising," executing pre-orders, and "surveying and photographing the vapor category," to inviting JLI to an Altria trade show. (PX2160 (JLI) at 096-97).

1968. One reason that Altria proposed amending the Services Agreement was that "you had confusion around the retailer, who they should talk to depending on a given topic," because JLI was "using [Altria's] sales force on an ad hoc basis" in addition to using its own sales force. (PX7010 (Gifford (Altria), IHT at 231-32)).

1969. At the time of the transaction, Altria had not anticipated the challenge of retailer confusion in connection with its sales services. (PX7010 (Gifford (Altria), IHT at 232)). Gifford testified that Altria "certainly expected [JLI] to engage with a lot more of our resources available to us," adding that Altria "had a well oiled machine with our sales force organization" but that JLI "basically would just use them on an ad hoc basis." (PX7010 (Gifford (Altria), IHT at 231-32)).

1970. In support of a claim that Altria's sales services "will result in $36 million in additional revenue net of the Territory Sales Manager costs," JLI cites to a draft slide deck prepared by third-party consultant McKinsey. (PX2160 (JLI) at 096 (JLI Second Request Narrative Response) (citing PX2189 (JLI) at 006 (draft McKinsey deck)). However, the slide deck does not identify the basis of the estimate, and Cullen could not provide further detail. (PX2189 (JLI) at 006; PX7008 (Cullen (JLI), IHT at 188-89)).

1971. In support of a claim that "JLI has experienced a 10% reduction in [out-of-stock issues], which corresponds to a $3 million benefit," JLI cites to a draft document that does not identify the basis for the claim (PX2160 (JLI) at 096 (JLI Second Request Narrative Response) (citing PX2210 (JLI) (direct mail and inserts summary)). Cullen acknowledged that the cited document "does not appear to support the claim related to reduction and out of stock," and could not provide further detail. (PX7008 (Cullen (JLI), IHT at 199-201)).

1972. As of early-2018, JLI was investing in expanding its sales force. (PX2040 (JLI) at 015 (March 2018 presentation script); PX7005 (Danaher, IHT at 76-77)). This included territory sales managers, who would be "based in their local market," would "visit retail establishments . . . to make sure that [JLI's] product was properly positioned based on the detail parameters, that it was stocked appropriately, et cetera." (PX7005 (Danaher (JLI), IHT at 76-77)). It also included "people who would be overseeing different B2B sales" and "would just be part of the order process flow management." (PX7005 (Danaher (JLI), IHT at 76-77)).

1973. According to a November 2018 JLI sales and marketing deck, JLI was planning a further investment of "$100 million in merchandising assets & execution to support brand building [in] 2019." (PX2062 (JLI) at 022).

1974. [redacted]

1975. Crossmark is an example of "a third party that could perform some services similar to [Altria]," and "in some settings where they are both present could be considered an alternative." (PX7008 (Cullen (JLI), IHT at 190-91); *see also* PX2189 (JLI) at 008, 010 (draft McKinsey deck). Crossmark is a "third-party merchandising services provider and offers a variety of services," indeed, "[t]heir business is sales services." (PX7008 (Cullen (JLI), IHT at 190-91)).

c) Database and Direct Marketing Services Are Not Cognizable

1976. Before the amended Services Agreement terminated all non-regulatory services, Altria had agreed to use its database containing contact information for adult smokers to circulate coupons for JLI products by direct mail and via Email, and to place JLI product inserts in packs of certain Altria brand cigarettes. (PX2160 (JLI) at 93-94).

1977. JLI directed that one of the statements of work for a direct mail campaign in 2019 be cancelled. (PX0007 (Altria) at 030).

1978. In terms of the Email campaigns, JLI noted that "delivery failures, difficulty passing spam filters, and low open rates have caused the campaign to be placed on hold." (PX2160 (JLI) at 094).

1979. A test Email campaign in early 2019 resulted in "deliverability [that] was very poor," and as of July 2019 the campaign "was still struggling with deliverability." (PX7008 (Cullen (JLI), IHT at 168-69). Any cost savings or revenue increases associated with the Email campaign were "not as meaningful as [JLI] would have hoped" and no further Email campaigns were planned for 2020. (PX7008 (Cullen (JLI), IHT at 168-69)).

1980. JLI expected Altria to execute three direct mail campaigns in 2019 at a total cost of $6.6 million. (PX2160 (JLI) at 092-93 (JLI Second Request Narrative Response)). For the first campaign, JLI did not attempt to account for the purchases that would not have occurred but for the coupons. (PX2160 (JLI) at 092). For the other two campaigns, JLI cited projected revenues that assumed two-thirds of redemptions would be new users rather than existing ones but did not provide the basis for that assumption. (PX2160 (JLI) at 092-93 (citing PX2210 (JLI) at 002 (direct mail and inserts summary))).

1981. A July 2019 internal JLI status update on Altria's services references "[d]eterioration of direct marketing relationship," noting "[s]everal issues, but the biggest is smoker database," and adding that Altria was "trying to restrict us to non-Altria (~5M of 19M) rather than giving access to the benefit of the entire smoker database due to potential conflicts of interest." (PX2203 (JLI) at 002; *see* PX7008 (Cullen (JLI), IHT at 150-51)).

1982. JLI claims that Altria launched two waves of inserts in 2019. (PX2160 (JLI) at 093 (JLI Second Request Narrative Response)). According to the cited document, the first wave resulted in a redemption rate of .007% (PX2210 (JLI) at 004 (direct mail and inserts summary)), which JLI referred to as "sub-par" (PX2203 (JLI) at 007 (status update on Altria services)). JLI's projections for the second wave assumed that two-thirds of redemptions would be new rather than existing users but did not provide the basis for that assumption. (PX2210 (JLI) at 002 (direct mail and inserts summary)).

1983. Altria did not agree to initiate any direct mail campaigns in 2020. (PX7008 (Cullen (JLI), IHT at 152-53)).

1984. JLI was able to improve its promotional efforts on a stand-alone basis, for example in the fall of 2018. (PX7009 (Burns (JLI), IHT at 153) (noting for fall 2018 promotional efforts that "every promotion across the key metrics was better")).

d) <u>Distribution Services Are Not Cognizable</u>

1985. Before the amended Services Agreement terminated all non-regulatory services, Altria had agreed to provide JLI with pooled distribution services in certain geographies, including warehouse storage and last-mile freight. (PX2160 (JLI) at 082-85). JLI claims that these services have resulted in cost savings, reduced delivery times, and more consistent lead times. (PX2160 (JLI) at 82-84).

1986. In February of 2020, Gifford confirmed that "[m]ost of the services under the distribution support were on a pilot basis," and that "unwinding it has been fairly simple." (PX7010 (Gifford (Altria), IHT at 66-67)).

1987. Cullen was unable to provide a bottom-line figure for JLI's cost savings achieved as a result of Altria's distribution services in 2019. (PX7008 (Cullen (JLI), IHT at 87)).

1988. JLI claims that Altria's ability to distribute new products was "faster and more effective" than JLI's, but cites no support related to JLI's capabilities. (PX2160 (JLI) at 083 (JLI Second Request Narrative Response)). For Altria's capabilities, JLI cites a draft McKinsey slide deck that does not identify its sources of information. (PX2160 (JLI) at 083 (citing PX2188 (JLI) at 005)).

1989. JLI claims that distribution services related to Altria's warehouse in Richmond, Virginia, estimated to cost $50,000 per year, represented "a significant improvement over rates available" from third-party logistics companies, but does not cite any support for this claim. (PX2160 (JLI) at 083 (JLI Second Request Narrative Response)). An internal JLI Email from March 2019 indicates a cost estimate associated with this Altria service of $54,000-$127,000. (PX2196 (JLI) at 001).

1990. JLI claims annual savings of $1.2 million related to pooled distribution services in California and Texas (PX2160 (JLI) at 085, 103 (JLI Second Request Narrative Response)), but the document cited for support does not mention the $1.2 million figure (PX2244 (JLI) at 002 (Altria services tracker)). By contrast, a March 2019 JLI Email indicates a benefit of "$200k-$1.2M annually" (PX2196 (JLI) at 001). The statements of work underlying these services were only effective for 6-8 months in 2019. (PX2160 (JLI) at 085).

1991. In connection with its savings estimates related to pooled distribution in California and Texas, an internal JLI tracking spreadsheet indicated savings closer to $300,000 through September 2019. (PX2213 (JLI); *see* PX7008 (Cullen (JLI), IHT at 55-57)).

1992. Cullen is not aware whether JLI sought quotes from logistics companies other than its incumbent servicers as potential alternatives to Altria's services related to public warehouses in California and Texas. (PX7008 (Cullen (JLI), IHT at 57-58)).

1993. In 2018, JLI made stand-alone investments in expanding points of distribution. (PX7005 (Danaher, IHT at 90)).

1994. A June 2019 internal JLI Email indicates that JLI secured a new contract with its third-party logistics company that "delivers $200-250k/month savings." (PX2219 (JLI) at 001).

1995. JLI does not indicate the extent to which any of its claimed cost savings from Altria's distribution services have been passed on to consumers. (PX2160 (JLI) at 083-85 (JLI Second Request Narrative Response)). Nor does it quantify any reduced delivery time or improved lead-time consistency in terms of their benefit to consumers. (PX2160 (JLI) at 083-85).

XV. WITNESS BACKGROUNDS

A. Lay Witnesses Who Testified at Trial

1. Respondents' Executives and Former Executives

Jody Begley of Altria (Begley Tr. 960-1134)

1996. Jody Begley is currently the Executive Vice President and Chief Operating Officer of Altria. (Begley (Altria) Tr. 961). He has held this position since September 2020. (Begley (Altria) Tr. 961). Begley's previous position at Altria was Senior Vice President for Tobacco Products, a position he held from June 2018 to September 2020. (Begley (Altria) Tr. 961).

1997. Begley served as President and General Manager at Nu Mark from July of 2015 to May 31, 2018. (Begley (Altria) Tr. 961). Nu Mark was one of Altria's operating units and was responsible for competing in the e-vapor space. (Begley (Altria) Tr. 961-62). In that position, he was involved in setting Nu Mark's strategic initiatives and financial targets. (Begley (Altria) Tr. 962-63).

1998. Begley owns more than $2 million worth of shares in Altria stock. (PX7022 (Begley (Altria), Dep. at 64-65)).

Dr. William Gardner of Altria (Gardner Tr. 2554-2695, 3075-3096)

1999. Dr. William Gardner is an associate fellow in the scientific strategy and advocacy group in regulatory affairs at Altria and held that position since April 2021. (Gardner (Altria) Tr. 2554-55). He has worked for Altria for 20 years. (Gardner (Altria) Tr. 2555). In his current position, Dr. Gardner is the lead scientist working on oral reduced-risk products. (Gardner (Altria) Tr. 2554-55). He helps in product development and to develop and execute regulatory applications. (Gardner (Altria) Tr. 2554-55).

2000. The FDA's assessment of conversion potential in PMTA applications is not an area of Dr. Gardner's expertise, and he was not responsible for assessing the conversion potential of Altria's e-vapor products. (Gardner (Altria) Tr. 2640).

2001. Dr. Gardner is not an expert in nicotine satisfaction or abuse liability. (Gardner (Altria) Tr. 2642-43)).

2002. Dr. Gardner was not involved in Altria's pharmacokinetic studies, at home studies, or actual use studies involving its e-vapor products. (Gardner (Altria) Tr. 2643).

2003. Dr. Gardner owns shares of Altria stock. (PX7026 (Gardner (Altria), Dep. at 235-36)). He has received Altria stock as part of his compensation for about 10 years. (PX7026 (Gardner (Altria), Dep. at 235-36)).

Murray Garnick of Altria (Garnick Tr. 1575-1830)

2004. Murray Garnick currently serves as Executive Vice President and General Counsel of Altria. (Garnick (Altria) Tr. 1575). He also leads the Regulatory Affairs Group at Altria. (Garnick (Altria) Tr. 1575). He became General Counsel and Head of Regulatory Affairs in July 2017. (Garnick (Altria) Tr. 1578). Garnick was previously Head of Litigation of Altria from 2008 to 2016. (Garnick (Altria) Tr. 1576).

2005. In June of 2018, Garnick took over the Regulatory Sciences Group that is composed of mostly scientists who conduct toxicological and other analyses to support Altria's allegations to the FDA. (Garnick (Altria) Tr. 1578). Altria recently combined the non-scientists in the Regulatory Affairs group and with the Regulatory Sciences group into one group under Garnick. (Garnick (Altria) Tr. 1578-79).

2006. Garnick participated in 2018 in the negotiations with JLI related to Altria acquiring an ownership interest in JLI. (Garnick (Altria) Tr. 1579). In 2018, Garnick also led the team that was responsible for preparing PMTAs for Altria's e-vapor products. (Garnick (Altria) Tr. 1579).

2007. Garnick does not make business decisions for Altria, and he was not one of the decision-makers about which e-vapor pipeline products Altria would pursue. (Garnick (Altria) Tr. 15879-80, 1584). He does not have firsthand knowledge of the profitability of Altria's e-vapor products. (Garnick (Altria) Tr. 1580).

2008. [redacted]} (PX7000 Garnick (Altria), IHT at 165) (*in camera*)).

Billy Gifford of Altria (Gifford Tr. 2706-2894)

2009. Billy Gifford is the CEO of Altria Group, Inc. (Gifford (Altria) Tr. 2706). Gifford started his professional work experience in accounting and joined PM USA, a predecessor company to Altria, in 1994. (Gifford (Altria) Tr. 2706-07). Gifford became CEO in April 2020, taking over from Willard. (Gifford (Altria) Tr. 2707, 2708). Prior to serving as CEO, Gifford served as Chief Financial Officer of Altria. (Gifford (Altria) Tr. 2707).

2010. Gifford was involved in the negotiations with JLI, when Altria acquired an ownership interest in JLI. (Gifford (Altria) Tr. 2761-62).

2011. Gifford was designated by Altria to discuss efficiencies in connection with the transaction in response to Complaint Counsel's subpoena directed to Altria. (PX7010 (Gifford (Altria), IHT at 36-37 (referring to PX0005 at 001-003 (FTC Subpoena Ad Testificandum addressed to Altria, dated Dec. 3, 2019)).

2012. Gifford owns stock in Altria. (PX7040 (Gifford (Altria), Dep. at 183)).

<u>Richard Jupe of Altria</u> (Jupe Tr. 2111-2334)

2013. Richard Jupe is currently the Vice President of Product Development at Altria Client Services, a position he has held since 2012. (Jupe (Altria) Tr. 2112). Jupe's product development group provided services to Nu Mark. (Jupe (Altria) Tr. 2113-14). Jupe assumed product development responsibilities for e-vapor products around the third quarter of 2017. (Jupe (Altria) Tr. 2114).

2014. Jupe's product development group was accountable for the design, development, and specifications of e-vapor products. (Jupe (Altria) Tr. 2115). The group was accountable for "writing all the requirements for manufacturing as well as providing the products to Altria's regulatory affairs and regulatory sciences group for demonstration through the FSA pathways." (Jupe (Altria) Tr. 2115).

<u>Jose Luis (Joe) Murillo of JLI</u> (Murillo Tr. 2895-3074)

2015. Jose Luis Murillo, known as Joe to his colleagues, is the Chief Regulatory Officer at JLI. (Murillo (JLI) Tr. 2896). Before that, Murillo was Senior Vice President of Regulatory Affairs at Altria Client Services. (Murillo (JLI) Tr. 2896).

