

Application to DHCD Submitted through CAMS

County of Fluvanna

Fluvanna Broadband Expansion

Application ID: 59812122018084131
Application Status: In Progress - DHCD
Program Name: Virginia Telecommunications Initiative 2019
Organization Name: County of Fluvanna
Organization Address: 132 Main Street
Palmyra, VA 22963
Profile Manager Name: Eric Dahl
Profile Manager Phone: (434) 591-1930
Profile Manager Email: edahl@fluvannacounty.org

Project Name: Fluvanna Broadband Expansion
Project Contact Name: Eric Pollitt
Project Contact Phone: (434) 591-1930
Project Contact Email: epollitt@fluvannacounty.org
Project Location: 25 Star Way
Columbia, VA 23038-3120
Project Service Area: Fluvanna County

Total Requested Amount: \$641,967.00
Required Annual Audit Status: Accepted

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Budget Information:

Cost/Activity Category	DHCD Request	Other Funding	Total
Telecommunications	\$641,967.00	\$1,846,625.00	\$2,488,592.00
Construction	\$641,967.00	\$1,846,625.00	\$2,488,592.00
Total:	\$641,967.00	\$1,846,625.00	\$2,488,592.00

Budget Narrative:

CVEC will provide all funding other than VATI funding. CVEC will invoice Fluvanna County for the construction costs and equipment costs, Fluvanna County will verify and submit requests for payments from DHCD for the \$641,697.00. CVEC has incentive agreements with both Fluvanna County that will provide an annual incentive payment equal to the amount of local property taxes on the new infrastructure. These agreements will provide those payments for five years, totaling up to \$90,000. While this funding does not fit into the VATI funding tables as direct one time funds to offset construction costs, it does provide local funding into the project.

Questions and Responses:

1. Project Area

Provide a map and description of the proposed geographic area including specific boundaries of the project area e.g.; street names, local and regional boundaries, etc. Explain why and how the project area(s) was selected. Attach a copy of your map(s).

Answer:

The Columbia substation area of the CVEC electric distribution territory is one of the substation areas most in need of the expansion of affordable, reliable gigabit speed broadband delivered over a world class fiber optic network. This area was chosen for many reasons; these are the top four:

1. The area is very poorly served for broadband internet service. A survey of local residents indicated that only 7% can receive 10 mbps download speed on occasion, with only a single DSL customer among the few who reported they were served at that speed.

2.

The grant will provide a gateway expansion that will allow fiber to be extended into areas of Fluvanna, Buckingham, Cumberland and Goochland County. The Columbia area is a natural extension of the CVEC fiber network from the Zion substation area scheduled for completion in mid-2019. The extension into the southeastern corner of Fluvanna County allows for further future expansion into the areas served by CVEC as well as other areas served

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with electric service by Dominion Power. The county Boards of Supervisors of all four counties have identified the lack of broadband access as a critical need and a strategic focus.

3.

The area is relatively underserved. The portion of the project area in Fluvanna (spread among US census block group 2 and census block 3; <https://censusreporter.org/profiles/15000US510650202002-block-group-2-fluvanna-va/>) typically has a lower average income than other areas of Fluvanna County.

4. The area needs infrastructure to stay viable for families. In recent years the toll of flood damages forced the town of Columbia to dissolve its town status. The local elementary school was closed as part of a plan to consolidate schools in the county. There are no medical facilities and no major employers in the area. Without broadband access the area will continue to lose population and decline.

The service area for this project begins just north of the village of Columbia and the James River. The project map then heads north along Wilmington Road and also picks up a small section of Shannon Hill road residences. It includes areas north of Wilmington Road along Cedar Lane Road and Venable Road. From the village of Wilmington it continues west along Courthouse Road toward Palmyra. The project map has major road names included to help identify the specific project area. The area has been designed to avoid overlap with current providers who reliably deliver internet service faster than 10 mbps download and 1 mbps upload. The project will extend fiber along existing overhead and underground distribution lines to lower the cost of installation as well as speed the construction.

2.

Describe your outreach efforts to identify existing providers in the selected project area. Provide a map and list of all existing providers (fixed and wireless), and speeds offered within the project area. Provide a detailed explanation of how this information was compiled and the source(s).

Answer:

The incumbent telephone provider in the area is CenturyLink. CenturyLink did accept CAF I funds but has not performed any upgrades to its facilities in the area to improve broadband availability.

There are no fixed wireless providers in the area.

Although CenturyLink covers the entire project area it does not meet the 10/1 standard. By covering the entire area, there is not a need for a map to show that this is the only land-based option for residents in the project area.

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Residents were surveyed to provide actual service details. An advertisement listing the project was run in the local newspaper to allow these providers and any others to contact the applicant regarding overlap in service areas.

3. Project Need/Description

To be eligible for VATI, applicants must demonstrate that the proposed project area(s) is unserved. An unserved area is defined as an area with speeds of 10 Mbps/1 Mbps or less, and with less than 10% service overlap within the project area. Describe the anticipated service overlap with current providers within the project area.

Answer:

The applicants and co-applicants used a number of methods to determine where service was available near and within the proposed project area. The FCC broadband map was reviewed as well as the Center for Innovative Technology Broadband Map for Virginia. Known providers were contacted. Residents of the area were surveyed.

The co-applicant is confident the proposed service area includes less than 10% homes and businesses that have access to broadband service delivered reliably at speed exceeding 10 mbps download and 1 mbps upload.

4. Describe population both in terms of absolute numbers within the project area and the eligible users that will be served by the proposed project. Describe the basis for these projections.

Answer:

There are 569 accounts in the proposed project area. Homes in the area average 2.5 household members using Fluvanna County census block 2 data from the most recent census data (censusreporter.org), indicating the broadband service will be made available to 1423 people.

All accounts will be eligible for service based on the survey results which indicated no land based provider was delivering in excess of 10/1 service within the project area.

5. Indicate the numbers of businesses and community anchor institutions the proposed project will pass in the project area.

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There are limited businesses in the project area, in part due to a lack of broadband availability. There is a former elementary school, but there are no active schools or health care facilities in the area. There is a campground and a park near the river. There are numerous local farming operations as well, mostly consisting of beef cattle operations. In addition there are several general contractor offices that are served in this territory and a cabinet making facility. Finally, there are a few cell tower sites within this district that would experience greater capacity and reliability from the extension of reliable fiber broadband service to this area known for poor cellular reception.

6. Provide the anticipated take rate for the proposed service within one year of project completion and describe the basis for the estimate. Also provide all actions to be implemented to reach the identified potential customers within the project area.

Answer:

The anticipated take rate is 40% in the first year with growth of another 5% to 10% in the second year as residents with satellite contracts choose to take the fiber service instead of renewing contracts. In the years following, it is anticipated that connections will grow by 2% to 4% until saturation is reached around 70% to 75%. This is a conservative projection based on previous construction in 2018 in a similar rural area (Appomattox County) that resulted in a 40% take rate. Potential customers will receive three mailings and an invitation to a community meeting to provide information on the availability of service. All customers will be notified by CVEC when field engineering for the electrical make ready construction begins, and again when fiber construction crews move into the area to place fiber optic cable on the poles. They will then receive a letter from Firefly Fiber Broadband detailing the services available and offering free connections if they pre-register for service. Door hangers detailing the offerings and providing contact information will be placed on all doors in the service area after the Firefly mailing goes out. The potential customers will also be invited to a community meeting for a question and answer session related to the services. In addition, CVEC and Firefly will both use social media and their websites to notify potential customers of the project work in the area.

7. A statement whether the proposed project is targeting the “last mile,” “middle mile,” or “backbone” portion of the broadband infrastructure.

Answer:

CVEC will install a fiber to the home (FTTH) network. It is a last mile system that will make world class, gigabit speed service available to every home and business within the project area.

8. For wireless projects only: Please explain the ownership of the proposed wireless infrastructure. Will the wireless co-applicant own or lease the radio mast, tower, or other raised structure onto which the wireless infrastructure will be installed?

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NA - Fiber to the Premise Project

9. Provide a description of the broadband service to be provided, including estimated download and upload speeds, whether that speed is based on dedicated or shared bandwidth, and the technology that will be used. This description can be illustrated by a map or schematic diagram, as appropriate.

Answer:

Internet service will be available at symmetrical gigabit level speed to every home and business. Firefly has a 10 gbps backhaul connection from the network head end that can be easily expanded as necessary to assure each user will be able to transmit and receive at the 1 gbps rate should they choose to. Some users may choose the 100 mbps option, therefore leaving more capacity in the network. Diversity of data usage typically will allow a 10 gbps connection to meet the needs of thousands of end users in systems offering gigabit level service. Network monitoring will assure there is never a slow down or lack of bandwidth for the users to access the internet at the speed for which they pay.

10. Provide a description of the network system design used to deliver broadband service from the network's primary Internet point(s) of presence to end users, including the network components that already exist and the ones that would be added by the proposed project. Also describe specific advantages of using this technology. Provide a detailed explanation on how this information was compiled and source(s). For wireless projects, provide a propagation map including the proposed project.

Answer:

The project will utilize existing CVEC fiber from its connection at the Zion substation to connect the CVEC fiber backbone ring to the new communications hut set at the Columbia substation. The network switching and routing gear will be placed in the hut and new fiber network cables will be extended from there to the individual homes, using overhead construction where there are presently overhead electric utilities and underground construction where there are existing underground utilities. The use of fiber optic cable provides a world class solution to deliver broadband internet service for now and for the foreseeable future to the rural residents. This technology provides the most reliable, highest speed service transfer of data in the marketplace.

A map of the service area is attached and shows the location for the new network nodules and where the fiber will be installed.

11. Project Readiness

What is the current state of project development (i.e. planning, preliminary engineering, final design, etc.)? Prepare a detailed project timeline or construction schedule, which identifies specific tasks, staff, contractor responsible(s), collection of data, etc., and estimated start and completion dates. The timeline should include all activities being

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completed within 12 months of contract execution with DHCD.

Answer:

The Columbia project has been included in the overall network preliminary plan developed by CVEC to eventually connect all of its members. The network plan provides for planning for the fiber backbone and loops. The preliminary design also included a plan for fiber to be placed on or adjacent to all electric distribution facilities, which provides an accurate estimate of overhead and underground miles and number of homes passed. All GIS data for each home and for the full path of the fiber from headend to the individual homes network interface devices (NIDs) is available from the CVEC mapping and information system.

