Good Morning:

As mentioned in my previous e-mail, attached is another policy brief that CCTA would like considered as the Broadband Council develops the State Action Plan. Please let me know if you have any questions.

Thank you,

Elizabeth Bojorquez California Cable & Telecommunications Association



From: Elizabeth Bojorquez Sent: Friday, November 13, 2020 5:01 PM To: CABroadbandCouncil@state.ca.gov Cc: Carolyn McIntyre Subject: CCTA Policy Briefs

Good Afternoon:

Attached are two policy briefs prepared by the CA Cable and Telecommunications Association for consideration by the Broadband Council as the Broadband Action Plan is developed and finalized. We will be submitting one more brief to the Council next week.

Thank you,

Elizabeth Bojorquez California Cable & Telecommunications Association





November 17, 2020

Amy Tong Director, California Department of Technology 1325 J Street, Suite 1600 Sacramento, CA 95814

Re: Policy Brief -- Technology-Neutral Broadband Policy

Dear Director Tong:

The California Cable & Telecommunications Association ("CCTA") submits this policy brief to supplement its letter dated September 17, 2020, which extended the support of the cable industry in connection with the Governor's Executive Order N-73-20 on broadband ("EO"). This policy brief sets forth the rationale for California broadband policy to be technology neutral and refute the unsupported assertions that fiber-optic facilities are the superior technology for all communications infrastructure.

CCTA and its member companies, which provide high-speed broadband service in California and nationwide, strongly urge the California Broadband Council ("CBC") to endorse technology neutral policy to advance California's state broadband goals. CCTA respectfully disagrees with the assertion of the Electronic Frontier Foundation and other stakeholders that fiber-optic facilities are the superior technology for all communications infrastructure. This premise ignores the capacity of hybrid fiber-coaxial ("HFC") cable network architecture and other technologies in providing advanced broadband connectivity now and in the future. CCTA is concerned with an approach that is not technology neutral and does not acknowledge the reality of robust intermodal competition in the communications market with services meeting customers' needs delivered via a variety of technologies. Thus, CCTA offers several observations regarding fiber and other infrastructure deployment.

First, fiber-optic cable is not inherently a superior technology to cost-effectively provide broadband service to every customer or location. Cable operators in California are offering gigabit or higher download speeds, as well as many other speed options that meet or exceed customers' usage needs, over HFC plant that has already been deployed throughout much of the state and can be upgraded to meet future demands.¹ HFC, for example, combines optical

¹ See, e.g., NCTA – The Internet & Television Association, *Introducing 10G: The Next Great Leap for Broadband* (Jan. 7, 2019), <u>https://www.ncta.com/media/media-room/introducing-10g</u> (explaining the cable industry's 10G initiative to offer up to 10 Gbps broadband speeds in the coming years over networks that Invested • Innovative • Competitive •

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fiber and coaxial cable and is already delivering 1 Gbps service to residential customers. Cable providers have been working to deploy deploy revolutionary 10 gigabit networks within their footprints.² This "10G" broadband initiative will be built into the existing HFC platform. Successful 10G field tests in residential settings have already occurred, and CableLabs has released specifications for DOCSIS 4.0, a breakthrough technical standard, to bring 10G symmetrical speed capabilities to consumers. In addition to providing 10G at faster speeds, DOCSIS 4.0 will provide a customer experience with lower latency, enhanced reliability, and better security in a manner that is scalable. This 10G evolution by cable providers will be built on projected nationwide industry investments over the next seven years that are expected to total over \$80 billion in direct network investment and over \$45 billion invested in intermediate goods and services.³ CCTA also notes that a fiber-only perspective ignores that certain wireless and satellite services may be the only reasonable and feasible technologies to connect customers in some remote and mountainous areas.

