

**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA**

In the Matter of the Joint Application of Sprint Communications Company L.P. (U-5112) and T-Mobile USA, Inc., a Delaware Corporation, For Approval of Transfer of Control of Sprint Communications Company L.P. Pursuant to California Public Utilities Code Section 854(a).

Application No. 18-07-011

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And Related Matter.

Application No. 18-07-012

**REPLY BRIEF OF  
COMMUNICATIONS WORKERS OF AMERICA DISTRICT 9  
(PUBLIC)**

May 10, 2019

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## SUMMARY OF RECOMMENDATIONS

CWA respectfully urges the Commission to **deny** the proposed merger as currently structured because:

- The merger is not in the public interest;
- The merger would eliminate thousands of California jobs;
- The merger would combine two companies with a long history of labor and employment violations;
- The merger would increase wireless employers' power to unilaterally set wages;
- The merger would adversely affect competition, disproportionately impacting low- and moderate-income customers;
- The merger would increase the merged company's ability to unilaterally raise prepaid plan prices by as much as 15.5% and postpaid plan prices by as much as 9.1%;
- There are no merger-specific, verifiable public interest benefits;
- The merger would not significantly improve the current level of coverage and capacity for rural California;
- T-Mobile and Sprint don't need the merger to roll out 5G services; and
- Both companies would continue to compete as standalone companies.

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(PUBLIC)**

Communications Workers of America District 9 (“CWA”) respectfully submits this Reply Brief pursuant to Rule 13.11 of the Rules of Practice and Procedure and the March 25, 2019 Administrative Law Judge’s Ruling Granting the Motion of the Office of the Public Advocate to Compel Responses to Data Requests and Revising the Schedule of this Proceeding.

**I. INTRODUCTION**

The proposed merger between the nation’s third (T-Mobile) and fourth (Sprint) (collectively, “Applicants”) largest mobile wireless carriers would harm competition and harm the public interest by eliminating jobs and increasing prices with no countervailing verifiable, merger-specific benefits. The Commission cannot lawfully authorize the merger as structured.

The record shows that the merger would eliminate more than 3,000 California jobs, increase wireless employers’ power to unilaterally set wages and combine two companies with a



long history of labor and employment violations. The proposed merger also raises serious competitive concerns that would disproportionately impact low- and moderate-income customers. The record shows that the merger would increase the merged company's ability to unilaterally raise prepaid plan prices by as much as 15.5% and postpaid plan prices by as much as 9.1%. New T-Mobile's low- and moderate-income prepaid customers, many of whom depend on their smartphones for broadband access, could be priced out of the wireless market.

Moreover, the Applicants have failed to provide evidence of verifiable, merger-specific public interest benefits. The record shows that both companies are already poised to roll out 5G services and both companies would continue to compete as standalone companies. The record also does not support the Applicants' claim that the merger would bring vastly improved service to rural California. The merger is not in the public interest and cannot lawfully be approved as structured.

## **II. THE COMMISSION CAN (AND SHOULD) DENY THE PROPOSED MERGER**

The Applicants argue that the proposed wireless merger does not require Commission approval and that federal law preempts the Commission from approving or denying the merger as structured.<sup>1</sup> The Applicants are wrong. The Commission has full discretion and authority to approve or deny a wireless merger.

Wireless carriers are "telephone corporations" and therefore subject to Commission jurisdiction pursuant to Public Utilities Code sections 216, 233 and 234. Accordingly, the Commission has asserted its jurisdiction to protect consumers of wireless services. In 1989, the

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<sup>1</sup> Applicants Opening Brief, p. 14.

Commission stated, “we reiterate that our primary focus in the regulation of the cellular industry is the provision of good service, reasonable rates, and customer convenience.”<sup>2</sup>

In 1993, Congress enacted the Omnibus Budget Reconciliation Act of 1993, which amended the Communications Act to provide that “no state or local government shall have any authority to regulate the entry of or the rates charged by any Commercial Mobile Service or any Private Mobile Service, except this paragraph shall *not* prohibit a state from regulating the *other terms and conditions* of Commercial Mobile Service.”<sup>3</sup> By “other terms and conditions,” Congress intended “that the State *will* be able to regulate the terms and conditions of these services,” including:

such matters as customer billing information and packaging and billing disputes and other consumer protection matters; facility siting issues (e.g. zoning); *transfers of control*, bundling of services and equipment; and the requirement that carriers make capacity available on a wholesale basis and such other matters as fall with the State’s lawful authority. This list is intended to be illustrative only and not meant to preclude other matters generally understood to fall under ‘terms and conditions.’<sup>4</sup>

Following the Omnibus Budget Reconciliation Act of 1993, the Commission instituted an investigation of the cellular industry “to develop a comprehensive regulatory framework consistent with the Federal Budget Act” and the Commission’s “own statutory responsibilities.”<sup>5</sup> The Court of Appeal also confirmed the Commission’s jurisdiction over wireless terms and conditions.<sup>6</sup>

Public Utilities Code sections 851-857 require the Commission to review utility mergers and other transfers of control. Section 853(b), however, allows the Commission to exempt a

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<sup>2</sup> D.89-07-019, Re Regulation of Cellular Radiotelephone Utilities, 32 CPUC2d 271, 281.

<sup>3</sup> 47 USC § 332(c)(3)(A) (emphasis added).

<sup>4</sup> House Report No. 103-111 at 251 (emphasis added).

<sup>5</sup> I.93-12-007.

<sup>6</sup> *Pacific Bell Wireless (Cingular) v. CPUC* (2005) 140 Cal.App.4<sup>th</sup> 718, 738.

public utility or a public utility class from the requirements of sections 851-857. In a 1995 decision, the Commission found that “[t]he transfer of ownership interests in a CMRS entity is not tantamount to [market] entry, and Commission jurisdiction over such transfers is not preempted under the federal legislation.”<sup>7</sup> However, the Commission exercised its authority to “forbear from exercising such authority” and required wireless entities to notify the Commission of proposed mergers.<sup>8</sup> The Commission reasoned that the cellular market was nascent at that time and consumers were not yet highly dependent on wireless services. Thus, the Commission found that, at that time, a “standing” merger review could have disrupted competition in the cellular industry.<sup>9</sup>

The Commission’s 1995 decision did not, however, abolish the Commission’s authority to approve or deny a proposed wireless merger in the future. Indeed, the 1995 decision went on to find that the Commission is *not* preempted by federal law to review wireless mergers in California and reaffirmed the Commission’s discretion and authority to impose conditions on wireless mergers where “necessary in the public interest.”<sup>10</sup> The Commission has since reaffirmed this finding.<sup>11</sup>

The Commission has full discretion and authority to regulate wireless mergers. Moreover, considering current market conditions, where the wireless industry is extremely

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<sup>7</sup> D.95-10-032, COL 9.

<sup>8</sup> *Id.*, pp. 15-18.

<sup>9</sup> *Id.*, p. 16 (standing merger approval process “could inhibit the growth of competition to impose more restrictive requirements on CMRS providers than is necessary to discharge our responsibilities to protect the public interest”).

<sup>10</sup> D.95-10-032, pp. 15-18.

<sup>11</sup> D.01-07-030; D.96-12-071 (Investigation on the Commission’s Own Motion into Mobile Telephone Service and Wireless Communications (1996) 70 CPUC2d 61, 72-73, stating that “we still remain concerned that the terms and conditions of service offered by each CMRS provider continue to provide adequate protection to consumers.”)

concentrated and most consumers heavily rely on wireless services in their day-to-day lives, it is incumbent upon the Commission to exercise its full authority to regulate this proposed merger pursuant to section 854.

The Commission must find that the merger provides short-term and long-term economic benefits to ratepayers, does not adversely affect competition and is in the public interest.<sup>12</sup> The Commission has broad discretion to determine if a merger is in the public interest<sup>13</sup> and must consider, on balance, a range of criteria, including whether the merger maintains or improves the quality of service to ratepayers, is fair and reasonable to utility employees, and benefits the state and local economies and communities served by the resulting public utility, among other factors.<sup>14</sup> The Applicants have failed to show that the merger would benefit ratepayers, is in the public interest, and would not adversely affect competition. On the contrary, the record shows that the proposed merger would eliminate thousands of California jobs, adversely affect competition and harm ratepayers (particularly low-income ratepayers). The Commission should deny the proposed merger.

### **III. THE PROPOSED MERGER WOULD HARM COMPETITION AND INCENTIVIZE NEW T-MOBILE TO INCREASE PRICES**

The Commission cannot authorize the proposed merger unless it finds that the merger would not adversely affect competition.<sup>15</sup> The Applicants argue that the proposed merger would be pro-competitive and result in lower prices.<sup>16</sup> But the Applicants have failed to show, by a

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<sup>12</sup> Pub. Util. Code §§ 854(a), (b) and (c).

<sup>13</sup> D.06-02-003, p. 23.

<sup>14</sup> Pub. Util. Code, §§ 854(c)(1)-(8).

<sup>15</sup> *Id.* § 854(b)(3).

<sup>16</sup> Applicants Opening Brief, p. 51.

preponderance of the evidence, that the proposed merger would not be anticompetitive or that the proposed merger would not result in price increases.

### **A. The Proposed Merger is Presumptively Anticompetitive Under Well-Established Antitrust Case Law**

It is undisputed that the DOJ and FTC’s Horizontal Merger Guidelines “describe the principal analytical techniques and the main types of evidence on which the Agencies rely to predict whether a horizontal merger may substantially lessen competition.”<sup>17</sup> CWA explained in its opening brief that antitrust agencies and courts use the Herfindahl-Hirschman Index (“HHI”) as the standard to calculate the competitive impact of mergers.<sup>18</sup> If a market is highly concentrated (i.e. has an HHI of 2,500 or more), the DOJ presumes that an HHI increase of more than 200 points likely enhances market power.<sup>19</sup> CWA provided evidence that the merger would significantly increase concentration in the already highly concentrated mobile

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<sup>17</sup> Exh. Jt Appl.-15, p. 1; *see Applicants Opening Brief*, p. 52 (“evaluating the competitive effects of a proposed merger requires a holistic assessment, as described in the Horizontal Merger Guidelines which the parties have agreed are authoritative”).

