I. Introduction

Good afternoon. Thank you to Steve Sunshine and the folks at Skadden and Charles River Associates for inviting me to speak about antitrust in the tech industry. Giving this speech to those of you in the heart of fabled Silicon Valley called to mind the role of fables overall, which is to entertain and instruct us. Thus, I am calling my remarks today Antitrust Tales in the Tech Sector because I see some parallels between actions taken by my agency, the Federal Trade Commission (FTC or Commission), and some familiar fairy tales. The first tale I call Goldilocks and the Three Tech Mergers, recounting how we came to three different conclusions about these transactions, with interesting results. The second one is a story with confusing plotlines and unexpected twists that I call Into the Muir Woods, where I address the FTC’s recent Section 5 policy statement.

1 The views expressed in these remarks are my own and do not necessarily reflect the views of the Federal Trade Commission or any other Commissioner.
II. Goldilocks and the Three Tech Mergers

Transactions combining tech firms can raise some of the most interesting and difficult issues in merger review, such as defining the relevant market in a certain way for the very first time or evaluating competition not just for a share of customers, but for the market as a whole. Phenomena such as first-mover advantage and network effects implicate both our effects and entry analyses. Finally, speaking of entry, you probably will not be surprised at the number of times that we hear that the merging parties could not possibly raise prices post-merger because Google, Amazon, or some other successful tech firm would undoubtedly enter and discipline the market. Sometimes that story is a fairy tale and sometimes it’s true.

Turning to Goldilocks and the Three Tech Mergers, you know the outlines of the story: one is too hot, one is too cold, etc.

A. This porridge is too hot.

The “this porridge is too hot” merger is NXP Semiconductors N.V.’s (NXP) $12 billion acquisition of Freescale Semiconductor Ltd. (Freescale), in which the Commission entered into a consent agreement with NXP that included an asset divestiture.² The acquisition combined the world’s two largest suppliers of radio frequency (RF) power amplifiers, which are high-power semiconductors that increase the strength of radio signals transmitted between electronic devices. The largest application for these amplifiers is wireless infrastructure, including in particular cell towers. Interestingly, one potential future application for RF power amplifiers is cooking, where RF solid-state technology may eventually replace traditional and microwave ovens.³ Perhaps


when you tech savvy folks read your children Goldilocks these days, the porridge is cooked in an RF oven.

In any case, the Commission concluded that the merger of NXP and Freescale would combine two of only three competitively meaningful suppliers of RF power amplifiers. In addition, the evidence showed that NXP and Freescale were each other’s closest competitor. As a result, we thought the deal was anticompetitive or, in my antitrust fairy tale, the porridge was too hot. As we explained in our Analysis to Aid Public Comment, the merger raised the prospect of significant unilateral competitive harm through both higher prices and reduced innovation, particularly in the wireless infrastructure segment. Higher prices are obviously a fundamental concern in reviewing mergers of close competitors. The loss of competition to innovate and to develop better, faster, more efficient products, however, can be just as concerning – particularly in the technology area, where the essential competition often is not on price, but rather on product features.

To remedy these competitive concerns, NXP agreed to divest its RF power amplifier assets to a Commission-approved buyer, Jianguang Asset Management Co., Ltd (JAC), a Chinese private equity fund management company, whose ultimate parent entity is China’s sovereign wealth fund (China Investment Corporation). Although one can imagine some concerns about a Chinese state-owned company supplying the wireless infrastructure industry, nonetheless, JAC received CFIUS approval for the acquisition, and, importantly, potential

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4 NXP Analysis, supra note 2, at 3.
customers confirmed that JAC would be a workable option as a supplier of RF power amplifiers.\textsuperscript{6}

\textbf{B. This porridge is too cold.}

In the next merger, which falls in the “this porridge is too cold” category, the Commission decided to close its investigation of Zillow Inc.’s acquisition of Trulia, Inc. At the time of the transaction, Zillow and Trulia operated the largest and second-largest consumer-facing web portals that sell advertising space to real estate agents seeking to attract customers buying and selling homes. We’re all familiar with both of these websites. I don’t know if they have listings for bears’ cottages or witches’ gingerbread homes, however. Though even a gingerbread house probably would get a million or two in Palo Alto these days.

