

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

Competitive Bidding Procedures and)	AU Docket No. 20-34
Certain Program requirements for the)	WC Docket No. 19-126
Rural Digital Opportunity Fund Auction)	WC Docket No. 10-90

REPLY COMMENTS OF CONEXON, LLC

Conexon, LLC (“Conexon”), which manages more rural fiber construction in the United States than any other company, hereby submits these reply comments in response to the Commission’s Public Notice in the above-captioned proceedings seeking comment on the competitive bidding procedures and program requirements for the upcoming Rural Digital Opportunity Fund (“RDOF”) Phase I Auction (“Auction 904”).¹

No further evidence should need be presented to demonstrate that rural America requires improved broadband services without further delay. Yet, many commenters have called for the delay of the RDOF Phase I auction. Delay until the FCC Form 477 data is updated, delay until more spectrum is auctioned, delay until some industry segment develops or deploys newer technology, delay until the COVID-19 crisis passes, etc. The Commission need not delay any further.

Since the press and the general public seem only recently to have become aware of the necessity of broadband in rural America, Conexon would like to point out that it has been:

- **Ten years** since the National Broadband Plan recommended universal broadband service;
- **Nine years** since the Commission adopted an Order to establish competitive bidding as the mechanism for broadband funding;

¹ *Comment Sought on Competitive Bidding Procedures and Certain Program Requirements for the Rural Digital Opportunity Fund Auction (Auction 904)*, Public Notice, FCC 20-21 (rel., Mar. 2, 2020) (“*RDOF Phase I Procedures Public Notice*”).

- **Eight years** since the FCC adopted a greenfield fiber-to-the-premise cost model to every rural home as the basis for broadband funding;
- **Seven years** since the Mobility Fund I reverse auction;
- **Six years** since the first reverse auction based on the Connect America Cost Model;
- **Five years** since the Commission squandered \$12 billion in public funding through the Right of First Refusal (“ROFR”) non-competitive offer in exchange for 10/1 Mbps service in the same areas to be funded in the RDOF;
- **Four years** since the CAF II auction rules were adopted;
- **Three years** since CAF II auction procedures were adopted;
- **Two years** since the CAF II auction was held;
- **One year** since the announcement of the Rural Digital Opportunity Fund.

Rural America has waited long enough. If anything, in the current economic climate, the RDOF Phase I auction should be accelerated, not delayed. To that end, the FCC should adopt procedures to permit those who are prepared to construct Gigabit fiber-to-the-premise networks to file a long-form application coincident with the short-form application, or shortly thereafter, so that such applicants might move ahead immediately following the auction. In the event the auction is delayed beyond this year, the FCC should fund such applicants at the reserve price if, by October 1, 2020, those applicants file a list of census block groups where they would bid. As one demonstration of the pent-up demand for the RDOF Phase I auction, Conexon has attached a letter as Exhibit A to these Reply Comments from a group of CEOs and General Managers from over seventy rural electric cooperatives who are prepared to move ahead expeditiously.

Furthermore, as the comments have illuminated, the FCC should adopt the same procedures for Gigabit tier bidding as were used in the CAF II auction. In its initial comments, Conexon noted that, by asking about Gigabit tier bidding by technologies not yet in service,

“[t]he Commission shouldn’t be surprised that, even by asking the question in the Public Notice, numerous other service providers and vendors of other types of technology will now claim that they, too, can deliver Gigabit service and should be eligible to bid in the Gigabit tier.”²

In fact, commenters were unabashed in their claims. Satellite, fixed wireless, DSL, every means of delivering information other than by carrier pigeon, now claims Gigabit tier capability, lack of deployment or actual service notwithstanding. Some, like WISPA, claim that lack of wireless Gigabit deployment is due to the absence of consumer demand for Gigabit service.³ Yet, contrary to the assertion made by WISPA, many of the cooperatives with which Conexon works already have customer “take rates” for Gigabit tier service in excess of 30% – and these coops just launched broadband service. Others, such as SpaceX, ask for public trust of non-public information. The FCC should protect the public’s fund from such speculation. Only when a bidder is using a technology that has been widely deployed and the service is widely available, should the FCC permit such technology for Gigabit tier bidding.