<sup>18</sup> Exh. Jt Appl.-15, p. 18; *United States v. Anthem, Inc.*, 855 F.3d 345, 349 (D.C. Cir. 2017), *cert. dismissed*, 137 S. Ct. 2250, 198 L. Ed. 2d 676 (2017); *Saint Alphonsus Med. Ctr.-Nampa Inc. v. St. Luke’s Health Sys., Ltd.*, 778 F.3d 775, 788 (9th Cir. 2015); *FTC v. H.J. Heinz Co.*, 246 F.3d 708, 715–16 (D.C. Cir. 2001); *Fed. Trade Comm’n v. Tronox Ltd.*, No. 1:18-CV-01622 (TNM), 2018 WL 4353660, at \*13 (D.D.C. Sept. 12, 2018) (merger would increase HHI from 2,320 to 3,046; since the merger “would increase the HHI score by well over 200 points, and because it would result in a highly concentrated market, the proposed transaction is presumptively anticompetitive under the Merger Guidelines”); *United States v. Energy Sols., Inc.*, 265 F. Supp. 3d 415, 440 (D. Del. 2017) (government can establish a prima facie case of anticompetitive effects by showing that the merger would produce a firm controlling an undue percentage of the relevant market and result in a significant increase in market concentration); *United States v. Aetna Inc.*, 240 F. Supp. 3d 1, 43 (D.D.C. 2017); *Fed. Trade Comm’n v. Sysco Corp.*, 113 F. Supp. 3d 1, 52 (D.D.C. 2015) (noting that a merger that results in highly concentrated markets that involve an increase in the HHI of more than 200 points will be presumed to be likely to enhance market power); *United States v. H&R Block, Inc.* 833 F. Supp. 2d 36, 72 (D.D.C. 2011) (finding a presumption of anticompetitive effects where the combined firm would have a market share of 28.4%).

<sup>19</sup> Exh. Jt Appl.-15, p. 19.

telephony/broadband and prepaid wireless retail markets. Thus, under established principles of federal antitrust law, there is a strong presumption that the proposed merger is anti-competitive.

**1. The Merger is Presumptively Anticompetitive Because it Would Increase Concentration in the Already Highly Concentrated Mobile Telephony/Broadband Market**

The national and local mobile telephony/broadband markets are already highly concentrated. In 2017, the four nationwide service providers accounted for 99% of the \$179.1 billion in wireless service revenues.<sup>20</sup> The Applicants do not dispute CWA's evidence that the national wireless market has a pre-merger HHI of 2,762 for wireless connections and 2,811 for wireless revenues, or that the merger would increase the HHI for wireless connections by 519 points and the HHI for wireless revenue services by 432 points.<sup>21</sup> Thus, it is undisputed that the merger is presumptively anticompetitive<sup>22</sup> on a national level.

Similarly, many California local markets, including major metropolitan markets, are highly concentrated.<sup>23</sup> According to the FCC, as of year-end 2017 the weighted average HHI for mobile wireless services was 3,106, and in virtually every local market analyzed by the FCC, the HHI exceeds the DOJ's threshold of 2,500 for a "highly concentrated market."<sup>24</sup> The Public Advocates Office provided undisputed evidence that the HHI changes that would result from the proposed merger in 76% of California's counties would exceed the DOJ's 200-point threshold.<sup>25</sup>

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<sup>20</sup> Exh. CWA-1, p. 12.

<sup>21</sup> *Id.*, p. 13.

<sup>22</sup> Exh. Jt. Appl.-15, § 5.3.

<sup>23</sup> Exh. CWA-1, p. 14.

<sup>24</sup> *Id.*

<sup>25</sup> Exh. Pub Adv-2, p. 46, Table 5.

Thus, for the vast majority of local California markets, the merger is presumptively anti-competitive.<sup>26</sup>

## **2. The Merger is Presumptively Anticompetitive Because it Would Increase Concentration in the Already Highly Concentrated Prepaid Wireless Retail Market**

It is undisputed that the prepaid services market is already highly concentrated (pre-merger HHI is 3,037) and that the merger would increase concentration by more than 1,400 points (seven times the DOJ's 200-point threshold).<sup>27</sup> Thus, it is undisputed that the merger is presumptively anticompetitive.<sup>28</sup> This is particularly concerning since price sensitive low- and moderate-income consumers typically purchase prepaid wireless plans,<sup>29</sup> and T-Mobile's MetroPCS, Sprint's Boost and Virgin Mobile prepaid brands and their wholesale partners serve 60% of the prepaid market.<sup>30</sup> Nearly one-third of these customers have annual incomes below \$25,000.<sup>31</sup> "Post-merger, the new T-Mobile's low- and moderate-income prepaid customers, many of whom depend on their smartphones for broadband access, could be priced out of the wireless market."<sup>32</sup>

### **B. The Applicants Have Not Overcome the Anticompetitive Presumption; the Applicants' Analyses of the Merger's Competitive Effects are Flawed**

Where the potential for competitive harm is great, as it is here, the merging parties must

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<sup>26</sup> Exh. CWA-1, p. 6; Exh. Jt. Appl.-15, § 5.3.

<sup>27</sup> Exh. CWA-1, p. 15; Exh. Pub Adv-2, p. 64.

<sup>28</sup> Exh. Jt Appl.-15, p. 19.

<sup>29</sup> Exh. CWA-1, p. 17.

<sup>30</sup> *Id.*, citing Petition to Deny of DISH Network submitted to FCC, August 27, 2018, pp. 75-76.

<sup>31</sup> *Id.*, citing Free Press Petition to Deny submitted to FCC, August 27, 2018, p. 69, Fig. 10.

<sup>32</sup> *Id.*

demonstrate “extraordinary efficiencies” to overcome the presumption.<sup>33</sup> A court “must undertake a rigorous analysis of the kinds of efficiencies being urged by the parties in order to ensure that those ‘efficiencies’ represent more than mere speculation and promises about post-merger behavior.”<sup>34</sup> Courts “generally have found inadequate proof of efficiencies to sustain a rebuttal of the government’s case.”<sup>35</sup> To date, there has been no case (and the Applicants have cited none) where merging parties have successfully rebutted the government’s prima facie case on the strength of efficiencies. This proposed merger is no different.

The Applicants argue that their economic analyses (the IKK model and the Cornerstone analysis) show “that competition will be intensified following the Transaction” and “that all wireless consumers will benefit from a decrease in price per GB.”<sup>36</sup> The Applicants’ conclusions are unverifiable and unreliable because both the IKK and Cornerstone analyses are flawed. The Public Advocate’s Office and DISH have provided evidence of why these economic models are flawed and unpersuasive. CWA provides the following additional reasons for skepticism.

### **1. The IKK Model is Flawed**

The Applicants prepared the IKK analysis (a merger simulation model) to measure the proposed merger’s efficiencies and to determine the proposed merger’s effect on competition. The Applicants claim that the “IKK’s merger simulation evaluates efficiencies grounded in the engineering model that T-Mobile used to evaluate the 5G network discussed above and that it otherwise uses in the ordinary course of business to manage its network demand.”<sup>37</sup> According to

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<sup>33</sup> *FTC v. H.J. Heinz Co.*, 246 F.3d 708, 720-721 (D.D.C. 2001); *FTC v. Sysco Corp.*, 113 F. Supp. 3d 1, 81 (D.D.C. 2015); *United States v. H & R Block, Inc.* 833 F. Supp. 2d 36, 89 (D.D.C. 2011).

<sup>34</sup> *FTC v. H.J. Heinz Co.*, 246 F.3d at 720-721.

<sup>35</sup> *Id.*

<sup>36</sup> Applicants Opening Brief, p. 59.

<sup>37</sup> *Id.*, p. 58.



the Applicants, the IKK model “confirms that the merger will create incentives to decrease prices.”<sup>38</sup> However, a close look at the IKK analysis reveals significant shortcomings: (1) it would take years for the predicted merger efficiencies to be realized (assuming they are ever realized) and prices would likely go up in the interim due to less robust competition; (2) a merger simulation that looks out three to five years is *not* standard practice; and (3) the engineering model on which the IKK analysis relied was *not* prepared in the ordinary course of business; rather, it was prepared for merger advocacy and litigation.

**a. The IKK Analysis is Based on Efficiencies that Would Not Arise for Several Years; In the Interim, Prices Would Go Up**

The IKK model predicts that there would be marginal cost savings and other efficiencies from the merger. However, most of these claimed benefits would not arise for several years (if they arise at all). Yet, the Applicants refuse to acknowledge that, before efficiencies are realized (if ever), prices would go up. According to the IKK analysis:

[t]he initial evolution of the New T-Mobile network will be driven by integration needs, as opposed to responding to changes in output levels. Consequently, our merger assessment commences in 2021, by which time the integration of the Parties’ wireless networks is anticipated to be largely complete, meaning that the available tools can be used to model the endogenous evolution of the New T-Mobile network.<sup>39</sup>

Substantially all of the claimed efficiency benefits in the IKK analysis only begin in 2021 and are not predicted to be fully realized until 2024.<sup>40</sup> This is because (with minor exceptions) the efficiencies commence only after a three-year integration period during which millions of customers would be transferred from one network to the other and spectrum would be cleared or “refarmed.” In addition, most of the claimed efficiencies depend on the widespread and

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<sup>38</sup> Applicants Opening Brief, p. 59.

<sup>39</sup> Exh. Jt Appl-7, Attachment B, ¶ 4.

<sup>40</sup> Tr., Vol. 6 at 852:13-15 (Israel).

successful rollout of 5G services following the integration period – even though 5G technology is in the early stages of development.

