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

Order Instituting Rulemaking )  
Regarding Broadband Infrastructure ) Rulemaking No. 20-09-001  
Deployment and to Support Service )  
Providers in the State of California.)

**CALIFORNIA EMERGING TECHNOLOGY FUND  
REPLY COMMENTS ON RULING ORDERING ADDITIONAL COMMENTS  
ON MIDDLE-MILE DATA COLLECTION**

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Order Instituting Rulemaking )  
Regarding Broadband Infrastructure ) Rulemaking No. 20-09-001  
Deployment and to Support Service )  
Providers in the State of California. )

Pursuant to Rule 6.2 of the Commission’s Rules of Practice and Procedure and the schedule established in the Assigned ALJ’s E-mail Ruling Ordering Additional Comments as Part of the Middle-Mile Data Collection, dated September 9, 2021 (“Ruling”), the California Emerging Technology Fund (“CETF”) hereby files Reply Comments on the Ruling relating to recommended locations for a statewide open-access middle-mile broadband network (“Network”). A non-profit organization formed by this Commission with a mission to close the Digital Divide in California, CETF filed Opening Comments on October 1, 2021. as a formal party to this rulemaking.

At the outset, there was strong support for the Commission focusing its primary efforts on identifying middle-mile locations in its report to the California Department of Technology (CDT) that will bring broadband service to unserved and underserved communities in the State, and not focusing on ancillary issues that are not directly within the scope of Senate Bill (SB) 156.<sup>1</sup> Given the short time frame for the federal deadlines to encumber these funds,<sup>2</sup> it is

<sup>1</sup> Comments of the National Diversity Council, Oct. 1, 2021 (NDC Comments), at pp. 1-3; Opening Comments of the Public Advocates Office on Assigned ALJ’s Ruling Ordering Additional Comments as Part of Middle Mile Data Collection, Oct. 1, 2021 (Cal Advocates), at p. 6; Comments of the California Cable and Telecommunications Association (CCTA Comments), Oct. 1, 2021, at pp. 1-2; Comments of Calaveras Telephone Company, Cal-Ore Telephone Company, Ducor Telephone Company, et al., Oct. 1, 2021 (“Small LECs”), at p. 1; Comments of Frontier California Inc. et al. on ALJ’s Ruling Issued on Sept. 9, 2021, Oct. 1, 2021 (“Frontier Comments”), at p.1; Comments of USTelecom – The Broadband Association of the Email Ruling Ordering Additional Comments as Part of Middle-Mile Data Collection, Oct. 1, 2021 (US Telecom Comments), at pp. 1-2; Comments of the Advanced Communications Law & Policy Institute at New York Law School to the ALJ’s Email Ruling Issued September 9, 2021, Oct. 1, 2021 (ACLP Comments), at pp. 3, 24-25.

<sup>2</sup> Opening Comments of AT&T on E-mail Ruling Ordering Additional Comments as Part of the Middle-

imperative that the Commission, CDT and the Third Party Administrator (TPA) stay on task to take full advantage of this significant federal funding for an important statewide open-access middle-mile network to reach unserved/underserved communities. In order to maximize this federal broadband funding, CETF recommends the Commission not hang too many ornaments and lights on the holiday tree.

1. **Open-Access: As described in more detail in the Order Instituting Rulemaking that initiated this proceeding, the Commission has regulatory authority [over] telecommunications service providers.**
  - **How can the Commission use its regulatory authority to assure durable and enforceable open-access and affordability requirements in perpetuity?**

A large number of Internet Service Providers (“ISPs”) object to the open-access requirement being imposed on the Statewide Middle-Mile Network (“Network”), arguing mainly that it is beyond scope of the Commission’s jurisdiction, such authority is not expressly granted to the Commission under SB156, and the middle-mile services are “Information Services” under federal telecommunications law and may not be regulated by a State agency, through common carrier regulatory mechanisms like tariffs, rate regulation or open-access obligations.<sup>3</sup>

CETF disagrees. The Commission does have authority to impose open-access requirements as a condition of a government grant to an entity over which is has regulatory authority. In the past, state and federal regulatory commissions have mandated open-access as a condition where an Internet service provider has sought grants of government funds, such as in the federal high-cost funds, federal grants like the Broadband Technologies Opportunity Program under the American Recovery and Reinvestment Act, the California High-Cost Funds, and the California Advanced Services Fund (CASF). In that situation, an open-access requirement has been imposed as a condition of the grant. CETF supports open-access requirements on middle-mile

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Mile Data Collection, Oct. 1, 2021 (AT&T Comments), at p.2.