2016. JLI hired Murillo from Altria in October 2019. (PX7027 (Murillo (JLI), Dep. at 16)). He joined JLI in October 2019. (Murillo (JLI) Tr. 2988, 3046). Murillo holds a J.D. from Columbia University. (Murillo (JLI) Tr. 2897). He joined Philip Morris Companies, a predecessor of Altria, in 1995. (Murillo (JLI) Tr. 2897).

2017. In 2012, Murillo became the first President and General Manager of Nu Mark. (Murillo (JLI) Tr. 2898). In his positions at Altria, Murillo's work dealt with FDA regulations related to e-cigarettes. (Murillo (JLI) Tr. 2900).

2018. As of January 2021, Murillo still owned approximately {[redacted]} of stock in Altria. (PX7027 (Murillo (JLI), Dep. at 25-26) (*in camera*)).

<u>Frederick Scott Myers of Altria</u> (Myers Tr. 3296-3399)

2019. Frederick Scott Myers, known as Scott to his colleagues, is the current President and CEO of the Altria Group Distribution Company. (Myers (Altria) Tr. 3297-98). The Altria Group Distribution Company is the sales and distribution arm that represents and provides services for Altria's operating companies. (Myers (Altria) Tr. 3297-98). His group handles finished goods after they are manufactured and through to wholesalers and retailers, and selling Altria's trade programs and representing Altria brands at retail trade partners. (Myers (Altria) Tr. 3297-98). Myers has been working at Altria his entire professional career and started as a territory sales manager. (Myers (Altria) Tr. 3297).

2020. In early 2018, Myers was the Vice President at Altria's Western Region. (Myers (Altria) Tr. 3314-15). In this role, he talked to retailers about the MarkTen Elite launch and related marketing initiatives. (Myers (Altria) Tr. 3315-16).

2021. As Vice President of the Western Region, Myers did not develop or approve any trade programs for Nu Mark. (Myers (Altria) Tr. 3376-78).

2022. As Vice President of the Western Region, Myers did not do any analysis for Nu Mark. (Myers (Altria) Tr. 3378). Myers measured success of Nu Mark's products largely on the feedback he received from trade partners. (Myers (Altria) Tr. 3378).

2023. Myers had no role in determining the initial selling quantities of MarkTen Elite, and he never had a role in deciding what e-vapor products Altria would bring to market. (Myers (Altria) Tr. 3379-80).

2024. When Myers was Vice President of the Western Region, he did not know how many of the selling issues MarkTen Elite had were due to a leaking gasket. (Myers (Altria) Tr. 3381).

2025. In October 2018, Myers became Vice President of Customer Service. (Myers (Altria) Tr. 3374). As Vice President of Customer Service, Myers had less than two months of responsibility for Altria's e-vapor products. (Myers (Altria) Tr. 3374-75).

2026. Myers did not have any design responsibilities for Altria's e-vapor products, nor did he have any responsibilities in acquiring new e-vapor products for Altria. (Myers (Altria) Tr. 3379).

2027. Myers never had any direct dealings with PMI regarding e-vapor products. (Myers (Altria) Tr. 3379).

2028. Myers never attended any Altria Board of Directors meetings where e-vapor products were discussed. (Myers (Altria) Tr. 3380).

2029. Myers has no expertise on obtaining PMTAs. (Myers (Altria) Tr. 3379).

2030. As of February 2021, Myers owned approximately $5 to 6 million of Altria stock. (Myers (Altria) Tr. 3381).

Joseph O'Hara of JLI (O'Hara Tr. 491-655)

2031. Joseph O'Hara is the Director of Regulatory Strategy for JLI, a position he has held since May 2020. (O'Hara (JLI) Tr. 492-93). He began working at JLI in December 2017 as a Senior Manager of Strategic Finance, serving in this role until December 2018 when he became Senior Manager of Corporate Strategy and later Director of Youth Prevention Strategies. (O'Hara (JLI) Tr. 492-93).

2032. In his role as Senior Manager of Strategic Finance, O'Hara was responsible for competitive analysis and competitive intelligence. (O'Hara (JLI) Tr. 493-94). He advised members of JLI's senior leadership team and sometimes JLI board members on competition in the e-vapor space. (O'Hara (JLI) Tr. 495).

<u>Nick Pritzker of JLI</u> (Pritzker Tr. 659-898)

2033. Nick Pritzker is an investor in JLI through his family investment business, Tao Capital. (Pritzker (JLI) Tr. 660). Tao Capital first invested in JLI in 2011. (Pritzker (JLI) Tr. 660). Pritzker's family investment entity received a portion of the $12.8 billion that Altria paid to acquire a 35 percent interest in JLI. (Pritzker (JLI) Tr. 662).

2034. Pritzker is a member of JLI's Board of Directors. (Pritzker (JLI) Tr. 660).

2035. Pritzker was a member of the negotiating team for the transaction on behalf of JLI. (Pritzker (JLI) Tr. 661). During these negotiations, Pritzker was a member of the Strategic Committee of the JLI Board that was formed to engage in negotiations with Altria. (Pritzker (JLI) Tr. 661).

2036. [redacted]

<u>Brian Quigley formerly of Altria</u> (Quigley Tr. 1924-2098)

2037. Brian Quigley is currently the Chief Operating Officer for Respira Technologies, a medical device company. (Quigley (Altria) Tr. 1924-25). He has been with Respira since July of 2020. (Quigley (Altria) Tr. 1925). Previously, Quigley had a consulting company called Green Sky Strategy, and prior to that Quigley worked at Altria. (Quigley (Altria) Tr. 1925).

2038. Quigley worked for Altria for approximately 16 years. (Quigley (Altria) Tr. 1925). Quigley was named President and CEO of Nu Mark around June 2018. (Quigley (Altria) Tr. 1937). He worked for Altria at the time Altria acquired a 35 percent interest in JLI. (Quigley (Altria) Tr. 1925). The last position Quigley held at Altria was the Senior Vice President of Marketing and Commerce. (Quigley (Altria) Tr. 1925).

2039. Quigley currently serves as a member of the Board of Directors of Lexaria. (Quigley (Altria) Tr. 1925-26). He became a board member in 2019. (Quigley (Altria) Tr. 1926). Lexaria Nicotine is one of the companies associated with Lexaria Bioscience and in which Altria is a partial owner. (Quigley (Altria) Tr. 1926). Lexaria Nicotine's business is to license technology to companies that are selling products in the nicotine space, including reduced-risk nicotine products. (Quigley (Altria) Tr. 1926-27). When Quigley was at Altria, Altria held an investment in Lexaria Nicotine that would give Altria an option to acquire technology. (Quigley (Altria) Tr. 1927).

Charles (Bob) Robbins of JLI (Robbins Tr. 3238-3284)

2040. Charles Robert Robbins is employed by JLI and goes by the name of Bob. (Robbins (JLI) Tr. 3239). Robbins joined JLI in September 2017 and is the Chief Growth Officer, a position he has held since March 2020. (Robbins (JLI) Tr. 3239). As Chief Growth Officer, Robbins oversees sales and marketing in all of the markets where JLI sells product. (Robbins (JLI) Tr. 3240).

2041. Robbins has also served as Chief Sales Officer for JLI from the time he was hired and for approximately a year. (Robbins (JLI) Tr. 3240). In that role he managed JLI's wholesale and retail partners. (Robbins (JLI) Tr. 3240). After serving as Chief Sales Officer, Robbins was President of the Americas until March 2020. (Robbins (JLI) Tr. 3240).

Craig Schwartz formerly of Altria (Schwartz Tr. 1841-1923)

2042. Craig Schwartz is retired from Altria; he retired on December 31, 2018. (Schwartz (Altria) Tr. 1842). Schwartz retired from the position of Senior Vice President of Operations for Nu Mark, an operating company under Altria created to develop alternative tobacco products. (Schwartz (Altria) Tr. 1843-44). Schwartz served for five years as Senior Vice President of Operations. (Schwartz (Altria) Tr. 1845). Prior to becoming SVP for Nu Mark, Schwartz was responsible for operations at the smokable or cigar and cigarette division of Altria. (Schwartz (Altria) Tr. 1846). When he retired, Schwartz received a severance package through March 2020. (Schwartz (Altria) Tr. 1843).

2043. As Senior Vice President of Operations for Nu Mark, Schwartz's role was to secure supply chain, to build a manufacturing and organizational base, to manufacture and bring to market products consistent with specifications, and to run a compliant manufacturing and sales process. (Schwartz (Altria) Tr. 1844).

2044. Schwartz served on the leadership team at Nu Mark. (Schwartz (Altria) Tr. 1846-47). Schwartz had input on Nu Mark's 3-year strategic plan. (Schwartz (Altria) Tr. 1847-48). Schwartz's responsibilities for the strategic plan included calculating the cost base for the product, capacity planning, new product planning, manufacturing base issues, and generally all strategic decisions that would go into making a product. (Schwartz (Altria) Tr. 1847-48).

Riaz Valani of JLI (Valani Tr. 899-959)

2045. Riaz Valani is an investor in JLI through his venture capital business, Global Asset Capital ("GAC"). (Valani (JLI) Tr. 899). He was one of the initial investors in the company that is now JLI. (Valani (JLI) Tr. 899).

2046. After Pax Labs spun off non-vapor products and became JLI in 2017, Valani and GAC-related entities owned more than 20 percent of JLI's shares. (PX7011 (Valani (JLI), IHT at 21-22)). As of early 2020, Valani and GAC-related entities owned around 10 percent of JLI's shares. (PX7011 (Valani (Altria), IHT at 21-22)).

2047. Valani is currently a member of JLI's Board of Directors. (Valani (JLI) Tr. 899). He has been a member of JLI's (and its predecessor entities) Board of Directors since 2007. (Valani (JLI) Tr. 899-900).

2048. Valani was involved in negotiating the Altria's acquisition of a 35 percent interest in JLI on behalf of JLI. (Valani (JLI) Tr. 901). During these negotiations with Altria, he was a member of the Strategic Committee of the JLI Board. (Valani (JLI) Tr. 901). The strategic committee was formed to engage in negotiations with Altria, and Nicholas Pritzker was the only other member. (Valani (JLI) Tr. 901).

2049. Valani's venture capital firm, Global Asset Capital, received a portion of the $12.8 billion that Altria paid to acquire a 35 percent interest in JLI. (Valani (JLI) Tr. 902).

2050. [redacted]

<u>Howard Willard formerly of Altria</u> (Willard Tr. 1136-1473)

2051. Howard Willard is currently retired and spent 28 years working for Altria or its predecessor companies. (Willard (Altria) Tr. 1136). He most recently held the position of Chairman and Chief Executive Officer at Altria. (Willard (Altria) Tr. 1136). Previous to this position, Willard was Chief Operating Office at Altria. (Willard (Altria) Tr. 1137).

2052. Willard has an ongoing financial relationship with Altria. (Willard (Altria) Tr. 1137). When he departed Altria in April 2020, Willard's salary at the time was a little over $1 million per year. (Willard (Altria) Tr. 1139). Willard received 64 weeks of severance payments based on his last salary (or a little less than $100,000 per month) after leaving Altria. (Willard (Altria) Tr. 1139). He will receive a pension from Altria. (Willard (Altria) Tr. 1137).

2053. Willard owns shares of Altria common stock valued at approximately $3 million. (Willard (Altria) Tr. 1137, 1141).

2. Third-Party Witnesses

<u>Paul Crozier of Sheetz</u> (Crozier Tr. 1475-1565)

2054. Paul Crozier is a Category Manager at Sheetz, Inc., where he has been employed for 15 years. (Crozier (Sheetz) Tr. 1476).

2055. Sheetz, Inc., is a convenience store chain operating in six mid-Atlantic states, offering food, made-to-order food, cigarettes, tobacco, and gasoline. (Crozier (Sheetz) Tr. 1476-77).

Sheetz has about 615 stores and all of them are company owned. (Crozier (Sheetz) Tr. 1476-77).

2056. Crozier has been a Category Manager since July 2016, and he currently manages the cigarettes and tobacco category, as well as lottery tickets. (Crozier Tr. (Sheetz) 1476). Crozier's responsibilities include electronic cigarettes. (Crozier (Sheetz) Tr. 1478).

2057. As a Category Manager, Crozier has profit and loss responsibility for all tobacco sales, lottery sales, including budgeting, picking new items, resets, running promotions, working with vendors on promotions, and conveying promotions to the public. (Crozier (Sheetz) Tr. 1477). Crozier is responsible for setting and achieving sales and margin goals on a monthly and yearly basis. (Crozier (Sheetz) Tr. 1478).

2058. Crozier is a board member of the trade association National Association of Tobacco Outlets. (Crozier (Sheetz) Tr. 1477).

Andrew Farrell of NJOY, LLC (Farrell Tr. 198-367)

2059. Andrew Farrell is Chief Revenue Officer of NJOY, LLC, a position he has held since May 2019. (Farrell (NJOY) Tr. 199-200). He has worked for NJOY since August 2018. (Farrell (NJOY) Tr. 199). He started in the position of Executive Vice President of Key Accounts, and his position title later shifted to Chief Partnerships Officer. (Farrell (NJOY) Tr. 201).

2060. NJOY is a manufacturer of e-cigarettes. (Farrell (NJOY) Tr. 200). NJOY currently sells a closed-system, rechargeable, pod-based e-cigarette system called the NJOY Ace, and a closed system disposable e-cigarette product called NJOY Daily. (Farrell (NJOY) Tr. 206-207). In 2018, NJOY also sold Loop, PFT, and King, which were are all closed-system e-cigarette products. (Farrell (NJOY) Tr. 206-207).

2061. Farrell's responsibilities as Chief Revenue Officer are primarily to manage and implement NJOY's retail sales strategy. (Farrell (NJOY) Tr. 200). He reports to the Chief Operating Officer of NJOY. (Farrell (NJOY) Tr. 200). As Executive Vice President of Key Accounts (later Chief Partnerships Officer), Farrell's responsibilities were to manage business relationships with key brick-and-mortar retail accounts. (Farrell (NJOY) Tr. 201).

Lamar Wade Huckabee of R.J. Reynolds Tobacco (Huckabee Tr. 368-489)

2062. Lamar Wade Huckabee is employed by R.J. Reynolds Tobacco ("Reynolds"), where he is the Senior Vice President and General Manager of Traditional Categories. (Huckabee (Reynolds) Tr. 370). He has held those roles for two years. (Huckabee (Reynolds) Tr. 371). Huckabee is also the Senior Vice President at Reynolds American, Incorporated, and at Santa Fe Natural Tobacco Company. (Huckabee (Reynolds) Tr. 371). Huckabee started at Reynolds in April of 2016 and has worked for the company for five years. (Huckabee (Reynolds) Tr. 370).

2063. Reynolds is the second largest U.S. tobacco products sales and marketing company. (Huckabee (Reynolds) Tr. 372). Reynolds markets and distributes products in five categories: traditional cigarettes, vapor, moist tobacco, modern oral, and SNUS (a pasteurized tobacco pouch). (Huckabee (Reynolds) Tr. 372, 374). Reynolds has four vapor products currently on the market. (Huckabee (Reynolds) Tr. 377). They are all sold under the brand name Vuse, and include Vuse Alto, Vuse Ciro, Vuse Solo, and Vuse Vibe. (Huckabee (Reynolds) Tr. 377).