As explained in the statement announcing the closing of our investigation,\textsuperscript{7} the Zillow-Trulia matter raised interesting issues involving product market definition and the two-sided nature of certain technology markets. Real estate brokers and agents have numerous online methods for targeting potential buyers and sellers – going well beyond the more traditional avenues of direct mail and outdoor signage. They can pursue leads through broker and agent websites, social media advertising, search engine marketing, and real estate portals, such as Zillow and Trulia. Those portals offer a variety of free and paid advertising products to aid real estate agents in lead generation. The most significant of those offerings, the Commission found, is zip-code-targeted advertising, which allows agents active in a particular zip code to display

\textsuperscript{6} NXP Analysis, \textit{supra} note 2, at 4.

\textsuperscript{7} The statement announcing the closing of the Zillow-Trulia investigation was issued by Commissioners Ohlhausen, Wright, and McSweeny. All five Commissioners, however, voted to close the investigation. See Statement of Commissioner Ohlhausen, Commissioner Wright, and Commissioner McSweeny Concerning Zillow, Inc./Trulia, Inc., FTC File No. 141-0214 (Feb. 19, 2015), https://www.ftc.gov/public-statements/2015/02/statement-commissioner-ohlhausen-commissioner-wright-commissioner-mcsweeny.
ads with their photograph and contact information adjacent to properties for sale in that zip code.\textsuperscript{8}

One of the threshold issues in the Zillow-Trulia investigation was whether the particular set of products and features offered by the merging parties and other real estate portals constituted a relevant antitrust market. Notwithstanding some documentary evidence indicating that the merging parties closely tracked each other’s consumer traffic, site features, and pricing, the balance of the evidence did not suggest that a hypothetical monopolist of real estate portals could profitably impose a price increase on agent advertising.\textsuperscript{9} That is, there was insufficient evidence to support a product market definition that was limited to real estate portals.

The Zillow-Trulia investigation also focused on the key issue of whether the merger was likely to lead to anticompetitive effects on either side of this two-sided platform – that is, on either real estate agents or on consumers researching home buying or selling online. On the agent side, the closing statement noted three things. First, the investigation yielded evidence that a high volume of agents leave Zillow and Trulia on a regular basis, suggesting that alternative sources may constrain their pricing. Second, the investigation yielded no reliable evidence regarding the magnitude and proportion of high-performing agents that exist in any particular zip code. Finally, there was no evidence that the merging parties have the ability to price discriminate and thereby target the high-performing agents with a post-merger price increase.\textsuperscript{10}

On the other side of the platform – that is, the consumer-facing side – we also concluded that the merger was not likely to lessen competition. First, the combined entity will continue to have strong incentives to develop new features to grow its consumer audience and thereby

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\textsuperscript{8} Id. at 1.
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\textsuperscript{9} Id.
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\textsuperscript{10} Id. at 1-2.
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increase its advertising revenue. Second, the combined firm will continue to face significant competition for consumer traffic from the remaining real estate portals, including Realtor.com, online brokerage services such as Redfin, and other online, consumer-facing real estate offerings.  

Based on these findings, the Commission closed its investigation and declined to challenge the Zillow-Trulia merger. I was happy to join two of my colleagues in issuing a statement explaining our rationale for closing our investigation. As I have stated on multiple occasions, I believe there is tremendous value in the Commission issuing such closing statements and providing greater transparency into its decision-making process.

C. This isn’t porridge at all.

Now for the “this porridge is just right” part of the story but, aha, I have a surprise. While we at the Commission thought we had another “this porridge is too hot” merger with likely anticompetitive effects, the court found it wasn’t porridge at all, that the matter did not implicate competition in a relevant market. So, what am I talking about? The Commission’s failed attempt to block the merger of Steris Corporation and Synergy Health plc (Synergy), two of the largest providers of contract sterilization services worldwide. Steris was the largest provider of sterilization services using gamma radiation in the U.S., while Synergy did not provide gamma sterilization in the U.S. at the time of the merger. However, we believed Synergy was poised to enter several local U.S. markets with x-ray sterilization and compete

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1 Id. at 2.

