ATTACHMENT 1

INTERVENOR TESTIMONY OF

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CALIFORNIA EMERGING TECHNOLOGY FUND

My name is Sunne Wright McPeak. I am the President and CEO of the California Emerging Technology Fund ("CETF"). I supervise and direct all public policy efforts by CETF. A non-profit organization established by this Commission in 2006 with the mission to close the Digital Divide in California, CETF has over a decade of expertise in broadband infrastructure and broadband adoption programs.

CETF regularly appears before this Commission in various proceedings relating to corporate mergers and the California Advanced Services Fund. In corporate mergers by providers of broadband services, CETF recommends that all corporate consolidations should be reviewed to ensure there are public benefits that are "appropriate, fair and comparable" to prior mergers where applicants voluntarily have provided a variety of public benefits, for example, new or upgraded infrastructure builds in the state, voluntary commitments to affordable rates for broadband service, and free or low-cost Internet ready electronic devices for low-income households, free public Wi-Fi hotspots in rural/remote areas or low-income urban areas, and other broadband adoption efforts for Digital Inclusion in the state. CETF has successfully negotiated settlement agreements with major broadband providers engaged in corporate consolidations to ensure there are public benefits afforded to the people of California relating to broadband infrastructure and adoption.

In this merger, CETF has a strong interest in ensuring that this proposed merger of Sprint Communications Company, L.P. ("Sprint") and T-Mobile USA ("T-Mobile") (collectively referred to as "Applicants") has benefits for California wireless customers, particularly those who are low-income and who rely on only their smartphones to access the Internet. CETF has this concern because both Sprint and T-Mobile have disproportionately more low-income customers than AT&T Mobility or Verizon Wireless and will be the largest prepaid provider in the market should the merger be approved.[1] Further, the Applicants have promised to improve data speeds nationally with the combined new T-Mobile entity, but there are no assurances made in the Applicants' Wireless Application that such data speed increases will occur *in California*. As shown in the wireless service maps produced by this Commission's Broadband Maps, wireless service speeds are often very slow and unreliable in rural, remote and tribal areas of California. In some areas, there is no wireless service at all. CETF recommends that this Commission require that the Applicants be clear about what benefits in terms of wireless infrastructure will flow *to California*, on what timeframe, and at what speeds. Any approval should be conditioned on such infrastructure commitments being fulfilled and ensuring Commission monitoring of verifiable progress.

In the Amended Assigned Commissioner's Scoping Memorandum and Ruling, dated October 4, 2018 (hereinafter "Amended Scoping Memo"), issues to be addressed in this proceeding include the following:

- 1. How would the merger impact competition for services currently provided by Sprint or T-Mobile in any metropolitan area or other geographically distinct market?
- 10. How would the merger impact the quality of, and access to, service to California consumers in metropolitan areas, rural areas, or other geographically distinct markets? What services would be affected?
- 11. How would the merger impact the Lifeline program?
- 12. Should the Commission impose conditions or mitigation measures to prevent significant adverse consequences and, if so, what should those conditions or measures be?

[1] CETF refers to the chart showing that T-Mobile and Sprint customers are disproportionately lower income than AT&T Mobility and Verizon Wireless customers on page 13 of the Protest of the Joint Consumers to Joint Application for Approval of Transfer of Control of Sprint Communications Company, L.P. Pursuant to Public Utilities Code Section 854(A), filed on August 16, 2018 (hereinafter "Joint Consumers Protest"), in this docket. The Joint Consumers are TURN and Greenlining, two consumer groups.

(See Amended Scoping Memo at 2-3.) The purpose of CETF's testimony is to respond to these issues in the proceeding, but it reserves the right to address additional issues raised by the testimony of other parties.

As the third and fourth largest U.S. wireless carriers respectively,[2] the T-Mobile – Sprint merger will create a combined New T-Mobile entity with more than 126 million customers, bringing it closer in size to first place rival Verizon (153.9 million customers as of Q3 2018), and second place rival AT&T Wireless (150.2 million customers as of Q3 2018).[3]

CETF points out that T-Mobile is the U.S. market leader in the *prepaid* wireless mobile phone service market. According to a 2013 Euromonitor International article, "T-Mobile . . . fiercely jumped on the prepaid bandwagon in 2013 and finalized the acquisition of MetroPCS, a US prepaid services provider. It also dumped its 2-year contracts, increasing its focus on the provision of contractless services. This allowed the company to nearly triple its revenue from prepaid-related services in 2013, resulting in it generating the largest revenue growth rate among the top industry players in the US."[4] The article goes on to predict that in the near term, the prepaid market will increase at three points over average telecommunications industry growth as the telecommunications market grows more competitive and consumers move towards contractless options to spend less. (*Id.*) A Q2 2017 study by Counterpoint Market Monitor[5] similarly found that "T-Mobile dominated the postpaid phone adds followed by Verizon which saw a surprise uptick after a lull last year." Thus, it is without question that if the merger is

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[2] As of Q3 2018, T-Mobile US reports 77.2 million customers and Sprint Corp. has 53.5 million customers.
[3] https://en.wikipedia.org/wiki/List_of_United_States_wireless_communications_service_providers
[4] https://blog.euromonitor.com/growing-popularity-of-prepaid-mobile-services-reshapes-us-telecommunications-market/
[5] https://www.counterpointresearch.com/q2-2017-usa-market-back-to-growth-as-smartphone-shipments-jump-14-yoy/

approved, the New T-Mobile entity will continue to be the leader in the pre-paid wireless market in the United States.