Second, fiber infrastructure frequently is the most expensive technology to deploy. For example, a report by the California Public Utilities Commission ("CPUC") on California Advanced Services Fund ("CASF") grants illustrates that fiber-to-the-premises projects have the highest cost-per-household compared to other technologies—up to \$23,000 per household compared with less than \$2,000 per household for other technologies.⁴ An unjustified requirement to deploy fiber in all instances would rapidly deplete finite infrastructure capital (or public broadband funds) that could be used to connect more Californians with more cost-effective, scalable technologies that enable service at speeds demonstrated to meet consumers' functional needs.

Finally, neither the CPUC, nor any other state agency, has jurisdiction to dictate the network architecture or technology that communications service providers use to deliver service to their customers. The ratemaking authority that the CPUC has for electric, gas, and water utilities, which includes review of IOU capital investments in a general rate case, does not apply to most competitive communications service providers, including cable-broadband providers. In addition, for cable providers specifically, any attempt to require construction of fiber infrastructure versus other technologies would independently be preempted by federal law, which prohibits states and franchising authorities from regulating cable system transmission

already pass 85 percent of U.S. homes, using a combination of technologies that currently exist alongside the ongoing advancements of new hardware, software, and technical standards).

² NCTA, Introducing 10G: The Next Great Leap for Broadband.

³ See NCTA – The Internet & Television Association, 10G Platform, <u>www.10gplatform.com</u>; Cable Labs, 10G Platform: What is 10G?, <u>www.cablelabs.com/10g</u>.

⁴ See CPUC Staff Report, "Supporting Materials for May 25 Communications Division Staff Workshop" (May 17, 2017) at 75 (listing CASF infrastructure grant projects with cost-per-household by technology), available at http://ftp.cpuc.ca.gov/Telco/CASF/Reports%20and%20Audits/CASF%20Workshop%20May%2025th.pdf.

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technology.⁵ Moreover, the Legislature has expressed California's technology neutral policy in state law.⁶

For all of these reasons, CCTA urges the CBC to adopt technology neutral policies in the Statewide Broadband Action Plan.

Thank you for your consideration.

Sincerely,

Carolyn McIntyre

CAROLYN MCINTYRE President

⁵ 1996 amendments to Section 624(e) of the Cable Act provide that "[n]o State or franchising authority may prohibit, condition, or restrict a cable system's use of any type of subscriber equipment or any transmission technology." 47 U.S.C. § 544(e). Legislative history confirms that Congress intended to "prohibit[] States or franchising authorities from regulating in the areas of technical standards, customer equipment, and transmission technologies." H.R. Rep. No. 104-204, at 110 (1996), as reprinted in 1996 U.S.C.C.A.N. 10, 77-78. In interpreting this provision, the FCC has noted that transmission technology is not a defined term in the Communications Act but "has been frequently used to include both the transmission medium, i.e. microwave, satellite, coaxial cable, twisted pair copper telephone lines, and fiber optic systems, and the specific modulation or communications format, i.e. analog or digital communications." Implementation of Cable Act Reform Provisions of the Telecommunications Act of 1996, Report and Order, 14 FCC Rcd. 5296 ¶ 141 (1999). Therefore, the FCC made clear that "local authorities may not control whether a cable operator uses digital or analog transmissions nor determine whether its transmission plant is composed of coaxial cable, fiber optic cable, or microwave radio facilities." Id. (emphasis added) see also MediaOne Grp., Inc. v. Cty. of Henrico, 97 F. Supp. 2d 712 (E.D. Va. 2000) (holding that Section 624(e) preempted a requirement that a cable operator provide other ISPs with open access to its cable modem platform, because compliance would require the cable operator "to make technological modifications to its current system"). See also, Digital Infrastructure and Video Competition Act ("DIVCA"), Cal. P.U. Code §5830(a), which includes a broad definition of broadband and does require a provider to use a certain technology.

⁶ See, e.g., Public Utilities Code Section 281(f)(1) (CASF grants shall be awarded on a technology-neutral basis).