An author of the IKK analysis, Dr. Israel, testified that one reason the IKK analysis looks “far into the future” (i.e. to the year 2024) is “to understand how things are affected by [the] more complete rollout of 5G.”<sup>41</sup> Notably, however, according to T-Mobile Chief Technology Officer Neville Ray, there is currently no operational 5G footprint.<sup>42</sup> In other words, the efficiency claims depend critically on not only the largest integration of wireless companies ever attempted, but even more critically on the successful rollout and adoption of next-generation wireless services. Meanwhile, the intense competitive rivalry between T-Mobile and Sprint would cease altogether. And, indeed, the IKK model predicts that, post-merger, prices for both postpaid and prepaid services would go up.<sup>43</sup>

**b. Contrary to the Applicants’ Claims, a Merger Simulation that Looks Out Three to Five Years is Not Standard Practice**

The IKK model analyzes the merger’s impact for the years 2021-2024.<sup>44</sup> Dr. Israel testified that “looking out something like five years into the future is a fairly common thing to do.”<sup>45</sup> But contrary to Dr. Israel’s claim, a merger simulation that looks out three to five years is *not* standard practice.

Economists and courts have greeted such distant projections with a high degree of skepticism. Economics teaches that merger simulation models can be helpful in predicting near-term price effects when “[t]he product attributes and marketing strategies are held constant [and]

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<sup>41</sup> Tr., Vol. 6 at 852:24 – 853:6 (Israel).

<sup>42</sup> Tr., Vol. 5 at 534:5-6 (Ray).

<sup>43</sup> Surrebuttal of Dr. Lee Selwyn, p. 3.

<sup>44</sup> Tr., Vol. 6 at 852:19-20 (Israel).

<sup>45</sup> *Id.* at 852:28 – 853:2 (Israel).

brands compete just on price.”<sup>46</sup> But merger simulation “cannot predict the long-run evolution of an industry. It cannot say much about entry or product repositioning; it cannot say much about changes in marketing strategy.”<sup>47</sup> Instead, merger simulation “indicates only relatively short-term effects: how prices will be adjusted by the merging firms after the merger, and how the non-merging firms will respond to those price changes.”<sup>48</sup>

The Court of Appeals for the D.C. Circuit recently considered efficiency claims that, similar to those asserted by the Applicants, would not materialize for a period of years. Defendants had claimed alleged cost savings from the renegotiation of long-term contracts, each of which was three to five years in length. Thus, the predicted cost savings were approximately as far out in the future as they are in the IKK analysis. The decision in that case, *United States v. Anthem*, is also noteworthy because the defense expert was Dr. Israel.

In rejecting the efficiency arguments, the Court of Appeals noted that “[t]he longer it takes for an efficiency to materialize, the more speculative it can be, *see* Guidelines ¶ 10 & n.15, so the district court was on solid ground to give [it] less weight.”<sup>49</sup> Here, the future of the wireless industry is, if anything, even less predictable, notwithstanding T-Mobile’s optimistic projections about the transition to 5G technology.

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<sup>46</sup> Gregory J. Werden, Senior Economic Counsel, U.S. Department of Justice, Merger Simulation Disciplined by Daubert, 2004 WL 230744 at \*1 (January 29, 2004).

<sup>47</sup> Whither Merger Simulation? Antitrust Source (May 2004) at 3 (comments of Gregory J. Werden, U.S. Department of Justice), available at [https://www.americanbar.org/content/dam/aba/publishing/antitrust\\_source/whither.authcheckdam.pdf](https://www.americanbar.org/content/dam/aba/publishing/antitrust_source/whither.authcheckdam.pdf).

<sup>48</sup> *Id.*

<sup>49</sup> *United States v. Anthem*, 855 F.3d 345, 360 (D.C.C. 2017).

**c. Contrary to the Applicants' Claims, the Network Engineering Model on Which the IKK Analysis Relied was Not Prepared in the Ordinary Course of Business**

The Applicants repeatedly claim that the IKK analysis relied on an engineering model that was prepared in the ordinary course of business.<sup>50</sup> Evidence shows, however, that the engineering work on which the IKK analysis relied was *not* prepared in the ordinary course of business. Rather, the engineering work was done at the request of counsel for the purpose of merger advocacy and litigation. A December 2018 letter from T-Mobile's counsel to the FCC states:

The request for a 5G engineering model was made to further demonstrate the dramatic benefits of the merger generated by the creation of a far superior 5G network for New T-Mobile relative to the standalone companies. *Absent the merger, T-Mobile would not have created a 5G engineering model in 2018. Prior to involvement by counsel, T-Mobile did not anticipate developing such a model in the ordinary course of its business in the near future (especially one that covered the period through 2024).* In ordinary course, T-Mobile would not have developed a 5G model until the Company moved from planning 5G deployments based on coverage to planning 5G deployments based on capacity.<sup>51</sup>

In other words, the 5G network engineering model on which the IKK analysis relies was developed solely for advocacy and litigation purposes. And this is “especially” true because the model covers the years through 2024. T-Mobile would not have done such work in the ordinary course until it had moved from planning 5G deployments based on coverage to planning 5G deployments based on capacity. Thus, the Commission should give little weight to the IKK's findings.

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<sup>50</sup> See e.g., Applicants Opening Brief, pp. 58, 60; Tr., Vol. 6 at 860:5-8 (Israel).

<sup>51</sup> Exh. CWA-8, pp. 2-3 (emphasis added).

## 2. The Cornerstone Report is Flawed

Dr. Bresnahan and his colleagues at Cornerstone Research “conducted a complementary study by analyzing granular data revealing how customers choose wireless plans to assess whether consumers would be better or worse off after the merger.”<sup>52</sup> Cornerstone concluded that the merger would create a higher quality 4G network and, thus, could attract customers of Verizon and AT&T, making the merger more competitive. But Cornerstone’s estimation of 4G quality and speed improvements are simply assumed. They are not found in the Applicants’ network engineering model (which Cornerstone simply chooses to ignore) or anywhere else in the record. Indeed, the Cornerstone report paints a picture of post-merger 4G benefits that is at odds with the testimony of T-Mobile CTO Neville Ray. And, although the Cornerstone report says nothing about 5G, it relies on an estimation of efficiencies that consists mostly of alleged 5G benefits.

### a. The Cornerstone Analysis is Unsupported by the Applicants’ Network Engineering Model

Mr. Ray testified on the Applicants’ network engineering model. According to Mr. Ray,

[w]hat our network engineering model has done for the transaction is carefully and precisely estimate the capacity available for the New T-Mobile, T-Mobile, and Sprint networks based on the cell site and spectrum resources available to each company. *Any other approach would be highly misleading and provide outcomes that are not factually based.*<sup>53</sup>

Yet, Dr. Bresnahan testified that, apart from incorporating marginal cost estimates from the IKK analysis, he and his colleagues at Cornerstone Research did not rely on the network engineering

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<sup>52</sup> Applicants Opening Brief, pp. 58-59.

<sup>53</sup> Exh. Jt Appl-2, Attachment B, Appendix B, ¶ 58 (emphasis added).

model.<sup>54</sup> According to the Cornerstone report, rather than use the engineering model to estimate quality and speed of the network:

New T-Mobile plans to combine the complementary spectrum assets of Sprint and T-Mobile to deliver better coverage and better speeds in more areas than either standalone can deliver on its own. We calculate the marginal costs that would make the merger competitively neutral under a scenario that captures some of these improvements to the following limited degree.

- If Sprint has lower time on LTE than T-Mobile in a particular geogrid where we can measure both, we *improve* Sprint to T-Mobile's time on LTE value.
- If T-Mobile has lower speeds than Sprint in a particular geogrid where we can measure both, we *improve* T-Mobile to Sprint's speed value.
- To the extent that Sprint or T-Mobile improve in a geogrid, we also *improve* the corresponding non-premium brand, Boost/Virgin or MetroPCS, respectively.<sup>55</sup>

Rather than use the engineering model to estimate quality and speed of the network, Cornerstone created a best-of-both worlds scenario where 4G LTE service quality (speed and coverage) would improve no matter what. In Mr. Ray's words, this approach, which diverges from the network engineering model approach, is "*highly misleading and provide outcomes that are not factually based.*"<sup>56</sup>

Further, Dr. Bresnahan testified that the Cornerstone report assumes that the proposed merger would increase 4G LTE speeds by 10% or, alternatively, that the merger would increase speeds and coverage to the levels of performance of the better performing of the two carriers.<sup>57</sup> Cornerstone's assumptions for speed and quality improvements are just that – assumptions, with no evidence to support them. Admittedly, the assumptions were not based on the Applicants' engineering model.<sup>58</sup> Again, in Mr. Ray's words, this approach, which diverges from the network

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<sup>54</sup> Tr., Vol. 6 at 800:22 – 801:8 (Bresnahan).

<sup>55</sup> Exh. Jt Appl-6, Attachment A, ¶ 104 (emphasis added).

<sup>56</sup> Exh. Jt Appl-2, Attachment B, Appendix B, ¶ 58 (emphasis added).

<sup>57</sup> Tr., Vol. 6 at 813:5-14 (Bresnahan).

<sup>58</sup> *Id.* at 813:18-19.

engineering model approach, is “**highly misleading and provide outcomes that are not factually based.**”<sup>59</sup>

#### **b. The Cornerstone Analysis Contradicts Neville Ray’s Testimony**

Cornerstone’s assumptions are not just unsupported by – but contradict – Mr. Ray’s portrayal of the three-year integration period as a time when the goal is to **prevent deterioration** of service quality in the 4G LTE network. Mr. Ray testified that the companies intend to rapidly begin migrating Sprint customers to the T-Mobile network in order to refarm spectrum for 5G use (and not to improve the existing LTE network). The Applicants have stated that the full integration of Sprint and T-Mobile, assuming the merger is permitted, would take place over a three-year period. Among the engineering challenges the Applicants have said they would face in this process is maintaining the current quality of service for the millions of Sprint customers who migrate to the T-Mobile network, while avoiding congestion from this additional traffic on the T-Mobile network. Congestion, if not managed, would result in a loss of quality for current T-Mobile and Sprint customers.

