BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Regarding Broadband Infrastructure Deployment and to Support Service Providers in the State of California.

Rulemaking 20-09-001

COMMENTS OF CENTURYLINK COMMUNICATIONS, LLC (U-5335-C), LEVEL 3 TELECOM OF CALIFORNIA, LP (U-5358-C) AND LEVEL 3 COMMUNICATIONS, LLC (U-5941-C) ON ASSIGNED COMMISSIONER'S RULING

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Pursuant to Rule 14.3 of the Commission's Rules of Practice and Procedure, CenturyLink Communications, LLC (U-5335-C); Level 3 Telecom of California, LP (U-5358-C) and Level 3 Communications, LLC (U-5941-C)¹ (collectively "Lumen") hereby provide comments² on Administrative Law Judge Glegola's September 10, 2021 email ruling requesting comments on additional issues raised in party comments or otherwise related to the statewide open access middle-mile fiber network authorized in Senate Bill (SB) 156.

Lumen looks forward to working with the Commission, the Office of Broadband and Digital Literacy and Corporation for Education Network Initiatives in California (CENIC) to develop plans for the open-access network that ensure the benefits are realized by all underserved Californians regardless of whether they are located in rural, urban or tribal areas.

I. RESPONSES TO ADMINISTRATIVE LAW JUDGE QUESTIONS

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

Response: Lumen views this as a question to be answered by prospective middle mile network users. Lumen is likely to be a provider, rather than a user.

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

Response: No, the Commission should allow the marketplace

¹ CenturyLink Communications, Level 3 Telecom, Level 3 Communications are all owned by CenturyLink, Inc. but continue to operate as separate subsidiaries.

² Lumen offers these comments pursuant to a pending Motion for Party Status filed on September, 10, 2021.

to be used as a dynamic proxy for reasonable pricing.

c. In October 2020, the Federal Communications Commission (FCC) eliminated a number of network unbundling and resale requirements placed on Incumbent Local Exchange Carriers, included 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?

Response: Lumen primarily operates as a CLEC in California and does not rely upon unbundling, resale, or dark fiber made available per 47 U.S.C 251 terms and conditions. Therefore, the FCC's order will likely not affect Lumen's ability to provide telecommunications services.

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

Response: Market pricing and cost of construction should be the basis for assessing affordability. Pricing that is affordable in one market may not be considered affordable in another.

b. Redlining:

Response: Determination of locations for the open-access network should focus on unserved and underserved areas rather than attempting to determine why the area is not served, e.g. due to redlining.

c. Route redundancy:

Response: The Commission should promote route *diversity*. Redundant networks do not enhance network durability and risk stranding existing private investment, creating market disruptions.

d. Competition:

Response: The Commission should prioritize areas where there is no middle-mile facility available currently. It should consider network deployment plans within the next twelve months. Using public money to overbuild existing facilities in areas where concrete plans exist to construct is a poor use of money because it discourages private investment.

e. Hardening, undergrounding, deployment in high fire threat areas:

Response: California topography, geography and population density varies dramatically across the state. Therefore, the Commission should allow carriers that are competing to provide facilities for the middle-mile network to identify any need for hardening or undergrounding in high fire threat areas. Additional costs in these areas associated with hardening, undergrounding, etc. should be factored into the determination of affordability.

f. Cell coverage; and

Response: Similar to hardening and undergrounding, the Commission should allow carriers that are competing to provide facilities for the middle-mile network to identify any need for middle-mile facilities for backhaul from cell sites.

g. Labor and economic development benefits:

Response: Lumen respectfully submits that economic development for individual cities or counties should not be considered as a factor in determining where to place the openaccess network facilities. The purpose of the network is to ensure that customers have access to broadband services, not whether a city or county may have improved economic development benefits from locating the middle-mile network near their jurisdiction.

- 2. <u>Middle-Mile Network Services for ISPs:</u> 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.
- a. 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?

Response: The Commission should rely on information provided in response to information requests to providers.

b. How can existing interconnection points or the creation of new interconnection points improve access for communities?