The CVEC fiber building team will be able to begin design work within a month of the signing of the grant documents. The first step will be an automated preliminary design that provides a bill of materials to begin material procurement. Project management staff will begin applications for permits from VDOT, railroads and other agencies necessary for construction. Letters will be sent to each homeowner and business notifying them of the upcoming work that will require several contractors to work in the rights of way with different trucks and equipment.

Field technicians from Conexon then confirm the autodesign details and provide feedback to develop a final design. This effort will take approximately 6 weeks.

The fiber design will be provided to the contract make ready engineering and staking crews from Power Tech. These technicians will visit each pole and home to provide the design for modifications to the existing electric facilities to make room for the fiber. These technicians will also require 4 weeks to complete their work. The communications hut will be set during this month.

The design will be provided to Richardson Wayland Electric Company (RVEC), or another electric distribution live line contractor who will perform the make ready work. RVEC will bring in the necessary crews to accomplish all of their construction within 6 weeks.

Once the line is ready for fiber, S&N Communications, or another fiber construction company, will install the fiber from the hut to each home that signs up for service. Overhead crews will place strand then lash the fiber optic cable to it and bring the fiber down at splice and splitter enclosures on the poles. Underground crews will work in parallel placing underground duct and then pulling in fiber. Splicers will follow the crews, splicing the taps and then the final splices at the NIDs to have service ready to the homes. This work should take 6 to 8 weeks.

The CVEC subsidiary Firefly will then perform installs to place optical network terminals, routers and mesh extenders as necessary to provide service that can reach gigabit level speeds at each home and business. Installations will be completed

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within two weeks after the final fiber is placed.

From start to finish the project should take 26 weeks. If there are unusual weather delays the work should still be accomplished well within the one year time frame.

CVEC also has the ability to overlap work with projects in other substation areas, with fiber design field techs working in one substations while make ready engineering is in another area and make ready construction in another to allow for multiple projects to be underway at a single time and all schedules to be met for grant agreements in different localities.

Week 1	Automated fiber design Material ordering Permitting Member contact
Week 2-5	Fiber design field verification and final design
Week 6-9	Make ready engineering
Week 10-13	Make ready construction
Week 14-18	Fiber construction
Week 17-20	Service installation

12. Matching funds: Provide a description of the matching funds the applicant and co-applicant will invest in the proposed project, (VATI funding cannot exceed 80% of total project cost). The Funding Sources Table should be completed.

i. For each element of matching funds in the description, indicate the type of match (cash, salary expense, or in-kind contribution).

ii. Identify whether the applicant or co-applicant is responsible for providing each element of the proposed matching funds.

iii. Include copies of vendor quotes or documented cost estimates supporting the proposed budget.

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1.

Matching funds from CVEC will be in the form of cash. CVEC will draw the funds from an approved loan from the Rural Utilities Service for \$66.5 million for fiber construction. The Virginia State Corporation Commission has approved this new debt for CVEC in case PUR-2018-00152. Related documents are included.

2.

CVEC will provide the matching funds during construction. Fluvanna County has entered into an agreement that will provide an incentive to CVEC for delivering broadband service in the area. This incentive will be the county's matching funds for the project. Fluvanna will contribute up to 5% of the project cost returned over a five year period beginning the year after construction is complete based on continuing performance of CVEC in providing the service. In addition, the County provided at \$375,000 grant for the Zion substation.

3.

A copy of the Conexon feasibility study cost estimate assumptions is included. Actual charges from vendors for the construction completed in 2018 have verified the assumptions. Actual costs are not included due to protect proprietary pricing from vendors.

13. Identify key individuals, including name and title, who will be responsible for the management of the project. Describe their role and responsibilities for the project. Present this information in table format.

Answer:

	Title	Role/Responsibilities
Eric Dahl	Deputy County Administrator/Director of Finance The County of Fluvanna, Virginia	Provides oversight of grant application for Fluvanna County

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Gary E. Wood	President and CEO CVEC and Firefly Fiber Broadband	Project oversight and Leadership
Bruce Maurhoff	Sr VP and COO CVEC and Firefly Fiber Broadband	Construction oversight
Tina Mallia	VP and CFO CVEC and Firefly Fiber Broadband	Financial records and Oversight
Randy Klindt	Partner Conexon	Design and Project Management Oversight

14. Applicant and Co-Applicant: A description of the public-private partnership involved in the project. Detail the local government assistance: Local government co-applicants should demonstrate assistance to project that will lower overall cost and further assist in the timely completion of construction, including assistance with permits, rights of way, easement and other issues that may hinder or delay timely construction and increase cost.

i. If the partnership is formalized in a written agreement provide a copy of that agreement.

ii. If the partnership has not been formalized, provide a short description of the project management role, financial commitment, or other contribution to the project for the applicant and co-applicant and any additional partners.

Answer:

The partnership between Fluvanna County and CVEC will be both financial and logistical.

Fluvanna has agreed to provide tax incentive payments to CVEC and its subsidiary for the first five years after the internet service is made available to the county residents. This will provide up to 5% of the project cost essentially rebated in return for the continuing performance of having service available.

Fluvanna also is providing guidance and administrative assistance during the grant application process. They also will provide assistance with permitting and public rights of way and easements to facilitate the construction of the project. They will provide the interface to DHCD for proof of construction and payment of the grant as well.

The county and cooperative have an informal verbal agreement to work on the grant application together.

15. Project Budget and Cost Appropriateness

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Applicants shall provide a detailed budget as to how the grant funds will be utilized, including an itemization of equipment and construction costs and a justification of proposed expenses. Expenses should be substantiated by clear cost estimates.

Answer:

Cost estimates are based on a feasibility study performed for CVEC by Conexon in 2017. Conexon is a consulting and design firm which has been responsible for construction of tens of thousands of miles of fiber at electric cooperatives across the US. Their assumptions document provides details of their estimates for overhead and underground fiber construction; that document is attached as the Supporting Documentation of Cost Estimates in the requires attachments section of the application. The detailed derivation of costs document also provides justification of the proposed expenses.

CVEC is well into construction of its first substation and has begun construction on its second substation area. It has bid materials for almost 800 miles of construction and negotiated proprietary pricing with vendors for communications huts, head end electronics and many other components of the system.

The estimates for this project are based on the original project estimates from the Conexon study, modified where necessary based on actual pricing from the ongoing CVEC fiber buildout.

Grant funds will be used to offset costs on overhead construction. The proposal budget includes VATI funds paying for 40% of the labor for overhead construction as well as paying 100% for strand, overhead fiber and associated hardware costs. All other costs will be paid by CVEC. CVEC will also be responsible for all cost overruns in these categories or additional costs in the project.

16. The cost benefit index is comprised of three factors: (i) state share for the total project cost, (ii) state cost per unit passed, and (iii) the internet speed. From these statistics, individual cost benefit scores are calculated. Finally, the three component scores are averaged together and converted to a 30 point scale to form a composite score.

Answer:

1. State Share for the Total Project Cost: \$641,967
2. 569 Units = \$1,128 State Cost per Unit Passed
3. All residents will be offered 1 gpbs internet speed

17. A description of applicant and co-applicant's history or experience with managing grants and constructing broadband communications facilities in the Commonwealth of Virginia and elsewhere.

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received an award from the Tobacco Regional Revitalization Commission for construction of a broadband project to serve over 1600 homes and businesses in Appomattox County. The project is under construction with completion expected in January 2019. The project not only met all project goals but has been expanded to include another 180 homes and businesses in an adjacent unserved area.

Fluvanna County has worked with numerous state and federal agencies on many different types of grants over the years, for Public Safety, Planning and Transportation to name a few. Fluvanna County Government and Fluvanna County Public Schools recently collaborated on a fiber network project for all school buildings and a majority of county buildings. This project allowed the schools to meet Erate Program Modernization 2.0, some key elements of the modernization order:

- Ensure that all schools and libraries have access to high-speed connectivity
- Permit self-construction of their own high-speed broadband networks, or portions of such networks
- Provide additional funding, up to 10 percent, to match state funding for special construction charges for high-speed broadband
- Requirements
 - o Dedicated internet bandwidth of 1 Gbps per 1,000 students and staff
 - o Internal wide area network bandwidth of 10 Gbps per 1,000 students and staff

Erate Self-Provisioned Fiber Funding was used for portions of the project for the schools, as well as the county library. In addition, the schools received some Virginia Public School Authority matching funds for the project.

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Fluvanna County has worked with numerous state and federal agencies on many different types of grants.

18. Service

Describe the Internet service offerings to be provided after completion of this project and your price structure for these services. The service offerings should include all relevant tiers.

Answer:

There will be two options for internet service:

Firefly Light	100 mbps symmetrical	\$49.99/mo.
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Firefly Flash	1 gbps symmetrical	\$79.99/mo.
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There will also be an option for Voice over IP phone service. The VoIP service is \$34.99 if purchased standalone or \$29.99 if purchased with internet service.

Internet service is delivered as a managed wifi service without extra charge to the customer. There will be a Lifeline option for voice or broadband that will provide a \$10 monthly discount for the accounts which qualify under the FCC definitions of low and moderate income households.

19. Additional Information

Any other equitable factor that the applicant desires to include.

Answer:

The Fluvanna and CVEC partnership project to deliver true broadband to the rural area of Fluvanna County should be a priority for funding from the VATI program. Not only does the proposed project meet all requirements, but it provides the highest level of speeds available in the world at extremely competitive prices. It leverages the electric

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distribution system infrastructure already in place, and it is based on a technology that is as future proof as any known in the communications field today. The grant funds request is also well below 50% of the project cost, providing a much higher match and an excellent return on investment for the state grant dollars.

The project will make 1 gbps speed available to each home or business. By changing the electronics at the communications hut with a different card in the electronics chassis, the same fiber can deliver 10 gbps today. At Ozarks Electric in Arkansas, the same vendor used in this project (Calix) is testing a new laser with theoretical limits of 80 gbps over the same type of fiber and same distribution design. The system has been in place and testing at speeds over 50 gbps for several months in the early stages of the testing. The fiber optic system provides a long term solution to the exponential growth in data transfer required in broadband systems.

The project also provides peripheral benefits to the community and state. Contractors use local businesses for meals, gas and lodging giving a nice bump to the economy during construction. CVEC is presently employing contractors headquartered in Virginia for its two largest labor contracts on the fiber projects, allowing all of the contract employees' earnings to be spent with other Virginia businesses and multiplying the benefits of the investment through the state. The final infrastructure will be a long term asset to members of CVEC, providing a high speed network that will allow new technologies to improve efficiency, improve reliability and lower power costs. The new plant investment will also increase the tax base in Fluvanna County, providing tax revenues through its utility tax on an annual basis.