Mr. Ray repeatedly stated that the goal during migration and farming is to **maintain** the quality of T-Mobile’s existing LTE network. For example, Mr. Ray testified:

- Having an accurate forecast of the traffic load on the network is a crucial step for **maintaining** a high quality of experience for subscribers.<sup>60</sup>
- Our modeling projections demonstrate that average LTE performance for New T-Mobile will be **maintained** during the refarming process to 5G.<sup>61</sup>

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<sup>59</sup> Exh. Jt Appl-2, Attachment B, Appendix B, ¶ 58 (emphasis added).

<sup>60</sup> *Id.* ¶ 8 (emphasis added).

<sup>61</sup> *Id.* ¶ 18 (emphasis added).

- The LTE engineering model was utilized to gauge the amount of spectrum that could be refarmed from LTE to 5G without *adverse effects* to the user experience on the LTE network.<sup>62</sup>
- As we are combining the networks, we will ensure that the transition occurs without any short-term disruption or service *degradation* to customers.<sup>63</sup>
- Our network modeling projections demonstrate that there will be *no negative impacts* on LTE performance during the refarming process.<sup>64</sup>

Noticeably absent from Mr. Ray’s goals is *improved* service. Rather, each statement is concerned with keeping quality levels where they are. Indeed, this appears to be no easy task. According to Mr. Ray, “[o]ur company goals is to fund and *mitigate* congestion in the network completely; however, absolute congestion avoidance is impractical due to issues with timely access to infrastructure, stochastic nature of traffic, and challenges with deploying congestion solutions.”<sup>65</sup> In short, Cornerstone’s assumptions of service quality *improvements* are unsupported and contradict Mr. Ray’s testimony.

### c. The Cornerstone Analysis Improperly Conflates 4G and 5G

Finally, the Cornerstone analysis is flawed because it adopts IKK’s efficiency analysis even though most of the efficiencies predicted by the IKK model are based on what might happen in a *5G world*, which is wholly irrelevant to the *4G world* that is the subject of the Cornerstone analysis. In other words, the Cornerstone analysis is unverifiable and unreliable because it improperly conflates 4G and 5G.

Economic literature suggests that acquiring firms may “systematically exaggerate the efficiencies from their deals, which may explain why harmful mergers between rivals are

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<sup>62</sup> *Id.* ¶ 20 (emphasis added).

<sup>63</sup> *Id.* ¶ 43 (emphasis added).

<sup>64</sup> *Id.* ¶ 60 (emphasis added).

<sup>65</sup> *Id.* ¶ 10 (emphasis added).



proposed.”<sup>66</sup> As a result, courts and agencies have adopted a “sliding scale” in assessing efficiencies. As the Merger Guidelines state, “efficiencies are most likely to make a difference in merger analysis when the likely adverse competitive effects, absent the efficiencies, are not great.”<sup>67</sup> The more likely a merger is to produce anticompetitive effects, the greater the burden on parties to show that the efficiencies would overcome the competitive effects. The Applicants have not met their burden.

### **C. The Proposed Merger Would Eliminate Head-to-Head Competition Between Close Competitors, Resulting in Greater Unilateral Competitive Impacts**

When a merger involves direct competitors, the primary competitive concern is often that the merger would lead to higher prices. According to the Merger Guidelines, “[t]he extent of direct competition between the products sold by the merging parties is central to the evaluation of unilateral price effects.”<sup>68</sup> “[T]he more the buyers of products sold by one merging firm consider products sold by the other merging firm to be their next choice,” the greater the unilateral price effects.<sup>69</sup> The Applicants’ proposed merger not only involves two of the four national facilities-based companies, but it also involves two companies that are particularly close competitors in both the postpaid and prepaid markets. The record shows that T-Mobile and Sprint engage in fierce, head-to-head competition. The record also shows that T-Mobile’s and Sprint’s customers view the companies as each other’s closest competitors. This is evidence that the proposed merger would result in significant unilateral price effects.

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<sup>66</sup> Jonathon Baker, *The Antitrust Paradigm* (Harvard U. Press 2019) at p. 15 and n.34.

<sup>67</sup> Exh. Jt Appl-15, p. 31.

<sup>68</sup> Exh. Jt Appl-15, p. 20.

<sup>69</sup> *Id.*; Exh. CWA-1, p. 28.

## 1. It is Undisputed that T-Mobile and Sprint Engage in Intense and Extensive Head-to-Head Competition

The record shows, and no party disputes, that T-Mobile and Sprint engage in fierce head-to-head competition through, for example, pricing, promotions, service, handset offerings and network upgrades.<sup>70</sup> CWA's opening brief detailed this extensive and targeted head-to-head competition covering, for example: Sprint's launch of its iPhone leasing program which took direct aim at T-Mobile's smartphone leasing program launched just three months before;<sup>71</sup> unlimited data plans announced by both companies within minutes of each other;<sup>72</sup> deals on the iPhone 7 offered by both companies on the same day;<sup>73</sup> Sprint's offer of unlimited HD video streaming at a new low price in response to T-Mobile adding unlimited HD video streaming to its basic unlimited plan;<sup>74</sup> Sprint offering a free year of unlimited data to customers of T-Mobile, Verizon and AT&T;<sup>75</sup> Sprint's launch of its senior plan shortly after T-Mobile launched One Unlimited 55+;<sup>76</sup> Sprint adding Hulu for free to its unlimited plans two months after T-Mobile began giving Netflix for free to its unlimited family plan subscribers;<sup>77</sup> Sprint's discounts on iPhone Xs which were quickly followed by T-Mobile's similar promotion;<sup>78</sup> and military plans launched by the companies three months apart.<sup>79</sup>

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<sup>70</sup> Exh. CWA-1, pp. 20-21.

<sup>71</sup> *Id.*, p. 21.

<sup>72</sup> *Id.*, p. 22.

<sup>73</sup> *Id.*, pp. 22-23.

<sup>74</sup> *Id.*, p. 23.

<sup>75</sup> *Id.*

<sup>76</sup> *Id.*, pp. 23-24.

<sup>77</sup> *Id.*, p. 24.

<sup>78</sup> *Id.*

<sup>79</sup> *Id.*, pp. 24-25.

The record also shows the extensive competition between Boost Mobile and MetroPCS. For example: one month after Boost Mobile offered to cut plan costs by 50% for customers who switched from either MetroPCS or Cricket Wireless, MetroPCS promoted plans with unlimited calling, messaging and data roaming in Mexico and specifically distinguished its plans from Boost Mobile's which did not offer data roaming services in Mexico;<sup>80</sup> two months after MetroPCS offered Sprint, Boost Mobile and Virgin Mobile customers the option to switch for 22 to 50% off, Boost Mobile offered two lines of unlimited talk, text and data for \$60 a month and advertised "2X More Data than MetroPCS" and "Save up to 25% compared to MetroPCS;"<sup>81</sup> Boost Mobile dropped its price for additional lines two weeks after MetroPCS launched a two-line unlimited data plan deal;<sup>82</sup> Boost Mobile started offering five lines of unlimited data for \$100 the same week that MetroPCS started offering four lines of unlimited data for \$100;<sup>83</sup> and during the same month Boost Mobile offered a free month of service for new customers who brought their own device to the carrier and MetroPCS announced that new customers would receive two months of free service.<sup>84</sup>

The proposed merger would put an end to the rivalry between particularly close competitors, along with the consumer benefits that go along with it such as competitive pricing, promotions, service and handset offerings. Eliminating this intense head-to-head competition would lead to greater unilateral competitive impacts.<sup>85</sup>

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<sup>80</sup> *Id.*, p. 25.

<sup>81</sup> *Id.*, p. 26.

<sup>82</sup> *Id.*

<sup>83</sup> *Id.*, p. 27.

<sup>84</sup> *Id.*

<sup>85</sup> Exh. Jt Appl-15, p. 20.

## 2. Evidence Shows that the Merger Would Incent New T-Mobile to Raise Prices Since T-Mobile's and Sprint's Customers View the Companies as Each Other's Closest Competitors

The Applicants argue that the merger would result in lower prices.<sup>86</sup> On the contrary, evidence shows that the merger would result in higher prices for consumers. The proposed merger would incent New T-Mobile to raise product prices if “a non-trivial fraction” of T-Mobile's or Sprint's customers view the other's products and services as their second choice.<sup>87</sup> Further, the greater the number of Sprint customers who view T-Mobile as their second choice (and vice versa), the greater the likely competitive harm.<sup>88</sup> DISH and Free Press have concluded that Sprint and T-Mobile customers see the other as their second choice.<sup>89</sup> Free Press found “that the loss of Sprint (along with its pre-paid brands Boost and Virgin) as an independent competitor would give post-merger T-Mobile a unilateral incentive to raise prices and otherwise exercise market power.”<sup>90</sup> The Brattle Group economists estimate that the unilateral effects from the proposed merger would result in price increases as much as 15.5% on New T-Mobile's prepaid plans and as much as 9.1% for postpaid plans.<sup>91</sup> And that is without taking into account the risk of coordinated effects from the transaction due to the loss of Sprint as a low-price maverick and the changed incentives of the merged firm.<sup>92</sup>

Record evidence shows that the proposed merger involves companies who engage in extreme head-to-head competition and whose customers view the companies as each other's

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<sup>86</sup> Applicants Opening Brief, p. 51.

<sup>87</sup> Exh. CWA-1, p. 28.

<sup>88</sup> *Id.*, pp. 28-29.

<sup>89</sup> *Id.*, pp. 29-30.

<sup>90</sup> *Id.*, p. 30., citing Free Press, WT Docket No. 18-197, pp. 2, 18-31.

<sup>91</sup> *Id.*, p. 30, citing DISH Reply Comments, FCC WT Docket No. 18-197 at 2 and 12-18 (October 31, 2018 (also filed in NY PSC Case 18-C-0396)).