head-to-head with Steris’ gamma offerings.\textsuperscript{13} Thus, we alleged that the merging parties were potential competitors in the radiation sterilization market and their combination would likely result in a substantial lessening of competition.\textsuperscript{14}

Our complaint alleged that Synergy’s CEO determined in 2012 that the company should develop a U.S. x-ray business to differentiate itself from the other major sterilization suppliers and that the company took numerous steps over the next two years leading up to its acquisition by Steris to further that plan.\textsuperscript{15} The Commission further alleged that Synergy’s leadership continued to support the x-ray strategy after the FTC began investigating the proposed merger. It was only after the Commission began to focus on the potential competition from Synergy’s x-ray entry that Synergy reversed course and took steps to abandon that entry.\textsuperscript{16}

Thus, based in large part on apparent customer interest in x-ray as an alternative option to gamma radiation,\textsuperscript{17} the Commission alleged that the Steris-Synergy merger would result in the termination of Synergy’s x-ray entry and thus the resulting price reductions and non-price benefits that otherwise would have flowed to sterilization customers in the relevant markets.\textsuperscript{18} All five Commissioners voted to challenge the Steris-Synergy transaction under a potential competition theory.


\textsuperscript{14} \textit{Id.} at 6.

\textsuperscript{15} \textit{Id.} at 30-34. For example, Synergy acquired an x-ray facility in Switzerland, as well as the exclusive U.S. rights to use the only commercially viable x-ray sterilization equipment available at the time. \textit{Id.} at 30-31. Further, approximately one month prior to the merger announcement, Synergy’s two corporate boards discussed the U.S. x-ray plan. Although there was no formal approval of the plan, immediately after the board meetings, Synergy began implementing its x-ray plan. \textit{Id.} at 32-34.

\textsuperscript{16} \textit{Id.} at 34-36.

\textsuperscript{17} See \textit{id.} at 8, 39-40. Even though Synergy had not yet opened a U.S. x-ray facility, a major supplier of medical devices had already sought and obtained FDA approval for Synergy to provide x-ray sterilization of one of its products. \textit{Id.} at 40.

\textsuperscript{18} \textit{Id.} at 38-41.
The district court hearing this case, however, took a different view of the evidence. Following three days of hearings, in which the court heard testimony from key employees of the merging parties, as well as potential x-ray customers, the court issued an order denying the Commission’s motion for a preliminary injunction.\(^{19}\) Although the merging parties challenged the potential competition theory underlying the FTC’s case,\(^{20}\) the district court assumed the validity of the theory and directed the parties to focus solely on the question of “whether, absent the acquisition, the evidence shows that Synergy probably would have entered the U.S. contract sterilization market by building one or more x-ray facilities within a reasonable period of time.”\(^{21}\)

The district court ultimately concluded that the Commission had failed to make that showing. The court pointed to, among other things, evidence that: (1) while one of the Synergy boards had endorsed the concept of U.S. x-ray, the business plan had not received the necessary board approvals; and (2) the remaining hurdles to obtaining those approvals – including obtaining customer commitments and meeting internal financial metrics for any sizeable capital outlay – were significant.\(^{22}\) Ultimately, the district court judge took a different view of the likelihood of Synergy coming to market in the U.S. with its x-ray technology than the Commission did in voting out the complaint. In the end, the Steris case shows just how difficult


\(^{20}\) In particular, the theory pursued by Commission staff in the PI proceedings was the so-called actual potential competition doctrine, under which a potential entrant merges with a firm already competing in a concentrated market, and the effect is a lessening of competition. \textit{Id.} at *3. There is also the perceived potential competition theory, under which competitors in a concentrated market are currently constrained from engaging in anticompetitive behavior by the perceived threat of entry by a nonparticipant. \textit{See} United States v. Marine Bancorp., 418 U.S. 602, 624-25 (1974). The latter theory was not at issue in Steris.