The financial benefits also are returned to the state and to the county, because CVEC is a not for profit electric cooperative owned by its members. All profits that Firefly Fiber Broadband will realize will be returned to its parent company, Central Virginia Electric Cooperative and its members helping to reduce the cost of electricity for the cooperative members.

The combination of the best technology and fastest speed, service from a local company at a very competitive price, with almost all benefits during and after construction going to the community and state, differentiate this project. With Fluvanna County's strong commitment in dollars and time, the county has also stepped forward to make a clear statement of the importance of solving the rural broadband problems in their locality. There is no other combination of public and private partnership that will provide the same level of benefits for the amount of grant dollars requested.

Attachments:

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Derivation of Cost (Project Budget)

1VATICostColumbia12142018124412.xlsx

Project Management Plan

2ProjectManagementPlan12142018124427.pdf

Supporting documentation for costs estimates

CVECFTHModel082917AssumptionsreportDDeditdocx1214201833337.pdf

Map(s) of project area, including proposed infrastructure

ColumbiaMap1214201833053.pdf

Map(s) or schematic of existing broadband providers (inventory of existing assets)

5Mapsorschematicofexistingbroadbandproviders12142018124453.pdf

Documentation of relationship between applicant and co-applicant (formal or informal)

FluvannaCountyVATIrelationshipbetweenapplicantandcoapplicantdocx1214201831150.pdf

Two most recent Form 477 submitted to FCC

7Form7inplaceofForm47712142018124521.pdf

Documentation for in-kind contributions, including value(s)

8Documentationforinkindcontributions12142018124551.pdf

Documentation supporting project costs (i.e. vendor quotes)

9Documentationsupportingprojectcosts12142018124612.pdf

Documentation of source of match funding

10Documentationofsourceofmatchfundingdocx12142018124804.pdf

Documentation that proposed project area is unserved based on VATI criteria

11Documentationthatproposedprojectareaisunserved12142018124929.pdf

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Documentation that proposed project area is not designated for Connect America Funding (CAF)

12DocumentationthatproposedareaisnotdesignatedforCAF12142018125032.pdf

Funding Sources Table

FluvannaVATIFundingSourcesTable9242018933231214201835643.docx

CDBG Derivation of Cost

Product		Total	VATI	Non-VATI	Source of Estimate	Date
EXAMPLE						
<u>Construction</u>						
200 LF of fiber @\$150/LF		\$30,000	\$15,000	\$15,000	Company A	9/5/2016
Tower		\$100,000	\$80,000	\$20,000	Company B	9/5/2016
Engineering		\$20,000	\$0	\$20,000	ABC Engineering Firm	9/5/2016

30000

Product	Units	Cost per unit	Total	VATI	Non-VATI	Source of Estimate	Date
Overhead labor	73.01	9240	\$ 674,612	\$ 269,845	\$ 404,767	Conexon consultant Confirmed with 2018 project	12/10/2018
Steel strand	73.01	1109	\$ 80,968	\$ 80,968	\$ -	Conexon consultant Confirmed with 2018 project	12/10/2018
Overhead fiber	73.01	2640	\$ 192,746	\$ 192,746	\$ -	Conexon consultant Confirmed with 2018 project	12/10/2018
Hardware	73.01	800	\$ 58,408	\$ 58,408	\$ -	Conexon consultant Confirmed with 2018 project	12/10/2018
Splicing (not including taps and splitters)	73.01	1100	\$ 80,311	\$ -	\$ 80,311	Conexon consultant Confirmed with 2018 project	12/10/2018
Fiber design and field confirmation (OH)	73.01	1200	\$ 87,612	\$ -	\$ 87,612	Conexon consultant Confirmed with 2018 project	12/10/2018
Construction management (OH)	73.01	827	\$ 60,379	\$ -	\$ 60,379	Conexon consultant Confirmed with 2018 project	12/10/2018
Overhead electric make ready construction	73.01	4500	\$ 328,545	\$ -	\$ 328,545	CVEC based on 2018 project	12/10/2018
Underground labor	9.23	47,520	\$ 438,610	\$ -	\$ 438,610	Conexon consultant Confirmed with 2018 project	12/10/2018
Underground conduit	9.23	2957	\$ 27,293	\$ -	\$ 27,293	Conexon consultant Confirmed with 2018 project	12/10/2018
Underground fiber	9.23	2140	\$ 19,752	\$ -	\$ 19,752	Conexon consultant Confirmed with 2018 project	12/10/2018
Pedestals and vaults	9.23	2640	\$ 24,367	\$ -	\$ 24,367	Conexon consultant Confirmed with 2018 project	12/10/2018
Hardware	9.23	250	\$ 2,308	\$ -	\$ 2,308	Conexon consultant Confirmed with 2018 project	12/10/2018
Splicing (not including taps and splitters)	9.23	900	\$ 8,307	\$ -	\$ 8,307	Conexon consultant Confirmed with 2018 project	12/10/2018

CDBG Derivation of Cost

Fiber design and field confirmation (UG)	9.23	1200	\$ 11,076	\$ -	\$ 11,076	Conexon consultant Confirmed with 2018 project	12/10/2018
Construction management (UG)	9.23	3874	\$ 35,757	\$ -	\$ 35,757	Conexon consultant Confirmed with 2018 project	12/10/2018
Outside plant splitters	569	159	\$ 90,471	\$ -	\$ 90,471	Conexon consultant Confirmed with 2018 project	12/10/2018
Service drop cost	228	550	\$ 125,400	\$ -	\$ 125,400	Conexon consultant Confirmed with 2018 project	12/10/2018
Communications hut (10x24 with A/C & power)	1	50,000	\$ 40,000	\$ 40,000	\$ -	CVEC based on 2018 project	12/10/2018
Communications hut installation	1	10,000	\$ 10,000	\$ -	\$ 10,000	CVEC based on 2018 project	12/10/2018
Communications hut electronics and inverters	1	91,670	\$ 91,670	\$ -	\$ 91,670	CVEC based on 2018 project	12/10/2018
Totals			\$2,488,593	\$641,967	\$1,846,625		

Project Management Plan

CVEC intends to manage the grant project using the same team and same approach that it has established for building out a fiber to the home network passing 9356 homes and businesses between August 2018 and July 2019. The one year effort will result in the construction of three substation areas that will total 556 miles of overhead fiber and 216 miles of underground plus three communication huts. All of the homes and businesses who sign up for service will also have drops installed and service connected within the year.

CVEC developed a team of business partners that provide the experience and resources necessary to design and build fiber along the rural electric distribution lines at a pace of 15 miles per week on average. The team is committed to the full first year buildout, after which CVEC may choose to rebid portions of the construction work or continue with the same partners.

CVEC has made the fiber construction project a priority within the cooperative. The internal project management team includes the three company officers: Gary Wood, CEO; Bruce Maurhoff, COO and Tina Mallia, CFO. The inclusion of the executive team assures that the project will receive the attention necessary to meet the aggressive schedule.

The CEO serves as executive project manager with the COO leading the internal CVEC operations and overseeing contractor liaisons. Conexon serves as the design contractor and also provides contract project management for make ready construction and fiber construction. Conexon uses a combination of office based design with field positions dedicated to the CVEC project to provide the necessary design and project oversight. Conexon also coordinates permits as required with VDOT, railroads and any other agencies. Conexon reviews invoices from construction partners, compares to design and material purchases, and reconciles differences before recommending them to CVEC for payment.

CVEC procures the material, and is using Graybar on a contract basis to provide material management for the fiber materials. The cooperative also provides GIS data on the existing electric system, handles customers contact and questions about the various contractors working in the rights of way, and provides a full time contractor liaison in the field to expedite resolutions to field encountered problems.

PowerTech provides contracting staking and field engineering resources as necessary (typically 8 to 12 employees) to meet schedules for field engineering every mile of overhead line and prepare staking sheets showing the necessary changes at each pole to prepare for the fiber installation.

Richardson Wayland Electrical Company (RWEC) provides electric line contracting to perform the make ready construction to prepare the poles for the fiber installation. When necessary, CVEC has used a second contractor and has added internal crews to assure the work stays on schedule regardless of weather issues. Typically there will be 8 to 12 crews daily working on make ready modifications to the poles.

S&N Communications performs all fiber construction, overhead and underground, as well as placing the service drops to the individual homes. On a typical day, S&N might have as many as 8 to 10 overhead crews and a similar number of underground crews on the project.

Project schedules are coordinated between the parties. Weekly project meetings review status and schedule as well as provide opportunities for issue identification and resolution.

VATI Grant Application: Supporting Documentation for Costs Estimates

Cost estimates are based on a feasibility study performed for CVEC by Conexon in 2017. Conexon is a consulting and design firm which has been responsible for construction of tens of thousands of miles of fiber at electric cooperatives across the US. Their assumptions document provides details of their estimates for overhead and underground fiber construction; that document is attached. CVEC is well into construction of its first substation and has begun construction on its second substation. It has bid materials for almost 800 miles of construction and has negotiated proprietary pricing with vendors for communications huts, head end electronics and many other components of the system. The pricing in the estimates for this project are based on the original estimates from Conexon, modified where necessary based on actual pricing from the ongoing CVEC fiber buildout.