<sup>92</sup> See Exh. Jt Appl-15, pp. 3-4 (Disruptive Role of a Merging Party), p. 24-25 (Coordinated Effects).

closest competitor. Pursuant to the Horizontal Merger Guidelines, this is evidence that the proposed merger would result in significant unilateral price effects.<sup>93</sup>

#### **IV. THE APPLICANTS' CLAIM THAT SPRINT AND T-MOBILE CAN'T COMPETE AS STANDALONE FIRMS IS UNSUPPORTED BY THE RECORD**

The Applicants argue that the companies need to merge to bring significant benefits to California and, without the merger, the companies' futures are grim.<sup>94</sup> The Applicants' claims are unsupported. Evidence shows that both companies are well-situated to compete as standalone companies and neither company needs the merger to bring 5G to California.

##### **A. T-Mobile's and Sprint's "Robust" 5G Networks Don't Depend on the Merger; Both Companies Have Touted 5G Plans for Years and Have Invested in 5G**

The Applicants argue "that the standalone companies cannot build the type of robust 5G network that New T-Mobile will offer, and that without the merger, all consumers will be deprived of the extensive benefits" of the merger.<sup>95</sup> The record shows that neither T-Mobile nor Sprint needs the proposed merger to bring 5G to California. Both companies have planned for and invested in 5G for several years.

Since at least 2017, T-Mobile has told investors that it planned to "be the first to have nationwide 5G."<sup>96</sup> In 2017, T-Mobile announced to investors that its 5G plan had been underway "for years" and that T-Mobile was making significant operational improvements and investments for 5G.<sup>97</sup> The following year, T-Mobile reaffirmed that standalone T-Mobile will have a national 5G mobile network by 2020.<sup>98</sup>

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<sup>93</sup> Exh. Jt Appl-15, p. 20.

<sup>94</sup> Applicants Opening Brief, p. 77.

<sup>95</sup> *Id.*

<sup>96</sup> Exh. CWA-1, p. 33, quoting Transcript, T-Mobile – Layer3 M&A Call, at 3 (December 13, 2017).

<sup>97</sup> Exh. CWA-1, p. 29.

<sup>98</sup> *Id.*, p. 33, quoting T-Mobile, FQ3 2018 Earnings Call Transcript (October 30, 2018).

Similarly, since 2016, Sprint has reported to investors its 5G plan. In 2016, Sprint reported that it had already shown “live over-the-air demonstrations of our 5G capabilities using millimetric band radius to deliver 4K streaming.”<sup>99</sup> In 2018, Sprint announced that it was “very, very well positioned for 5G.”<sup>100</sup> Indeed, Sprint has made substantial capital investments to enable 5G deployment and its plan is to make 5G “standardized in the 2019-2020 timeframe.”<sup>101</sup> That same year, the Sprint CEO reported that he was “very confident in Sprint’s future based on” its “competitive advantage” “with the deployment of 5G on our 2.5Ghz spectrum” which “will put Sprint at the forefront of technology and innovation on par with other leading carriers in the world.”<sup>102</sup> He exclaimed that Sprint’s network would enable it “to be the leader in the true mobile 5G.”<sup>103</sup> Notably, at an early December 2018 investor conference, Sprint CFO Mark Andrew Davies stressed that its 5G investment plans will be the same whether or not the proposed transaction takes place.<sup>104</sup> To ensure that reality, Davies reported that Sprint “tapped the market for an extra \$1.1 billion on the term loan B.” in part “to help us further upsize spectrum notes in the event that we did have to contemplate a standalone life.”<sup>105</sup>

In short, T-Mobile’s and Sprint’s claims that they need the merger to have a “robust” 5G just don’t stand up to the evidence and should be “greeted with skepticism.”<sup>106</sup>

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<sup>99</sup> *Id.*, p. 34, quoting Sprint, FQ1 2017 Earnings Call Transcript, p. 5 (July 25, 2016).

<sup>100</sup> *Id.*, p. 32, quoting Transcript, Sprint Corp., Q2 2018 Earnings Call, S&P Global (October 31, 2018).

<sup>101</sup> *Id.*, pp. 33-34, quoting Takeaways from management meeting, John C. Hodulik, UBS Global Research (December 13, 2016).

<sup>102</sup> Exh. CWA-10 (It appears that S&P/CIQ’s headers contain errors related to the time period, however the transcript text is correct and reflects the proper time period).

<sup>103</sup> *Id.*

<sup>104</sup> Exh. CWA-1, p. 35, quoting Transcript, UBS Investment Bank Company Conference Presentation, at 14 (December 3, 2018).

<sup>105</sup> *Id.*

<sup>106</sup> *Id.*, quoting Sprint Petition to Deny Applications of AT&T Inc. and Deutsche Telekom AG For Consent to Assign or Transfer Control of Licenses and Authorizations, WT Docket No. 11-65, at 97 (May 31, 2011).

## **B. The Record Does Not Support the Applicants' Attempt to Justify the Anticompetitive Merger with Alleged Competitive Challenges**

Attempting to justify a merger that is presumptively anticompetitive and would end the intense rivalry between close competitors, T-Mobile and Sprint paint a bleak picture of their prospects (especially Sprint's) as standalone companies.<sup>107</sup> The Applicants argue that, absent the merger, T-Mobile could not “add significant quantities of consumers” and Sprint’s “ability to invest in its business will be challenged.”<sup>108</sup> The reality – including financial reports that postdate the filing of the merger application and statements by the companies’ executives – is quite different. Evidence shows that both companies are well-situated to compete as standalone companies.

For example, Sprint continued to invest significantly in its network despite the pending merger.<sup>109</sup> Analysts have highlighted Sprint’s financial and network transformation. In August 2018, an analyst reported, “[s]olid C2Q Results as Focus Stays on Revenue & EBITDA Improvements with Stable Subscribers” and “Capex ramped 45% q/q, and Sprint’s network transformation continues despite the announced merger with T-Mobile.”<sup>110</sup> Also:

Sprint’s F2Q18 results demonstrated meaningful financial progress, as the company 1) grew wireless service revenue for the first time in almost five years (ahead of its year-end target), 2) generated its highest F2Q EBITDA in twelve years with wireless cash EBITDA margins +350 bps Y/Y, and 3) generated net income for the 4th consecutive quarter and operative income for the 11th consecutive quarter. . . On a standalone basis, Sprint would expect another 1-2 years of elevated capex as it deploys its 2.5 Ghz spectrum.<sup>111</sup>

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<sup>107</sup> Applicants Opening Brief, p. 77.

<sup>108</sup> *Id.*, pp. 77-78.

<sup>109</sup> Exh. CWA-1, p. 36, quoting Increasing TP to \$8 as Guidance Increased and Risk/Reward of Potential Merger Still Attractive, Ric Prentiss, Raymond James & Associates (August 2, 2018).

<sup>110</sup> *Id.*, quoting Solid C2Q Results as Focus Stays on Revenue & EBITDA Improvements with Stable Subscribers, Phil Cusick, J.P. Morgan & Co. (August 1, 2018).

<sup>111</sup> *Id.*, p. 37, quoting Simon Flannery, Morgan Stanley, Profitability Focus Pays Off (October 31, 2018).

In short, Sprint’s strategy of improving its network has begun to pay dividends.

Reports on standalone T-Mobile are similarly positive. For example, in May 2018, the reports were: “Strong Standalone Subscriber Momentum: Regardless of the completion of the Sprint merger, we believe near-term subscriber growth prospects for standalone T-Mobile remain strong,”<sup>112</sup> “1Q18 results demonstrated TMUS can continue to succeed as a standalone,”<sup>113</sup> and “[p]erhaps more importantly, mgmt. clarified drivers of their pro forma forecasts that paint a much rosier picture of the standalone businesses than we (and others) had feared.”<sup>114</sup>

T-Mobile’s and Sprint’s recent reports to investors have been incredibly positive. Sprint reported that it “reached a major milestone by delivering year-over-year growth in wireless service revenue for the first time in nearly five years” and that its “strategy of balancing growth and profitability while we increase network investments and add digital capabilities continues to drive solid financial results.”<sup>115</sup> In February 2019, Sprint COO Brandon Dow Draper testified that “there’s nothing in my rebuttal testimony, again, that says Sprint is going out of business, that Sprint is not going to build a 5G network, that Sprint is not going to be a competitor in the future.”<sup>116</sup> When asked whether he agreed with Bloomberg’s News report that Sprint’s 2018 fiscal third quarter results “help allay concerns that the carrier is doomed if it can’t complete its proposed merger with T-Mobile,” Mr. Draper responded, “Yes.”<sup>117</sup> After being pressed further

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<sup>112</sup> *Id.*, quoting 1Q18 Review and Model Update, RBC Capital Markets, Jonathan Atkin (May 2, 2018).

<sup>113</sup> *Id.*, quoting Better Results Remind Investors of Strong Standalone Prospects, SunTrust Robinson Humphrey, Greg P. Miller (May 1, 2018).

<sup>114</sup> *Id.*, p. 38, quoting TMUS: 1Q18 Quick Take: Good Results; Clarity On Pro Forma Forecast; More Juice for Standalone Scenario; New Street Research, Jonathan Chaplin (May 1, 2018).

<sup>115</sup> Exh. CWA-11 (It appears that S&P/CIQ’s headers contain errors related to the time period, however the transcript text is correct and reflects the proper time period).

<sup>116</sup> Tr., Vol. 5, at 673:19-24 (Draper).