<sup>3</sup> See, for example, AT&T Comments, at pp. 2-8; CCTA Comments, at p. 4 (open-access authority granted to CDT’s Office and the TPA, not the CPUC); Comcast Comments, at pp. 3-6; Frontier California Comments, at pp. 1-2; Small LECs Comments, at p. 2; Response of CellCo Partnership and MCImetro Access Transmission Services to ALJ’s E-mail Ruling Ordering Additional Comments as Part of Middle-Mile Data Collection, Oct. 1, 2021 (“Verizon Comments”), at pp. 1-2.

facilities built with government grants but does not favor open-access requirements on last-mile facilities.

- **Should the Commission adopt a tariffing requirement for open-access networks?**

Various ISPs object to a tariffing requirement for the middle-mile network.<sup>4</sup> In contrast, a competitive local exchange carrier (CLEC), Sonic, requests that the Commission require that open-access networks make all services available on a non-discriminatory basis with the same terms, conditions and pricing for all parties. Sonic and other CLECs use ILEC interoffice dark fiber transport facilities to serve substantial numbers of end users. Without that dark fiber transport that can be configured by each CLEC to meet its competitive needs, Sonic states that “CLECs would be unable to continue to provide competitive services to Californians, and competition will be gravely injured.”<sup>5</sup> Similarly, Cal Advocates urges tariffing requirements for publicly funded and partially funded open access networks.<sup>6</sup>

CETF does not recommend a tariffing requirement for open-access networks as the optimal approach, given tariffs arise from a rigid “command-and-control” common carrier regulatory mindset. A better, less regulatory approach would be for CDT’s Office to require the TPA publish the rates and terms and conditions on its website so that there is transparency and availability as to the Network’s rates, rentals, charges, classifications, special rules, and terms and conditions, similar to the information presented in typical telecommunications tariffs and similar to the way the California Department of

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<sup>4</sup> See for example, AT&T Comments, at p. 2-6 (SB156 does not authorize the CPUC to issue regulations or tariffs for the middle-mile network and is beyond the scope of the issuing a Staff Report. CPUC does not have jurisdiction over broadband services); Comcast Comments, at pp. 3-6 (Tariffing, price regulation and wholesale access/unbundling are classic forms of common carrier regulation which a state may not lawfully impose in broadband as an interstate information service); Frontier Comments, at pp. 1-2 (CPUC already has existing governing rules as to public-funded middle-mile projects via the CASF program; CPUC should rely on market forces to ensure middle-mile facilities are available to accommodate broadband service offerings and should not attempt a tariffing requirement); Small LECs Comments, at p. 2 (CPUC should not tariff middle-mile fiber networks. Commercial negotiation of individual case arrangements should continue to be the basis upon which ISPs access these networks.)

<sup>5</sup> Opening Comments of Sonic Telecom, LLC on Additional “Middle-Mile Issues,” Oct. 1, 2021 (Sonic Comments), at p. 4.

<sup>6</sup> Cal Advocates Comments, at p. 4 (relying on the General Order 96-B definition of “tariffs”).

Technology publishes the CalNet contract from which all state agencies purchase telecommunications services.<sup>7</sup>

If another goal is to bring affordable middle-mile rates, the Commission should instead go through the CETF-proposed RFP process described in its Opening Comments on any given middle-mile segment where there is existing middle-mile infrastructure. If an incumbent claims that a proposed State Route is served by existing middle-mile, then hard questions should be asked about the availability, pricing, and capacity for last-mile providers. If an existing middle-mile segment lacks available dark fiber or is priced unreasonably, then it is not viable for other last-mile ISPs to use the segment to reach unserved households.