General Assumptions

GPON fiber to the home
16:2:1 split (utilizing 2:1 headend split and distributed taps or 16:1 effective field splitters)
Calix E7 access equipment
Installations capitalized as short term asset
Battery backup installed on ONT at subscriber's expense
Heavy reliance on contractors for construction, installation, maintenance
Redundant 10 gigabit paths to internet
All passive network (no remote active cabinets)
No email offering
Strand and lash construction in power zone when necessary to avoid make ready
Partner to provide voice

Construction Assumptions

Miles main line distribution plant		3,474
% aerial		79%
Drops success based		Yes
Base cost per mile - underground	\$	61,480
Labor per mile	\$	47,520
Conduit	\$	2,957
Fiber	\$	2,140
Design and walkout	\$	1,200
Peds and Vaults	\$	2,640
Hardware	\$	250
Splicing (not including taps/splitters)	\$	900

Construction management	\$	3,874
Materials management	\$	-
Base cost per mile - aerial	\$	16,546
Labor per mile	\$	9,240
Strand material cost per mile	\$	739
Fiber average cost per mile	\$	2,640
Design and walkout	\$	1,200
Hardware	\$	800
Splicing (not including taps/splitters)	\$	1,100
Construction management	\$	827
Materials management	\$	-
Make ready cost per mile (direct fiber)	\$	3,000
Average OSP splitter cost per port (passing)	\$	159
Cost per service drop	\$	550
Homes and small businesses passed		36,633
Large businesses and cell towers passed		600
Initial res/bus customer take rate		35%

Initial large business take rate		10%
Customer ramp period (months)		24
Churn rate (per month)		0.2%
New homes per year (%)		1.6%
Penetration growth rate per year (after construction)		3.0%
Maximum penetration		60.0%
Interest rate on loans		3.8%
Loan term in years		30
Startup costs (legal, compliance, contracts, permitting)	\$	250,000
Property taxes (% of NBV of property)		0.75%
Maintenance per mile	\$	50.00
Maintenance capex (% of distribution plant)		0.3%
Annual expense increases		3.0%
Long term depreciation (years)		30
Mid term depreciation		10
Short term depreciation		5
Fiber lease charged to OE rate per mile per year	\$	3,100
Lease rate charged to OE per service drop per year	\$	58.30
Lease rate annual escalator		3%
Fiber lease rate per mile during construction	\$	3,000
Lease rate per service drop during construction	\$	40.00

Operating Entity Assumptions

Video headend (if selected)	\$	-
Routers, back office, marginal head-end and licenses	\$	700,000
OLT electronics cost per splitter port	\$	66.89
Blended video rate (includes equip)	\$	84.07
Blended data rate	\$	60.57
Blended telephone rate	\$	38.14
Percent taking video		0%
Percent taking data		100%
Percent taking a phone service		35%
Video takerate annual decline		-1%
Phone takerate annual decline		-1%
Blended bundle discount per connect	\$	-
Large customer retail rate (blended)	\$	350.00
Annual increase - retail (not video)		0.0%
Fee per installation (contribution)	\$	100
Annual increase - video rates		4.0%
Potential annual CAF Subsidy	\$	-
Blended Video Cost	\$	66.70
Blended telephone cost	\$	9.22
Annual video rate increases		4.0%
Tech support fees - per subscriber	\$	1.75

Annual telephone increases		0.0%
Head end and electronics maintenance per year as % of value		2.0%
Base bandwidth, data and video transport per month	\$	12,000
Base bandwidth capacity (Mbps)		4,096
Over subscription ratio N:1		250
Reserved bandwidth per large commercial data cust		20
Cost per incremental Mbps	\$	2.00
Growth rate of cost per Mbps		-0.5%
Annual bandwidth growth per customer		3.0%
Interest rate on loans		3.9%
Term in years		20
Years of loan that are interest only		1
Increase in install fee after const	\$	50.00
Introductory promotion monthly value	\$	-
Introductory promotion period in months (MAX 12)		0
Startup costs (legal, compliance, contracts, permitting)	\$	150,000.00
Property taxes (% of NBV of property)		1%
Marketing per new passing	\$	25.00
Bad debt (% of revenue)		0.5%
Utilities (per month)	\$	3,000
Average new vehicle price	\$	60,000.00
Vehicle life in years		6
Vehicle repairs/fuel (each/month)	\$	600.00
Annual expense increases		2.0%
Other operating expense (% revenue)		0.3%
Maintenance capex (% of distribution plant)		0.3%
Long term depreciation (years)		30.00
Mid term depreciation		10.00
Short term depreciation		5.00
Expected income tax rate (federal, state, and local)		39%
Average installation cost per connect	\$	140
Set top box - HD - cost per box	\$	-
Set top box - HD/DVR - cost per box	\$	-
Set top box - HD - boxes per video customer	\$	-
Set top box - HD/DVR - boxes per home	\$	-
Head end license fee per subscriber	\$	-
Install materials (in-house) - per install	\$	50
ONT cost	\$	205
Annual price increases		0.0%
Technical average annual salary	\$	65,000
Marketing average annual salary	\$	65,000
Average number of subscribers per technician		2500
Average technician salary	\$	45,000
Average number of subscribers per CSR		2500
Average CSR salary	\$	35,000

Administrative positions in year 1		5
Capex per new employee	\$	5,000
Travel expenses (per administrative position)	\$	5,000

VATI Grant Application: Maps or schematic of existing broadband providers

Mapping existing providers is a difficult challenge. There is an existing telephone provider, CenturyLink, who covers most of the service area which probably equates to 80% of the area. Verizon covers the remaining area which is primarily the southwest portion of the project area. CenturyLink does not provide service at speeds exceeding the 10/1 standard inside the service area to more than 10% of the homes and businesses.

Fixed wireless providers offer propagation studies to represent their service territories, but the studies are based on a number of assumptions and have proven to not be accurate based on the results of surveys of homeowners in the area who do not receive the speed promised from the provider. What service area lines to use for wireless providers is a quandary without a clear solution. SCS Broadband is the primary fixed wireless provider in the Midway area but the coverage inside the project area does not include more than 10% of the homes at the speed of 10 mbps download based on the survey results from residents in the area.

Cell towers could be located but their coverage area is again hard to define. The providers generally do not like to provide the transmitter power specifications and their propagation varies significantly based on the power of the transmitter. Cell towers that cover the grant proposal area provide coverage and most residents use cell service for internet connectivity. These signals do not meet the 10/1 standard and often come with data caps, or speed slowdowns after certain amounts of data transfer.

Cable companies do not provide maps of their service areas in response to questions related to overlap.

Surveys of homeowners provide some information on where service is available, but it also provides information about where the service is not available even though the service providers state that they have coverage.

Fluvanna Relationship VATI Grant

CVEC has a relationships with Fluvanna County based on mutual interests to overcome the lack of broadband availability. This relationship goes beyond this grant application to provide ongoing support and incentives to CVEC based on payments equivalent to the new tax revenues into the counties for the new fiber infrastructure. Fluvanna has agreed to provide incentive payments to CVEC and its subsidiary Central Virginia Services, Inc equivalent to the amount of tax revenue realized by the county in return for CVEC and CVSI making gigabit level service available to the CVEC members in the county. This agreement also encourages the expansion of the fiber based internet service offering beyond the CVEC borders as well.

For this grant, Fluvanna will provide assistance with the grant application and during construction will assist with permitting and public rights of way and easements to facilitate the construction of the project. The agreement is verbal and informal.

VATI Grant Application: Two of most recent Form 477 submitted to FCC

CVEC has not yet submitted a Form 477 and is providing the last two years of its Form 7 for this section, as approved by our DCHD liaison.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0572-0032. The time required to complete this information collection is estimated to average 15 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

UNITED STATES DEPARTMENT OF AGRICULTURE
RURAL UTILITIES SERVICE

**FINANCIAL AND OPERATING REPORT
ELECTRIC DISTRIBUTION**

BORROWER DESIGNATION
VA0029

PERIOD ENDED December, 2016

BORROWER NAME
Central Virginia Electric Cooperative

INSTRUCTIONS - See help in the online application.

This information is analyzed and used to determine the submitter's financial situation and feasibility for loans and guarantees. You are required by contract and applicable regulations to provide the information. The information provided is subject to the Freedom of Information Act (5 U.S.C. 552)

CERTIFICATION

We recognize that statements contained herein concern a matter within the jurisdiction of an agency of the United States and the making of a false, fictitious or fraudulent statement may render the maker subject to prosecution under Title 18, United States Code Section 1001.

We hereby certify that the entries in this report are in accordance with the accounts and other records of the system and reflect the status of the system to the best of our knowledge and belief.

ALL INSURANCE REQUIRED BY PART 1788 OF 7 CFR CHAPTER XVII, RUS, WAS IN FORCE DURING THE REPORTING PERIOD AND RENEWALS HAVE BEEN OBTAINED FOR ALL POLICIES DURING THE PERIOD COVERED BY THIS REPORT PURSUANT TO PART 1718 OF 7 CFR CHAPTER XVII

(check one of the following)

All of the obligations under the RUS loan documents have been fulfilled in all material respects.

There has been a default in the fulfillment of the obligations under the RUS loan documents. Said default(s) is/are specifically described in Part D of this report.

Gary Wood

4/3/2017

DATE

PART A. STATEMENT OF OPERATIONS

ITEM	YEAR-TO-DATE			THIS MONTH (d)
	LAST YEAR (a)	THIS YEAR (b)	BUDGET (c)	
1. Operating Revenue and Patronage Capital	84,826,746	84,594,302	84,739,135	8,767,686
2. Power Production Expense	24,051	16,503	31,445	278
3. Cost of Purchased Power	55,403,052	51,509,611	51,447,686	4,698,903
4. Transmission Expense	157,544	118,983	95,370	10,387
5. Regional Market Expense				
6. Distribution Expense - Operation	3,719,098	3,680,607	4,029,858	389,450
7. Distribution Expense - Maintenance	5,395,770	5,891,547	5,262,714	461,825
8. Customer Accounts Expense	1,859,104	2,104,565	2,054,436	184,424
9. Customer Service and Informational Expense	237,012	158,357	224,178	15,154
10. Sales Expense				
11. Administrative and General Expense	5,891,843	5,964,843	6,492,079	743,273
12. Total Operation & Maintenance Expense (2 thru 11)	72,687,474	69,445,016	69,637,766	6,503,694
13. Depreciation and Amortization Expense	6,234,168	6,486,413	6,901,556	536,976
14. Tax Expense - Property & Gross Receipts				
15. Tax Expense - Other				
16. Interest on Long-Term Debt	4,898,816	4,471,215	4,379,327	365,520
17. Interest Charged to Construction - Credit				
18. Interest Expense - Other	27,319	122,925	27,312	43,242
19. Other Deductions	(32,866)	2,163,283		2,163,283
20. Total Cost of Electric Service (12 thru 19)	83,814,911	82,688,852	80,945,961	9,612,715
21. Patronage Capital & Operating Margins (1 minus 20)	1,011,835	1,905,450	3,793,174	(845,029)
22. Non Operating Margins - Interest	136,562	33,749	32,400	2,662
23. Allowance for Funds Used During Construction				
24. Income (Loss) from Equity Investments				
25. Non Operating Margins - Other	3,542	(114,656)	211,800	(62,444)
26. Generation and Transmission Capital Credits				
27. Other Capital Credits and Patronage Dividends	119,939	187,014		(5,568)
28. Extraordinary Items				
29. Patronage Capital or Margins (21 thru 28)	1,271,878	2,011,557	4,037,374	(910,379)

UNITED STATES DEPARTMENT OF AGRICULTURE
RURAL UTILITIES SERVICE

FINANCIAL AND OPERATING REPORT
ELECTRIC DISTRIBUTION

BORROWER DESIGNATION

VA0029

PERIOD ENDED

December, 2016

INSTRUCTIONS - See help in the online application.