According to a Wikipedia definition,[6] a "prepaid mobile device" has credit purchased in advance of service use. The purchased credit is used to pay for telecommunications and data (Internet) services at the point the service is accessed or consumed. If there is no credit, then access is denied by the service provider company. Users then can increase, or "top up", their credit at any time using a variety of payment mechanisms in order to resume service on the mobile device.

According to The NPD Group, in 2013, 32% of all smartphone sales in the U.S. are prepaid phones.[7] Thus, the prepaid market makes up a hefty one-third of the U.S. wireless marketplace. The prepaid wireless market targets and serves consumers that require certainty about the cost of their wireless phone bills. Thus, prepaid plans are popular with low-income persons, students, retirees, or others on a strict financial budget.

The alternative main billing method is a post-paid mobile phone, also known as a mobile contract. In a post-paid billing method, smartphone subscribers enter into a long-term contract (often lasting 12, 18 or 24 months) or a short-term contract (for example, a 30-day contract) and billing arrangement with a service provider. The largest post-paid service providers are AT&T Mobility and Verizon Wireless, who hold about 68% of the market. Post-paid billing methods are for customers who are less price sensitive and these customers are considered more profitable than prepaid customers.[8]

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[6] https://en.wikipedia.org/wiki/Prepaid_mobile_phone
[7] https://www.npd.com/wps/portal/npd/us/news/press-releases/the-npd-group-nearly-one-third-of-all-smartphones-sold-in-the-u-s-are-prepaid/
[8] https://www.zacks.com/stock/news/306823/competition-intensifies-in-the-us-postpaid-wireless-market

In summary, if the merger is approved, the New T-Mobile entity will be the nation's leader in prepaid customers which constitutes one-third of the U.S. wireless market. It will focus its efforts on wireless voice and data (Internet) service to low-income consumers and others that are price sensitive and prefer contractless agreements.

Annually, CETF provides funding to pay for research on broadband connectivity and the Digital Divide in California. In 2017, the "Broadband Internet Connectivity and the Digital Divide in California 2017" survey released on June 27, 2017 (hereinafter referred to as the "2017 Annual Survey") was performed by the Independent Institute of Governmental Studies Poll at the University of California, with funding from CETF.[9] The 2017 Annual Survey was conducted with California adults age 18 or older from May 4- May 29, 2017, administered by cellular and landline telephone by live interviewers. The sample size was 1,628 persons. It was administered in English, Spanish, Cantonese, Mandarin, Korean and Vietnamese languages.

CETF draws the Commission's attention to the following important finding of the 2017 Annual Survey: **18% of the California households connect to the Internet through smart phone only.** (See 2017 Annual Survey results at page 2, Table 1). Overall, 87% of Californians have broadband connectivity at home, with 69% via a computing device such as a desktop, laptop or tablet computer, and as noted previously, 18% via smart phone only. 13% of Californians have no home broadband connectivity at all. Further, the 18% connection to the Internet via smart phone only represents a 4% increase over 2016 when only 14% connected via a smart phone, and 2014 and 2015 when only 8% connected via smart phone. (See 2017 Annual Survey results at page 3, Table 2.) Thus, the trend is

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[9] http://www.cetfund.org/progress/annualsurvey

increasing where nearly a fifth of California households are connecting to the Internet only via smart phone. As a result, CETF shares the legitimate concerns of the Joint Consumers about how to ensure affordable wireless and data service rates for the low-income populations from the New T-Mobile entity given its market power in the prepaid market for low-income consumers in the state.

CETF also draws attention to who is *not* connected to broadband Internet at home. Age is a key factor; the lowest connectivity (69%) is by persons aged 65 or older. Income status is also the biggest factor. There is a 75% connection rate by those making less than $20,000 annual household income, whereas those earning over $60,000 have connection rates of 97%-99%. (See 2017 Annual Survey results at page 6, Table 3c.) Immigrants show a 79% connection rate compared to 91% for U.S. born. 75% of disabled persons are connected compared to 91% of not disabled persons. Other race/ethnicity groups showing lower connectivity than white non-Hispanics (91%) are Spanish-speaking Latinos (70%), Latino (total) (82%), and Asian American (84%). (See 2017 Annual Survey results at page 4, Table 3a). Sixty seven percent of non-high school graduates are connected compared to rates in the 90%-96% range for those with higher education attainment. (2017 Annual Survey results, at p. 5, Table 3b.)

