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To: Federal Communications Commission
445 12th St., SW, Room TW-A325,
Washington, DC 20554

From:

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Chairman, ECFiber Governing Board and ECF Holding, LLC

Comments regarding Further Notice of Proposed Rule-Making (Docket WC 10-90)

Ref: §213 (Cost-effectiveness): Broadband networks are essential infrastructure for the modern economy, equally important as bridges, highways, and other transportation facilities. In evaluating the cost-effectiveness of competing proposals, we urge the Commission to take a long-term view, which should include realistic estimates of a project's economically useful lifespan, whether ongoing subsidies will be needed, and total life-cycle cost. Proposals to build infrastructure with a service life of ten years or more will make more efficient use of funds than those that need replacement in five years or less, and should be weighted accordingly.

For new broadband networks in rural areas, the combined cost of design, make-ready, and construction labor typically exceeds cost of materials by a wide margin. For this reason it is much more cost-effective to expend that effort once on infrastructure which has the longest possible service life and can most easily be upgraded as future bandwidth requirements increase.

Ref: §214 (“...the extent to which the applicant proposes to build robust, scalable networks ... “):

We believe that the Commission's Jan. 2014 order is consistent both with the intent of the original Telecommunications Act of 1936, as well as Section 254 of the 1996 Telecommunications Act as quoted on pp 73-74, viz. “[c]onsumers in all regions of the Nation, including low-income consumers and those in rural, insular, and high cost areas should have access to ... advanced telecommunications and information services ... that are reasonably comparable to services provided in urban areas.”

Urban and suburban customers already have access to bandwidth ranging from twice to ten times the 4/1 requirements of this Order, with average bandwidths growing at 25%/year. At that rate, even those few proposals hypothetically aimed at achieving 6/1.5 within five years can only fall further and further behind the “reasonably comparable” standard of Sec 254. This basic reality fully justifies advantageous weighting for proposals that can deliver at least 6/1.5 immediately, and can demonstrate an economical upgrade path to at least 25/25 within five years or less. Similarly, if two proposals offer equal speeds but one will impose lower monthly usage caps, the one with the higher cap will bring about greater consumer benefit. In each comparison, perhaps the relative costs per user should be equalized by the ratios of their respective parameters: bandwidth first, then usage cap.

Because upload speed is so important for advanced education, business, and healthcare applications, we also urge the Commission to assign positive weight to proposals whose upload speed is as great as the download speed (e.g. 4/4, 6/6, 25/25, etc.)

Ref: §215 (“innovative funding strategies that leverage non-Federal funds”):

Surely anyone who pays Federal taxes of any kind would agree that applications which rigorously demonstrate how the requested FCC funds will result in State, local, and/or private investment should be given additional weight. We would suggest that the extra weight be proportional to the demonstrated multiplier effect.

Ref: §218 (what information to require in the application process) -

- a. “the planned service offerings that would be offered to residential and small businesses, and such anchor institutions, with details regarding the proposed speeds, latencies, usage allowance (if any), and pricing of such offerings” - yes, all of this information should be required in every application.
- b. “whether the services offered to residential consumers would be sufficiently robust to utilize advanced educational and health care applications” - absolutely should be required information.
- c. ... “planned deployment schedule” ... yes.
- d. “whether the infrastructure can be upgraded later to offer greater throughput (i.e., speeds) and more capacity for each user at a given price point;” - of course.
- e. “how network speeds and other characteristics can be measured” There are several widely available speed-test websites. We urge the Commission to recognize, and disallow, the “up to” qualifier widely used by telecom marketers. If an application promises, for example, 4/1 bandwidth, then 4/1 should be the minimum delivered to any home or business in the proposed service area, to be tested and verified at times of peak usage (late morning for businesses, 3-5 and 8-10 PM for residences.)
The same test should be applied, with equal rigor, to challenges by incumbent price-cap carriers: only those locations where the incumbent is prepared to prove that they can fully satisfy the bandwidth requirement should be rendered ineligible for the Experiment.
- f. “whether and how other service providers can use the facilities constructed” should certainly be required information in an application to use Federal funds of any kind, including CAF.

...

- g. “whether the applicant plans to rely in part on financing from non-federal governmental institutions” - Yes.
- h. “whether the applicant expects to have access to resources that will contribute to project success, such as in-kind contributions, ... “ - Yes, this can be a meaningful measure of widespread public support.
- i. “the proposed network to be deployed and the technologies to be utilized (e.g., wireline, fixed wireless, or mobile wireless)” - Yes, essential for evaluating how robust and scalable the proposed network will be.

Ref: §219 (What extent of competitive overlap is *de minimus*?)

We urge the Commission to bear in mind that rural census blocks vary enormously in size (i.e. square mileage), number of premises contained, and in accessibility at certain times of the year. In census blocks containing at least 10 non-seasonal premises, 20% overlap should be acceptable. For more sparsely populated census blocks, up to 50% should still be considered *de minimus*.

Ref: §221 (Partially served census blocks?)

The availability of 3/1 service at one corner of a census block that covers one or many square miles ought not to cut off other premises within that block from the possibility of getting 21st-century broadband service. We strongly encourage the Commission to pursue the approach outlined in this paragraph.

Sincerely,

Irving H. Thomae, Chair
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(ECFiber is a municipally-owned, subscriber-funded, open access fiber-to-the-home internet and telephone provider in east central Vermont. As is typical of mountainous rural areas, our territory has a high percentage of multigenerational communities, linked by roads that are frequently rendered impassable by weather. The resulting isolation accounts for a strong tradition of entrepreneurship and self-employment, as well as keen public awareness of broadband's potential to overcome physical barriers.)