\(^{21}\) Steris, 2015 WL 5657294, at *4. Commission staff asserted in the PI proceedings that “the acquisition of an actual potential competitor violates Section 7 [of the Clayton Act] if (1) the relevant market is highly concentrated, (2) the competitor ‘probably’ would have entered the market, (3) its entry would have had pro-competitive effects, and (4) there are few other firms that can enter effectively.” \textit{Id.}

\(^{22}\) \textit{Id.} at *15-20.
a potential competition case is to win – even assuming the validity of that theory. The outcome in that case ought to give the agency pause in pursuing potential competition cases in the future – though, to be fair, they are neither considered nor pursued very often.

My own view is that the appropriate standard for a potential competition case is “clear proof that independent entry would have occurred but for the merger or acquisition.” That is the standard the Commission laid out in its 1984 *B.A.T. Industries* decision and which some courts have adopted. In meeting this admittedly demanding standard, as the Commission has noted, the best evidence concerning a firm’s incentive to enter a market “is likely to be subjective; this is, how did the firm evaluate its independent entry prospects? Did it find them to be sufficiently attractive to warrant preparing concrete capital investment plans? Did its corporate management approve those plans?” In contrast, relying solely or primarily on objective evidence – for example, evidence showing a firm was capable of entering, and that it would have been profitable for a firm to enter, a market, regardless of any steps toward entry taken by such firm – runs the serious risk of the Commission (or any other plaintiff) substituting its judgment for that of the businesspeople who must make these complex decisions.

A rigorous standard helps to overcome one of the greatest shortcomings of some earlier potential competition cases brought by the antitrust agencies: the tendency to second-guess business judgment. When I voted to support the *Steris* complaint, I had reason to believe that

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24 See id. at 926-28; FTC v. Atl. Richfield Co., 549 F.2d 289, 294-95 (4th Cir. 1977). Other courts typically inquire whether the independent entry was likely or reasonably probable. See, e.g., Tenneco, Inc. v. FTC, 689 F.2d 346, 352 (2d Cir. 1982) (requiring evidence that the acquiring firm “would likely” have entered the relevant market); Yamaha Motor Co. v. FTC, 657 F.2d 971, 977-79 (8th Cir. 1981) (adopting reasonable probability standard).

25 B.A.T. Indus., 104 F.T.C. at 927.

26 See, e.g., Atl. Richfield, 549 F.2d at 295 (fact that firm had “strong economic incentives” to enter market insufficient to support potential competition theory); United States v. Black & Decker Mfg. Co., 430 F. Supp. 729, 755-60 (D. Md. 1976) (fact that firm had “ample incentive to enter” insufficient).
that clear proof standard was met in that case.\textsuperscript{27} Going forward, that is the standard I will apply
to any potential competition cases recommended by staff. The potential competition theory
generally and the Steris decision in particular could fill up an entire panel, but I hope I have
given you a sense of this relatively novel theory and my views on how and when it ought to be
applied.

And so the Goldilocks tale ends with a cautionary note, that whatever views the agency
may have about the relative temperature of porridge or mergers, the federal courts are the
ultimate tasters and they may have a different appetite than does the Commission.

\textbf{III. Into the Muir Woods}

Let me leave now turn briefly to another tale, where the narrative is less familiar and the
plot anything but straightforward. I call this Into the Muir Woods.

\textbf{A. The Commission’s Section 5 Policy Statement}

One of the most significant Commission actions from the past year implicating primarily
conduct matters but also possibly mergers is the agency’s issuance of a policy statement on the
use of its FTC Act Section 5 authority.\textsuperscript{28} Section 5 prohibits unfair methods of competition,
including violations of the antitrust laws. That prohibition, however, has been read to include
other business conduct that is not necessarily illegal under the antitrust laws but is nonetheless an
unfair method of competition. We sometimes refer to these as standalone Section 5 cases.