- **In October 2020, the Federal Communications Commission (FCC) eliminated a number of network unbundling and resale requirements placed on Incumbent Local Exchange Carriers, including requirements for DS1 and DS3 loops, and dark fiber transport provisioned from wire centers within a half-mile of competitive fiber networks. (See *In the Matter of Modernizing Unbundling and Resale Requirements in an Era of Next-Generation Networks and Services*, WC Docket No. 19-308, FCC 20-152) How will this impact Competitive Local Exchange Carriers in California that currently utilize these services to provide telecommunications services, including last-mile broadband Internet access service?**

The Commission inquired as to the impact of the FCC Order ending ILEC requirements for resale of unbundled network elements under 47 United States Code Section 251(c)(3)-(4) of the 1996 Telecom Act and its potential impact on Broadband Internet Access Services to consumers in unserved and underserved areas. In the FCC’s 2020 Report and Order on Unbundling and Resale Requirements in WC Docket 19-308 (“Unbundling Order”), the FCC eliminated unbundling requirements, subject to a fairly long transition period, for enterprise grade DS1 and DS3 loops where there is evidence of actual and planned competition, for broadband-capable DS0 loops in the most densely populated areas, and for voice-grade narrowband loops nationwide. Notably, the FCC did “preserve unbundling requirements for DS0 loops in less densely populated areas and DS1 and DS3 loops in areas without sufficient evidence of competition.” The FCC also eliminated unbundled dark fiber transport provisioned from wire centers within a half-mile

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<sup>7</sup> <https://cdt.ca.gov/services/calnet-services/>

of competitive fiber networks but provided an eight-year transition period for existing circuits so as to avoid stranding investment and last-mile deployment by competitive LECS that may harm consumers.<sup>8</sup> Thus, for a short period of time (three to eight years), unbundled network elements serving rural and less densely populated areas will be available to CLECs, and CLECs will have time to make alternative arrangements for these loops and transport.

While the FCC did not end unbundling requirements in less densely-populated areas or in areas that do not show sufficient evidence of competition in its Unbundling Order, these factual determinations of competition are based on the current FCC broadband maps which are acknowledged to overstate broadband availability, and, pursuant to the Broadband DATA Act, are being replaced by a location-level collection for fixed broadband and the use of a standardized propagation model parameters for mobile and fixed wireless broadband.<sup>9</sup>

While the Unbundling Order transition period provides a lengthy transition period for CLECs to build their own middle mile networks or find alternatives, the FCC's Unbundling Order may have significant negative impacts on CLECs, as reported by Sonic in its comments.<sup>10</sup> CLECs may not be able to rely on availability of these facilities through mandated regulatory resale from incumbent local exchange carrier ("ILEC" such as AT&T and Frontier) in the future. If the ILEC declines to resell a certain middle-mile service for any reason, then the CLEC must seek alternative middle-mile providers, if any, or build that middle-mile facility itself. This development means that the new Statewide Middle-Mile Network may play a more prominent role to fill in any middle-mile gaps that may appear in the future, should that middle-mile facility be necessary to reach unserved or underserved households. As a result, while CETF recommends that the Network be allowed to maintain an operating reserve fund, in order to cover unexpected expenses

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<sup>8</sup> Report and Order, In the Matter of Modernizing Unbundling and Resale Requirements in an Era of Next-Generation Networks and Services, FCC 20-152, released Oct. 28, 2020 ("Unbundling Order"), at para. 3, at p. 2.

<sup>9</sup> In two FCC Report and Orders issued thus far in July 2020 and January 2021, the FCC is working to develop the framework and elements of the new data collection, along with mapping platforms <https://www.fcc.gov/document/improving-broadband-mapping-data-february-open-meeting-presentation>

<sup>10</sup> Sonic Comments, at pp. 4-6.

caused by disasters or other emergencies, but also to construct new middle-mile facilities should the FCC's Unbundling Order create new middle-mile transport needs in areas that will become unserved or underserved as a result.