<sup>117</sup> *Id.* at 677:17-22 (Draper).



regarding Sprint’s claimed (but unsupported) doom and gloom, Mr. Draper confirmed that, on a standalone basis, Sprint “will be a competitor. Sprint will launch 5G.”<sup>118</sup> And when asked to clarify, “[j]ust for the record” whether it was his “opinion that Sprint will survive on a standalone basis,” Mr. Draper emphatically responded, “Absolutely.”<sup>119</sup>

Meanwhile, T-Mobile’s “record-breaking” numbers have continued: “T-Mobile delivered ANOTHER record-breaking quarter! We continue to drive our business beyond expectations and despite the work underway to close the merger, we delivered our best financials ever in Q3.”<sup>120</sup>

T-Mobile has made significant “advancements in network technology”:

T-Mobile continues to increase and expand the speed and capacity of our network to better serve our customers. . . In addition to building out 5G on 600 MHz, T-Mobile intends to bring 5G to 30 cities in 2018 using both 600 MHz and millimeter wave spectrum. The network will harness 4G and 5G bandwidths simultaneously (dual connectivity) and will be ready for the introduction of the first 5G smartphones in 2019.<sup>121</sup>

In short, standalone T-Mobile and standalone Sprint are positioned to maximize their individual resources and remain effective competitors. The Applicants’ attempt to justify a merger that is presumptively anticompetitive and will end the intense rivalry between close competitors with claims of poor long-term viability utterly fails. The record shows that both companies are well-situated to compete as standalone companies.

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<sup>118</sup> *Id.* at 686:6-7, 21-24 (Draper).

<sup>119</sup> *Id.* at 686:21-24 (Draper).

<sup>120</sup> Exh. CWA-1, quoting “T-Mobile Delivers Its Best Financials Ever and Strong Customer Growth in Q3”, T-Mobile (October 30, 2018).

<sup>121</sup> *Id.*, pp. 38-39.

## V. THE MERGER WOULD ELIMINATE JOBS AND DEPRESS WAGES, WHICH IS NOT IN THE PUBLIC INTEREST

To authorize a proposed merger, the Commission must find that the merger is in the public interest.<sup>122</sup> To determine whether the proposed merger is in the public interest, the Commission must consider whether the merger, among other factors, is fair and reasonable to utility employees.<sup>123</sup> The Commission should not consider the purported benefits of a merger if they are “vague, speculative, or otherwise cannot be verified by reasonable means.”<sup>124</sup>

The Applicants claim that “[j]obs are projected to increase as a result of the merger” and they “expect[] to add new jobs associated with rural stores, network build, customer care, and new or expanded service.”<sup>125</sup> While the Applicants argue that its business plan anticipates job creation, there is no record evidence that increased employment is merger-specific. Rather, evidence shows that the companies had aggressive growth plans notwithstanding the merger. Moreover, the post-merger reality for employees who work for authorized dealer stores or contractors (direct external employees)<sup>126</sup> is dismal and the Applicants completely fail to account for the massive job losses that would occur when dealer stores close because of the merger. Indeed, record evidence shows that the merger would eliminate more than 3,000 California jobs from retail store closures.

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<sup>122</sup> Pub. Util. Code § 854(c).

<sup>123</sup> *Id.*, §§ 854(c)(1)-(8).

<sup>124</sup> Exh. Jt Appl-15, p. 7.

<sup>125</sup> Applicants Opening Brief, p. 86. The Applicants also point to 1,000 new employees at a new customer experience center in the Central Valley. CWA supports the May 2, 2019 motion of the Public Advocates Office to strike portions of the Applicants’ brief related to the Central Valley customer experience center. The Applicants did not reference this call center in its application or testimony. There was no opportunity for discovery or cross examination on the alleged call center. Moreover, the Commission cannot base its decision on information that is not in the evidentiary record.

<sup>126</sup> “Direct external employees” are employees who work for authorized dealers or contractors. In contrast, “Direct internal employees” are the company’s payroll employees.

### A. The Applicants' Claimed Job Creation is Not Attributable to the Merger

T-Mobile and Sprint claim that their plans to increase employment are merger specific.<sup>127</sup> However, the record shows that both companies had aggressive growth plans notwithstanding the proposed merger.

For example, T-Mobile opened 2,800 stores in fiscal year 2017,<sup>128</sup> opened a 1,200-worker call center in South Carolina in March 2018,<sup>129</sup> and in July 2018 announced sixteen store openings in markets where it already has a significant presence.<sup>130</sup> In August 2018, T-Mobile announced that its customer call center operations would focus on live representatives and would avoid automation, suggesting that T-Mobile would continue to expand its call center staff.<sup>131</sup>

Similarly, in December 2016, Sprint pledged to create 5,000 jobs in the U.S. by the end of 2017, primarily by reshoring call center positions.<sup>132</sup> Sprint opened 1,300 stores in fiscal year 2017,<sup>133</sup> and in March 2018, announced it would open 600 Sprint stores and 850 Boost Mobile stores by the end of year.<sup>134</sup> In May 2018, Sprint stated that merging with T-Mobile would not change its plans to open new stores.<sup>135</sup>

The Applicants' claim that substantial job creation is merger specific is unsupported by the record. Rather, evidence shows that the Applicants' claim is based on pre-existing job growth plans.

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<sup>127</sup> Exh. Jt Appl.-2, pp. 36-37.

<sup>128</sup> Exh. CWA-1, p. 50.

<sup>129</sup> *Id.*

<sup>130</sup> *Id.*

<sup>131</sup> *Id.*

<sup>132</sup> *Id.*, p. 51.

<sup>133</sup> *Id.*

<sup>134</sup> *Id.*

<sup>135</sup> *Id.*

## **B. The Applicants’ “Plans” to Keep Prepaid Stores Open are Unsupported**

According to industry analysts, store closures are a key element of the projected cost savings from the proposed merger.<sup>136</sup> Indeed, CWA’s analysis showed that the merger would result in a significant number of store closures. Specifically, CWA showed that 28% of T-Mobile and Sprint stores in California would close from the merger, eliminating approximately 3,342 California jobs.<sup>137</sup> T-Mobile acknowledged that the merger would result in a significant number of postpaid store closings in California but it has not determined which stores would close and “it is still evaluating plans related to any prepaid retail store locations as a result of the merger.”<sup>138</sup> While the Applicants claim that “New T-Mobile has no plans to close any prepaid stores,”<sup>139</sup> the Applicants do not know how many stores would close because of the merger.

CWA used a regression model to determine the number of postpaid T-Mobile and Sprint stores likely to close post-merger. The model shows that, post-merger, T-Mobile and Sprint would close approximately 41% of its postpaid corporate and dealer retail stores in current T-Mobile/Sprint California markets. These closures would eliminate more than 2,864 postpaid retail positions.<sup>140</sup> These losses would be somewhat offset by expanded staffing at remaining stores. Therefore, CWA found that the merger would result in a net loss of 1,707 postpaid retail jobs in California.<sup>141</sup>

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<sup>136</sup> Exh. CWA-1, p. 53, citing New Street Research “Sprint/T-Mobile Redux: Refreshing Synergies and Scenarios,” at 28 (April 15, 2018).

<sup>137</sup> *Id.*, pp. 52, 101-109.

<sup>138</sup> Exh. CWA-2, p. 6.

<sup>139</sup> Applicants Opening Brief, p. 89.

<sup>140</sup> Exh. CWA-1, p. 54.

<sup>141</sup> *Id.*

Sprint and T-Mobile also have prepaid brands with separate retail operations that would also be affected by the merger. In California, MetroPCS and Boost Mobile have a combined total of 2,010 locations, virtually all of which are operated by independent authorized dealers.<sup>142</sup> CWA's analysis shows that 545 MetroPCS and Boost Mobile stores in California would close because of the merger, costing an additional 1,635 California jobs.<sup>143</sup>

The Applicants now claim that they have no "plans" to close prepaid stores.<sup>144</sup> But it is difficult to imagine how the Applicants' "plans" would materialize since Boost and Metro have historically been direct competitors.<sup>145</sup> Furthermore, as CWA showed, 60% of all Boost stores in California are located less than 1/3 of a mile from the closest Metro store.<sup>146</sup> The Applicants have utterly failed to show how two fiercely competitive brands that operate retail footprints in close proximity would continue to effectively compete when combined under the same corporate owner. Would New T-Mobile maintain the same marketing budgets and the same aggressive promotional pricing for these brands? Would Boost continue to offer incentives for Metro subscribers to switch? If these competitive dynamics are not present, how would multiple dealers sustain themselves in such close proximity? The Applicants have failed to provide answers to these essential questions and, thus, have failed to prove that New T-Mobile would not close prepaid stores.

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<sup>142</sup> *Id.*

<sup>143</sup> *Id.*, p. 55.

<sup>144</sup> Applicants Opening Brief, p. 89.

<sup>145</sup> Exh. CWA-1, pp. 25-27.

<sup>146</sup> *Id.*, p. 55.

### C. The Applicants’ “Jobs Commitment” Does Nothing for Employees of Authorized Dealers

The Applicants announced that “New T-Mobile has formally committed to no net job losses in California.”<sup>147</sup> The Applicants explain that the jobs commitment “means that the total number of New T-Mobile direct employees” in California “will be equal to or greater than the total number of employees of Sprint and T-Mobile” in California.<sup>148</sup> However, the jobs commitment would only apply to direct internal employees – *not direct external employees*. The Applicants’ promise is wholly insufficient to ensure no net job loss in California from the merger.

CWA’s opening brief noted that approximately [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] of T-Mobile stores are authorized dealer stores. T-Mobile’s jobs commitment would apply to *none* of the employees at these authorized dealer stores.<sup>149</sup> Indeed, the Applicants acknowledge that their promise of job opportunities does not extend to authorized dealer employees since, as the Applicants put it, “T-Mobile cannot control these employees.”<sup>150</sup> The Applicants’ claim of “no net job losses in California” is disingenuous (at best), if not willfully misleading. While claiming that the merger would result in “no net job losses in California,” the Applicants know that the commitment would only cover [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] of stores selling T-Mobile and Sprint service in California.

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<sup>147</sup> Applicants Opening Brief, p. 87.

<sup>148</sup> *Id.*, pp. 87-88.

<sup>149</sup> CWA Opening Brief, p. 28. [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] is based on T-Mobile’s data (Exh. CWA-2C). CWA’s own data similarly shows that approximately 83% of T-Mobile’s stores are authorized dealer stores.