At a minimum, the FCC should adhere to the procedures used in the CAF II auction whereby Gigabit tier bidding was limited to technologies already widely deployed to provide Gigabit in rural areas. Having examined the most recent publicly available 477 data of Gigabit services offered in rural areas, Conexon makes one additional suggestion. Conexon recommends that the FCC not limit its inquiry into whether a provider’s Form 477 indicated Gigabit service. The FCC should also examine the providers’ advertised service offerings to ensure that such providers actually provide Gigabit service.

² See Comments of Conexon, LLC, at 4, AU Docket No. 20-34, WC Docket No. 19-126, WC Docket No. 10-90 (Mar. 27, 2020).

³ See Comments of Wireless Internet Service Providers Association, at 8, AU Docket No. 20-34, WC Docket No. 19-126, WC Docket No. 10-90 (Mar. 27, 2020).

I. THE COMMISSION HAS BEEN INEFFICIENTLY SPENDING PUBLIC FUNDS ON EVOLVING BROADBAND SPEEDS FOR A DECADE – THE RDOF PHASE I AUCTION COULD CHANGE THAT DYNAMIC.

It has been over a decade since passage of the American Reinvestment and Recovery Act (“ARRA”), which in part allocated many millions of dollars to the Commission to write a national broadband plan. By the summer of 2009, dozens of consultants were diligently working in FCC offices. An FCC task force was created, leading to 36 public workshops, 9 field hearings, 31 public notices, 75,000 pages of public comments, and 131 online blog posts. The task force produced a 360-page report composed of 17 chapters containing 208 specific recommendations.

The 2010 National Broadband Plan’s Number 1 Goal by 2020: “At least 100 million U.S. homes should have affordable access to actual download speeds of at least 100 megabits per second and actual upload speeds of at least 50 megabits per second.” In Chapter 8, the National Broadband Plan sets out a 2020 goal for rural America: 4 Mbps download, 1 Mbps upload. The Commission then set 4 Mbps as its goal for rural and called it reasonably comparable to 100 Mbps. The Commission thus established a policy that put rural America at a structural economic disadvantage to the rest of the country and spent a decade largely compounding the error.

The universal service programs over the past decade also came at enormous cost. The federal government has spent over \$50 billion on various rural broadband initiatives. Among these plans and expenditures were:

- \$2.5 billion for service with speeds from 768 kbps down/200kbps to 4/1 Mbps (Broadband Initiative Program, 2009);
- \$115 million in Connect America Fund I for 4/1 Mbps (CAF I, 2012);
- \$9 billion in Connect America Fund II for 4/1 Mbps, later changed to \$12.6 billion for 10/1 Mbps (CAF II offer to price cap carriers, 2015);
- \$12.7 billion to small telephone companies for services of 4/1, 10/1, 25/3 Mbps or service upon reasonable request (ACAM program, 2016);

- \$5.4 billion to small telephone companies for services of 4/1, 25/3 Mbps or service upon reasonable request (ACAM II program, 2019).

This spending has been just part of tens of billions spent on e-rate subsidies for schools and libraries, for broadband infrastructure to rural health care institutions, for telecommunications network programs such as high cost loop support, interstate access support, Connect America Fund intercarrier compensation, Connect America Fund broadband loop support, the Rural Broadband Experiments, CAF I, the CAF II ROFR program, the CAF II auction, ACAM I, ACAM II, Mobility Fund I, Mobility Fund II, RUS Community Connect grants, ReConnect grants, Farm Bill programs, state broadband grant programs, and on and on and on.

The federal government has already spent more money on rural broadband than would have been necessary to build fiber optic networks to every rural home and business in the country. Instead of a “spend once” approach, the federal government’s incrementalistic approach has spent the public’s money repeatedly in the same places for services that are usually outmoded before the money is spent. And now, the public will spend money again in the same places.

The RDOF represents a change, with the potential of bringing next generation networks to most of rural America. The RDOF structure is a vast improvement over earlier Commission programs, but one crack in the RDOF’s structure could undermine its very foundation: speculative bidding.