Response: Interconnection points can enable existing and/or new providers to access the middle-mile fiber network where needed and thereby improve efficiency of network design.

c. What technical performance characteristics will increase the attractiveness and usefulness of the statewide open-access middle-mile broadband network for commercial internet service providers?

Response: Price is a key factor, but pricing should be based on market conditions to avoid stranding existing private investment. If existing networks are available, rather than overbuilding those networks, subsidies could be provided to commercial internet service providers to support them and existing network suppliers in high cost areas. Lumen believes this question is more rightly an implementation issue and less useful for the task of identifying areas to be served with openaccess middle-mile network.

d. 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 services providers?

Response: The Commission should allow carriers that are competing to provide facilities for the middle-mile network to identify network design and technical aspects.

e. What services should the network provide commercial providers (e.g., dark fiber, lit fiber, colocation, wireless backhaul, etc.)?

Response: The Commission should allow carriers that are competing to provide facilities for the middle-mile network to identify the specific offerings.

f. 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?

Response: The Commission should allow carriers that are competing to provide facilities for the middle-mile network to identify the number of strands of dark fiber based on the characteristics of a given segment's location. If the Commission attempts to set too many technical details in advance, some providers may choose not to participate.

3. Middle-Mile Network Services for Consumers:

a. 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?

Response: The Commission should allow carriers that are competing to provide facilities for the middle-mile network to identify anchor institutions. Serving anchor institutions will likely require not only middle-mile facilities, but last mile facilities. Therefore, it may not be feasible to determine how to serve anchor institutions taking into account only middle-mile fiber. A carrier competing to participate as a provider for the open access network will be better able to determine how to serve anchor institutions contemporaneous with designing the middle-mile network segments rather than having the Commission determine how to serve anchor institutions as part of the initial network plan.

b. Should the middle-mile network directly provide broadband internet access service, voice service, etc.?

Response: No. The middle-mile network would be focused only connectivity that supports providers' ability to offer enhanced services such as broadband internet access or voice via their own last-mile facilities See #5 below.

c. 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?

Response: No, current requirements address the areas most prone to commercial power outages due either to wildfires or planned outages instituted by the electric utilities.

- 4. <u>Last-Mile Providers:</u> The middle-mile network must enable last-mile connections.
- a. How can the middle-mile network enable last mile connections in unserved, underserved and served areas of the state?

Response: Adding middle-mile facilities in or near underserved areas will expand capacity for services provided via last-mile facilities. While California is funding the open-access middle-mile network, last-mile projects might be federally funded. The same provider might or might not be responsible for both. Therefore, middle-mile projects should be coordinated with last-mile projects to ensure that both types of facilities are deployed simultaneously. Each project should be bound by an implementation schedule overseen by CENIC or the Commission. A middle-mile project that is not linked to benefits made possible through last-mile projects (whether the last mile project is government sponsored or is not), should be discounted or rejected.

b. 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?

Response: See #1

- 5. <u>Other States:</u> Numerous other states operate open-access networks, including but not limited to Illinois, Kentucky, Massachusetts, Michigan, Missouri, North Carolina, Ohio, Virginia, and Washington.
- a. 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?

Response: Lumen does not have sufficient familiarity with these other state operated networks to provide comments. Lumen notes, however, that state-operated networks should be carefully planned and operated to ensure they do not discourage privately operated network expansion.

7. Other Issues Not Covered:

a. Are there any issues the State of California should take into

consideration as it develops the statewide middle-mile network?

Response: Yes. The Commission should coordinate with local jurisdictions to streamline and expedite permitting processes so that the benefits of the open access network are delivered as soon as possible. The Commission should prioritize not only deployment of fiber, but also expanding the supply of accessible, open conduit and utility poles to facilitate multiple carriers' opportunity to deploy their own facilities.

II. CONCLUSION

Lumen urges the Commission to provide oversight but let market forces ensure that taxpayer dollars are spent efficiently and effectively. The open-access network would be carefully designed to complement and not undermine existing private investment or discourage new investment. Last, the Commission and the State should utilize IRUs, purchased from private fiber providers, to construct new middle-mile network wherever possible to reduce delay and complexity.

Signed and dated October 1, 2021 at Walnut Creek, CA.

Respectfully submitted,

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