**2. Additional Factors to Consider: What additional criteria should the Staff Report take into consideration and to what extent, including, but not limited to:**

- **Affordability**
- **Redlining**
- **Route redundancy**
- **Competition**
- **Hardening, undergrounding, deployment in high fire threat areas**
- **Cell coverage, and**
- **Labor and economic development benefits.**

Many ISPs oppose considering these additional factors, or if so, urging their consideration only in light of the Commission's duties under SB156.<sup>11</sup> Sonic urges consideration of affordability, route redundancy and competition in its comments.<sup>12</sup> Many consumers and local government groups disagree, making the case for various factors.<sup>13</sup>

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<sup>11</sup> AT&T Comments, at pp. 8-12 (urging rejection of all of these factors); CCTA Comments, at p. 6 (Section 11549.54 does not require or authorize the Commission to consider "additional criteria" outside these statutory directives when preparing the staff report"); Comcast Comments, at pp. 6-8 (look at factors in light of CPUC's specific statutory mandates under SB156, for example to identify areas that lack affordable middle-mile facilities); Frontier Comments, at pp. 2-3 (additional criteria go beyond CPUC mandate in SB156); Verizon Comments, at pp. 2-3 (only focus on factors that relate to route selection, such as poor cell coverage, hardening and undergrounding, but not affordability).

<sup>12</sup> Sonic Comments, at pp. 6-7.

<sup>13</sup> California Community Foundation Comments on ALJ's Ruling Ordering Additional Comments as Part of Middle-Mile Data Collection, Oct. 1, 2021 (CCF Comments), at pp. 2-5 (include competition, redlining, affordability and areas of greatest need as issues for consideration); LAEDC Comments, at pp. 5-6 (affordability should include household median income, adjusted cost of living, and poverty rates as factors; redlining, route redundancy, competition, labor and economic development benefits and network capacity should be factors); NDC Comments, at pp. 4-8 (include affordability, route redundancy, competition, hardening, undergrounding, deployment in high threat areas, and sufficient capacity); Cal Advocates, at pp. 6-9 (put focus on prioritizing marginalized communities; on redlining, look at disparate outcomes not discriminatory intent; require low income broadband plans \$10-\$15/ month; consider factors like route redundancy, hardening and cell coverage); Comments of Utility Consumers' Action Network (UCAN) on ALJ Glegola's Email Ruling Requesting Additional Comments on Middle-Mile Data Collection, Oct. 1, 2021 (UCAN Comments), at pp. 2-3 (consider affordability and redlining, labor

CETF continues to recommend that these additional factors be considered but agrees that the focus should be on how the factor impacts the Network and duties of the various parties as to SB156.

CETF agrees with parties like Sonic<sup>14</sup> and LAEDC<sup>15</sup> on the importance of “route redundancy” or “network redundancy” which CETF defines as “the process of adding additional instances of network devices and lines of communications to help ensure network availability and decrease the risk of failure along the critical data path.” A goal for all Middle-Mile Network services should be reliable telecommunications and data services. CETF agrees with Cal Advocates that route redundancy to unserved and marginalized communities is important for reliability during emergencies, like wildfires.<sup>16</sup>

On cellular coverage, CETF agrees with Verizon and Cal Advocates that poor cellular coverage may coincide with areas not well served by other broadband providers.<sup>17</sup> In practice, areas that are unserved by other broadband providers are likely to coincide with areas not well served by cellular wireless signals. Poor cellular coverage should be a factor that the TPA may consider to inform it of routes for potential middle-mile segments.