2064. Huckabee currently reports to the Chief Commercial Officer of Reynolds American. (Huckabee (Reynolds) Tr. 371).

2065. Huckabee's current responsibilities include primary responsibility for Reynolds' cigarette business, moist tobacco business, the SNUS category, as well as the company's revenue growth management function. (Huckabee (Reynolds) Tr. 373).

2066. In his role in revenue growth management, Huckabee's team designs and builds price pack architecture, promotional plans, and pricing strategies across Reynolds' product categories, including the vapor category. (Huckabee (Reynolds) Tr. 374-75, 379-80). Huckabee receives competitive intelligence materials covering vapor products in his management role. (Huckabee (Reynolds) Tr. 376). Huckabee has held his management role in revenue growth, both informally and formally, for three years. (Huckabee (Reynolds) Tr. 376). The company began focusing the revenue management activities on vapor products during the last year. (Huckabee (Reynolds) Tr. 376-377).

2067. Huckabee is also a part of Reynolds' marketing leadership team. (Huckabee (Reynolds) Tr. 380).

2068. Before he became Senior Vice President, Huckabee was Vice President of Strategy and Planning. (Huckabee (Reynolds) Tr. 380). In this vice president role, he had primary accountability to supply materials to the senior leadership team, and in this role he received materials on competitors' products research, sales performance, volume performance, and share trends. (Huckabee (Reynolds) Tr. 381).

Martin King of PMI (King Tr. 2335-2550)

2069. Martin King is employed by Philip Morris International and is the Chief Executive Officer of PMI America. (King (PMI) Tr. 2336-38). He has been CEO of PMI America since May 1, 2020, and has worked for PMI for 30 years. (King (PMI) Tr. 2339-40). Over his years with PMI, King has served as Chief Financial Officer of PMI, President of the Asia region, President of the Latin America/Canada region, Senior Vice President of Worldwide Operations, as well as other positions. (King (PMI) Tr. 2340). As CEO of PMI America King reports to Jacek Olczak, the CEO of PMI. (King (PMI) Tr. 2339).

2070. King holds an M.B.A. from the Darden School of the University of Virginia and a B.A. from Harvard University. (King (PMI) Tr. 2341).

2071. PMI is an international company that manufactures and sell various nicotine-containing products, including cigarettes and heated tobacco products, as well as e-cigarettes. (King (PMI) Tr. 2337). In 2008, PMI split from its former parent, Altria, with PMI focusing on international markets and Altria focusing on the U.S. markets. (King (PMI) Tr. 2337). PMI and Altria jointly own the famous Philip Morris brands such as Marlboro, with PMI owning trademarks for countries other than the U.S., and Altria owning the trademarks in the U.S. (King (PMI) Tr. 2337-38).

2072. PMI America is an entity created about a year ago to focus on the U.S. market for PMI, including the commercialization of PMI's IQOS heat-not-burn product in the U.S., which was licensed to Altria, and to represent PMI in the U.S. in the company's regulatory proceedings, including with the FDA. (King (PMI) Tr. 2338).

2073. PMI sells a pod-based closed system vapor product called VEEV, which utilizes PMI's proprietary MESH technology. (King (PMI) Tr. 2344). Veev has been launched in a number of countries, including the UK, New Zealand, and several markets in the EU. (King (PMI) Tr. 2344, 2354-55). PMI is currently seeking FDA authorization to sell Veev in the U.S. (King (PMI) Tr. 2355). Prior to Altria's transaction with JLI, PMI was planning for Altria to launch Veev in the U.S. (King (PMI) Tr. 2357).

2074. As CEO of PMI America, King is responsible for the commercialization of next-generation or reduced-rick products and noncombustible products that have been scientifically verified in the U.S. (King (PMI) Tr. 2338-39). He also has responsibility for bringing additional products to the U.S. from PMI's noncombustible portfolio around the world, including working on the regulatory environment. (King (PMI) Tr. 2338-39). This portfolio includes e-cigarettes. (King (PMI) Tr. 2339).

B. Expert Witnesses Who Testified at Trial

1. Complaint Counsel's Expert Witness

a) Dr. Dov Rothman (PX7048 (Trial Dep.))

(1) Background

2075. Dr. Rothman is the managing principal at Analysis Group, a consulting group, and an instructor at University of California at Berkeley and at Harvard University. (PX7048 (Rothman, Trial Dep. at 7)). He was previously an assistant professor at Columbia University. (PX7048 (Rothman, Trial Dep. at 7)).

2076. Dr. Rothman has a Ph.D. degree in economics from the University of California at Berkeley, an MPhil degree from Cambridge University, and an undergraduate degree from the University of California at Berkeley. (PX7048 (Rothman, Trial Dep. at 7)).

2077. Dr. Rothman is a member of the American Economic Association, and he has published in Antitrust Law Journal, Journal of Competition Law and Economics, and Health Economics. (PX7048 (Rothman, Trial Dep. at 7)). Dr. Rothman has published on the subject of antitrust analysis and is a senior editor of the Antitrust Law Journal. (PX7048 (Rothman, Trial Dep. at 7-8)). Dr. Rothman has served as an expert as well as a consulting economist on many antitrust matters over a number of years, including work for the Department of Justice, the FTC, and private parties. (PX7048 (Rothman, Trial, Dep. at 8)).

2. Respondents' Expert Witness

a) <u>Dr. Kevin Murphy (Murphy Tr. 3098-3237)</u>

(1) Background

2078. Dr. Murphy is a professor of economics at the University of Chicago where he teaches in both the Graduate School of Business and the Department of Economics. (Murphy Tr. 3099).

2079. Dr. Murphy charged an hourly rate of $1,500 for his work on this case, and he personally spent about 60 hours working on the matter. (Murphy Tr. 3170-71).

2080. Dr. Murphy is not an expert on the development of e-vapor products. (Murphy Tr. 3171).

2081. Dr. Murphy is not an expert on nicotine satisfaction. (Murphy Tr. 3171).

2082. Dr. Murphy is not an expert on the biological side of the science of nicotine satisfaction. (Murphy Tr. 3171).

2083. Dr. Murphy is not an expert on nicotine conversion studies and has not written any papers on e-vapor products regarding nicotine conversion. (Murphy Tr. 3171).

2084. Dr. Murphy is not an expert on the FDA's regulation of e-vapor products. (Murphy, Tr. 3171-72).

2085. Dr. Murphy is not an expert on the PMTA approval process. (Murphy Tr. 3172).

(2) Dr. Murphy Failed to Do Quantitative Analyses to Define the Relevant Market

2086. In his report, Dr. Murphy, did not express an opinion on what the appropriate relevant product market is in this case. (Murphy Tr. 3176). Dr. Murphy, did not reach an opinion on whether the relevant market includes open-system and closed-system e-cigarette products. (Murphy Tr. 3177; RX1217 at 086 (¶ 122) (Murphy Expert Report)).

2087. Dr. Murphy did not reach an opinion on whether there are separate relevant markets for cigalikes and pod-based products. (Murphy Tr. 3179).

2088. Dr. Murphy's report does not include an analysis comparing the prices of pod-based devices to cigalike devices. (Murphy Tr. 3176). Additionally, Dr. Murphy's, report does not include an analysis comparing the prices of cigalike cartridges versus the prices of pod-based cartridges. (Murphy (Respondents' Expert) Tr. 3176).

2089. Nowhere in his report does Dr. Murphy test whether a market consisting of only cigalikes passed the Hypothetical Monopolist test. (Murphy Tr. 3180-3181). Dr. Murphy does not discuss anywhere in his report whether a hypothetical monopolist of cigalikes could profitably impose a SSNIP. (Murphy Tr. 3181).

2090. Nowhere in his report does Dr. Murphy test whether a market consisting of only pod-based products pass the Hypothetical Monopolist Test. (Murphy Tr. 3182). Dr. Murphy did not use the hypothetical monopolist test to evaluate a market of pod-based products as a candidate market. (Murphy Tr. 3182).

2091. Dr. Murphy did not offer an opinion in his report that a market consisting of all closed-system e-cigarettes failed the Hypothetical Monopolist Test. (Murphy Tr. 3182).

2092. Dr. Murphy's report does not include a critical elasticity analysis or an analysis where he compares the actual elasticity of demand for e-vapor products with the critical elasticity. (Murphy Tr. 3188).

2093. Dr. Murphy's report does not include any critical loss analysis. (Murphy Tr. 3188). Nowhere in his report does Dr. Murphy compare the predicted loss from a hypothetical monopolist imposing a SSNIP in a candidate market with the critical loss for the hypothetical monopolist. (Murphy Tr. 3189).

(3) Dr. Murphy's Post-Transaction Market Analysis Is Flawed and Irrelevant and Does not Demonstrate That the Market Was Not Harmed Competitively By Altria's Exit

2094. Dr. Murphy's post-transaction market analysis does not demonstrate that the market was not harmed competitively by Altria's exit. (*See* CCFF ¶¶ 2095-122, below).

2095. Dr. Murphy did not do any analysis in his report of whether cigalike device or cartridge prices rose or fell after Altria exited the e-vapor business. (Murphy Tr. 3192).

2096. Dr. Murphy does not analyze the average industry price for cigalike devices in his report. (Murphy Tr. 3191). Figure V.1 from Dr. Murphy's report does not include cigalike device prices. (Murphy Tr. 3191; *see* RX1217 at 047-48 (¶ 62, Fig. V.1) (Murphy Expert Report)). Figure V.1 of Respondents' Expert's, Dr. Murphy's, report simply plots the average price over time for pod-based devices. (Murphy Tr. 3195-96; *see* RX1217 at 047-48 (¶ 62, Fig. V.1) (Murphy Expert Report)).

2097. Figure V.1 in Dr. Murphy's expert report shows that the average industry price for pod-based devices was decreasing prior to Elite exiting the market in November 2018. (Murphy Tr. 3189-90; RX1217 at 047-48 (¶ 62, Fig. V.1) (Murphy Expert Report)).

2098. Nowhere in his expert report does Dr. Murphy analyze the average industry price for cigalike cartridges. (Murphy Tr. 3191-92). Figure V.2 in Dr. Murphy's expert report does not incorporate any data for the prices of cigalike cartridges. (Murphy Tr. 3191; *see* RX1217 at 048-49 (¶ 63, Fig. V.2) (Murphy Expert Report)).

(a) Flaws in Analyses of Pod-Based Cartridges

2099. Dr. Murphy did not perform any econometric analysis of why prices for pod-based cartridges were declining after Altria's exit from e-cigarettes. (Murphy Tr. 3192). Dr.

Murphy did not do an attribution analysis to determine why pod-based cartridge prices declined in the months after Altria exited e-cigarettes. (Murphy Tr. 3192-94).

2100. Dr. Murphy did not analyze the effect of negative press surrounding vaping on the price of pod-based cartridges. (Murphy Tr. 3194).

2101. Dr. Murphy did not analyze the impact of changes in the minimum age to purchase nicotine products on the price for pod-based cartridges. (Murphy Tr. 3194).

2102. Dr. Murphy did not analyze the impact of the FDA's flavor ban on the prices for pod-based cartridges. (Murphy Tr. 3194).

2103. Dr. Murphy agrees that the pricing data he presents in Figure V.2 of his report doesn't rule out the possibility that pod-based cartridge prices would have fallen further if Altria hadn't discontinued its e-cigarette products. (Murphy Tr. 3194; *see* RX1217 at 048-49 (¶ 63, Fig. V.2) (Murphy Expert Report)).

2104. Dr. Murphy did not run any regressions to determine why prices for pod-based cartridges fell in the time period from November 2018 to September 2020. (Murphy Tr. 3195).

2105. Dr. Murphy did not include any regression analyses in his report to explain why sales volumes of pod-based cartridges were higher in 2019 than they were prior to Altria's exit. (Murphy Tr. 3197).

2106. Dr. Murphy did not attempt to calculate what the average price of pod-based cartridges would have been had Altria stayed in the market. (Murphy Tr. 3195).

(b) Flaws in Analyses of Pod-Based Devices:

2107. Dr. Murphy did not run any regressions to address the question of why pod-based device prices fell from September of 2018 to September 2020. (Murphy Tr. 3196).

2108. Dr. Murphy did not do an econometric analysis of the impact of negative press surrounding vaping on the price for pod-based devices. (Murphy Tr. 3196).

2109. Dr. Murphy did not analyze the impact of state bans on non-tobacco and non-menthol flavored e-cigarettes on the price of pod-based devices. (Murphy Tr. 3196).

2110. Dr. Murphy agrees that demand for pod-based product was rising before Altria discontinued its e-cigarette products. (Murphy Tr. 3197).

2111. Dr. Murphy did not include in his report any regression analysis to explain why sales volumes of pod-based devices are higher than they were prior to Altria's exit. (Murphy Tr. 3198).

(c) Other Flaws in Murphy's Effects Analyses

2112. Dr. Murphy did not include in his report nor did he conduct any switching analysis report that identifies precisely where or what products pod users are coming from or what percentage of pod users were coming from cigarette smokers versus new users. (Murphy Tr. 3203-04).

2113. There is no analysis in Dr. Murphy's report that would indicate what percentage, if any, of pod users are coming from youth users that aren't currently smokers. (Murphy Tr. 3205).

2114. Dr. Murphy did not offer an opinion that Reynolds' 99 cent promotion for Vuse Alto was induced by Altria's exit from the e-vapor business. (Murphy Tr. 3206).

2115. In his report, Dr. Murphy does not discuss Altria's joint research, development, and technology sharing agreement with Philip Morris, International (PMI). (Murphy Tr. 3220-21). Respondents' expert's, Dr. Murphy's, report does not include any analysis of Altria's R&D relationship with PMI. (Murphy Tr. 3221).

2116. In his report, Dr. Murphy only analyzed e-vapor products that were actually sold in the U.S. marketplace. (Murphy (Respondents' Expert) Tr. 3225). In his report, Respondents' expert, Dr. Murphy, did not consider any e-vapor products that Altria had in development at the time of the transaction. (Murphy Tr. 3225).

2117. Dr. Murphy does not recall if his report discusses the work that Altria was doing before it exited the market on an updated version of Elite – Elite 2.0. (Murphy Tr. 3225). Dr. Murphy does not recall if Elite 2.0 contained nicotine salts. (PX7047 (Murphy (Respondents' Expert), Dep. at 27)).

2118. Dr. Murphy does not recall if in his report he discussed products that PMI had in development. (Murphy Tr. 3227). CEO of PMI America King's deposition testimony is not cited as something that Dr. Murphy relied upon in his report. (PX7047 (Murphy (Respondents' Expert), Dep. at 24-26)). In his report, Dr. Murphy does not discuss Altria's joint research, development, and technology sharing agreement with Philip Morris, International (PMI). (Murphy Tr. 3220-21). Dr. Murphy does not recall reviewing any materials discussing PMI's MESH technology. (PX7047 (Murphy (Respondents' Expert), Dep. at 22)). Dr. Murphy is not aware that PMI's VEEV product is currently being sold outside the U.S. and does not recall Altria's plans to commercialize VEEV in the U.S. (PX7047 (Murphy (Respondents' Expert), Dep. at 23)). Dr. Murphy does not recall mentioning the VEEV product in his report. (PX7047 (Murphy (Respondents' Expert), Dep. at 23-24)).

2119. In his report, Dr. Murphy did not compare the profitability of Altria's e-vapor business to other e-vapor competitors at the time of Altria's exit. (Murphy Tr. 3230). In his report, Dr. Murphy did not compare the profitability of Altria's e-vapor business to Reynolds' e-vapor business at the time of Altria's exit. (Murphy Tr. 3230). Dr. Murphy did not compare the profitability of Altria's e-vapor business to NJOY's e-vapor business at the time of Altria's exit. (Murphy Tr. 3230-3231).