The CAF II ROFR program, the CAF II auction, the ACAM and ACAM II funds, and the RDOF are all based on the cost to construct, maintain, upgrade and operate greenfield fiber-to-the-premise Gigabit Passive Optical Networks for a thirty year life to every rural home and small

business in the country. The decision by the Commission to model such networks was not based on speed, but the recognition that only fiber optic networks could meet the requirements of speed, capacity, latency, and the ability to be upgraded with electronics to meet the demand of growing internet traffic for decades.

The willingness of the Commission to consider alternate means of transmission to meet the universal service objectives was a compromise within the Commission, which has in turn compromised the economic prospects of rural America. That compromise should not extend to encouraging speculation for scarce public funds. The FCC opened the door to that discussion when the Commission asked about public funding of private speculation of SpaceX's capabilities. Every other technology has asked to push through that door, which should now be shut.

Other commenters agree that funding SpaceX and other speculative ventures is unwarranted.⁴ The sensible procedural rule that governed the CAF II auction with respect to Gigabit tier bidding should be followed in the RDOF auction. Bidders at the Gigabit tier should be permitted to use only those technologies that have demonstrated their capability in the marketplace by wide deployment in rural areas. An examination of the most recent publicly available 477 data confirms the FCC's findings in the Public Notice that only fiber optic networks are widely deployed offering Gigabit service. Further examination accentuates that data.

As Conexon found when examining 477 data, no satellite or DSL technology currently offers Gigabit service according to 477 data. In addition, only a handful of fixed wireless providers even claim to offer Gigabit service in rural areas and, of those, only one advertises

⁴ See e.g., Comments of California Internet, L.P. dba GeoLinks at 5 ("SpaceX should not now be permitted to seek RDOF funding to complete commitments it has already made to the Commission.").

Gigabit service using wireless technology. Therefore, in addition to limiting the Gigabit tier to those fixed wireless providers who have indicated Gigabit service in rural areas on their Form 477, Conexon recommends the modest step of checking as to whether Gigabit service is actually being offered by fixed wireless technology.

II. FURTHER DELAY OF THE RDOF IS UNWARRANTED AND, IN FACT, THE FCC SHOULD ADOPT PROCEDURES TO ACCELERATE THE FUNDING PROCESS FOR THOSE GIGABIT TIER BIDDERS READY TO BUILD.

There is a way to adopt limited additional procedures that would accelerate broadband infrastructure investment and lead to new construction this year. In order to help rural economies recover from the current economic downturn, Conexon recommends that the Commission make the following changes to the RDOF Phase I auction procedures.

First, the FCC should use its schedule for the short-form application process and add an accelerated long-form option for Gigabit tier fiber-to-the-premise applicants. The FCC should accept with the short-form application an attendant long-form application for those projects that would win funding automatically under the rules of the RDOF auction, *i.e.*, fiber-to-the-premise, Gigabit tier networks. The long-form application can be identical to the long-form application used in the CAF II auction, and should include proof of a letter of credit commitment letter with the application. The FCC should separately evaluate the long-form applicants, while continuing its established process for qualifying bidders through the short-form application.

Second, successful fiber-to-the-premise Gigabit bidders would then be eligible for funding shortly after conclusion of the auction. Under the current RDOF Phase I auction rules, the fiber-to-the-premise Gigabit tier applicants will likely win in the auction, and almost certainly at the clearing round price point. It would be straightforward to review those long-form applications early and award the funding before year's end. The FCC could condition an

expedited process on an accelerated construction timetable, such as initial construction within six months and initial service availability within one year of the carrier's receipt of RDOF Phase I support. The remainder of the RDOF Phase I auction would proceed on its current schedule.

How many potential new fiber construction projects would commence in this manner? A couple weeks ago, Conexon circulated a letter to rural electric cooperatives. CEOs and General Managers from over seventy electric coops have added their name to the letter. A copy of the letter is included as Exhibit A to this filing.

Conexon believes that the RDOF can be the best designed rural broadband program by any federal agency. The funding our cooperative clients received in the CAF II auction leveraged three to four times additional private investment in rural infrastructure. Every one of those electric coops is providing Gigabit tier broadband and voice services to their members today.