AT&T observes that SB156 does not specify that wireless facilities can be considered as part of the existing network structure. AT&T points to the Commission’s definition of “Middle Mile” to mean “high-capacity fiber-optic cables that traverse long distances (e.g., 10s and 100s of miles) to connect communities to the Internet backbone.”<sup>18</sup> As a result, AT&T believes the Commission’s approach excludes wireless networks in its evaluation to build the state-owned network. *Id.* CETF does not agree; it

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and economic development and community involvement); Additional Comments of UNITE-LA, Inc, as Part of Middle-Mile Data Collection, Oct. 1, 2021, (UNITE-LA), at p. 4 (consider unemployment rates, low education rates, high poverty, high levels of public benefits, high Internet adoption through cellphones).

<sup>14</sup> Sonic Comments, at p. 10.

<sup>15</sup> LAEDC Comments, at pp. 8-9.

<sup>16</sup> Cal Advocates, at p. 9.

<sup>17</sup> Verizon Comments, at p. 3. Cal Advocates, at p. 9.

<sup>18</sup> AT&T Comments, at p. 11.



continues to advocate for technology neutrality in approach, as different situations may require different solutions, including microwave and fixed wireless applications, particularly in very remote or mountainous areas of the state.

LAEDC supported the factor of labor and economic development benefits, noting broadband availability has been proven to be an economic multiplier and can help encourage additional investments and job creation.<sup>19</sup> CETF strongly concurs.

CETF commends SDG&E on its comments relating to where communications companies can partner with electric utilities during the IOUs' fire hardening efforts where possible. SDG&E suggests a single point of contact at the communications companies to ensure quick decision-making so that communications companies with facilities on overhead electric poles could join a joint trench with the IOU for undergrounded facilities. This would help fire harden utility and communications infrastructure. SDG&E requests a balancing account for cost recovery, funding for all parties, and electric ratepayer protection from cross subsidies.<sup>20</sup> CETF agrees that these are issues that should be taken up immediately by the Commission and resolved as quickly as possible as a high priority item. Given PG&E has announced a long-term project to underground 10,000 miles of its electric facilities in high fire threat areas,<sup>21</sup> the regulatory issues raised by SDG&E should be resolved in a timely manner.

CETF agrees with Cal Advocates who supports hardening of the Network to improve reliability of communications services during emergencies like wildfires.<sup>22</sup> On a related point, CETF continues to recommend adding "reliability" as a factor. CETF defines "reliability" as an attribute of a computer network that it will consistently perform according to its specifications.

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<sup>19</sup> LAEDC Comments, at pp. 9-10.

<sup>20</sup> SDG&E Comments, at pp. 2-3.

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[https://www.pge.com/en/about/newsroom/newsdetails/index.page?title=20210721\\_pge\\_announces\\_major\\_new\\_electric\\_infrastructure\\_safety\\_initiative\\_to\\_protect\\_communities\\_from\\_wildfire\\_threat\\_undergrounding\\_10000\\_miles\\_of\\_power\\_lines\\_in\\_highest\\_fire-threat\\_areas](https://www.pge.com/en/about/newsroom/newsdetails/index.page?title=20210721_pge_announces_major_new_electric_infrastructure_safety_initiative_to_protect_communities_from_wildfire_threat_undergrounding_10000_miles_of_power_lines_in_highest_fire-threat_areas)

<sup>22</sup> Cal Advocates, at p. 9.

CETF would also add a “quality of service” factor which it defines as a set of technologies that work on a network to guarantee its ability to dependably run high-priority applications and traffic under limited network capacity. Measurements should include bandwidth (throughput), latency (delay), jitter (variance in latency), and error rates. These additional factors of reliability and quality of service will enhance the proposed Middle-Mile Network.