2120. Prior to his trial testimony, Dr. Murphy did not review any portions of the trial testimony of Mr. Wade Huckabee from Reynolds. (Murphy Tr. 3232).

2121. Dr. Murphy does not address Altria's intellectual property portfolio in his report. (PX7047 (Murphy (Respondents' Expert), Dep. at 31)).

2122. Dr. Murphy did not offer an opinion in this case as to whether Altria would have exited the e-vapor business but for the transaction. (Murphy Tr. 3229).

(4) Dr. Murphy Failed to Investigate, Quantify, or Demonstrate That Any Sales Expansion By Third Parties Post-Altria's Exit Was in Fact in Response to Altria's Exit

2123. Dr. Murphy did not quantify in his report the extent to which Reynolds' sales expansion was in response to Altria's exit. (Murphy Tr. 3207-08).

2124. Dr. Murphy did not offer an opinion in his report that NJOY's expansion in sales was in response to Altria's exit from e-cigarettes. (Murphy Tr. 3208).

(5) Dr. Murphy Failed to Demonstrate That the Transaction between Altria and JLI Gave Rise to Any Regulatory Benefits

2125. Respondents' expert, Dr. Murphy, did not offer an opinion in his report on whether the transaction likely gave rise to consumer benefits resulting from Altria's assumed regulatory expertise. (Murphy (Respondents' Expert) Tr. 3216).

2126. Dr. Murphy's basis for the statement in his report "that the transaction likely gave rise to potential consumer benefits" (RX1217 at 071 (¶ 93) (Murphy Expert Report)) was statements made by people at Altria and JLI. (Murphy (Respondents' Expert) Tr. 3212). He relied on the judgment of Altria and JLI executives as support for his statement that the transaction will likely result in efficiencies. (Murphy Tr. 3212).

2127. Dr. Murphy agrees that whether or not Altria has regulatory expertise before the FDA is a factual issue. (Murphy Tr. 3213).

2128. Dr. Murphy admits that he is not directly assessing Altria's regulatory expertise in a scientific or technical sense. (Murphy Tr. 3214). Dr. Murphy agrees that, assuming Altria does, in fact, have regulatory expertise, whether that expertise will provide JLI with an enhanced ability to secure PMTA approval is a factual issue. (Murphy Tr. 3214).

2129. Dr. Murphy did not conduct an independent assessment of Altria's expertise in preparing PMTA applications. (Murphy Tr. 3214). Dr. Murphy does not know the number of PMTAs that Altria has filed. (Murphy Tr. 3214-15). Dr. Murphy did not perform an independent assessment of Altria's in-house resources to support PMTA applications. (Murphy Tr. 3215).

2130. Dr. Murphy did not perform an independent assessment of whether Altria's regulatory advisory services increased the likelihood that existing JLI products can receive FDA approval. (Murphy Tr. 3215).

2131. Dr. Murphy did not quantify the likelihood that the FDA will approve PMTA applications for any of JLI's existing products. (Murphy Tr. 3215).

2132. Dr. Murphy did not perform an independent assessment of whether Altria's regulatory advisory services increased the speed with which existing JLI products can receive FDA approval. (Murphy Tr. 3215).

2133. No one at Altria or JLI or their counsel provided Dr. Murphy with any estimates of the consumer benefits that would be achieved by increasing the likelihood that new JLI e-cigarette products would receive market approval. (Murphy Tr. 3215-16).

2134. Dr. Murphy did not do any work to verify whether the potential consumer benefits from Altria's regulatory advisory services have actually occurred. (Murphy Tr. 3216). Also, nowhere in his report does Dr. Murphy discuss any work that he did to verify whether the potential consumer benefits from Altria's regulatory advisory services are likely to occur. (Murphy Tr. 3216).

2135. Respondents' expert, Dr. Murphy, did not evaluate whether JLI could achieve potential regulatory benefits through means other than the transaction with Altria. (Murphy Tr. 3217).

2136. Respondents' expert, Dr. Murphy, did not offer an opinion in his report that the transaction would, in fact, result in a one percent increase in the probability that JLI receives regulatory approval for its products. (Murphy Tr. 3218 (testifying about RX1217 at 126 (¶ 203) (Murphy Expert Report)).

C. WITNESSES WHO TESTIFIED BY DEPOSITION AND/OR INVESTIGATIONAL HEARING ONLY

1. Respondents' Employees and Former Employees

Michelle Baculis of Altria (PX7014, Dep.)

2137. Michelle Baculis is employed by Altria and currently works at United States Smokeless Tobacco. (PX7014 (Baculis (Altria), Dep. at 11)). She previously worked at Nu Mark, and her first boss at Nu Mark was Joe Murillo. (PX7014 (Baculis (Altria), Dep. at 11)). Baculis has been in brand management her entire career at Altria and its predecessor companies. (PX7014 (Baculis (Altria), Dep. at 11)). Baculis started at Altria when it was PM USA in brand management for the Parliament. (PX7014 (Baculis (Altria), Dep. at 11)).

2138. When working at Nu Mark, Baculis worked on brand management and was responsible for the in-market testing of MarkTen. (PX7014 (Baculis (Altria), Dep. at 12-13)). Later at Nu Mark, her role was focused on leading and guiding the new product development for the pipeline products. (PX7014 (Baculis (Altria), Dep. at 12-13)).

<u>Michael Brace of Altria</u> (PX7013, Dep.)

2139. Michael Brace is currently employed at Altria where he is the Vice President and General Manager of Marlboro. (PX7013 (Brace (Altria), Dep. at 10)). He started in this position in September 2020. (PX7013 (Brace (Altria), Dep. at 10-11)). In his current role, he leads the marketing efforts for the cigarette portfolio in the Philip Morris USA subsidiary. (PX7013 (Brace (Altria), Dep. at 10)). Prior to becoming Vice President and General Manager of Marlboro, Brace was Vice President of Region Sales in the Northeast, working with core tobacco products. (PX7013 (Brace (Altria), Dep. at 11)).

2140. Prior to February 2019, Brace was the General Manager of Nu Mark, a role he started in October 2018. (PX7013 (Brace (Altria), Dep. at 11)). As General Manager of Nu Mark, Brace lead the marketing commercialization and operation work of Nu Mark. (PX7013 (Brace (Altria), Dep. at 12)). During his time at Nu Mark, Brace reported to Quigley. (PX7013 (Brace (Altria), Dep. at 13)). Prior to serving as General Manager, Brace was the Marketing Director of Nu Mark from November 2017 to October 2018. (PX7013 (Brace (Altria), Dep. at 15-16)).

<u>Kevin Burns formerly of JLI</u> (PX7025, Dep.; PX7009, IHT)

2141. Kevin Burns was formerly the Chief Executive Officer of JLI. (PX7025 (Burns (JLI), Dep. at 9); PX7009 (Burns (JLI), IHT at 7)). As CEO, Burns was responsible for day-to-day operations of the business, providing strategic direction, interfacing with the board of directors around governance and other matters, and delivering financial and other performance of the business. (PX7009 (Burns (JLI), IHT at 8)). Burns started at JLI around December 2017. (PX7009 (Burns (JLI), IHT at 43)).

2142. Burns was involved in the negotiations to sell an ownership interest in JLI to Altria. (PX7009 (Burns (JLI), IHT at 42)). He was a part of the core team along with some members of the board, the CFO, the General Counsel, and others. (PX7009 (Burns (JLI, former), IHT at 42)). Burns stepped down as CEO of JLI in 2019. (PX7009 (Burns (JLI, former), IHT at 213)).

2143. As of January 2021, Burns owned some equity in JLI, including options and restricted stock units. (PX7025 (Burns (JLI), Dep. at 182)).

<u>K.C. Crosthwaite of JLI and formerly of Altria</u> (PX7024, Dep.; PX7006, IHT)

2144. K.C. Crosthwaite is the Chairman and CEO of JLI. (PX7024 (Crosthwaite (JLI), Dep. at 7)).

2145. Crosthwaite was previously employed by Altria and left Altria in September of 2019. (PX7024 (Crosthwaite (JLI), Dep. at 7)). When he departed, his position at Altria was Chief Growth Officer, a position he had held since June 2018. (PX7024 (Crosthwaite (JLI), Dep. at 7, 14)). Before being named Chief Growth Officer, Crosthwaite was President and CEO of Philip Morris USA. (PX7024 (Crosthwaite (JLI), Dep. at 15)). Crosthwaite joined Philip

Morris USA in 1997 as a territory sales manager. (PX7024 (Crosthwaite (JLI), Dep. at 14)).

2146. As President and CEO of Philip Morris USA, Crosthwaite did not have any responsibility for e-vapor products or initiatives at Altria; he was responsible for the cigarettes and cigars business. (PX7024 (Crosthwaite (JLI), Dep. at 15)). Crosthwaite also held positions as Vice President for Strategy and Business Development for Altria Client Services and General Manager for Marlboro. (PX7024 (Crosthwaite (JLI), Dep. at 15, 19)).

2147. [redacted]

<u>Eugene Cullen of JLI</u> (PX7008, IHT)

2148. Eugene Cullen, III started working for JLI in the summer of 2018. (PX7008 (Cullen (JLI), IHT at 8-9)). He is the Director of Strategic Finance. (PX7008 (Cullen (JLI), IHT at 9)). In this position, Cullen works on high priority projects of the executive team, typically mergers and acquisitions, corporate development, new business development, and strategic initiatives. (PX7008 (Cullen (JLI), IHT at 9)).

2149. Cullen was designated by JLI to discuss efficiencies in connection with the transaction in response to Complaint Counsel's subpoena directed to JLI. (PX7008 (Cullen (JLI), IHT at 10-11 (referring to PX0006 at 001-003 (FTC Subpoena Ad Testificandum addressed to JLI, dated Dec. 3, 2019))).

<u>Timothy Danaher formerly of JLI</u> (PX7042, Dep.; PX7005, IHT)

2150. Timothy Danaher joined JLI in 2015 as Vice President of Finance. (PX7042 (Danaher (JLI), Dep. at 12)). He was promoted to Chief Financial Officer in 2017, and in that role was responsible for mergers and acquisitions and investor relations. (PX7042 (Danaher (JLI), Dep. at 12-13)). Danaher transitioned out of the CFO role at JLI in October 2019. (PX7042 (Danaher (JLI), Dep. at 13)). Danaher is currently employed by NEXT Trucking as CFO. (PX7042 (Danaher (JLI), Dep. at 6)).

2151. As of February 2021, Danaher held an equity interest in JLI in the form of shares and options. (PX7042 (Danaher (JLI), Dep. at 170-71)).

<u>Dinny Devitre of Altria</u> (PX7001, IHT)

2152. Dinny Devitre is a member of the Board of Directors at Altria Group. (PX7001 (Devitre (Altria), IHT at 8)). He began working for Philip Morris, predecessor of Altria, in 1970. (PX7001 (Devitre (Altria), IHT at 8)). Devitre became President of Philip Morris Asia in 1984. (PX7001 (Devitre (Altria), IHT at 9-10)). In 1990, Devitre became Senior Vice President and Chief Administrative Officer of PMI, and in 1995, Head of Corporate Planning. (PX7001 (Devitre (Altria), IHT at 10-11)). Devitre left Philip Morris in 1997 for Citigroup and remained there until 2001. (PX7001 (Devitre (Altria), IHT at 11)). In 2002, Devitre returned to Altria Group and became Senior Vice President and CFO, a position he held until March 2008. (PX7001 (Devitre (Altria), IHT at 12)).

2153. In 2008, Devitre retired from Altria and became a director of the Altria board. (PX7001 (Devitre (Altria), IHT at 12)). About three years ago (as of December 6, 2019), he became Chairman of the Finance Committee of the Altria board. (PX7001 (Devitre (Altria), IHT at 13)). As an Altria board member, Devitre approved dividends, major capital expenditures, the annual budget, and certain acquisitions, and served as an informal advisor to the CEO. (PX7001 (Devitre (Altria), IHT at 14)). Devitre also serves on the innovation committee of the Altria board whose role is to look at the product innovations of the company and encourage innovations with regard to new products and research and development. (PX7001 (Devitre (Altria), IHT at 14, 16)).

Pascal Fernandez of Altria (PX7023, Dep.)

2154. Pascal Fernandez is a managing director for Altria Client Services. (PX7023 (Fernandez (Altria), Dep. at 7)). He works on a variety of projects, including innovation projects, and acts as an executive coach for next generation leaders in the company. (PX7023 (Fernandez (Altria), Dep. at 7-8)). Fernandez works on a tobacco innovation project that involves reduced harm, but he is not currently working on an e-vapor product. (PX7023 (Fernandez (Altria), Dep. at 8-9)).

2155. As of January 2021, Fernandez owned approximately $1 million in stock in Altria. (PX7023 (Fernandez (Altria), Dep. at 220)).

Maria Gogova of Altria (PX7015, Dep.)

2156. Maria Gogova is Vice President of Regulatory Sciences, a position she assumed in 2019. (PX7015 (Gogova (Altria), Dep. at 12, 26)). She joined Altria full time in 2003 in the clinical team to work on reduced risk products. (PX7015 (Gogova (Altria), Dep. at 10-11, 13-14)). Her role was to design and conduct clinical studies for future products. (PX7015 (Gogova (Altria), Dep. at 11)). Later, after 2010, she moved to the regulatory sciences group, her role was to understand and interpret FDA guidance documents and develop scientific strategies to create the framework for and evaluate reduced risk products. (PX7015 (Gogova (Altria), Dep. at 12)).

2157. Gogova evaluated products for PMTA readiness by designing and conducting product studies that would provide the information the FDA was looking for in its approval process. (PX7015 (Gogova (Altria), Dep. at 18-20)).

Paige Magness of Altria (PX7017, Dep.)

2158. Paige Magness is the Senior President of Regulatory Affairs for Altria. (PX7017 (Magness (Altria), Dep. at 18)). Magness joined Philip Morris USA in 2004. (PX7017 (Magness (Altria), Dep. at 11-12)). Magness became manager of PMTAs in 2016. (PX7017 (Magness (Altria), Dep. at 17, 19-20, 22)). Magness is a communications professional and uses her communications expertise in helping Altria to prepare its PMTA filings. (PX7017 (Magness (Altria), Dep. at 18-20)).

2159. As of January 2021, Magness owned stock in Altria. (PX7017 (Magness (Altria), Dep. at 82-83)).

Gerald Masoudi formerly of JLI (PX7035, Dep.)

2160. Gerald Masoudi joined JLI in July of 2018 as Chief Legal Officer. (PX7035 (Masoudi (JLI), Dep. at 16)). He remained in that position until July 2020 when he became counselor and advisor to the CEO of JLI, and he stayed at JLI until September 2020. (PX7035 (Masoudi (JLI, former), Dep. at 16)). He is currently a partner in the Covington and Burling law firm. (PX7035 (Masoudi (JLI, former), Dep. at 16-17)).

2161. As Chief Legal Officer, Masoudi's responsibilities related to JLI's transaction with Altria were to attend board meetings at which the transaction was discussed, work with outside counsel on the term sheets and draft agreements, answer questions on legal issues that board members or the CEO had, participating in due diligence meetings with Altria, and attending some negotiation meetings between JLI and Altria. (PX7035 (Masoudi (JLI, former), Dep. at 21-22)).