Whether the current health and economic crisis lasts a few months or a year, funding long-term rural fiber networks is necessary and long overdue. To quote from the attached letter,

[i]n the 1930's, rural electric cooperatives, in partnership with the federal government, helped pull rural economies out of the Great Depression. We have maintained those very electric networks and helped sustain our communities for over eighty years. In the current crisis, we are prepared again to build the necessary infrastructure in partnership with the federal government. Our commitment is to begin now. We ask the same of you.

Respectfully submitted,

CONEXON, LLC

By: _____/s/
Jonathan Chambers
Partner
Conexon, LLC
2001 Grand Blvd., Ste. 700
Kansas City, MO 64108
Phone: (202) 798-3884

April 10, 2020

EXHIBIT A

An Open Letter to the Political Leadership of the Nation

Dear Mr. President, Speaker Pelosi, House Majority Leader Hoyer, House Republican Leader McCarthy, Senate Majority Leader McConnell, Senate Democratic Leader Schumer, and FCC Chairman Pai:

We, the undersigned, are CEO's and General Managers of rural electric cooperatives. Our nation's membership cooperatives collectively provide electricity to tens of millions of people, many of whom lack adequate broadband service. Like our parents and grandparents before us, we are committed to improving the lives and livelihoods of rural Americans. In the 1930's and 1940's, that commitment meant building the nation's electric infrastructure. Today, it means building fiber optic broadband networks.

We are writing to make clear our commitment. We ask that our elected leaders accelerate a vital federal broadband program, the Rural Digital Opportunity Fund (RDOF). If legislation proposed by Congressman Jim Clyburn to accelerate RDOF is adopted and then implemented by the FCC, we will immediately commence new fiber construction and expand current fiber projects. This construction will lead to new jobs in our rural communities and create the foundation for future economic development.

We are not asking for any new funding to be appropriated by Congress, merely that the timetable for the FCC's program be accelerated. We are not asking for special treatment, only that any company that is ready to build now be given the opportunity now, instead of waiting until next year. We are not asking for a bailout, but a partial investment in infrastructure, at amounts and in areas already determined by the FCC. Our members will invest in our communities to build broadband networks and to serve ourselves.

In these uncertain times, one thing is certain. The world is interconnected in many ways, and the future of information, education, work, health care, social connection and entertainment are all tied to broadband internet access. The COVID-19 crisis accentuates a point we have known for some time. For our kids to have the same educational opportunity, for our young adults to find work without moving away from the community, for our elderly to receive quality health care, rural America needs fiber broadband service.

In the 1930's, rural electric cooperatives, in partnership with the federal government, helped pull rural economies out of the Great Depression. We have maintained those very electric networks and helped sustain our communities for over eighty years. In the current crisis, we are prepared again to build the necessary infrastructure in partnership with the federal government. Our commitment is to begin now. We ask the same of you.