**3. Middle-Mile Network Services for ISPs: The statute mandates that the State of California take into consideration various aspects that will increase the attractiveness and usefulness of the statewide open-access middle-mile broadband network for commercial internet service providers.**

- **What specific locations, routes, interconnection points, regeneration points, and tie-ins should the Commission consider in order to increase the attractiveness and usefulness of the statewide open-access middle-mile broadband network for commercial internet service providers?**
- **How can existing interconnection points or the creation of new interconnection points improve access for communities?**
- **What technical performance characteristics will increase the attractiveness and usefulness of the statewide open-access middle-mile broadband network for commercial internet service providers?**
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- **What technical performance characteristics will increase the attractiveness and usefulness of the statewide open-access middle-mile broadband network for commercial internet service providers?**
- **What network design and other design, technical, business, and operational considerations will increase the attractiveness and usefulness of the statewide open-access middle-mile broadband network for commercial Internet service providers?**
- **How can existing interconnection points or the creation of new interconnection points improve access for communities?**
- **What technical performance characteristics will increase the attractiveness and usefulness of the statewide open-access middle-mile broadband network for commercial internet service providers?**
- **What network design and other design, technical, business, and operational considerations will increase the attractiveness and usefulness of the statewide open-access middle-mile broadband network for commercial Internet service providers?**
- **What services should the network provide commercial providers (e.g., dark fiber, lit fiber, colocation, wireless backhaul, etc.)?**
- **If the network offers dark fiber, how many strands of dark fiber should the network make available on each route? What should the lease terms be?**

A tremendous amount of information has been provided to the Commission by various Internet service providers, localities, Tribal Nations, Regional Broadband Consortia, economic development groups, and other stakeholders on locations, routes, interconnection points (such as central offices or carrier hotels), regeneration points, and more. CETF recommends the information and data be analyzed, collated and presented to the CDT and the TPA with a focus on locations for a Middle-Mile Network necessary to serve current unserved and underserved communities, with emphasis on High Poverty and Tribal Lands. This information -- plus reasonable rates and terms and conditions for middle-mile services by the Network -- will ensure attractiveness to ISPs to build out last-mile facilities, with the additional incentive of a CASF grant or other federal broadband infrastructure funding, such as the Rural Digital Opportunity Fund. CETF provided numerous existing sources of information in its Opening Comments and urges the Commission to include those sources in determining unserved / underserved communities and identifying near term transportation and other projects (such as IOU wildfire hardening projects) where fiber conduit may be laid in a cost-effective manner in existing State transportation or utility projects.

Southern California Edison (SCE) recommended a commonsense process by which the Commission first identifies unserved and underserved communities, then identifies the Tiers 2 and 3 Internet Exchange Points (IEPs) that are closest to those rural and remote communities. SCE then suggests the CPUC issue a Request for Information (RFI) to determine if there is capacity on any existing networks that can connect these Tier 2 and 3 IEPs to the communities, and then use the highway routes from the ArcGIS map to fill in the gaps where the State needs new middle-mile infrastructure.<sup>23</sup> These gaps would be recommended to the CDT and TPA as Network routes. CETF suggested in its opening comments many sources to identify the unserved and underserved communities. A missing piece in SCE's process is to ensure any existing capacity on existing networks is fairly priced and available for the foreseeable future. Further, there needs to be identification of last-mile providers that are willing to construct the last-mile unserved/underserved communities, likely with the incentive of a CASF program grant,

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<sup>23</sup> SCE Comments, at pp. 4-5.

to ensure a project is not “a Middle-Mile To Nowhere.” CETF recommends ongoing and frequent dialogue between the Commission, CDT, the TPA and a broad group of the Internet service providers to ensure there is always a last-mile provider ready to build to rural and remote unserved communities via a Middle-Mile Network segment.

#### 4. Middle Mile Network Services for Consumers

- **The middle mile network must prioritize connections to anchor institutions that lack sufficient high-bandwidth connections. Should the statewide middle mile network provide direct service to anchor institutions?**
- **Should the middle-mile network directly provide broadband Internet access service, voice service, etc.**