PART B. DATA ON TRANSMISSION AND DISTRIBUTION PLANT

ITEM	YEAR-TO-DATE		ITEM	YEAR-TO-DATE	
	LAST YEAR (a)	THIS YEAR (b)		LAST YEAR (a)	THIS YEAR (b)
1. New Services Connected	351	595	5. Miles Transmission	68.32	68.32
2. Services Retired	69	75	6. Miles Distribution – Overhead	3,312.90	3,309.43
3. Total Services in Place	37,570	38,201	7. Miles Distribution - Underground	1,265.53	1,293.28
4. Idle Services (Exclude Seasonals)	1,880	1,966	8. Total Miles Energized (5 + 6 + 7)	4,646.75	4,671.03

PART C. BALANCE SHEET

ASSETS AND OTHER DEBITS		LIABILITIES AND OTHER CREDITS	
1. Total Utility Plant in Service	224,625,385	30. Memberships	0
2. Construction Work in Progress	6,658,040	31. Patronage Capital	48,328,213
3. Total Utility Plant (1 + 2)	231,283,425	32. Operating Margins - Prior Years	0
4. Accum. Provision for Depreciation and Amort.	68,459,783	33. Operating Margins - Current Year	1,905,450
5. Net Utility Plant (3 - 4)	162,823,642	34. Non-Operating Margins	106,107
6. Non-Utility Property (Net)	0	35. Other Margins and Equities	4,359,311
7. Investments in Subsidiary Companies	0	36. Total Margins & Equities (30 thru 35)	54,699,081
8. Invest. in Assoc. Org. - Patronage Capital	943,701	37. Long-Term Debt - RUS (Net)	0
9. Invest. in Assoc. Org. - Other - General Funds	0	38. Long-Term Debt - FFB - RUS Guaranteed	63,521,671
10. Invest. in Assoc. Org. - Other - Nongeneral Funds	1,275,352	39. Long-Term Debt - Other - RUS Guaranteed	0
11. Investments in Economic Development Projects	0	40. Long-Term Debt Other (Net)	40,913,764
12. Other Investments	956,135	41. Long-Term Debt - RUS - Econ. Devel. (Net)	0
13. Special Funds	0	42. Payments – Unapplied	0
14. Total Other Property & Investments (6 thru 13)	3,175,188	43. Total Long-Term Debt (37 thru 41 - 42)	104,435,435
15. Cash - General Funds	1,682,902	44. Obligations Under Capital Leases - Noncurrent	0
16. Cash - Construction Funds - Trustee	1	45. Accumulated Operating Provisions and Asset Retirement Obligations	2,086,902
17. Special Deposits	0	46. Total Other Noncurrent Liabilities (44 + 45)	2,086,902
18. Temporary Investments	0	47. Notes Payable	9,000,000
19. Notes Receivable (Net)	0	48. Accounts Payable	5,318,438
20. Accounts Receivable - Sales of Energy (Net)	10,586,242	49. Consumers Deposits	1,578,484
21. Accounts Receivable - Other (Net)	503,386	50. Current Maturities Long-Term Debt	4,490,958
22. Renewable Energy Credits	0	51. Current Maturities Long-Term Debt - Economic Development	0
23. Materials and Supplies - Electric & Other	2,320,705	52. Current Maturities Capital Leases	0
24. Prepayments	208,855	53. Other Current and Accrued Liabilities	1,328,861
25. Other Current and Accrued Assets	8,037	54. Total Current & Accrued Liabilities (47 thru 53)	21,716,741
26. Total Current and Accrued Assets (15 thru 25)	15,310,128	55. Regulatory Liabilities	0
27. Regulatory Assets	0	56. Other Deferred Credits	2,067,824
28. Other Deferred Debits	3,697,025	57. Total Liabilities and Other Credits (36 + 43 + 46 + 54 thru 56)	185,005,983
29. Total Assets and Other Debits (5+14+26 thru 28)	185,005,983		

<p style="text-align: center;">UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION</p>	<p>BORROWER DESIGNATION VA0029</p>
<p>INSTRUCTIONS - See help in the online application.</p>	<p>PERIOD ENDED December, 2016</p>
<p>PART D. NOTES TO FINANCIAL STATEMENTS</p>	

<p>UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE</p> <p>FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION</p>	<p>BORROWER DESIGNATION</p> <p>VA0029</p>
<p>INSTRUCTIONS - See help in the online application.</p>	<p>PERIOD ENDED</p> <p>December, 2016</p>
<p>PART D. CERTIFICATION LOAN DEFAULT NOTES</p>	
<p> </p>	

**FINANCIAL AND OPERATING REPORT
ELECTRIC DISTRIBUTION**

BORROWER DESIGNATION VA0029

PERIOD ENDED December, 2016

INSTRUCTIONS - See help in the online application.

PART E. CHANGES IN UTILITY PLANT

PLANT ITEM	BALANCE BEGINNING OF YEAR (a)	ADDITIONS (b)	RETIREMENTS (c)	ADJUSTMENTS AND TRANSFERS (d)	BALANCE END OF YEAR (e)
1. Distribution Plant	180,910,472	11,215,634	6,127,203		185,998,903
2. General Plant	15,949,111	6,073,247	7,597,857		14,424,501
3. Headquarters Plant	7,820,430		1,663		7,818,767
4. Intangibles	2,126,286	0	0	0	2,126,286
5. Transmission Plant	14,256,929	0	0	0	14,256,929
6. Regional Transmission and Market Operation Plant					
7. All Other Utility Plant	0				0
8. Total Utility Plant in Service (1 thru 7)	221,063,228	17,288,881	13,726,723	0	224,625,386
9. Construction Work in Progress	7,406,922	(748,883)			6,658,039
10. Total Utility Plant (8 + 9)	228,470,150	16,539,998	13,726,723	0	231,283,425

PART F. MATERIALS AND SUPPLIES

ITEM	BALANCE BEGINNING OF YEAR (a)	PURCHASED (b)	SALVAGED (c)	USED (NET) (d)	SOLD (e)	ADJUSTMENT (f)	BALANCE END OF YEAR (g)
1. Electric	2,175,212	2,456,645	180,661	2,480,720	11,093		2,320,705
2. Other	0						0

PART G. SERVICE INTERRUPTIONS

ITEM	AVERAGE MINUTES PER CONSUMER BY CAUSE				TOTAL (e)
	POWER SUPPLIER (a)	MAJOR EVENT (b)	PLANNED (c)	ALL OTHER (d)	
1. Present Year	110.000	62.000	8.000	205.000	385.000
2. Five-Year Average	89.000	1,130.000	12.000	214.000	1,445.000

PART H. EMPLOYEE-HOUR AND PAYROLL STATISTICS

1. Number of Full Time Employees	102	4. Payroll - Expensed	5,397,056
2. Employee - Hours Worked - Regular Time	212,163	5. Payroll - Capitalized	2,733,091
3. Employee - Hours Worked - Overtime	11,593	6. Payroll - Other	55,297

PART I. PATRONAGE CAPITAL

ITEM	DESCRIPTION	THIS YEAR (a)	CUMULATIVE (b)
1. Capital Credits - Distributions	a. General Retirements	1,070,446	15,265,884
	b. Special Retirements	527,042	5,971,730
	c. Total Retirements (a + b)	1,597,488	21,237,614
2. Capital Credits - Received	a. Cash Received From Retirement of Patronage Capital by Suppliers of Electric Power		
	b. Cash Received From Retirement of Patronage Capital by Lenders for Credit Extended to the Electric System	123,637	
	c. Total Cash Received (a + b)	123,637	

PART J. DUE FROM CONSUMERS FOR ELECTRIC SERVICE

1. Amount Due Over 60 Days	\$ 215,549	2. Amount Written Off During Year	\$ 259,243
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ENERGY EFFICIENCY AND CONSERVATION LOAN PROGRAM

1. Anticipated Loan Delinquency %		4. Anticipated Loan Default %	
2. Actual Loan Delinquency %		5. Actual Loan Default %	
3. Total Loan Delinquency Dollars YTD	\$	6. Total Loan Default Dollars YTD	\$

UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION	BORROWER DESIGNATION VA0029
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INSTRUCTIONS - See help in the online application	PERIOD ENDED December, 2016
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PART K. kWh PURCHASED AND TOTAL COST

No	ITEM	SUPPLIER CODE	RENEWABLE ENERGY PROGRAM NAME	RENEWABLE FUEL TYPE	kWh PURCHASED	TOTAL COST	AVERAGE COST (Cents/kWh)	INCLUDED IN TOTAL COST - FUEL COST ADJUSTMENT	INCLUDED IN TOTAL COST - WHEELING AND OTHER CHARGES
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
1	Southeastern Power Admin	29304	Hydro Electric	Hydro	27,672,779	1,785,803	6.45		
2	PJM Interconnection (PA)	800468				16,762,398	0.00		
3	*Miscellaneous	700000				1,205,594	0.00		
4	*Miscellaneous	700000			720,369,986	31,755,816	4.41		
	Total				748,042,765	51,509,611	6.89		

UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION	BORROWER DESIGNATION VA0029
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INSTRUCTIONS - See help in the online application	PERIOD ENDED December, 2016
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PART K. kWh PURCHASED AND TOTAL COST

No	Comments
1	
2	
3	
4	

UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION		BORROWER DESIGNATION VA0029	
INSTRUCTIONS - See help in the online application.		PERIOD ENDED December, 2016	
PART L. LONG-TERM LEASES			
No	NAME OF LESSOR (a)	TYPE OF PROPERTY (b)	RENTAL THIS YEAR (c)
	TOTAL		

UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION		BORROWER DESIGNATION VA0029	
INSTRUCTIONS - See help in the online application.		PERIOD ENDED December, 2016	
PART M. ANNUAL MEETING AND BOARD DATA			
1. Date of Last Annual Meeting 6/22/2016	2. Total Number of Members 30,901	3. Number of Members Present at Meeting 90	4. Was Quorum Present? Y
5. Number of Members Voting by Proxy or Mail 1,220	6. Total Number of Board Members 9	7. Total Amount of Fees and Expenses for Board Members \$ 237,292	8. Does Manager Have Written Contract? N