Signed,

Mitchell Johnson, CEO
Ozarks Electric Cooperative, AR, OK

Mel Coleman, CEO
North Arkansas Electric Cooperative, AR

Brad Harrison, CEO
Mississippi County Electric Cooperative, AR

Hayley Tibbs, Interim CEO
South Central Arkansas Electric Cooperative, AR

Brian Duncan, CEO
Craighead Electric Cooperative, AR

Don Crabbe, CEO
First Electric Cooperative, AR

Al Simpson, CEO
Arkansas Valley Electric Cooperative, AR, OK

Keith Hayward, CEO
Northeast Mississippi Electric Power Association, MS

Randy Carroll, CEO
East Mississippi Electric Power Association, MS

Ron Barnes, CEO
Coast Electric Power Association, MS

David O'Bryan, General Manager
Delta Electric Power Association, MS

Randy Smith, General Manager
Dixie Electric Power Association, MS

Bill Long, CEO
Tombigbee Electric Power Association, MS

Tim Wigginton, CEO
Tishomingo Electric Power Association, MS

Shawn Edmondson, CEO
Natchez Trace Electric Power Association, MS

Brad Robison, CEO
Tallahatchie Valley Electric Power Association, MS

Ronny Rowland, CEO
Prentis County Electric Power Association, MS

Kevin Bonds, CEO
Southwest Electric EPA, MS

Barry Rowland, CEO
Monroe County Electric Power Association, MS

Ron White, CEO
Yazoo Valley Electric Cooperative, MS

Bob Pauling, CEO
Mid-Carolina Electric Cooperative, SC

Paul Basha, CEO
York Electric Cooperative, SC

Jim Lovinggood, CEO
Blue Ridge Electric Cooperative, SC

Rob Ardis, CEO
Santee Electric Cooperative, SC

Keith Avery, CEO
Newberry Electric Cooperative, SC

Berl Davis, CEO
Palmetto Electric Cooperative, SC

Chad Lowder, CEO
Tri-County Electric Cooperative, SC

Mike Fuller, CEO
Pee Dee Electric Cooperative, SC

Robert Hochstetler, CEO
Central Electric Power Cooperative, SC

Bob Hance, CEO
Midwest Energy and Communications, MI

Bill Scott, CEO
Great Lakes Energy, MI

Tom Sobeck, CEO
Presque Isle Electric Cooperative, MI

Dallas Braun, CEO
Thumb Electric Cooperative, MI

Mark Kappler, General Manager
HomeWorks Tri-County Electric Cooperative, MI

Gary Wood, CEO
Central Virginia Electric Cooperative, VA

Casey Logan, CEO
Prince George Electric Cooperative, VA

Mike Keyser, CEO
BARC Electric Cooperative, VA

Patrick Grace, CEO
Oklahoma Electric Cooperative, OK

David Goodspeed, President
OEC Fiber, OK

Daniel Webster, CEO
Northeast Oklahoma Electric Cooperative, OK

Gary Highley, CEO
Canadian Valley Electric Cooperative, OK

Tim Smith, CEO
East Central Oklahoma Electric Cooperative, OK

Hunter Robinson, CEO
Central Electric Cooperative, OK

Tim Davis, CEO
Pemiscot Dunklin Electric Cooperative, MO

Sean Vanslyke, CEO
SEMO Electric Cooperative, MO

Aaron Bradshaw, CEO
Co-Mo Electric Cooperative, MO

Jim Bagley, CEO
United Electric Cooperative, MO, IA

Tom Howard, CEO
Callaway Electric Cooperative, MO

Jim Davis, CEO
Sac Osage Electric Cooperative, MO

Jarrold Campbell, CEO
Osage Valley Electric Cooperative, MO

Lynn Thompson, CEO
Consolidated Electric Cooperative, MO

Jeff Hohn, CEO
Kenergy Electric Cooperative, KY

Tim Johnson, CEO
Otsego Electric Cooperative, NY

Todd Way, CEO
Douglas Fastnet, OR

Brent Bischoff, CEO
Coos-Curry Electric Cooperative, OR

Andy Fletcher, CEO
Columbia Basin Electric Coop, OR

Don Taylor, CEO
Corn Belt Energy, IL

Jeff Newman, CEO
Forked Deer Electric Cooperative, TN

Chris Davis, CEO
Cumberland Electric Cooperative, TN

Paul Thompson, General Manager
Tri-County Electric Membership Corporation, TN

Dan McNull, CEO
Firelands Electric Cooperative, OH

Ed VanHoose, General Manager
Lorain-Medina Rural Electric Cooperative, OH
North Central Electric Cooperative, OH

Jeff Triplett, CEO
Washington Electric Cooperative, OH

Phil Caskey, CEO
Consolidated Electric Cooperative, OH

Jasen Bronec
Delta Montrose Electric Association, CO

Mike Malandro, CEO
Choptank Electric Cooperative, MD

Jeremy Richards, CEO
Maquoketa Valley Electric Cooperative, IA

Steve Foshee, CEO
Tombigbee Electric Cooperative, AL

Nate Boettcher, CEO
Pierce Pepin Cooperative Services, WI

Kerry Kelton, CEO
MidSouth Synergy, TX

Billy Marricle, CEO
San Bernard Electric Cooperative, TX