SB156 is crystal clear that first, the Commission and CDT must prioritize service by the Network to last-mile unserved communities -- which mostly are located in rural, remote and Tribal Lands. They may also be located in high-poverty urban neighborhoods. The primary purpose of the Statewide Middle-Mile Network is to enable broadband service to unserved locations; losing focus on this primary purpose will waste resources and cause the state to end up with the “Middle-Mile To Nowhere.” *Only after there is a middle-mile route to an unserved community, along the “path of deployment” of such middle-mile project, all unserved anchor institutions should be connected.* The order is important. The primary goal of SB156 is to connect unserved households. As a secondary benefit, anchor institutions *that lack broadband service* along the path may be served also, which is spelled out in the statute. Most ISPs and their associations agreed with this statement, including CCTA, AT&T, Comcast, Frontier, Small LECs, and Sonic.<sup>24</sup> CCBC disagrees, stating the Network should not provide any direct service to anchor institutions but should try and find local agencies or private providers in such an instance.<sup>25</sup> CETF agrees but if no local provider or agency is found, there should be no restriction on the Network providing direct broadband service to the unserved anchor institute that is on the pathway to an unserved community.

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<sup>24</sup> AT&T Comments, at p. 13-14; CCTA Comments, at pp. 8-11; Comcast Comments, at pp. 9-10; Frontier Comments, at pp. 3-4; Small LECs Comments, at pp. 2-3; and Sonic Comments, at pp. 11-12.

<sup>25</sup> CCBC Comments, at pp. 5-6.

Cal Advocates is comfortable with the Network providing direct broadband service “at cost” to unserved anchor institutions.<sup>26</sup> On this Cal Advocates’ proposal, CETF would require that these anchor institutions be along the path of deployment to the unserved/underserved communities per the requirement of SB156. CETF would not mandate that the anchor broadband service is provided “at cost;” the Network should be allowed to charge a reasonable mark-up from actual cost. CETF disagrees with comments by Cal Advocates that may suggest the Network may provide services directly to smaller customers.<sup>27</sup> With the exception of unserved anchor institutions along the path of deployment to the unserved/underserved communities, the TPA should not provide Network services directly to smaller customers (last mile service). The Statewide Middle-Mile Network should not provide broadband Internet access service or voice service directly because it will disrupt the competitive Internet market mandated by the federal and state government.

- **The Commission’s 72-hour backup power requirements apply to all facilities-based wireline and wireless communications service providers that provide service in Tier 2 and Tier 3 High Fire Threat Districts. Should the Commission consider additional requirements?**

CETF join with commenters like Cal Advocates, Center for Accessible Technology (CforAT) and AT&T who support a 72-hour backup power requirement for the Network in Tier 2 and 3 High Fire Threat Districts.<sup>28</sup> Any back-up power requirements for facilities-based wireline or wireless communications service providers should be equally applied to the Network parts that are located in Tier 2 and Tier 2 High Fire Threat Districts for increased reliability. These back-up power requirements greatly assist in keeping communications service up in rolling blackouts (de-energization events), power outages, and emergencies. Thus, CETF disagrees with Frontier

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<sup>26</sup> Cal Advocates Comments, at pp. 9-10.

<sup>27</sup> Cal Advocates Comments, at pp. 9-10.

<sup>28</sup> Cal Advocates, at pp. 10-11; Comments of the Center for Accessible Technology on the Assigned Commissioner’s September 9, 2021, Ruling on Phase III Issues, Oct. 1, 2021 (CforAT Comments), at p. 10; AT&T Comments, at p. 13-14;

Communications, who discourages such requirements on fiber networks “for several years” recommending only Commission study.<sup>29</sup>

Small LECs, Sonic and SDG&E do not favor an additional requirement be placed on the Middle-Mile Network for 72-hour back up power.<sup>30</sup> SCE suggests any additional requirements for the 72-hour backup should be addressed in R.18-03-011.<sup>31</sup> CETF agrees that additional requirements should be addressed elsewhere in a docket focusing on back up power requirements from a technical perspective.