RUS Financial and Operating Report Electric Distribution

Revision Date 2014

UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION	BORROWER DESIGNATION VA0029
INSTRUCTIONS - See help in the online application.	PERIOD ENDED December, 2016

PART N. LONG-TERM DEBT AND DEBT SERVICE REQUIREMENTS

No	ITEM	BALANCE END OF YEAR (a)	INTEREST (Billed This Year) (b)	PRINCIPAL (Billed This Year) (c)	TOTAL (Billed This Year) (d)
1	Rural Utilities Service (Excludes RUS - Economic Development Loans)				
2	National Rural Utilities Cooperative Finance Corporation	37,468,327	1,710,982	2,540,386	4,251,368
3	CoBank, ACB	3,445,437	151,236	116,648	267,884
4	Federal Financing Bank	63,521,671	2,608,997	1,904,108	4,513,105
5	RUS - Economic Development Loans				
6	Payments Unapplied				
7	Principal Payments Received from Ultimate Recipients of IRP Loans				
8	Principal Payments Received from Ultimate Recipients of REDL Loans				
9	Principal Payments Received from Ultimate Recipients of EE Loans				
	TOTAL	104,435,435	4,471,215	4,561,142	9,032,357

UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION	BORROWER DESIGNATION VA0029
INSTRUCTIONS - See help in the online application.	PERIOD ENDED December, 2016

PART O. POWER REQUIREMENTS DATABASE - ANNUAL SUMMARY

CLASSIFICATION	CONSUMER SALES & REVENUE DATA	DECEMBER (a)	AVERAGE NO. CONSUMERS SERVED (b)	TOTAL YEAR TO DATE (c)
1. Residential Sales (excluding seasonal)	a. No. Consumers Served	32,611	32,423	
	b. kWh Sold			487,370,132
	c. Revenue			62,606,907
2. Residential Sales - Seasonal	a. No. Consumers Served			
	b. kWh Sold			
	c. Revenue			
3. Irrigation Sales	a. No. Consumers Served			
	b. kWh Sold			
	c. Revenue			
4. Comm. and Ind. 1000 KVA or Less	a. No. Consumers Served	3,854	3,803	
	b. kWh Sold			124,697,306
	c. Revenue			13,473,710
5. Comm. and Ind. Over 1000 KVA	a. No. Consumers Served	14	13	
	b. kWh Sold			126,413,710
	c. Revenue			7,076,648
6. Public Street & Highway Lighting	a. No. Consumers Served			
	b. kWh Sold			
	c. Revenue			
7. Other Sales to Public Authorities	a. No. Consumers Served			
	b. kWh Sold			
	c. Revenue			
8. Sales for Resale - RUS Borrowers	a. No. Consumers Served			
	b. kWh Sold			
	c. Revenue			
9. Sales for Resale - Other	a. No. Consumers Served			
	b. kWh Sold			
	c. Revenue			
10. Total No. of Consumers (lines 1a thru 9a)		36,479	36,239	
11. Total kWh Sold (lines 1b thru 9b)				738,481,148
12. Total Revenue Received From Sales of Electric Energy (lines 1c thru 9c)				83,157,265
13. Transmission Revenue				
14. Other Electric Revenue				1,437,036
15. kWh - Own Use				1,262,249
16. Total kWh Purchased				748,042,765
17. Total kWh Generated				192,904
18. Cost of Purchases and Generation				51,645,097
19. Interchange - kWh - Net				
20. Peak - Sum All kW Input (Metered) Non-coincident <input checked="" type="checkbox"/> Coincident <input type="checkbox"/>				222,885

UNITED STATES DEPARTMENT OF AGRICULTURE
RURAL UTILITIES SERVICE

**FINANCIAL AND OPERATING REPORT
ELECTRIC DISTRIBUTION**

BORROWER DESIGNATION VA0029

PERIOD ENDED December, 2016

INSTRUCTIONS - See help in the online application.

PART P. ENERGY EFFICIENCY PROGRAMS

CLASSIFICATION	ADDED THIS YEAR			TOTAL TO DATE		
	No. of Consumers (a)	Amount Invested (b)	Estimated MMBTU Savings (c)	No. of Consumers (d)	Amount Invested (e)	Estimated MMBTU Savings (f)
1. Residential Sales (excluding seasonal)						
2. Residential Sales - Seasonal						
3. Irrigation Sales						
4. Comm. and Ind. 1000 KVA or Less						
5. Comm. and Ind. Over 1000 KVA						
6. Public Street and Highway Lighting						
7. Other Sales to Public Authorities						
8. Sales for Resale – RUS Borrowers						
9. Sales for Resale – Other						
10. Total						

RUS Financial and Operating Report Electric Distribution

Revision Date 2014

UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION INVESTMENTS, LOAN GUARANTEES AND LOANS	BORROWER DESIGNATION VA0029 PERIOD ENDED December, 2016
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INSTRUCTIONS - Reporting of investments is required by 7 CFR 1717, Subpart N. Investment categories reported on this Part correspond to Balance Sheet items in Part C. Identify all investments in Rural Development with an 'X' in column (e). Both 'Included' and 'Excluded' Investments must be reported. See help in the online application.

PART Q. SECTION I. INVESTMENTS (See Instructions for definitions of Income or Loss)

No	DESCRIPTION (a)	INCLUDED (\$) (b)	EXCLUDED (\$) (c)	INCOME OR LOSS (\$) (d)	RURAL DEVELOPMENT (e)
2	Investments in Associated Organizations				
	CFC PATRONAGE		775,619		
	CFC CAPITAL TERM CERTIFICATE		1,130,340		
	CFC MEMBER CAPITAL CERTIFICATE		25,000		
	COBANK		168,082		
	OTHER PATRONAGE		24,315		
	FEDERATED		95,697		
	Totals		2,219,053		
4	Other Investments				
	UNITED UTILITY		5,231		
	ERMCO		169,434		
	NRTC		17,512		
	INSURANCE POLICY		763,958		
	Totals		956,135		
6	Cash - General				
	BBT	1,492,706			
	COLLECTING BANKS		188,096		
	WORKING FUNDS		2,100		
	Totals	1,492,706	190,196		
9	Accounts and Notes Receivable - NET				
	MISC ACCOUNTS RECEIVABLE		503,386		
	Totals		503,386		
11	TOTAL INVESTMENTS (1 thru 10)	1,492,706	3,868,770		

UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION INVESTMENTS, LOAN GUARANTEES AND LOANS	BORROWER DESIGNATION VA0029 PERIOD ENDED December, 2016
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INSTRUCTIONS - Reporting of investments is required by 7 CFR 1717, Subpart N. Investment categories reported on this Part correspond to Balance Sheet items in Part C. Identify all investments in Rural Development with an 'X' in column (e). Both 'Included' and 'Excluded' Investments must be reported. See help in the online application.

PART Q. SECTION II. LOAN GUARANTEES

No	ORGANIZATION (a)	MATURITY DATE (b)	ORIGINAL AMOUNT (\$) (c)	LOAN BALANCE (\$) (d)	RURAL DEVELOPMENT (e)
	TOTAL				
	TOTAL (Included Loan Guarantees Only)				

UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION INVESTMENTS, LOAN GUARANTEES AND LOANS	BORROWER DESIGNATION VA0029
	PERIOD ENDED December, 2016

INSTRUCTIONS - Reporting of investments is required by 7 CFR 1717, Subpart N. Investment categories reported on this Part correspond to Balance Sheet items in Part C. Identify all investments in Rural Development with an 'X' in column (e). Both 'Included' and 'Excluded' Investments must be reported. See help in the online application.

SECTION III. RATIO

RATIO OF INVESTMENTS AND LOAN GUARANTEES TO UTILITY PLANT [Total of Included Investments (Section I, 11b) and Loan Guarantees - Loan Balance (Section II, 5d) to Total Utility Plant (Line 3, Part C) of this report]	0.64 %
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SECTION IV. LOANS

No	ORGANIZATION (a)	MATURITY DATE (b)	ORIGINAL AMOUNT (\$) (c)	LOAN BALANCE (\$) (d)	RURAL DEVELOPMENT (e)
	TOTAL				

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0572-0032. The time required to complete this information collection is estimated to average 15 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

UNITED STATES DEPARTMENT OF AGRICULTURE
RURAL UTILITIES SERVICE

**FINANCIAL AND OPERATING REPORT
ELECTRIC DISTRIBUTION**

BORROWER DESIGNATION
VA0029

PERIOD ENDED December, 2017

BORROWER NAME
Central Virginia Electric Cooperative

INSTRUCTIONS - See help in the online application.

This information is analyzed and used to determine the submitter's financial situation and feasibility for loans and guarantees. You are required by contract and applicable regulations to provide the information. The information provided is subject to the Freedom of Information Act (5 U.S.C. 552)

CERTIFICATION

We recognize that statements contained herein concern a matter within the jurisdiction of an agency of the United States and the making of a false, fictitious or fraudulent statement may render the maker subject to prosecution under Title 18, United States Code Section 1001.

We hereby certify that the entries in this report are in accordance with the accounts and other records of the system and reflect the status of the system to the best of our knowledge and belief.

ALL INSURANCE REQUIRED BY PART 1788 OF 7 CFR CHAPTER XVII, RUS, WAS IN FORCE DURING THE REPORTING PERIOD AND RENEWALS HAVE BEEN OBTAINED FOR ALL POLICIES DURING THE PERIOD COVERED BY THIS REPORT PURSUANT TO PART 1718 OF 7 CFR CHAPTER XVII

(check one of the following)

All of the obligations under the RUS loan documents have been fulfilled in all material respects.

There has been a default in the fulfillment of the obligations under the RUS loan documents. Said default(s) is/are specifically described in Part D of this report.