Elizabeth Mountjoy of Altria (PX7034, Dep.)

2162. Elizabeth Mountjoy joined Altria in late 2015 as Director of Consumer Marketplace Insights supporting Nu Mark. (PX7034 (Mountjoy (Altria), Dep. at 13)). Mountjoy's role was to bring insights to Nu Mark of what consumers were thinking about and what was going on in the marketplace that could inform Nu Mark's vapor business from an innovation perspective. (PX7034 (Mountjoy (Altria), Dep. at 13)). Mountjoy reported to the head of Consumer Marketplace Insights who was Pascal Fernandez. (PX7034 (Mountjoy (Altria), Dep. at 15)). Mountjoy worked on consumer research on flavor and form for vapor products. (PX7034 (Mountjoy (Altria), Dep. at 21-23)).

2163. Mountjoy did not work much directly with the product and regulatory team. (PX7034 (Mountjoy (Altria), Dep. at 31)).

2. Third-Party Witnesses

Jeff Eldridge of ITG (PX7012, Dep.)

2164. Jeff Eldridge is Vice President, area central, at ITG Brands, LLC. ("ITG"). (PX7012 (Eldridge (ITG), Dep. at 19, 22-23)). As Vice President, Eldridge oversees the distribution and sales arm of cigarettes, cigars, and vapor products that ITG sells in 13 Midwestern states. (PX7012 (Eldridge (ITG), Dep. at 23)).

2165. ITG stands for the Imperial Tobacco Group. (PX7012 (Eldridge (ITG), Dep. at 19)). ITG is the third largest U.S. tobacco company and a subsidiary of Imperial Brands, PLC. (PX7012 (Eldridge (ITG), Dep. at 23)). ITG sells traditional tobacco products such as cigarettes and cigars, as well as e-vapor products. (PX7012 (Eldridge (ITG), Dep. at 23-

24)). ITG sells multiple e-vapor products under the brand name blu. (PX7012 (Eldridge (ITG), Dep. at 26)).

Peter Gross of Goldman Sachs (PX7043, Dep.)

2166. Peter Gross is employed by Goldman Sachs and is Vice Chairman, Investment Banking. (PX7043 (Gross (Goldman Sachs), Dep. at 14)). As an investment banker, Gross has done work for and advised JLI. (PX7043 (Gross (Goldman Sachs), Dep. at 16)). Gross started working with JLI in late 2017 or early 2018, and his assignment was to help JLI negotiate an agreement with Altria where Altria would take a minority position in JLI. (PX7043 (Gross (Goldman Sachs), Dep. at 16)). Gross was involved in JLI's negotiations with Altria. (PX7043 (Gross (Goldman Sachs), Dep. at 17)).

John Logan (Jack) Stout of 7-Eleven (PX7044, Dep.)

2167. John Logan (Jack) Stout started working for 7-Eleven in 2003. (PX7044 (Stout (7-Eleven), Dep. at 8, 23)). Currently he serves as the Senior Vice President for Merchandising and Demand Chain, a position he has held since 2017. (PX7044 (Stout (7-Eleven), Dep. at 23-24)). Stout is responsible for the product assortment in stores, including deciding which products the stores will carry and recommending products to the franchise stores. (PX7044 (Stout (7-Eleven), Dep. at 24)). In some cases, he is responsible for product development of things such as fresh food and private brands. (PX7044 (Stout (7-Eleven), Dep. at 24)). Stout is also responsible for negotiating the terms under which 7-Eleven's stores purchase products from national brand suppliers and maintaining the relationships with third-party distribution partners. (PX7044 (Stout (7-Eleven), Dep. at 24-25)).

2168. 7-Eleven is a convenience store chain, operating in the U.S. and the world. (PX7044 (Stout (7-Eleven), Dep. at 35); PX8001 at 001 (¶ 001) (Stout (7-Eleven), Decl.)). 7-Eleven has over 9,000 stores in the U.S., of which approximately 80% are franchised and 20% are company owned, and over 70,000 stores worldwide. (PX8001 at 001 (¶ 01) (Stout (7-Eleven), Decl.)).

James Wappler of Perella Weinberg Partners (PX7028, Dep.)

2169. James Wappler is a Partner at Perella Weinberg Partners ("PWP"). (PX7028 (Wappler (PWP), Dep. at 12)). Wappler serves as an advisor to Altria on financial and strategic matters, including mergers and acquisitions. (PX7028 (Wappler (PWP), Dep. at 13-14)). Wappler began advising Altria in 2014. (PX7028 (Wappler (PWP), Dep. at 13)).

2170. Wappler worked on Project Tree, which was Altria's investment in JLI. (PX7028 (Wappler (PWP), Dep. at 15)). He started on this project in the spring of 2017. (PX7028 (Wappler (PWP), Dep. at 15)). More than half of Wappler's work time in 2018 was dedicated to Altria. (PX7028 (Wappler (PWP), Dep. at 16)). Wappler also evaluated other potential acquisitions for Altria in the e-vapor space. (PX7028 (Wappler (PWP), Dep. at 17)).

<u>Lawrence Wexler of Turning Point Brands</u> (PX7030, Dep.)

2171. Lawrence Wexler is President and CEO of Turning Point Brands. (PX7030 (Wexler (Turning Point Brands), Dep. at 6)). Wexler was previously employed by Philip Morris but left the company in 1998. (PX7030 (Wexler (Turning Point Brands), Dep. at 16)).

2172. Turning Point Brands operates in three segments: smokeless tobacco products, smoking products, and NewGen (including vapor) products. (PX7030 (Wexler (Turning Point Brands), Dep. at 18-20); PX8003 (Wexler at 001 (¶ 002) (Turning Point Brands), Decl.)). The majority of the products, not including its moist snuff, that Turning Point Brands sells are manufactured by third parties. (PX7030 (Wexler (Turning Point Brands), Dep. at 18)). Turning Point Brands markets the RipTide vapor products. (PX7030 (Wexler (Turning Point Brands), Dep. at 19-20)).

COMPLAINT COUNSEL'S PROPOSED CONCLUSIONS OF LAW

I. THE FEDERAL TRADE COMMISSION HAS JURISDICTION

1. The Federal Trade Commission ("FTC or "Commission") has jurisdiction over the subject matter of this proceeding, pursuant to Section 5 of the Federal Trade Commission Act ("FTC Act"), 15 U.S.C. § 45, and Sections 7 and 11 of the Clayton Act, 15 U.S.C. § 18, 21(b).

2. The Commission has jurisdiction over Respondent Altria Group, Inc. ("Altria").

3. Respondent Altria is, and at all relevant times has been, a corporation as defined in Section 4 of the FTC Act, 15 U.S.C. § 44, and also a person as defined in Section 1 of the Clayton Act, 15 U.S.C. § 12, and in Section 7 of the Sherman Act, 15 U.S.C. § 7.

4. The Commission has jurisdiction over Respondent JUUL Labs, Inc. ("JLI").

5. Respondent JLI is, and at all relevant times has been, a corporation as defined in Section 4 of the FTC Act, 15 U.S.C. § 44, and also a "person" as defined in Section 1 of the Clayton Act, 15 U.S.C. § 12 and in Section 7 of the Sherman Act, 15 U.S.C. § 7.

6. Respondents Altria and JLI are, and at all relevant times have been, engaged in activities, including their agreements relevant to this proceeding, in or affecting "commerce" as defined in Section 4 of the FTC Act, 15 U.S.C. § 44, and Section 1 of the Clayton Act, 15 U.S.C. § 12.

7. Section 5 of the FTC Act prohibits "unfair methods of competition in or affecting commerce, and unfair or deceptive acts or practices in or affecting commerce." 15 U.S.C. § 45(a)(1).

8. Unfair methods of competition under Section 5 of the FTC Act include any conduct that would violate Section 1 of the Sherman Act. *FTC v. Cement Inst.*, 333 U.S. 683, 694 (1948).

9. Section 7 of the Clayton Act prohibits mergers or acquisitions "the effect of [which] may be substantially to lessen competition, or to tend to create a monopoly" in "any line of commerce or . . . activity affecting commerce in any section of the country." 15 U.S.C. § 18.

II. THE RELEVANT MARKET IS SALES OF CLOSED-SYSTEM E-CIGARETTES IN THE UNITED STATES

10. In defining a relevant antitrust market, courts are guided by the Supreme Court's decision in *Brown Shoe Co. v. United States*, 370 U.S. 294 (1962). Courts also rely heavily on the "hypothetical monopolist test" in *U.S. Department of Justice & Federal Trade Commission's Horizontal Merger Guidelines* (2010) (hereinafter "*Horizontal Merger Guidelines*") as an analytical method for defining relevant markets. *See In re Otto Bock*

HealthCare N. America, Inc., Docket No. 9378, 2019 WL 5957363, at *13 (F.T.C. Nov. 1, 2019); *FTC v. Peabody Energy Corp.*, 492 F. Supp. 3d 865, 886 (E.D. Mo. 2020); *FTC v. Penn State Hershey Med. Ctr.*, 838 F.3d 327, 338 (3d Cir. 2016); *United States v. H&R Block*, 833 F. Supp. 2d 36, 51-52 (D.D.C. 2011).

11. "As the United States Supreme Court observed in [*Brown Shoe*], 'The 'area of effective competition' must be determined by reference to a product market (the 'line of commerce') and a geographic market (the 'section of the country').'" *U.S. Steel Corp. v. FTC*, 426 F.2d 592, 595-96 (6th Cir. 1970) (quoting *Brown Shoe*, 370 U.S. at 324). In this case, the area of effective competition is the sales of closed-system e-cigarettes in the United States. (CCFF § V).

12. The United States is the relevant geographic market. (CCFF ¶ 408).

13. The relevant product market refers to the "product and services with which the defendants' products compete." *United States v. Anthem, Inc.*, 236 F. Supp. 3d 171, 193 (D.D.C. 2017), *aff'd* 855 F.3d 345 (D.C. Cir.). In other words, the relevant product market is the "line of commerce" affected by a merger. *Brown Shoe*, 370 U.S. at 324.

14. "A market's 'outer boundaries' are determined by the 'reasonable interchangeability of use or the cross-elasticity of demand between the product itself and substitutes for it.'" *FTC v. Tronox Ltd.*, 332 F. Supp. 3d 187, 198 (D.D.C. 2018) (quoting *Brown Shoe*, 370 U.S. at 325). Stated another way, a product market includes all goods that are "reasonable substitutes." *FTC v. Sysco Corp.*, 113 F. Supp. 3d 1, 25 (D.D.C. 2015) (citations omitted); *H & R Block*, 833 F. Supp. 2d at 51 (citation omitted).

15. "A relevant product market need not be defined around a *single* product." *Peabody Energy*, 492 F. Supp. 3d at 884 (emphasis in original); *see also United States v. Grinnell Corp.*, 384 U.S. 563, 572 (1966) ("We see no barrier to combining in a single market a number of different products or services where that combination reflects commercial realities.").

16. "Defining a relevant product market is primarily a process of describing those groups of producers which, because of the similarity of their products, have the ability—actual or potential—to take significant amounts of business away from each other." *Polypore Int'l, Inc. v. FTC*, 686 F.3d 1208, 1217 (11th Cir. 2012) (quoting *U.S. Anchor Mfg., Inc. v. Rule Indus., Inc.*, 7 F.3d 986, 995 (11th Cir. 1993)).

17. In defining a relevant product market, courts consider "'practical indicia' of market definition such as industry or public recognition of the market as a separate economic entity, the product's peculiar characteristics and uses, unique production facilities, distinct customers, distinct prices, sensitivity to price changes, and specialized vendors." *Otto Bock*, 2019 WL 5957363, at *13 (citing *Brown Shoe*, 370 U.S. at 325); *see also In re Polypore Int'l, Inc.*, Docket No. 9327, 2010 WL 9549988, at *11 (F.T.C. Nov. 5, 2010).

18. The evidence for both the "practical indicia" identified by the Supreme Court in *Brown Shoe* and the hypothetical monopolist test outlined in the *Horizontal Merger Guidelines*

supports the conclusion that sales of closed-system e-cigarettes is an appropriate relevant product market. The United States is an appropriate relevant geographic market.

19. The relevant market inquiry is part of an analysis under Section 7 of the Clayton Act, 15 U.S.C. § 18; however, for Section 1 of the Sherman Act, 15 U.S.C. § 1, "[w]hen 'horizontal restraints involve agreements between competitors not to compete in some way, [the Supreme Court] concluded that it did not need to precisely define the relevant market to conclude that these agreements were anticompetitive.'" *In re Benco Dental Supply Co.*, Docket No. 9379, 2019 WL 5419393, at *70 (F.T.C. Oct. 15, 2019) (quoting *Ohio v. Am. Express Co.*, 138 S. Ct. 2274, 2285 n.7 (2018)); *see also FTC v. Indiana Fed'n of Dentists*, 476 U.S. 447, 460 (1986) ("the purpose of the inquiries into market definition and market power is to determine whether an arrangement has the potential for genuine adverse effects on competition").

III. RESPONDENTS AGREED ALTRIA WOULD EXIT THE E-CIGARETTE MARKET IN EXCHANGE FOR ITS STAKE IN JLI

20. Section 1 of the Sherman Act, 15 U.S.C. § 1, prohibits "every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States."

21. Establishing a violation of Section 1 of the Sherman Act requires proof of (1) "a contract, combination, or conspiracy—or, more simply, an agreement" that (2) "unreasonably restrain[s] trade." *Realcomp II, Ltd. v. FTC*, 635 F.3d 815, 824 (6th Cir. 2011) (citation omitted); *Benco*, 2019 WL 5419393, at *68.

22. Complaint Counsel need only establish Respondents' agreement by a preponderance of the evidence. *In re High Fructose Corn Syrup Antitrust Litig.*, 295 F.3d 651, 655-56, 663 (7th Cir. 2002); *In re Adventist Health Sys./West*, 117 F.T.C. 224, 297 (1994). In other words, a plaintiff need only present evidence that is sufficient to allow the fact-finder "to infer that the conspiratorial explanation is more likely than not." *In re Publ'n Paper Antitrust Litig.*, 690 F.3d 51, 63 (2d Cir. 2012) (quoting Phillip E. Areeda & Herbert Hovenkamp, Antitrust Law (hereinafter "Areeda & Hovenkamp") ¶ 1403(b)).

A. The Totality of the Evidence Establishes Respondents' Agreement

23. "The existence of an agreement is the very essence of a section 1 claim." *Benco*, 2019 WL 5419393, at *7 (quoting *In re Flat Glass Antitrust Litig.*, 385 F.3d 350, 356 (3d Cir. 2004)).

24. An agreement may be established through either direct or circumstantial evidence, or a combination of the two. *See Benco*, 2019 WL 5419393, at *9; *W. Penn Allegheny Health Sys., Inc. v. UPMC*, 627 F.3d 85, 99 (3d Cir. 2010).

25. Because it is rare for parties to an illegal agreement to commit the entirety of their agreement to writing, plaintiffs commonly prove the existence of an agreement through inferences drawn from circumstantial evidence. *See Benco*, 2019 WL 5419393, at *9; *City of Tuscaloosa v. Harcros Chems., Inc.*, 158 F.3d 548, 569 (11th Cir. 1998); *see also In re*

Wholesale Grocery Prod. Antitrust Litig., 752 F.3d 728, 734 (8th Cir. 2014); *In re Elec. Books Antitrust Litig.*, 859 F. Supp. 2d 671, 681 (S.D.N.Y. 2012) ("[C]onspiracies nearly always must be proven through inferences that may fairly be drawn from the behavior of the alleged conspirators."). Circumstantial evidence often takes the form of so-called "plus factors," which are "economic actions and outcomes . . . that are largely inconsistent with unilateral conduct but largely consistent with explicitly coordinated action." William E. Kovacic et al., *Plus Factors and Agreement in Antitrust Law*, 110 MICH. L. REV. 393, 393 (2011).