<sup>150</sup> Applicants Opening Brief, p. 87.

Taking it one step further, CWA analyzed data provided by T-Mobile and found, assuming eight workers per postpaid store and three workers per prepaid store, that [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] of T-Mobile's postpaid retail workforce and [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] of Metro's prepaid retail workforce are employed by authorized dealers. This means that the Applicants' claim of "no net job losses" would only apply to [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] of current retail workers selling T-Mobile service in California.<sup>151</sup> Thus, the Applicants' jobs commitment would NOT cover [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] of current retail workers selling T-Mobile service in California. Since the Applicants did not provide CWA with data regarding Sprint's current corporate and authorized dealer locations, CWA was unable to perform the equivalent analysis for Sprint.

#### **D. The Merger Would Negatively Impact Industry-Wide Wages**

CWA showed that the merger "could substantially increase concentration in numerous local wireless industry retail labor markets, increasing the monopsony power of employers in purchasing labor power of retail wireless workers, thereby depressing workers' wages and benefits through reduced competition for labor."<sup>152</sup> The Applicants argue that "CWA's claims regarding retail employee wage reduction from consolidation in the wireless industry [ ] employ assumptions that do not match up with reality."<sup>153</sup> The Applicants' argument is unsupported.

The Economic Policy Institute and Roosevelt Institute studied the labor market impact of the proposed merger on retail workers who sell wireless equipment and services. The economists

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<sup>151</sup> Exh. CWA-2C; Exh. CWA-1, p. 55 and Appendix C.

<sup>152</sup> Exh. CWA-1, pp. 57-59.

<sup>153</sup> Applicants Opening Brief, p. 89.

found that, post-merger, the annual earnings of retail wireless workers in the most expensive urban areas in the State would decline (by as much as \$2,906 in Los Angeles, \$2,953 in San Francisco, \$2,363 in San Diego, \$2,728 in San Jose and \$2,319 in Sacramento on an annual basis).<sup>154</sup> The Applicants argue that the labor market definition used in the Economic Policy Institute and Roosevelt Institute analysis is overly narrow because it assumes that “employees at AT&T, Sprint, T-Mobile, and Verizon retail stores are only employable at wireless retail stores of one of those four companies.”<sup>155</sup> But the paper explicitly does *not* make this assumption.

The paper states, “while it is likely that workers outside the retail wireless sector might apply for jobs in that sector, employers nonetheless have a significant amount of unilateral power to set wages.”<sup>156</sup> Furthermore, the authors explain that research shows that labor markets can be defined even more narrowly than in this case, down to job titles and even individual firms “without finding substantially different results in terms of the magnitude of the estimated earnings elasticity to measured concentration.”<sup>157</sup> Thus, T-Mobile’s methodological concerns were anticipated and put to rest by the Economic Policy Institute and Roosevelt Institute study itself.

In sum, the Applicants’ claim that the merger would be jobs positive is wholly speculative and contradicts record evidence. Moreover, the Applicants’ willful disregard for the massive job loss that would occur for employees of authorized dealers is remarkable. The record shows that the merger would eliminate more than 3,000 California jobs from retail store closures.

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<sup>154</sup> Exh. CWA-1, p. 59.

<sup>155</sup> Applicants Opening Brief, p. 89.

<sup>156</sup> Adil Abdela and Marshall Steinbaum, Labor market impact of the proposed Sprint – T-Mobile merger, December 17, 2018, p. 9, available at <https://www.epi.org/files/pdf/159194.pdf>.

<sup>157</sup> *Id.*



The record also shows that the merger would suppress industry-wide wages. The merger is not in the public interest.

## **VI. THE APPLICANTS' CLAIM THAT THE MERGER WOULD BRING DRAMATICALLY IMPROVED SERVICE TO RURAL CALIFORNIA IS UNSUPPORTED BY THE RECORD**

T-Mobile and Sprint claim that the proposed merger would vastly improve service in rural California.<sup>158</sup> The Applicants' claim is unsupported and contradicts the record which shows that for much of rural California, the merger would provide little network benefit.

A review of T-Mobile CTO Neville Ray's testimony confirms that the Applicants' claim of vastly improved service in rural areas is overstated. In fact, the merger would provide only marginally better options than standalone T-Mobile in much of rural California. Even six years after a T-Mobile/Sprint merger, service in rural areas would continue to have significant limitations and would still lag far behind urban and suburban areas. Thus, the merger would do little to bridge the urban-rural digital divide.

### **A. The Applicants Exaggerate the Merger Benefits of Advanced Services for Rural Areas**

Mr. Ray testified that:

New T-Mobile will benefit rural Californians immensely. The broad geographic reach of New T-Mobile's 5G network will facilitate the use of advanced applications that are critically needed in small towns and rural communities. For example, New T-Mobile's 5G network will transmit high resolution video and audio to distant physicians enabling rural residents to access higher quality medical care and to get it faster and without having to travel hundreds of miles.<sup>159</sup>

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<sup>158</sup> See e.g., Applicants Opening Brief, p. 34 (“these maps illustrate that significantly more non-urban and rural communities will get deep 5G coverage relative to the standalone world, helping to bridge the urban-rural digital divide”), p. 37 (“[t]he increase in data speeds anticipated by the merger is especially beneficial for low-income consumers and for rural Californians”), p. 42 (the merger “*doubles* the number of rural Californians who have access to those types of broadband speeds today”).

<sup>159</sup> Exh. Jt Appl-3, p. 41.

However, cross examination of Mr. Ray revealed that, post-merger, the large number of customers in rural areas receiving only low-band signals would continue to have very limited shared capacity for video streaming.

Mr. Ray's testimony provides anticipated spectrum holdings for New T-Mobile from [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL], including for low-band spectrum.<sup>160</sup> At hearings, Mr. Ray confirmed that New T-Mobile would have [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] of spectrum in the low-band which provides half its capacity in the network-to-user direction (or [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL]), that the average spectral efficiency in the low-band for 5G is 2.5 bps/cell, and that the maximum possible capacity for one cell site in the low-band is approximately [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL].<sup>161</sup> Mr. Ray further confirmed that, since the low-band capacity for a single cell site is [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL], only [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] people could watch [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] simultaneously, and only [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] people could watch [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] simultaneously.<sup>162</sup> Further, in some cases, the maximum simultaneous streaming of [BEGIN CONFIDENTIAL] [REDACTED] [END

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<sup>160</sup> Exh. Jt. Appl.-2C, Attachment A, Appendix B, p. 21, Table 2.

<sup>161</sup> Tr., Vol. 5 at 569:19 – 570:9 (Ray). Notably, [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] low-band capacity contradicts Mr. Ray's testimony that 100 Mbps would likely be the capacity available in rural areas. (Tr., Vol 5 at 531:1-4).

<sup>162</sup> *Id.* at 570:26 – 571:11 (Ray).

**CONFIDENTIAL]** and **[BEGIN CONFIDENTIAL]** [REDACTED] **[END CONFIDENTIAL]**  
would be shared over an area of hundreds of square miles.<sup>163</sup>

To put this in perspective, take the example of post-merger Humboldt County. The record shows that, post-merger, 50,598 of the county’s 136,754 residents would have only low-band service in 2021 and 30,085 of the 136,754 residents would still have only low-band service in 2024.<sup>164</sup> In other words, 37% of Humboldt County’s population in 2021 would have low-band only and 22% would have low-band only in 2024.<sup>165</sup> Notably, these numbers apply to outdoor service. When considering indoor service, the numbers get even smaller.<sup>166</sup> Thus, a significant number of Humboldt County residents, for example, would have extremely limited access to video streaming (a maximum of **[BEGIN CONFIDENTIAL]** [REDACTED] **[END CONFIDENTIAL]** streams and **[BEGIN CONFIDENTIAL]** [REDACTED] **[END CONFIDENTIAL]** streams shared over an area of hundreds of square miles) on the New T-Mobile network, even in 2024.

Mr. Ray attempted to dismiss the limited video streaming capacity for rural areas post-merger, arguing that “if there are many customers that are using video for a second or two seconds or three seconds, then the numbers can compound very rapidly. This is instantaneous capacity.”<sup>167</sup> However, video signals tend to be continuous. Telemedicine and video surgery video transmissions, for example, are likely to last longer than just a few seconds of web browsing. Tellingly, when asked if T-Mobile’s claim that the merger would bring advanced

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<sup>163</sup> *Id.* at 572:12-15 (Ray).

<sup>164</sup> *Id.* at 579:24 – 580:6 (Ray).

<sup>165</sup> *Id.* at 578:20 – 579:5 (Ray).

<sup>166</sup> *Id.* at 582:1-3 (Ray).

<sup>167</sup> *Id.* at 571:16-20 (Ray).

services (such as “high resolution video and audio to distant physicians enabling rural residents to access higher quality medical care and to get it faster and without having to travel hundreds of miles”) assumes the use of mid-band spectrum, Mr. Ray responded, “It might.”<sup>168</sup> Thus, for the tens of thousands of rural residents with low-band service only, these advanced services may never materialize.

## **VII. THE APPLICANTS’ MOU WITH CETF WOULD RESULT IN POST-MERGER SERVICE IN RURAL AREAS THAT IS INFERIOR TO THE SERVICE DESCRIBED IN THE APPLICANTS’ TESTIMONY**

The Applicants and the California Emerging Technology Fund entered into a memorandum of understanding regarding the proposed merger whereby the Applicants agreed, “[w]ithin six years of the Transaction close date” New T-Mobile would deploy 5G technology “at 90% of the cell site locations in its network plan for California. Plus, coverage and speed commitments will be verified by site-specific speed tests and coverage maps.”<sup>169</sup> While the Applicants claim that this agreement is an effort to demonstrate New T-Mobile’s commitment to providing extraordinary benefits to California, for rural areas this commitment is a step backwards from the service described in the Applicants’ testimony. In addition, the MOU’s coverage and speed verification lacks sufficient test criteria and overestimates post-merger rural speeds.