CETF further draws attention to Table 5a of the 2017 Annual Survey which delineates the reasons why California residents without home Internet connectivity say their household does not have it. The main reason (34%) is cost -- that it is "too expensive/no computer or smart phone at home." The second next reason (22%) is "not interested", and the third and fourth reasons (12% each) is "too difficult to set up and learn" and "concerns about privacy/computer viruses". (2017 Annual Survey results at p. 12, Table 5a) The survey demonstrates that the main concern is cost, with lack of awareness, digital literacy and privacy as the next reasons. A 2018 Digital Divide survey that was more limited in scope confirmed that while progress was made in connecting low-income households to high speed Internet, cost and lack of awareness of more affordable subscriptions remain standing barriers to closing the Digital Divide.[10]

The 2017 Annual Survey also identified state regions where home broadband Internet connections were lower than the statewide average of 82% (both at home and outside the home). The areas with the lowest connectivity were the Inland Empire (76%) and Los Angeles County (77%). (See 2017 Annual Survey results at p. 20, Table 8e.) This survey result suggests a focus on these regions to understand why the connection rate is lower, and whether there should be affirmative efforts made by Applicants (e.g. Digital Literacy classes, free WiFi hotspots to the public, low cost affordable service plans, etc.) in these regions to improve broadband adoption among those who connect to the Internet via smart phone only.

With this California data in mind, CETF raises the issue of the potential negative impact of the market power of the combined New T-Mobile entity over rates, terms and conditions, and data caps for low-cost prepaid plans for both wireless voice and Internet access targeted to low-income and other disadvantaged communities (e.g. seniors, immigrants, minorities, non-English speaking, disabled community, etc.) who have low home connection rates to the Internet. CETF is concerned that the rates and terms of service provided on smartphone low-income plans of the combined New T-Mobile entity remain affordable and of similar service quality to normal retail plans. It is a fact that for low-income households, a wireless phone often represents their only voice service and their only access to the Internet via the phone's data service. CETF also suggests that focus should be put on whether Applicants' data caps on its wireless service plans are adequate for normal usage of popular applications. Low data caps

[10] http://www.cetfund.org/2018_Survey

can make the Internet difficult to access, and may prohibit a low-income household from using some applications that are data intensive. For example, a student may not be able to access an educational video that she is required to watch for her American history class. If there are additional charges for data overages, these extra charges can run up the wireless bill for a low-income household and cause financial hardship.

CETF further expresses its concern that the Application fails to provide the usual assurances that wireless service rates will remain the same for existing customers for a certain period of time. This may signal that New T-Mobile intends to raise wireless rate plans generally, which likely will have a negative impact on subscribers who live in low-income households and communities of color.

CETF specifically shares the concerns of TURN and Greenlining about the future of New T-Mobile's participation in the LifeLine program in California.[11] Joint Consumers point out that while Sprint and its subsidiaries Virgin Mobile (via its Assurance brand) and Boost are significant players in the California LifeLine program, T-Mobile has never been a part of the California LifeLine program. The Wireless Application only promises to continue Lifeline services by Virgin Mobile. Also, Joint Consumers report that T-Mobile has stated publicly in 2017 that it intends to eliminate its Lifeline programs in seven states. CETF shares the concerns of the Joint Consumers. Should the New T-Mobile decline to voluntarily participate in the LifeLine program, this may have a serious and negative impact on the availability of wireless providers in the LifeLine program, with negative impacts on the availability of affordable plans for low-income communities. These negative impacts on our most vulnerable residents should be considered in determining whether this merger is approved.

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[11] Joint Consumers Protest, at 18-19.

Further, CETF shares the concerns of TURN and Greenlining who have raised in their Joint Consumers Protest[12] that while Applicants promise significant economic investment in rural America with high quality mobile broadband and fixed wireless services, there are no California-specific infrastructure commitments. CETF recommends that this Commission require Applicants to specifically commit to mobile broadband and fixed wireless service infrastructure upgrade commitments for California, make them merger conditions, and monitor these commitments post-merger to ensure they are performed so that California consumers will see concrete benefits from this proposed merger.

In conclusion, CETF recommends that there should be verifiable and enforceable conditions placed on this merger if approved, that will: (1) ensure that low cost and affordable wireless service plans -- including LifeLine plans that include adequate data -- remain in place at existing rates for at least 3-5 years; (2) require New T-Mobile to offer low cost data plans that are adequate to access the Internet via a smartphone so that typical applications are accessible; (3) require Applicants to make California-specific commitments to infrastructure upgrades to increase data speeds in areas of the state with no, slow or unreliable wireless service, and that such commitments are verifiable; and (4) require Applicants to provide digital adoption outreach programs that encourage unconnected low-income or disadvantaged persons to access the Internet in areas where broadband adoption is low in the state. The latter may include provision of free public WiFi hotspots in low-income and disadvantaged communities that lack broadband access, and/or digital literacy education programs.

This concludes my testimony.

[12] Joint Consumers Protest, at 14-15.