26. Circumstantial evidence is no less persuasive than direct evidence. *United States v. Apple Inc.*, 952 F. Supp. 2d 638, 689 (S.D.N.Y. 2013), *aff'd* 791 F.3d 290 (2d Cir. 2015).

27. When evaluating the existence of an anticompetitive agreement, courts must consider the "totality of the evidence." *Apple*, 952 F. Supp. 2d at 689 (quoting *In re Publ'n Paper Antitrust Litig.*, 690 F.3d 51, 64 (2d Cir. 2012)); *Benco*, 2019 WL 5419393, at *9.

28. When viewing the evidence, "[t]he character and effect of a conspiracy are not to be judged by dismembering it and viewing its separate parts, but only by looking at it as a whole." *Cont'l Ore Co. v. Union Carbide & Carbon Corp.*, 370 U.S. 690, 699 (1962) (citation omitted). Not every detail needs to be worked out in order to prove that an agreement exists for purposes of antitrust liability. *See id.*; *Esco Corp. v. United States*, 340 F.2d 1000, 1008 (9th Cir. 1965).

29. An agreement exists "if a course of conduct . . . once suggested or outlined by a competitor . . . is followed by all — generally and customarily— and continuously for all practical purposes, even though there are slight variations. . . . An exchange of words is not required. Thus not only action, but even a lack of action, may be enough from which to infer a combination or conspiracy." *Esco*, 340 F.2d at 1008 (citation omitted); *see also In re Polyurethane Foam Antitrust Litig.*, 152 F. Supp. 3d 968, 978 (N.D. Ohio 2015) ("No formal agreement is necessary to constitute an unlawful conspiracy. . . . The essential combination or conspiracy in violation of the Sherman Act may be found in a course of dealings or other circumstances as well as in any exchange of words.") (quoting *Am. Tobacco Co. v. United States*, 328 U.S. 781, 809-10 (1946)).

30. Proof of an agreement can include evidence that competitors followed conduct "suggested or outlined by a competitor," *Esco*, 340 F.2d at 1007-08; *United States v. Champion Int'l Corp.*, 557 F.2d 1270, 1273 (9th Cir. 1977); *United States v. Foley*, 598 F.2d 1323, 1331-32 (4th Cir. 1979).

31. In *Gainesville Utilities Department v. Florida Power & Light Co.*, the totality of direct communications between high-level executives of rival utility companies led the court to find an agreement to divide the market, reasoning: "Indeed, if solid economic reasons existed for refusing service to [each other's territory], there was no reason for communicating with a competitor about the refusal, and certainly not for expressing such decisions in terms of hopeful, if not expected, reciprocity." 573 F.2d 292, 299, 301 (5th Cir. 1978).

32. The totality of the record evidence makes it more likely than not that Respondents entered into an unlawful agreement under which Altria exited the U.S. e-cigarette market in exchange for its stake in JLI. (CCFF §§ VI-IX).

B. Plus Factors Confirm Respondents' Agreement

33. "Actions against interest by a participant in a conspiracy are actions that would have been economically irrational for a firm acting in a competitive market." *In re McWane, Inc.*, Docket No. 9351, 2012 WL 4101793, at *9 (F.T.C. Sept. 14, 2012).

34. Actions against unilateral economic self-interest is plus-factor evidence that supports a finding of conspiracy. *Apple*, 952 F. Supp. 2d at 690. "Evidence that the defendant acted contrary to its interests means evidence of conduct that would be irrational assuming that the defendant operated in a competitive market." *In re Flat Glass Antitrust Litig.*, 385 F.3d 350, 360-61 (3d Cir. 2004).

35. For example, depriving oneself of a promising market opportunity is an action against self-interest that points towards conspiracy. *Toys "R" Us v. FTC*, 221 F.3d 928, 935 (7th Cir. 2000) (finding an agreement after it was "suspicious for a manufacturer to deprive itself of a profitable sales outlet"); *In re Pool Prods. Distrib. Mkt. Antitrust Litig.,* 988 F. Supp. 2d 696, 713 (E.D. La. 2013) (acts that "risk a loss of market share to the other manufacturers" are acts against economic self-interest supporting claim of conspiracy).

36. Toy manufacturers' decisions to forego sales to warehouse club stores, a growing and profitable sales channel, was conduct against self-interest that was indicative of an agreement in *Toys "R" Us*, especially where each manufacturer feared its competitors would steal market share by selling to warehouse stores. 221 F.3d at 931-32, 935-36.

37. Respondent Altria's abrupt shutdown of its Nu Mark subsidiary and e-cigarette business was against its economic self-interest and indicative of an agreement. (CCFF § IX.A.1). The evidence is clear that Altria would never have exited the U.S. e-cigarette market in the absence of the JLI transaction because Altria viewed market leadership in e-cigarettes as critically important to its long-term success. (CCFF ¶¶ 93-108, 409-10, 532-44).

38. Indeed, the evidence suggests that Respondents "would not have acted as they did had they not been conspiring." *In re Polyurethane Foam Antitrust Litig.*, 152 F. Supp. 3d 968, 989 (N.D. Ohio 2015) (quoting *City of Tuscaloosa v. Harcros Chems., Inc.*, 158 F.3d 548, 572 (11th Cir. 1998)).

39. Statements suggestive of a conspiracy have also been identified as an independent "plus factor" supporting the inference of an agreement. *See McWane*, 2012 WL 4101793, at *14; *High Fructose Corn Syrup*, 295 F.3d at 662.

40. Respondents' words and actions suggest they were acutely aware that a deal between Altria and JLI—in particular, explicitly linking Altria's purchase of economic stake in JLI with the shutdown of Altria's e-cigarette business—could raise antitrust concerns. (CCFF ¶ 730). This evidence further supports finding an agreement was more likely than not.

41. When compared to Altria's prior commitment to being a long-term, strategic competitor in the e-cigarette market, the timeline of its actions starting after July 30, 2018 strongly suggests that JLI's non-compete demand drove key decisions made by Altria's senior leadership. *See* (CCFF §§ VIII.E-M); *In re Urethane Antitrust Litig.*, 913 F. Supp. 2d 1145, 1154-55 (D. Kan. 2012) (timeline of events can support inference of conspiracy).

42. "Pretextual excuses are circumstantial evidence that can disprove the likelihood of independent action." *Rossi v. Standard Roofing, Inc.*, 156 F.3d 452, 478 (3d. Cir. 1998); *see also Fragale & Sons Beverage Co. v. Dill*, 760 F.2d 469, 474 (3d. Cir. 1985) ("evidence of pretext, if believed by the [fact finder], would disprove the likelihood of independent action on the part of [Respondent]."). Indeed, evidence of pretext can "strengthen an inference of joint action that is otherwise in evidence." *White v. RM Packer Co., Inc.*, 635 F.3d 571, 585 (1st Cir. 2011).

43. Respondent Altria's excuses, all of which are pretextual and implausible, for its action to shut down its e-cigarette business right before the JLI transaction are plus-factor evidence pointing towards conspiracy. (CCFF § IX).

44. Similarly, evidence of frequent communications between conspirators is an independent "plus factor" further supporting an inference of agreement. *See McWane*, 2012 WL 4101793, at *13 n.11 (citing *In re Plywood Antitrust Litig.*, 655 F.2d 627, 633 (5th Cir. 1981)); *see also Stanislaus Food Prods. Co. v. USS-POSCO Indus.*, 803 F.3d 1084, 1092-93 (9th Cir. 2015); *SD3, LLC v. Black & Decker (U.S.) Inc.*, 801 F.3d 412, 432 (4th Cir. 2015).

45. Respondents' numerous in-person meetings (sometimes without lawyers), frequent exchanges of text messages and one-on-one telephone calls provide plus-factor evidence relevant to a finding of agreement. (CCFF ¶¶ 614-24).

C. Respondents' Denials Are Unavailing

46. Self-serving witness denials do not preclude a conspiracy finding in an antitrust case. *See, e.g., Gainesville Utils. Dep't*, 573 F.2d at 301 n.14 (overturning denial of judgment notwithstanding the verdict relying on witness denials); *Champion Int'l*, 557 F.2d at 1273 (upholding trial court finding of an agreement to eliminate competitive bidding for timber where defendants asserted that meetings were innocent, but court found otherwise); *United States v. Capitol Service, Inc.*, 568 F. Supp. 134, 144-45 (E.D. Wis. 1983), *aff'd*, 756 F.2d 502 (7th Cir. 1985) (finding agreement despite defendants' testimony that no agreement existed); *United States v. Beachner Const. Co.*, 555 F. Supp. 1273, 1278-79 (D. Kan. 1983), *aff'd*, 729 F.2d 1278 (10th Cir. 1984) ("[A]though witnesses denied any overall agreement or understanding or participation in a single conspiracy, there can be no doubt that bid rigging was a way of life in the industry in Kansas.").

47. "It is to be expected that [Respondents'] witnesses would deny that there was an agreement, but [such] testimony does not offset . . . compelling documentary evidence of a planned common course of action or understanding." *Advert. Specialty Nat'l Ass'n v. FTC*, 238 F.2d 108, 117 (1st Cir. 1956).

48. Oral testimony that is in conflict with contemporaneous documentary evidence deserves little weight. *United States v. U.S. Gypsum Co.*, 333 U.S. 364, 395-96 (1948) ("On cross-examination most of the witnesses denied that they had acted in concert . . . Where such testimony is in conflict with contemporaneous documents we can give it little weight, particularly when the crucial issues involve mixed questions of law and fact".); *Gainesville Utils. Dep't*, 573 F.2d at 301 n.14 (Where defendants' executives testimony denying an agreement "is in conflict with contemporaneous documents we can give it little weight.").

49. Requiring admission of agreement would be tantamount to requiring direct evidence of conspiracy—a standard that finds no support in the law. *See, e.g.*, *Apple*, 952 F. Supp. 2d at 689 ("A plaintiff may rely on either direct or circumstantial evidence to establish that a defendant entered into an agreement in violation of the antitrust laws.").

50. Respondents' executives' denials do not offset the body of evidence supporting an inference of agreement. *See* (CCFF § IX).

51. In addition, a misrepresentation and a subsequent forced admission of a material fact calls the overall truthfulness of Altria executives' explanations for the company's actions into serious question. *See, e.g.*, *Impax Labs, Inc. v. FTC*, 994 F.3d 484, 499-500 (5th Cir. 2021) (citing *Reeves v. Sanderson Plumbing Prods., Inc.*, 530 U.S. 133, 147 (2000) (discussing the "general principle of evidence law that the factfinder is entitled to consider a party's dishonesty about a material fact as 'affirmative evidence of guilt.'")).

52. During the pre-complaint investigation, several of Altria executives testified under oath that Altria did not approve the gasket change to fix the leaking issue and the new gasket couldn't be and wasn't implemented. (CCFF ¶ 1225). In February 2020, Altria also submitted a white paper to the Commission making this argument and relying on this sworn testimony. (CCFF ¶ 1224). Several months after the Altria executives denied the gasket fix, however, Altria responded to Complaint Counsel's discovery request admitting that Altria in fact "incorporated a replacement gasket into Elite and that Nu Mark distributed Elite units with the replacement gasket to its customers for sale to consumers in the fall of 2018," thereby contradicting its executives' prior sworn testimony (CCFF ¶ 1226). This reversal is relevant to a material fact and casts serious doubt on the veracity of Altria's claim that Elite's leaking issue was a major challenge to its success in the market. *See Impax*, 994 F.3d at 499-500 (citing *Sanderson Plumbing*, 530 U.S. at 147).

D. Claims of Independent Business Justification Are No Defense to an Unlawful Conspiracy

53. Whether conspiracy conduct is consistent with independent business justifications does not preclude a finding of an agreement. *Standard Oil Co. of Cal. v. Moore*, 251 F.2d 188, 211 (9th Cir. 1957) ("[I]f there is sufficient evidence to support a finding that a merchant entered into such an agreement, combination, or conspiracy, the fact that his individual refusal to deal may be explainable as a reasonable business decision is not excusatory of liability.").

54. "It is of no consequence, for purposes of determining whether there has been a combination or conspiracy under § 1 of the Sherman Act, that each party acted in its own lawful interest." *United States v. Gen. Motors Corp.*, 384 U.S. 127, 142 (1966).

55. In *United States v. North Dakota Hospital Ass'n*, an agreement among hospitals not to grant discounts to Indian Health Services and "to adhere to [the hospitals'] independently developed, preexisting policies against granting [such] discounts" was nonetheless an unreasonable restraint where "the effect of defendants' agreement was to foreclose any potential competition." 640 F. Supp. 1028, 1036-37 (D.N.D. 1986).

56. In *Apple*, "the fact that Apple's conduct was in its own economic interest in no way undermines the inference that it entered an agreement to raise ebook prices." *United States v. Apple, Inc.*, 791 F.3d 290, 317-18 (2d Cir. 2015) (citing Areeda & Hovenkamp ¶ 1413a).

57. "[A] finding of conspiracy requires 'evidence that tends to exclude the possibility' that the defendant was 'acting independently.'" *Apple*, 791 F.3d at 315 (quoting *Monsanto Co. v. Spray-Rite Serv. Corp.*, 465 U.S. 752, 764 (1984)). "This requirement, however, '[does] not mean that the plaintiff must disprove all nonconspiratorial explanations for the defendants' conduct'; rather, the evidence need only be sufficient 'to allow a reasonable fact finder to infer that the conspiratorial explanation is more likely than not.'" *Id.* (quoting *In re Publ'n Paper Antitrust Litig.,* 690 F.3d 51, 63 (2d Cir.2012) (quoting Phillip E. Areeda & Herbert Hovenkamp, *Fundamentals of Antitrust Law* § 14.03(b), at 14–25 (4th ed.2011))).

58. Respondent Altria's claim that shutting down its e-cigarette business was in its economic interests (while contradicted by the documentary evidence and testimony) does not prevent a finding of a horizontal agreement.

IV. RESPONDENTS' AGREEMENT IS UNLAWFUL UNDER SECTION 5 OF THE FTC ACT AS IT VIOLATES SECTION 1 OF THE SHERMAN ACT

59. As the Supreme Court has explained, "the inquiry mandated by the rule of reason is whether the challenged agreement is one that promotes competition or one that suppresses competition." *Nat'l Soc'y of Prof'l Eng'rs v. U.S.*, 435 U.S. 679, 691 (1978); *see also FTC v. Indiana Fed'n of Dentists*, 476 U.S. 447, 458 (1986); *Chicago Board of Trade v .United States*, 246 U.S. 231, 238 (1918). Under the rule of reason framework, the antitrust plaintiff "must demonstrate that a particular contract or combination is in fact unreasonable and anticompetitive before it will be found unlawful." *Texaco Inc. v. Dagher*, 547 U.S. 1, 5 (2006).