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<sup>168</sup> *Id.* at 573:22-24 (Ray).

<sup>169</sup> Applicants Opening Brief, pp. 5-6.

**A. The Applicants and CETF Agreed to a 10% Reduction in Service, Which Would Disproportionally Affect Rural Areas**

Mr. Ray’s testimony presented a network engineering model which predicted that New T-Mobile would serve 99% of Californians with 5G mid-band service in 2024.<sup>170</sup> The MOU *reduces* post-merger 5G service to 90% of cell sites and delays reaching even that lower benchmark by one year.

If only 90% of the new sites received 5G, the number of 5G sites would go down from [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] to [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL], a reduction of [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] sites.<sup>171</sup> It is reasonable to assume that a substantial portion of the reduction would fall disproportionately on rural areas since reduction would, in part, be due to New T-Mobile’s “[i]nability to acquire necessary equipment or backhaul before the conclusion of the six-year commitment,” a more likely outcome in a rural area than in an urban one.

A single site has a range of up to 18 miles in low-band and up to 4 miles in mid-band, covering approximately 50 square miles in mid-band and 1,000 square miles in low-band. To demonstrate the impact of a single site, Figures 1 and 2 (below) are the Projected 2021 and 2024 5G coverage, respectively, in Humboldt County, provided as part of Mr. Ray’s testimony.<sup>172</sup> On Figure 2, CWA inserted a 4-mile (yellow) and 18-mile (green) radius hexagon in one of the areas where T-Mobile claims it will enhance the coverage between 2021 and 2024. If a single cell site

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<sup>170</sup> Exh. Jt Appl-3, p. 45.

<sup>171</sup> Applicants Opening Brief, p. 10.

<sup>172</sup> Exh. Jt Appl-3C, Attachment D. While the maps are marked confidential in testimony, the Applicants made the maps public during evidentiary hearings.

in the southeastern county were part of the 10% not upgraded, almost all of the projected 5G mid-band enhancement proposed in the county from 2021 to 2024 would be left out.

Figure 1—Projected 2021 5G Coverage from T-Mobile Network Model

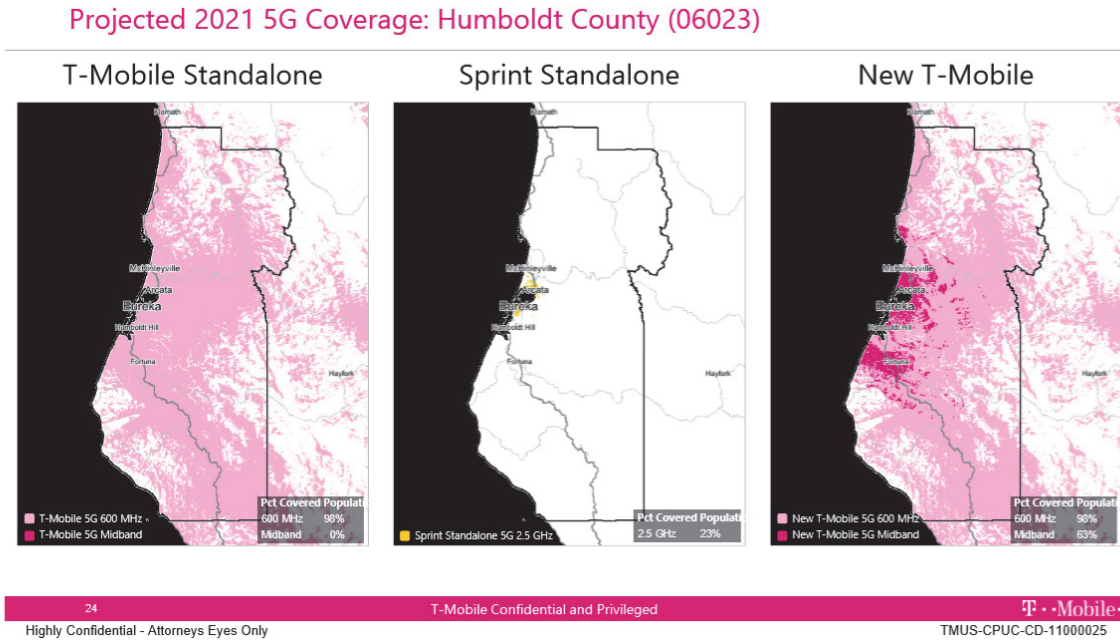
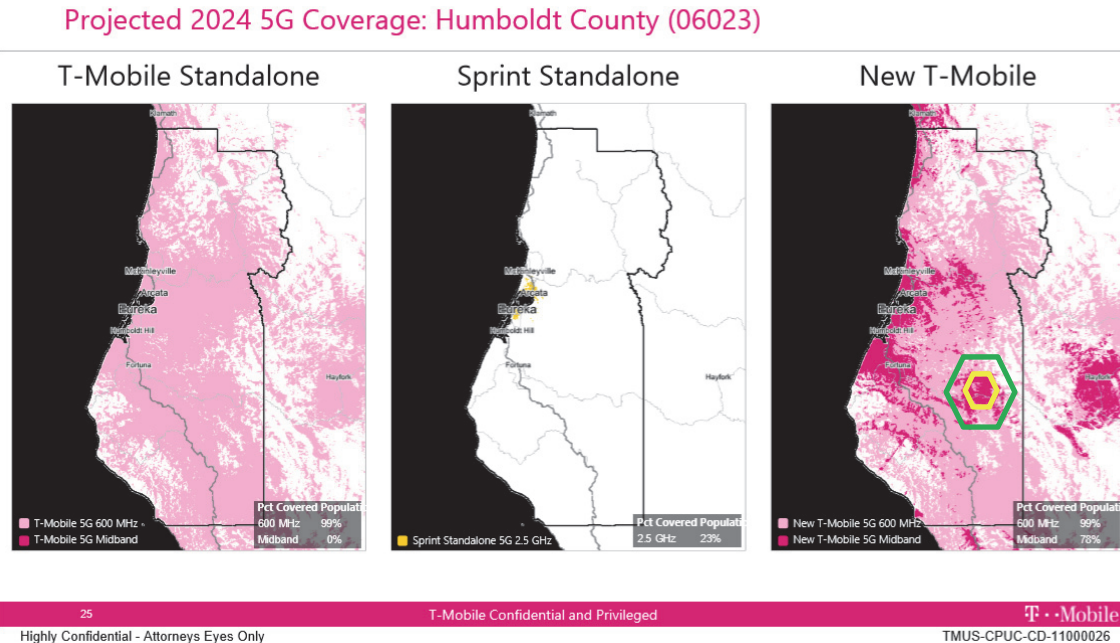


Figure 2 – Projected 2024 5G From T-Mobile Network Model with Example Coverage Area of Single Cell Site in Yellow (Mid-Band) and Green (Low-Band) Hexagons



Further, consider that not upgrading this one site is only about [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] of the total impact that the missing [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] sites would create across California, and that the impact of each of the remaining [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] sites could be this large and would likely affect each of the 58 counties in the state. The difference in the total area not receiving upgraded service would depend on the overlap of the non-upgraded sites with neighboring antennas, as well as the power level of those sites. However, estimating the order of magnitude of the potential impact can be done considering the mid-band coverage area. If the [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] skipped sites are multiplied by the 50 square-mile mid-band service area of each site, then [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] square miles, or approximately [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] *of the entire area of California* would not receive upgraded service. Thus, the MOU's 10% reduction in the number of upgraded sites is bound to affect large areas that the Applicants claim would be served with mid-band as part of the 2024 network plan, with the rural areas being the probable areas not to receive the service.

## **B. The MOU Lacks Sufficient Test Criteria and Overestimates Rural Speeds**

The MOU states that Applicants would deliver 100 Mbps or 300 Mbps to various cell sites in California, and that “an independent third party selected by CETF from a list of experts” would verify the speed for each site.<sup>173</sup> But the MOU fails to include testing criteria to ensure that testing is accurate and reliable.

Even if the party testing the service is an independent one, it is critical for that party to have the appropriate testing criteria. To truly verify the speeds obtained by actual Californians, the tests must take place in the actual conditions where the service would be used and with the same devices. Since actual conditions may include indoors, outdoors and obstructed areas, the tests must occur at the cell edge and indoors. Yet, the MOU provides that testing should be a “reasonable outdoor use case...without unusual blockage and an appropriate distance between cell tower at cell site edge.”<sup>174</sup> As a result, the tests would likely provide speeds for optimal conditions, not “real life” conditions.

Moreover, the test criteria must verify not only the speeds in the mid-band areas receiving the highest speeds, but also the more limited speeds where mid-band is not available. In areas where only low-band service is available (anywhere more than 4 miles from the antenna or at cell sites with only low-band service), 100 Mbps is simply not attainable on the network. As shown in the cross-examination of Mr. Ray, the bandwidth and spectral efficiency limits the low-band service to [BEGIN CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] even in optimal conditions and even when 5G technology is used.<sup>175</sup>

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<sup>173</sup> Applicants Opening Brief, Appendix 1, pp. 11-12.

<sup>174</sup> *Id.*, Appendix 1, p. 12.

<sup>175</sup> Tr. Vol. 5 at 578-579 (Ray).



In short, the MOU's 10% reduction in the number of upgraded sites would result in post-merger service in rural areas that is inferior to the service described in the Applicants' testimony. The MOU is a step backwards.

### VIII. CONCLUSION

The proposed merger would eliminate thousands of California jobs, adversely affect competition and raise prices for consumers, with no countervailing verifiable, merger-specific benefits. The merger is not in the public interest and the Commission cannot lawfully authorize it as currently structured. To protect the public interest in quality jobs, the Commission must require the Applicants to make verifiable, enforceable commitments that no T-Mobile or Sprint employee (including those of dealers and contractors) loses a job as a result of the transaction, to return all overseas customer call center jobs to the U.S., and to commit to complete neutrality in allowing employees to form a union of their own choosing free from any interference by the New T-Mobile.

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Respectfully submitted,

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