## **5. Last-Mile Providers: The middle-mile network must enable last-mile connections.**

- **How can the middle-mile network enable last mile connections in unserved, underserved and served areas of the state?**

On this question, SCE recommended a commonsense process by which the Commission first identifies unserved and underserved communities, then identifies the Tiers 2 and 3 Internet Exchange Points (IEPs) that are closest to those rural and remote communities. SCE then suggests the CPUC issue a Request for Information (RFI) to determine if there is capacity on any existing networks that can connect these Tier 2 and 3 IEPs to the communities, and then use the highway routes from the ArcGIS map to fill in the gaps where the State needs new middle-mile infrastructure.<sup>32</sup> CETF generally concurs with the thrust of the SCE proposal, and trusts that CENIC, an experienced network operator, will be able to design the Network effectively to CPUC-identified unserved and underserved communities. CETF recommends that the last-mile provider have as a condition of its CASF or other broadband infrastructure grant, an obligation to build to all unserved locations, and that the grant be adequate to ensure this is feasible.

- **How can the middle mile network assist the operation and development of public broadband networks? Are there opportunities to aggregate network monitoring, provide a managed voice service, security services, call center, and other back-office services among public networks?**

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<sup>29</sup> Frontier Comments, at pp. 3-4.

<sup>30</sup> Small LECs Comments, at pp. 2-3; Sonic Comments, at pp. 11-12; SDG&E Comments, at pp. 3-4 (existing resiliency plans area already in place for outages by communications providers).

<sup>31</sup> SCE Comments, at p. 6.

<sup>32</sup> SCE Comments, at pp. 4-5.

Major Internet service providers argue that this question on public broadband networks goes too far afield from the pressing SB156 task at hand for the Commission.<sup>33</sup> Other parties have expressed that the mere existence of an Open Access Middle-Mile Network providing dark fiber “at-cost” or at affordable rates will allow new public broadband networks to arise, owned by local governments or Tribal Nations.<sup>34</sup> CETF recommends that the Commission first focus on its statutory duty to identify unserved and underserved communities first. This type of assistance to aid development of a public broadband network sought by a specific locality may be best dealt with by a CASF grant to the public entity for Local and Tribal Technical Assistance Program.

**6. Other States: Numerous other states operate open-access networks, including but not limited to Illinois, Kentucky, Massachusetts, Michigan, Missouri, North Carolina, Ohio, Virginia, and Washington.**

- **Are there any successes or pitfalls the State of California should take into consideration from other statewide open-access networks or even from other countries?**

CETF declines to comment on the other state network projects discussed in various comments, on grounds that each state project is unique, each state has different challenges in terms of infrastructure, each state has different political environments, and most of these other state projects are not like what is being built in California per SB156. CETF instead urges the Commission to faithfully perform its prescribed role in SB156 and allow the CDT and TPA to design and operate the Open-Access Middle-Mile Network without overly restrictive regulatory oversight that is more common carrier based, than information service based.

- **Other Issues Not Covered - Are there any issues the State of California should take into consideration as it develops the statewide middle mile network?**

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<sup>33</sup> AT&T Comments, at pp. 14-15 (The question regarding how the middle mile network can assist public broadband networks with activities seeks information that is not related to SB156); Comcast Comments, at pp. 10-12 (a middle mile network designed around the unique needs and desires of public network operators would not comply with SB156 requirements); Frontier Comments, at p. 4 (The operation and maintenance of the middle mile network should not be expanded to include public broadband networks.)

<sup>34</sup> See for example, Cal Advocates, at p. 11-12; EFF Comments, at pp. 8-9; LAEDC Comments, at p. 11; and UCAN Comments, at p. 4.

CENIC comments that issues of operating expenditures, network management plans, and technology refresh needs are critical components for the ongoing success of a Middle-Mile Network and proposes to discuss them in roundtables with the TPA.<sup>35</sup> CETF concurs. CETF recommends that the Statewide Open-Access, Middle-Mile Network be operated as a nonprofit organization, charging rates that are cost-based, but not “at cost” as requested by Cal Advocates.

WHEREFORE, CETF respectfully requests that the Commission consider its reply comments herein when it provides the Staff Report to the California Department of Technology.

Respectfully submitted,

*/s/ Sunne Wright McPeak*

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<sup>35</sup> CENIC Comments, at p. 7.