60. In analyzing an alleged violation of Section 1 under the rule of reason, courts use a burden-shifting framework. *Impax Labs. Inc. v. FTC*, 994 F.3d 484, 492 (5th Cir. 2021) (citing *Ohio v. Am. Express Co.*, -- U.S. --, 138 S. Ct. 2274, 2284 (2018)). First, the "initial burden is on the FTC to show anticompetitive effects." *Id.* If the FTC succeeds, the burden shifts to Respondents to "demonstrate that the restraint produced procompetitive benefits." *Id.* If Respondents "successfully prove procompetitive benefits, then the FTC

can demonstrate that any procompetitive effects could be achieved through less anticompetitive means." *Id.* Finally, if the FTC "fails to demonstrate a less restrictive alternative way to achieve the procompetitive benefits, the court must balance the anticompetitive and procompetitive effects of the restraint." *Impax*, 994 F.3d at 492 (citing *Apani Sw., Inc. v. Coca-Cola Enters., Inc.,* 300 F.2d 620, 627 (5th Cir. 2002)). "If the anticompetitive harm outweighs the procompetitive benefits, then the agreement is illegal." *Id.* This framework "do[es] not represent a rote checklist, nor may [it] be employed as an inflexible substitute for careful analysis." *Alston*, 141 S. Ct. at 2160.

A. Respondents' Agreement Caused Anticompetitive Harm

61. Agreements among horizontal competitors not to compete are considered the *"bête noir"* of antitrust law. *Impax*, 994 F.3d at 493 (citing Joshua P. Davis & Ryan J. McEwan, *Deactivating* Actavis*: The Clash Between the Supreme Court and (Some) Lower Courts*, 67 RUTGERS U.L. REV. 557, 559 (2015)).

62. Indeed, market allocation agreements are more pernicious than price-fixing schemes because the former eliminates *all* forms of competition on every dimension. *Blue Cross & Blue Shield United of Wis. v. Marshfield Clinic*, 65 F.3d 1406, 1415 (7th Cir. 1995) (Posner, C.J.); *Impax*, 994 F.3d at 493. Here, Altria's shutdown of its e-cigarette business pursuant to the agreement harmed consumers by instantly eliminating all forms of current and future competition from Altria, including price competition, innovation competition, and competition for shelf-space.(CCFF §§ VIII.M, X.A-D). In sum, the agreement caused substantial anticompetitive harm because it replaced the "possibility of competition [from Altria] with the certainty of none." *See Impax*, 994 F.3d at 495.

63. "[I]t is a basic antitrust principle that the impact of an agreement on competition is assessed as of 'the time it was adopted.'" *Impax*, 994 F.3d at 496 (quoting *Polk Bros. v. Forest City Enters.*, 776 F.2d 185, 189 (7th Cir. 1985) (Easterbrook, J.)).

64. Complaint Counsel has shown direct evidence, through its expert and other documentary proof, that Respondents' agreement harmed competition. This direct evidence of anticompetitive effects meets the initial burden for Complaint Counsel to state a *prima facie* case. (CCFF §§ X.A-D). Under the rule of reason, plaintiffs may meet their initial burden by showing either: (1) direct evidence anticompetitive effects, or (2) Respondents' market power along with the likely effect of the conduct. *Realcomp II, Ltd. v. FTC*, 635 F.3d 815, 825 (6th Cir. 2011). Where the plaintiff can show actual anticompetitive effects, a "full blown market analysis is not necessary." *Intel Corp. v. Fortress Investment Group LLC*, 511 F. Supp. 3d 1006, 1014 (N.D. Cal. 2021) (quoting *Bhan v. NME Hosps., Inc.*, 929 F.2d 1404, 1413 (9th Cir. 1991).

B. Respondents Cannot Show Procompetitive Justifications for Their Agreement

65. Under the rule of reason, after Complaint Counsel has shown evidence of anticompetitive harm, the burden switches to Respondents to establish the "pro-competitive redeeming virtues" of the agreement. *See Clorox Co. v. Sterling Winthrop, Inc.*, 117 F.3d 50, 59 (2nd

Cir. 1997). Procompetitive benefits can include "the creation of efficiencies in the operation of a market or the provision of goods and services." *Indiana Fed'n of Dentists*, 476 U.S. at 459.

66. Respondents cannot demonstrate how the only service from Altria to JLI that survived the Amended Services Agreement (regulatory support service) benefitted consumers or competition. (CCFF §§ XI, XIV). Thus, Respondents cannot offer any "pro-competitive redeeming virtues" sufficient to save the anticompetitive agreement. *See Clorox*, 117 F.3d at 59.

67. As an anticompetitive agreement without offsetting benefits, Respondents' agreement constitutes an unfair method of competition in violation of FTC Act Section 5, 15 U.S.C. §45(a), and Section 1 of the Sherman Act, 15 U.S.C. § 1.

C. Even if Respondents Could Show Procompetitive Justifications for Their Agreement, the Agreement Is Not Necessary to Achieve Them

68. A restraint is unreasonable when "any procompetitive benefits it produces 'could have been achieved through less anticompetitive means.'" *Impax*, 994 F.3d at 497 (quoting *Am. Express*, 138 S. Ct. at 2284). "Less restrictive alternatives are 'those that would be less prejudicial to competition as a whole.'" *N. Am. Soccer League, LLC v. U.S. Soccer Fed'n Inc.*, 883 F.3d 32, 45 (2d Cir. 2018) (quoting *Capital Imaging Associates v. Mohawk Valley Med. Associates Inc.*, 996 F.2d 537, 543 (2d Cir. 1993). "The idea is that it is unreasonable to justify a restraint of trade based on a purported benefit to competition if that same benefit could be achieved with less damage to competition. Focusing on the existence of less restrictive alternatives may allow court to avoid difficult balancing and to 'smoke out' anticompetitive effects or pretextual justifications for the restraint." *Impax*, 994 F.3d at 497-98 (quoting C. Scott Hemphill, *Less Restrictive Alternatives in Antitrust Law*, 116 COLUM L. REV. 927, 947-63 (2016)).

69. As the Supreme Court in *Alston* observed, "however framed and at whichever step, anticompetitive restraints of trade may wind up flunking the rule of reason to the extent the evidence shows that substantially less restrictive means exist to achieve any proven procompetitive benefits." *Alston*, 141 S. Ct. at 2162 (citing Areeda & Hovenkamp ¶1505 ("To be sure, these two questions can be collapsed into one," since a "legitimate objective that is not promoted by the challenged restraint can be equally served by simply abandoning the restraint, which is surely a less restrictive alternative")).

70. Even if Respondents could show a procompetitive justification for their agreement, the evidence shows that the anticompetitive agreement was not necessary to achieve these objectives. (CCFF ¶¶ 1920-55).

D. Standing Alone, the Written Non-Compete Also Violates Section 1 of the Sherman Act

71. Covenants not to compete are valid where "(1) ancillary to the main business purpose of a lawful contract, and (2) necessary to protect the covenantee's legitimate property interest which require that the covenants be as limited as is reasonable to protect the covenantee's

interest." *Lektro-Vend Corp. v. Vendo Co.*, 660 F.2d 255, 265 (7th Cir. 1981) (citing *United States v. Addyston Pipe & Steel Co.*, 85 F. 271, 280 (6th Cir. 1898), *aff'd* 175 U.S. 211 (1899)). Respondents satisfy neither element here.

72. Respondents' written non-compete agreement included in the Transaction ("Non-Compete") precludes Altria from participating in all aspects of the e-cigarette business, including R&D and any collaboration with third-parties (including PMI), for an initial term of six years, which is indefinitely extendable by three-year increments if not terminated by either party. (CCFF ¶¶ 38-40, § VIII.N). Even if the Court believes Altria exited the e-cigarette market for reasons unrelated to the deal with JLI, the Non-Compete still violates Section 1 given Altria's status as a potential competitor in the e-cigarette market. *See FTC v. Actavis, Inc.*, 570 U.S. 136, 146 (2013); *Palmer v. BRG of Ga. Inc.*, 498 U.S. 46, 50 (1990).

73. Respondents cannot demonstrate that the Non-Compete is ancillary to an otherwise lawful transaction because the underlying Transaction is invalid. In order to be ancillary, "an agreement eliminating competition must be subordinate and collateral to a separate, legitimate transaction." *Rothery Storage & Van Co. v. Atlas Van Lines, Inc.*, 792 F.2d 210, 224 (D.C. Cir. 1986). Importantly, for the ancillary restraints doctrine to apply, the underlying Transaction must itself be legitimate, and "even restraints ancillary in form are illegal if they are part of a general plan" to violate the antitrust laws. *Id.* (citing *Addyston Pipe*, 85 F. at 280). Accordingly, any restraint in furtherance of a Section 1 or Section 7 violation cannot properly be considered an "ancillary" restraint. *Id.*

74. Where a restraint is "so broad that part of the restraint suppresses competition without creating efficiency, the restraint is, to that extent, not ancillary." *Rothery Storage*, 792 F.2d at 224. Moreover, "under established precedent, a restraint is only ancillary if it [is] necessary to achieve otherwise unobtainable procompetitive benefits." *In re Sulfuric Acid Antitrust Litig.*, 743 F. Supp. 2d 827, 872 (N.D. Ill. 2010). The Non-Compete fails on these criteria as well: the written agreement is broad enough to harm competition, it creates little to no efficiencies, and any procompetitive benefits could be achieved by less restrictive alternatives.

75. Even where ancillary to a legitimate transaction, written non-competes are subject to the rule of reason. *Lektro-Vend*, 660 F.2d at 265; *Eichorn v. AT&T Corp.*, 248 F.3d 131, 138 (3rd Cir. 2001). Here, the Non-Compete fails under the rule of reason because the anticompetitive effects of the written agreement substantially outweigh any procompetitive benefits. (CCFF §§ X.B.3, X.C-D).

V. THE TRANSACTION VIOLATES SECTION 7 OF THE CLAYTON ACT

76. Section 7 of the Clayton Act prohibits the acquisition of "the whole or any part of the stock or other share capital" where "the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly." 15 U.S.C. § 18.

77. As the Supreme Court held in *United States v. E. I. du Pont de Nemours & Co.*, "any acquisition by one corporation of all or any part of the stock of another corporation,

competitor or not, is within the reach of [Section 7 of the Clayton Act] whenever the reasonable likelihood appears that the acquisition will result in a restraint of commerce or in the creation of a monopoly of any line of commerce." 353 U.S. 586, 592 (1957); *see also Yamaha Motor Co. v. FTC*, 657 F.2d 971, 947 (8th Cir. 1981) (involving an acquisition of a 38 percent interest).

78. Section 7 prohibits acquisitions that create a reasonable probability of anticompetitive effects. *See, e.g.*, *FTC v. Univ. Health*, *Inc.*, 938 F.2d 1206, 1218 (11th Cir. 1991). "Congress used the phrase '*may be* to substantially competition' to indicate that its concern was with probabilities, not certainties[.]" *FTC v. Penn State Hershey Med. Ctr.*, 838 F.3d 327, 337 (3d Cir. 2016) (quoting *Brown Shoe,* 370 U.S. at 323).

79. An acquisition violates Section 7 if it "create[s] an appreciable danger of [anticompetitive] consequences in the future. A predictive judgment, necessarily probabilistic and judgmental rather than demonstrable, is called for." *Hospital Corp. of America v. FTC*, 807 F.2d 1381, 1389 (7th Cir. 1986) (Posner, J.) (citation omitted).

80. Although the Transaction involves a partial (35 percent) equity acquisition of JLI, it effectively caused the effect of a full acquisition as it completely eliminated one of the competitors (here, Altria) from the market. (CCFF §§ VIII.M-N). This is exactly like the type of a merger case described in the *Horizontal Merger Guidelines*—a horizontal merger that "completely and permanently eliminat[es] competition between them. This elimination of competition is a basic element of merger analysis." *Horizontal Merger Guidelines* § 13 ("Partial acquisitions, like mergers, vary greatly in their potential for anticompetitive effects. Accordingly, the specific facts of each case must be examined to assess the likelihood of harm to competition.").

A. The Transaction Is Presumptively Unlawful in the Relevant Market

81. Courts traditionally analyze Section 7 under a burden-shifting framework consisting of three steps. *United States v. Baker Hughes, Inc.*, 908 F.2d 981, 982–83 (D.C. Cir. 1990); *In re Polypore Int'l, Inc.*, Docket No. 9327, 2010 WL 9549988, at *9 (F.T.C. Nov. 5, 2010).

82. Under the burdening-shifting framework, Complaint Counsel can establish a presumption of anticompetitive harm by defining a relevant product and geographic market and showing that the transaction will lead to undue concentration in the market. *United States v. Philadelphia Nat'l Bank*, 374 U.S. 321, 363 (1963). The typical measure for determining market concentration is the Herfindahl-Hirschman Index ("HHI") which is calculated by summing the squares of the individual market shares of all the firms in the market. *FTC v. H.J. Heinz Co.*, 246 F.3d 708, 715–16 (D.C. Cir. 2001); *Tronox*, 332 F. Supp. 3d at 207. The government can bolster its presumption based on market share with additional evidence showing that competitive effects are likely. *Heinz*, 246 F.3d at 717.

83. Respondents can then rebut the presumption of harm by producing "evidence that casts doubt on the significance or accuracy of" the government's evidence. *Polypore*, 2010 WL 9549988, at *9 (citing *Baker Hughes*, 908 F.2d at 985); *Chicago Bridge & Iron Co. N.V.*

v. FTC, 534 F.3d 410, 423 (5th Cir. 2008). The stronger the government's *prima facie* case, however, "the greater Respondents' burden of production on rebuttal." *In re OSF Healthcare Sys.*, 2012 FTC LEXIS 76, *46 (Apr. 4, 2012); *see also Heinz*, 246 F.3d at 725. If Respondents successfully rebut the *prima facie* case, the burden of production shifts back to the government and "merges with the ultimate burden of persuasion, which remains with the government at all times." *Baker Hughes*, 908 F.2d at 983 (citation omitted).

84. The Commission may rely on "the closest available approximation" of market shares when calculating concentration levels. *FTC v. PPG Indus.*, 798 F. 2d 1500, 1505 (D.C. Cir. 1986). Indeed, the "FTC need not present market shares and HHI estimates with the precision of a NASA scientist." *Sysco*, 113 F. Supp. 3d at 54 (market share estimates were reliable because they were the "closest available approximation"); *see also PPG Indus.*, 798 F.2d at 1505 (affirming finding of highly concentrated market based on comparison of market shares in a related market); *United States v. Bazaarvoice, Inc.*, No. 13-cv-133, 2014 U.S. Dist. LEXIS 3284, at *237 (N.D. Cal. Jan. 8, 2014) (shares are imperfect but reveal the basic market structure).

85. "Sufficiently large HHI figures establish the FTC's prima facie case that a merger is anticompetitive." *Heinz*, 246 F.3d at 716; *see also Tronox*, 332 F. Supp. 3d at 207; *FTC v. Staples, Inc. ("Staples II")*, 190 F. Supp. 3d 100, 128 (D.D.C. 2016); *Aetna*, 240 F. Supp. 3d at 42-43. An acquisition is "presumptively anticompetitive" if it increases the HHI by more than 200 points and results in a "highly concentrated market" with a post-acquisition HHI exceeding 2,500. *Tronox*, 332 F. Supp. 3d at 207; *Staples II*, 190 F. Supp. 3d at 128; *Horizontal Merger Guidelines* § 5.3.