\footnote{\textsuperscript{27} I recused myself from the 2013 Nielsen-Arbitron matter and thus did not participate in the other potential
competition case pursued by the FTC during my tenure as a Commissioner.}

\footnote{\textsuperscript{28} Fed. Trade Comm’n, Statement of Enforcement Principles Regarding “Unfair Methods of Competition” under
Section 5 of the FTC Act (Aug. 13, 2015) [hereinafter Section 5 Policy Statement],
I have argued frequently that the Commission’s Section 5 authority should be very limited in scope and reach very little beyond antitrust violations.\textsuperscript{29} One reason is the need to avoid false positives – that is, the condemning of business conduct that is procompetitive or competitively neutral – and the resulting chilling of efficient conduct. A frequent use of our Section 5 authority is challenging invitations by one competitor to another competitor to collude.\textsuperscript{30} Putting aside these relatively non-controversial invitation-to-collude cases, however, the Commission’s standalone Section 5 cases over the past decade have been focused virtually entirely on the technology space. Those cases have included allegations of wrongdoing by N-Data, Intel, Bosch, and Google’s Motorola Mobility subsidiary.\textsuperscript{31} Thus, you companies who dwell near Muir Woods may be particularly interested in this tale.

It is in the technology space, where our application of any competition law – whether it is the Sherman Act or the FTC Act – is going to be most challenging, given the dynamic nature of competition in that area. Although I am not arguing that antitrust has no place in technology markets, with a statute as elastic as Section 5, I think the Commission ought to tread extremely lightly in that space. Otherwise, it runs a serious risk of chilling innovation in what are arguably some of the most important industries in our economy.


\textsuperscript{30} We have entered into consent orders with several parties over the past two decades who we alleged attempted to, but did not in fact, fix prices, allocate markets, or something comparable. See, e.g., \textit{In re Step N Grip, LLC, FTC File No. 151-0181, Analysis to Aid Public Comment (Oct. 27, 2015)}, https://www.ftc.gov/system/files/documents/cases/151027stepngrpipanalysis.pdf.

Since I was sworn in as a Commissioner, I have been arguing that if the agency wishes to pursue standalone section 5 cases, it should issue some type of guidance to give our constituencies – including in particular the businesses subject to our enforcement authority – a better sense of the type of conduct that might trigger liability under such a vaguely worded statute. 32 Well, if fairy tales teach us anything, it is that we should be careful of what we wish for. Last August, the Commission issued a Section 5 policy statement, of sorts. It’s a very short story, coming in at little over half a page.

I voted against the issuance of the policy statement, and in my dissent, laid out several procedural and substantive objections to the statement. 33 In the interest of time, I will note just a few of those here. My primary substantive concern is that the statement does next to nothing to limit the Commission’s Section 5 authority and, even worse, invites a very broad reading of that authority. The policy statement’s combined claim of authority over conduct outside the letter of the antitrust laws and vague limitations about when to use Section 5 for conduct already reachable under the antitrust laws raises the specter of the FTC using Section 5 to rewrite well-settled areas of antitrust law. 34 For example, if the Commission believes the Section 2 case law in a given area is too restrictive, it can recast the same conduct as a Section 5 violation, with a lower liability standard. 35


34 See Section 5 Policy Statement, supra note 28, at 1.

35 For example, the Intel complaint included an assertion to the effect that no showing of a dangerous probability of recoupment is necessary to make out a predatory pricing-type claim under Section 5. See Intel Complaint, supra note 31, at 9 (“Although it is not a necessary element under a Section 5 claim, Intel as a monopolist is likely to recoup any losses that it suffered as a result of selling any of its products to certain OEMs below cost.”).
No policy statement can anticipate all issues or questions that are likely to arise in the enforcement of a statute. However, this statement raised many more questions than it answered. Thus, I see a lingering cloud of uncertainty for U.S. businesses about when and where the Commission will use its broad Section 5 authority. As was the case before the recent policy statement, how dark and menacing that cloud becomes for business depends on the views of a majority of the Commission at any given time. In some way, this is an esoteric issue – and one that hopefully does not arise very often – but given the Commission’s recent focus on technology firms when enforcing Section 5, this is an area that the tech sector ought to keep an eye on.

IV. Conclusion

In closing, I hope you have enjoyed my tales of antitrust in the tech sector. Like the well-known Goldilocks story, the Commission has largely been on firm ground in reviewing technology mergers, applying its well-developed merger guidelines, but also incorporating into its analysis the unique features of these fast-moving markets. When the agency seeks to go off the well-defined road of antitrust law and into the uncharted woods of standalone Section 5, however, it should lay down a better path than it did in its recent policy statement. This is especially important for the technology sector because failing to give clear guidance runs a serious risk of dampening incentives to compete vigorously.