86. Evidence presented at the hearing shows that the Transaction results in an HHI over 3,900 and an increase in HHI by over 650, well above the threshold for presumed harm. (CCFF ¶ 1754). The market shares and HHI levels here are comparable to the levels found to be unlawful by courts. In *FTC v. University Health*, *Inc.*, the court found that the FTC had "clearly established a *prima facie* case of anticompetitive effect" when it proved that a merger of two nonprofit hospitals would have resulted an increase in HHI of over 630, and a post-merger HHI of 3200. *Univ. Health Inc.*, 938 F.2d 1206,1211 n.12, 1219 (11th Cir. 1991); *see also Tronox*, 332 F. Supp. 3d at 207 (an increase in HHI over 720 and a post-merger HHI over 3,000).

B. Evidence of Competitive Harm Bolsters the Presumption

87. Through contemporaneous business documents and testimony, Complaint Counsel presented evidence of competitive harm caused by the Transaction. Most importantly, the evidence clearly shows that Altria would not have exited the e-cigarette market absent the Transaction. This additional evidence of competitive harm further strengthens the structural presumption under the Section 7 framework, which increases the burden Respondents must shoulder on rebuttal. *Sysco*, 113 F. Supp. 3d at 23 ("The more compelling the [FTC's] prima facie case, the more evidence the defendant must present to rebut [the presumption] successfully.") (quoting *Baker Hughes*, 908 F.2d at 991).

88. The Commission and courts have acknowledged that a showing of actual post-transaction harm is not required. Indeed, the Supreme Court in *United States v. General Dynamics Corp.* explained that the absence of "concrete anticompetitive symptoms . . . does not itself imply that competition has not already been affected." 415 U.S. 486, 505 (1974).

89. "Even in a consummated merger, the ultimate issue under Section 7 is whether anticompetitive effects are reasonably probable in the future, not whether such effects have occurred as of the time of trial." *Polypore*, 2010 WL 9549988, at *8 (citing *General Dynamics*, 415 U.S. at 505-06).

90. "And there is certainly no requirement that the anticompetitive power manifest itself in anticompetitive action before [section 7] can be called into play. If the enforcement of [section 7] turned on the existence of actual anticompetitive practices, the congressional policy of thwarting such practices in their incipiency would be frustrated." *FTC v. Procter & Gamble Co.*, 386 U.S. 568, 577 (1967).

91. Evidence that Altria and JLI competed vigorously against each other before the Transaction supports a finding of anticompetitive effects. "[M]ergers that eliminate head-to-head competition between close competitors often result in a lessening of competition." *United States v. Anthem, Inc.*, 236 F. Supp. 3d 171, 216 (D.D.C. 2017); *Aetna*, 240 F. Supp. 3d at 43; *Staples II*, 190 F. Supp. 3d at 131.

92. The Transaction between Respondents eliminated significant head-to-head competition between Altria and JLI in the U.S. closed-system e-cigarette market. (CCFF § X.A). Evidence from a variety of sources, including Respondents' own ordinary course documents, demonstrates that before the Transaction, Altria and JLI had engaged in intense price and non-price competition and that competition was set to intensify. (CCFF ¶¶ 1418-92, 1532-52). This pre-Transaction competition included frequent promotions and innovation competition to improve products for consumers. (CCFF §§ X.A.1-2). The loss of this competition provides direct evidence of the likely anticompetitive effects of the Transaction and bolsters the presumption of competitive harm. *See, e.g.*, *Polypore*, 2010 WL 9549988, at *24 (pre-acquisition competition between merging parties supported likely anticompetitive unilateral effects); *FTC v. Staples*, 970 F. Supp. 1066, 1083 (D.D.C. 1997); *Horizontal Merger Guidelines* § 6.1.

93. The Transaction also harmed competition by eliminating the future competition between Altria and JLI in the "but for" world. *See FTC v. Peabody Energy Corp.*, 492 F. Supp. 3d 865, 883 (E.D. Mo. 2020) ("The Court's objective is to determine the JV's likely effect on competition compared to the but-for world in which the JV is not allowed."). Because of the Transaction, including the written Non-Compete between Respondents, Altria stopped (and had to eliminate) its entire e-cigarette-related R&D efforts. (CCFF ¶¶ 1538-87, § X.C). Thus, the innovation competition in the closed-system e-cigarette market was significantly diminished because of Altria's exit, which further strengthens the presumption of competitive harm.

C. Respondents Cannot Rebut the Strong Presumption of Harm

94. Respondents have the burden to rebut the presumption of illegality by "produc[ing] evidence that 'show[s] that the market-share statistics [give] an inaccurate account of the [merger's] probable effects on competition' in the relevant market." *Heinz*, 246 F.3d at 715 (alterations in original) (quoting *United States v. Citizens & S. Nat'l Bank*, 422 U.S. 86, 120 (1975)).

95. Respondents' burden is heavy, given the strength of Complaint Counsel's *prima facie* case. The stronger the *prima facie* case, the more evidence defendants must present to rebut the established presumption. *See Sysco*, 113 F. Supp. 3d at 23.

96. Respondent has "the burden of showing that the entry [] of competitors will be 'timely, likely and sufficient in its magnitude, character, and scope to deter or counteract the competitive effects of concern.'" *Staples II*, 190 F. Supp. 3d at 133 (citation omitted); *see also Sysco*, 113 F. Supp. 3d at 80; *Horizontal Merger Guidelines* § 9. The higher the barriers to entry, the less likely it is that the "timely, likely, and sufficient" test can be met. *United States v. Visa U.S.A., Inc.*, 163 F. Supp. 2d 322, 342 (S.D.N.Y. 2001).

97. Respondents bear the burden of proving cognizable efficiencies of a character and magnitude sufficient to ensure that the merger is not likely to be anticompetitive in any relevant market. *See H&R Block*, 833 F. Supp. 2d at 89; *Horizontal Merger Guidelines* § 10. Cognizable efficiencies must be merger-specific, verified, and not the result of anticompetitive reductions in output or service. *Horizontal Merger Guidelines* § 10. Given the high market concentration levels in this case, Respondents need to present "proof of extraordinary efficiencies" to rebut the presumption of likely anticompetitive effects. *United States v. Aetna*, 240 F. Supp. 3d. 1, 98 (D.D.C. 2017), *citing Heinz*, 246 F.3d at 72

98. Claimed efficiencies are not cognizable unless they are (1) "merger-specific," and (2) "reasonably verifiable by an independent party." *Staples II*, 190 F. Supp. 3d at 137 n. 15. Respondents must prove "merger-specificity and verifiability" of all claimed efficiencies. *Anthem*, 855 F.3d at 364; *see also Heinz*, 246 F.3d at 722.

99. Respondent has not produced evidence sufficient to rebut the presumption of harm likely to result from the Transaction. (CCFF §§ XIII-XIV).

D. The Transaction Also Eliminated Altria As a Potential Competitor to JLI

100. Like the public exchanges case in *United States v. Aetna Inc.*, it is proper here to treat Respondents as actual competitors under Section 7 for analyzing the competitive effects of the Transaction because "the [relevant] case law does not support defendants' approach of viewing competition as an on-off switch where a merging party can simply switch it off entirely by withdrawing from a market . . . ." *United States v. Aetna Inc.*, 240 F. Supp. 3d 1, 76 (D.D.C. 2017). As the evidence indisputably shows, this is not a case where "there is no pre-existing competition to begin with" between Respondents. *Id.* (citing *Int'l Shoe Co. v. FTC*, 280 U.S. 291, 298 (1930)).

101. Moreover, just like the case in *Aetna*, Complaint Counsel in this case alleges—and the evidence clearly shows—that Altria shut down its e-cigarette business *because of* the Transaction; therefore, it would be "especially inappropriate to apply a legal framework that would limit judicial inquiry." *Aetna*, 240 F. Supp. 3d at 78. "Courts appropriately guard their ability to ascertain the actual facts at issue, rather than allow a party to thwart judicial review through its own machinations." *Id.* (citing *United States v. W.T. Grant Co.*, 345 U.S. 629, 632 (1953)).

102. Even if the Court decided to treat Respondent Altria as a potential competitor instead of an actual one, as shown above, Complaint Counsel has provided ample evidence proving each of the elements of an actual potential competition case. (CCFF §§ VI, X.B-D).

103. "Actual potential competition rests on the theory that the merger eliminated a firm that was on the verge of entering the market de novo or through a toehold acquisition." *Polypore*, 2010 WL 9549988, at *23 n.41 (citing *Marine Bancorp.*, 418 U.S.at 633; *Yamaha*, 657 F.2d at 977-78; *Mercantile Tex. Corp.*, 638 F.2d at 1265-70)), *aff'd on other grounds*, 686 F.3d 1208 (11th Cir. 2012); *Tenneco, Inc. v. FTC*, 689 F.2d 346, 352 (2d Cir. 1982) ("The theory of the (actual potential competition) doctrine is that competition in the market would be enhanced by the addition of the new competitor and therefore the elimination of such a potential competitor would substantially lessen competition within the meaning of [Section] 7." (internal quotations and citation omitted)).

104. "Although the Supreme Court has yet to rule specifically on the validity of the actual-potential-entrant doctrine, it has delineated two preconditions that must be present, prior to any resolution of the issue. First, it must be shown that the alleged potential entrant had 'available feasible means' for entering the relevant market, and second, 'that those means offer(ed) a substantial likelihood of ultimately producing deconcentration of that market or other significant procompetitive effects.'" *Yamaha Motor Co. v. FTC*, 657 F.2d 971, 977-78 (8th Cir. 1981) (footnote omitted) (quoting *United States v. Marine Bancorporation*, 418 U.S. 602, 633 (1974)).

105. When determining whether a firm is an actual potential entrant, the appropriate question is whether the firm "probably" would have entered the relevant markets. *Yamaha*, 657 F.2d at 977. A probability standard is consistent with Section 7 of the Clayton Act. Indeed, in *Yamaha*, the Eighth Circuit "stress[ed] the word 'probably' . . . because the question under Section 7 is not whether competition was actually lessened, but whether it 'may be' lessened substantially." *Id.*

106. In the Commission's recent applications of the actual potential competition doctrine, the Commission has applied a "reasonable probability" standard. *See In re McWane, Inc.*, Docket No. 9351, 2014 WL 556261, at *32 (F.T.C. January 30, 2014). In *McWane*, the Commission stated that the "ultimate issue" in determining whether a firm is an actual potential competitor hinges on whether the firm's "entry was reasonably probable." *Id.* (citations omitted). Notably, the Commission cited the Eighth Circuit's decision in *Yamaha* as support for the "reasonably probable" standard. *Id*.

107. Respondents' reliance on *In re B.A.T. Industries, Ltd.*, in which the Commission chose to apply what it termed a "clear proof" standard, is misplaced. 104 F.T.C. 852, 926 (1986). Not only does *B.A.T. Industries* predate the Commission's more recent applications of a "reasonable probability standard," but it was a unique "test case to see if purely objective evidence would establish liability under the actual potential entrant theory." *Id.* at 947 (Bailey, concurring). But even assuming *arguendo* that the "clear proof" standard is the correct standard of proof, the evidence proffered by Complaint Counsel clearly meets even this more stringent standard. (CCFF §§ VI, X.B-D).

VI. THE PROPOSED ORDER IS WARRANTED

108. Respondents Altria and JLI's agreement constituted unfair methods of competition in or affecting commerce in violation of Section 5 of the FTC Act, 15 U.S.C. § 45. To address competitive harms caused by their agreements, the Proposed Order is warranted.

109. Respondents' Transaction also violated Section 7 of the Clayton Act, 15 U.S.C. § 18. The Proposed Order is warranted to address competitive harms caused by the Transaction. Once Complaint Counsel has established a violation of Section 7, "all doubts as to the remedy are to be resolved in its favor." *United States v. E.I. du Pont de Nemours & Co.*, 366 U.S. 316, 334 (1961).

110. Complaint Counsel met its burden of proof in support of Count I and Count II of the Complaint.

111. Entry of the Proposed Order is necessary and appropriate to remedy and prevent the violations of law found to exist. *FTC v. Nat'l Lead Co.*, 352 U.S. 419, 428-30 (1957).

112. The Court has "wide discretion" in its choice of remedy where there is "a reasonable relation to the unlawful practices found to exist." *Jacob Siegel Co. v. FTC*, 327 U.S. 608, 611-13 (1946).

113. The Court is not limited to prohibiting the illegal practices in the precise form in which it finds they existed in the past. The Court "must be allowed effectively to close all roads to the prohibited goal, so that its order may not be by-passed with impunity." *In re Polygram Holding, Inc.*, Docket No. 9298, 2003 WL 25797195, at *29 (F.T.C. July 24, 2003).

Dated: October 20, 2021

Respectfully submitted,

/s/ James Abell
James Abell

Federal Trade Commission
600 Pennsylvania Avenue, NW
Washington, DC 20580
Tel: 202-326-2289
jabell@ftc.gov

Counsel Supporting the Complaint

COMPLAINT COUNSEL'S WITNESS INDEX

CONFIDENTIAL – REDACTED IN ENTIRETY

COMPLAINT COUNSEL'S EXHIBIT INDEX

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CERTIFICATE OF SERVICE

I hereby certify that on October 20, 2021, I filed the foregoing document electronically using the FTC's E-Filing System, which will send notification of such filing to:

April Tabor
Secretary
Federal Trade Commission
600 Pennsylvania Ave., NW, Rm. H-113
Washington, DC 20580
ElectronicFilings@ftc.gov

The Honorable D. Michael Chappell
Administrative Law Judge
Federal Trade Commission
600 Pennsylvania Ave., NW, Rm. H-110
Washington, DC 20580

I also certify that I delivered via electronic mail a copy of the foregoing document to:

Debbie Feinstein
Robert J. Katerberg
Justin P. Hedge
Francesca M. Pisano
Adam Pergament
Le-Tanya Freeman
Arnold & Porter Kaye Scholer LLP
601 Massachusetts Ave, NW
Washington, DC 20001
Tel: 202-942-5000
debbie.feinstein@arnoldporter.com
robert.katerberg@arnoldporter.com
justin.hedge@arnoldporter.com
francesca.pisano@arnoldporter.com
Adam.Pergament@arnoldporter.com
tanya.freeman@arnoldporter.com

Marc Wolinsky
Jonathan Moses
Kevin Schwartz
Adam Goodman
Wachtell, Lipton, Rosen & Katz
51 West 52nd Street
New York, NY 10019
Tel: 212-403-1000
MWolinsky@wlrk.com
JMMoses@wlrk.com
KSchwartz@wlrk.com
ALGoodman@wlrk.com

David Gelfand
Jeremy J. Calsyn
Jessica Hollis
Matthew Bachrack
Cleary Gottlieb Steen & Hamilton LLP
2112 Pennsylvania Avenue, NW
Washington, DC 20037
Tel: 202-974-1500
dgelfand@cgsh.com
jcalsyn@cgsh.com
jhollis@cgsh.com
mbachrack@cgsh.com

Counsel for Respondent JUUL Labs, Inc.

.

PUBLIC

Beth A. Wilkinson
James M. Rosenthal
Hayter Whitman
Wilkinson Stekloff LLP
2001 M Street NW, 10th Floor
Washington, DC 20036
Tel: 202-847-4000
bwilkinson@wilkinsonstekloff.com
jrosenthal@wilkinsonstekloff.com
hwhitman@wilkinsonstekloff.com

Moira Penza
Wilkinson Stekloff LLP
130 W 42nd Street, 24th Floor
New York, NY 10036
Tel: 929-264-7773
mpenza@wilkinsonstekloff.com

Counsel for Respondent Altria Group, Inc.

By: s/ James Abell
James Abell, Attorney

Counsel Supporting the Complaint