Gary Wood

3/23/2018

DATE

PART A. STATEMENT OF OPERATIONS

ITEM	YEAR-TO-DATE			THIS MONTH (d)
	LAST YEAR (a)	THIS YEAR (b)	BUDGET (c)	
1. Operating Revenue and Patronage Capital	84,594,302	79,903,997	83,716,592	9,068,375
2. Power Production Expense	16,503	6,125	33,987	299
3. Cost of Purchased Power	51,509,611	47,957,406	49,480,043	4,731,632
4. Transmission Expense	118,983	132,514	121,698	9,314
5. Regional Market Expense				
6. Distribution Expense - Operation	3,680,607	3,815,358	4,105,998	694,615
7. Distribution Expense - Maintenance	5,891,547	5,375,212	5,572,315	460,957
8. Customer Accounts Expense	2,104,565	1,935,920	2,200,026	59,862
9. Customer Service and Informational Expense	158,357	117,041	148,709	7,060
10. Sales Expense				
11. Administrative and General Expense	5,964,843	6,324,249	6,667,922	441,584
12. Total Operation & Maintenance Expense (2 thru 11)	69,445,016	65,663,825	68,330,698	6,405,323
13. Depreciation and Amortization Expense	6,486,413	6,753,402	6,625,532	580,761
14. Tax Expense - Property & Gross Receipts				
15. Tax Expense - Other				
16. Interest on Long-Term Debt	4,471,215	4,725,711	4,865,095	405,673
17. Interest Charged to Construction - Credit				
18. Interest Expense - Other	122,925	79,942	29,496	20,354
19. Other Deductions	2,163,283	(30,391)	0	(30,391)
20. Total Cost of Electric Service (12 thru 19)	82,688,852	77,192,489	79,850,821	7,381,720
21. Patronage Capital & Operating Margins (1 minus 20)	1,905,450	2,711,508	3,865,771	1,686,655
22. Non Operating Margins - Interest	33,749	76,832	204,366	7,767
23. Allowance for Funds Used During Construction				
24. Income (Loss) from Equity Investments				
25. Non Operating Margins - Other	(114,656)	42,988	1,800	(67,761)
26. Generation and Transmission Capital Credits				
27. Other Capital Credits and Patronage Dividends	187,014	316,902	210,000	17,500
28. Extraordinary Items				
29. Patronage Capital or Margins (21 thru 28)	2,011,557	3,148,230	4,281,937	1,644,161

UNITED STATES DEPARTMENT OF AGRICULTURE
RURAL UTILITIES SERVICE

**FINANCIAL AND OPERATING REPORT
ELECTRIC DISTRIBUTION**

BORROWER DESIGNATION

VA0029

PERIOD ENDED

December, 2017

INSTRUCTIONS - See help in the online application.

PART B. DATA ON TRANSMISSION AND DISTRIBUTION PLANT

ITEM	YEAR-TO-DATE		ITEM	YEAR-TO-DATE	
	LAST YEAR (a)	THIS YEAR (b)		LAST YEAR (a)	THIS YEAR (b)
1. New Services Connected	595	522	5. Miles Transmission	68.32	68.32
2. Services Retired	75	36	6. Miles Distribution – Overhead	3,309.43	3,306.74
3. Total Services in Place	38,201	38,448	7. Miles Distribution - Underground	1,293.28	1,306.86
4. Idle Services (Exclude Seasonals)	1,966	1,814	8. Total Miles Energized (5 + 6 + 7)	4,671.03	4,681.92

PART C. BALANCE SHEET

ASSETS AND OTHER DEBITS		LIABILITIES AND OTHER CREDITS	
1. Total Utility Plant in Service	242,030,103	30. Memberships	0
2. Construction Work in Progress	4,281,786	31. Patronage Capital	48,515,030
3. Total Utility Plant (1 + 2)	246,311,889	32. Operating Margins - Prior Years	0
4. Accum. Provision for Depreciation and Amort.	71,798,926	33. Operating Margins - Current Year	3,028,410
5. Net Utility Plant (3 - 4)	174,512,963	34. Non-Operating Margins	119,820
6. Non-Utility Property (Net)	0	35. Other Margins and Equities	4,907,633
7. Investments in Subsidiary Companies	0	36. Total Margins & Equities (30 thru 35)	56,570,893
8. Invest. in Assoc. Org. - Patronage Capital	1,025,934	37. Long-Term Debt - RUS (Net)	0
9. Invest. in Assoc. Org. - Other - General Funds	0	38. Long-Term Debt - FFB - RUS Guaranteed	81,118,421
10. Invest. in Assoc. Org. - Other - Nongeneral Funds	1,303,125	39. Long-Term Debt - Other - RUS Guaranteed	0
11. Investments in Economic Development Projects	0	40. Long-Term Debt Other (Net)	38,116,267
12. Other Investments	1,030,129	41. Long-Term Debt - RUS - Econ. Devel. (Net)	0
13. Special Funds	0	42. Payments – Unapplied	1,186,527
14. Total Other Property & Investments (6 thru 13)	3,359,188	43. Total Long-Term Debt (37 thru 41 - 42)	118,048,161
15. Cash - General Funds	818,162	44. Obligations Under Capital Leases - Noncurrent	0
16. Cash - Construction Funds - Trustee	41,335	45. Accumulated Operating Provisions and Asset Retirement Obligations	2,018,565
17. Special Deposits	0	46. Total Other Noncurrent Liabilities (44 + 45)	2,018,565
18. Temporary Investments	0	47. Notes Payable	3,000,000
19. Notes Receivable (Net)	0	48. Accounts Payable	5,695,605
20. Accounts Receivable - Sales of Energy (Net)	11,032,415	49. Consumers Deposits	1,977,978
21. Accounts Receivable - Other (Net)	505,012	50. Current Maturities Long-Term Debt	4,612,857
22. Renewable Energy Credits	0	51. Current Maturities Long-Term Debt - Economic Development	0
23. Materials and Supplies - Electric & Other	2,199,489	52. Current Maturities Capital Leases	0
24. Prepayments	170,405	53. Other Current and Accrued Liabilities	2,143,498
25. Other Current and Accrued Assets	7,726	54. Total Current & Accrued Liabilities (47 thru 53)	17,429,938
26. Total Current and Accrued Assets (15 thru 25)	14,774,544	55. Regulatory Liabilities	0
27. Regulatory Assets	0	56. Other Deferred Credits	2,760,259
28. Other Deferred Debits	4,181,121	57. Total Liabilities and Other Credits (36 + 43 + 46 + 54 thru 56)	196,827,816
29. Total Assets and Other Debits (5+14+26 thru 28)	196,827,816		

<p>UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE</p> <p>FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION</p>	<p>BORROWER DESIGNATION</p> <p>VA0029</p>
<p>INSTRUCTIONS - See help in the online application.</p>	<p>PERIOD ENDED</p> <p>December, 2017</p>
<p>PART D. NOTES TO FINANCIAL STATEMENTS</p>	

<p style="text-align: center;">UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE</p> <p style="text-align: center;">FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION</p>	<p>BORROWER DESIGNATION</p> <p style="text-align: center;">VA0029</p>
<p>INSTRUCTIONS - See help in the online application.</p>	<p>PERIOD ENDED</p> <p style="text-align: center;">December, 2017</p>
<p>PART D. CERTIFICATION LOAN DEFAULT NOTES</p>	

**FINANCIAL AND OPERATING REPORT
ELECTRIC DISTRIBUTION**

BORROWER DESIGNATION VA0029

PERIOD ENDED December, 2017

INSTRUCTIONS - See help in the online application.

PART E. CHANGES IN UTILITY PLANT

PLANT ITEM	BALANCE BEGINNING OF YEAR (a)	ADDITIONS (b)	RETIREMENTS (c)	ADJUSTMENTS AND TRANSFERS (d)	BALANCE END OF YEAR (e)
1. Distribution Plant	185,998,903	15,654,376	2,366,421		199,286,858
2. General Plant	14,424,501	1,896,204	610,371		15,710,334
3. Headquarters Plant	7,818,767	2,833,081			10,651,848
4. Intangibles	2,126,286				2,126,286
5. Transmission Plant	14,256,929		2,152		14,254,777
6. Regional Transmission and Market Operation Plant					
7. All Other Utility Plant	0				0
8. Total Utility Plant in Service (1 thru 7)	224,625,386	20,383,661	2,978,944		242,030,103
9. Construction Work in Progress	6,658,039	(2,376,253)			4,281,786
10. Total Utility Plant (8 + 9)	231,283,425	18,007,408	2,978,944		246,311,889

PART F. MATERIALS AND SUPPLIES

ITEM	BALANCE BEGINNING OF YEAR (a)	PURCHASED (b)	SALVAGED (c)	USED (NET) (d)	SOLD (e)	ADJUSTMENT (f)	BALANCE END OF YEAR (g)
1. Electric	2,320,705	3,791,559	114,873	4,020,958	7,036	346	2,199,489
2. Other	0						0

PART G. SERVICE INTERRUPTIONS

ITEM	AVERAGE MINUTES PER CONSUMER BY CAUSE				TOTAL (e)
	POWER SUPPLIER (a)	MAJOR EVENT (b)	PLANNED (c)	ALL OTHER (d)	
1. Present Year	87.000	0.000	9.600	143.000	239.600
2. Five-Year Average	100.600	648.400	11.180	199.200	959.380

PART H. EMPLOYEE-HOUR AND PAYROLL STATISTICS

1. Number of Full Time Employees	104	4. Payroll - Expensed	5,571,451
2. Employee - Hours Worked - Regular Time	215,319	5. Payroll - Capitalized	2,714,643
3. Employee - Hours Worked - Overtime	10,931	6. Payroll - Other	130,222

PART I. PATRONAGE CAPITAL

ITEM	DESCRIPTION	THIS YEAR (a)	CUMULATIVE (b)
1. Capital Credits - Distributions	a. General Retirements	1,484,358	16,750,242
	b. Special Retirements	278,158	6,249,888
	c. Total Retirements (a + b)	1,762,516	23,000,130
2. Capital Credits - Received	a. Cash Received From Retirement of Patronage Capital by Suppliers of Electric Power		
	b. Cash Received From Retirement of Patronage Capital by Lenders for Credit Extended to the Electric System	156,069	
	c. Total Cash Received (a + b)	156,069	

PART J. DUE FROM CONSUMERS FOR ELECTRIC SERVICE

1. Amount Due Over 60 Days	\$ 145,011	2. Amount Written Off During Year	\$ 174,839
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ENERGY EFFICIENCY AND CONSERVATION LOAN PROGRAM

1. Anticipated Loan Delinquency %		4. Anticipated Loan Default %	
2. Actual Loan Delinquency %		5. Actual Loan Default %	
3. Total Loan Delinquency Dollars YTD	\$	6. Total Loan Default Dollars YTD	\$

UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION	BORROWER DESIGNATION VA0029
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INSTRUCTIONS - See help in the online application	PERIOD ENDED December, 2017
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PART K. kWh PURCHASED AND TOTAL COST

No	ITEM	SUPPLIER CODE	RENEWABLE ENERGY PROGRAM NAME	RENEWABLE FUEL TYPE	kWh PURCHASED	TOTAL COST	AVERAGE COST (Cents/kWh)	INCLUDED IN TOTAL COST - FUEL COST ADJUSTMENT	INCLUDED IN TOTAL COST - WHEELING AND OTHER CHARGES
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
1	Southeastern Power Admin	29304	Hydro Electric	Hydro	16,084,905	1,167,300	7.26		
2	PJM Interconnection (PA)	800468				14,122,442	0.00		
3	*Miscellaneous	700000			751,289,463	32,667,664	4.35		
	Total				767,374,368	47,957,406	6.25		

UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION		BORROWER DESIGNATION VA0029
INSTRUCTIONS - See help in the online application		PERIOD ENDED December, 2017
PART K. kWh PURCHASED AND TOTAL COST		
No	Comments	
1		
2		
3		

UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION		BORROWER DESIGNATION VA0029	
INSTRUCTIONS - See help in the online application.		PERIOD ENDED December, 2017	
PART L. LONG-TERM LEASES			
No	NAME OF LESSOR (a)	TYPE OF PROPERTY (b)	RENTAL THIS YEAR (c)
	TOTAL		

UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION		BORROWER DESIGNATION VA0029	
INSTRUCTIONS - See help in the online application.		PERIOD ENDED December, 2017	
PART M. ANNUAL MEETING AND BOARD DATA			
1. Date of Last Annual Meeting 6/14/2017	2. Total Number of Members 36,011	3. Number of Members Present at Meeting 77	4. Was Quorum Present? Y
5. Number of Members Voting by Proxy or Mail 1,566	6. Total Number of Board Members 8	7. Total Amount of Fees and Expenses for Board Members \$ 226,415	8. Does Manager Have Written Contract? N

RUS Financial and Operating Report Electric Distribution

Revision Date 2014

UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION	BORROWER DESIGNATION VA0029
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PART N. LONG-TERM DEBT AND DEBT SERVICE REQUIREMENTS

No	ITEM	BALANCE END OF YEAR (a)	INTEREST (Billed This Year) (b)	PRINCIPAL (Billed This Year) (c)	TOTAL (Billed This Year) (d)
1	Rural Utilities Service (Excludes RUS - Economic Development Loans)				
2	National Rural Utilities Cooperative Finance Corporation	34,887,865	1,605,303	2,634,933	4,240,236
3	CoBank, ACB	3,228,402	188,787	204,846	393,633
4	Federal Financing Bank	81,118,421	2,931,621	1,239,071	4,170,692
5	RUS - Economic Development Loans				
6	Payments Unapplied	1,186,527			
7	Principal Payments Received from Ultimate Recipients of IRP Loans				
8	Principal Payments Received from Ultimate Recipients of REDL Loans				
9	Principal Payments Received from Ultimate Recipients of EE Loans				
	TOTAL	118,048,161	4,725,711	4,078,850	8,804,561

UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION	BORROWER DESIGNATION VA0029
INSTRUCTIONS - See help in the online application.	PERIOD ENDED December, 2017

PART O. POWER REQUIREMENTS DATABASE - ANNUAL SUMMARY

CLASSIFICATION	CONSUMER SALES & REVENUE DATA	DECEMBER (a)	AVERAGE NO. CONSUMERS SERVED (b)	TOTAL YEAR TO DATE (c)
1. Residential Sales (excluding seasonal)	a. No. Consumers Served	32,855	32,780	
	b. kWh Sold			469,673,560
	c. Revenue			58,585,576
2. Residential Sales - Seasonal	a. No. Consumers Served			
	b. kWh Sold			
	c. Revenue			
3. Irrigation Sales	a. No. Consumers Served			
	b. kWh Sold			
	c. Revenue			
4. Comm. and Ind. 1000 KVA or Less	a. No. Consumers Served	3,961	3,908	
	b. kWh Sold			124,418,050
	c. Revenue			12,908,382
5. Comm. and Ind. Over 1000 KVA	a. No. Consumers Served	17	14	
	b. kWh Sold			130,450,848
	c. Revenue			7,121,430
6. Public Street & Highway Lighting	a. No. Consumers Served			
	b. kWh Sold			
	c. Revenue			
7. Other Sales to Public Authorities	a. No. Consumers Served			
	b. kWh Sold			
	c. Revenue			
8. Sales for Resale - RUS Borrowers	a. No. Consumers Served			
	b. kWh Sold			
	c. Revenue			
9. Sales for Resale - Other	a. No. Consumers Served			
	b. kWh Sold			
	c. Revenue			
10. Total No. of Consumers (lines 1a thru 9a)		36,833	36,702	
11. Total kWh Sold (lines 1b thru 9b)				724,542,458
12. Total Revenue Received From Sales of Electric Energy (lines 1c thru 9c)				78,615,388
13. Transmission Revenue				
14. Other Electric Revenue				1,288,609
15. kWh - Own Use				1,337,324
16. Total kWh Purchased				767,374,368
17. Total kWh Generated				0
18. Cost of Purchases and Generation				48,096,045
19. Interchange - kWh - Net				
20. Peak - Sum All kW Input (Metered) Non-coincident <input checked="" type="checkbox"/> Coincident <input type="checkbox"/>				253,373

UNITED STATES DEPARTMENT OF AGRICULTURE
RURAL UTILITIES SERVICE

**FINANCIAL AND OPERATING REPORT
ELECTRIC DISTRIBUTION**

BORROWER DESIGNATION VA0029

PERIOD ENDED December, 2017

INSTRUCTIONS - See help in the online application.

PART P. ENERGY EFFICIENCY PROGRAMS

CLASSIFICATION	ADDED THIS YEAR			TOTAL TO DATE		
	No. of Consumers (a)	Amount Invested (b)	Estimated MMBTU Savings (c)	No. of Consumers (d)	Amount Invested (e)	Estimated MMBTU Savings (f)
1. Residential Sales (excluding seasonal)						
2. Residential Sales - Seasonal						
3. Irrigation Sales						
4. Comm. and Ind. 1000 KVA or Less						
5. Comm. and Ind. Over 1000 KVA						
6. Public Street and Highway Lighting						
7. Other Sales to Public Authorities						
8. Sales for Resale – RUS Borrowers						
9. Sales for Resale – Other						
10. Total						

UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION INVESTMENTS, LOAN GUARANTEES AND LOANS	BORROWER DESIGNATION VA0029 PERIOD ENDED December, 2017
--	--

INSTRUCTIONS - Reporting of investments is required by 7 CFR 1717, Subpart N. Investment categories reported on this Part correspond to Balance Sheet items in Part C. Identify all investments in Rural Development with an 'X' in column (e). Both 'Included' and 'Excluded' Investments must be reported. See help in the online application.

PART Q. SECTION I. INVESTMENTS (See Instructions for definitions of Income or Loss)

No	DESCRIPTION (a)	INCLUDED (\$) (b)	EXCLUDED (\$) (c)	INCOME OR LOSS (\$) (d)	RURAL DEVELOPMENT (e)
1	Non-Utility Property (NET)				
	Totals				
2	Investments in Associated Organizations				
	CFC PATRONAGE		858,601		
	CFC CAPITAL TERM CERTIFICATE		1,126,146		
	CFC MEMBER CAPITAL CERTIFICATE		25,000		
	COBANK		167,333		
	FEDERATED		123,237		
	OTHER PATRONAGE		28,742		
	Totals		2,329,059		
4	Other Investments				
	UNITED UTILITY		5,231		
	ERMCO		203,846		
	NRTC		26,702		
	INSURANCE POLICY		794,349		
	Totals		1,030,128		
6	Cash - General				
	BBT	683,011			
	COLLECTING BANKS		133,051		
	WORKING FUNDS		2,100		
	Totals	683,011	135,151		
9	Accounts and Notes Receivable - NET				
	MISC ACCOUNTS RECEIVABLE		505,012		
	Totals		505,012		
11	TOTAL INVESTMENTS (1 thru 10)	683,011	3,999,350		

UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION INVESTMENTS, LOAN GUARANTEES AND LOANS	BORROWER DESIGNATION VA0029
	PERIOD ENDED December, 2017

INSTRUCTIONS - Reporting of investments is required by 7 CFR 1717, Subpart N. Investment categories reported on this Part correspond to Balance Sheet items in Part C. Identify all investments in Rural Development with an 'X' in column (e). Both 'Included' and 'Excluded' Investments must be reported. See help in the online application.

PART Q. SECTION II. LOAN GUARANTEES

No	ORGANIZATION (a)	MATURITY DATE (b)	ORIGINAL AMOUNT (\$) (c)	LOAN BALANCE (\$) (d)	RURAL DEVELOPMENT (e)
	TOTAL				
	TOTAL (Included Loan Guarantees Only)				

UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION INVESTMENTS, LOAN GUARANTEES AND LOANS	BORROWER DESIGNATION VA0029
	PERIOD ENDED December, 2017

INSTRUCTIONS - Reporting of investments is required by 7 CFR 1717, Subpart N. Investment categories reported on this Part correspond to Balance Sheet items in Part C. Identify all investments in Rural Development with an 'X' in column (e). Both 'Included' and 'Excluded' Investments must be reported. See help in the online application.

SECTION III. RATIO

RATIO OF INVESTMENTS AND LOAN GUARANTEES TO UTILITY PLANT [Total of Included Investments (Section I, 11b) and Loan Guarantees - Loan Balance (Section II, 5d) to Total Utility Plant (Line 3, Part C) of this report]	0.28 %
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SECTION IV. LOANS

No	ORGANIZATION (a)	MATURITY DATE (b)	ORIGINAL AMOUNT (\$) (c)	LOAN BALANCE (\$) (d)	RURAL DEVELOPMENT (e)
1	Employees, Officers, Directors				
2	Energy Resources Conservation Loans				
	TOTAL				

VATI Grant Application: Documentation for in-kind contributions

CVEC is not claiming any in kind contributions for credits in the grant matching, using cash instead. There will be in kind contributions in terms of project management labor, materials procurement labor, and the Firefly in home installations with equipment and labor. There will be more than \$1000 per connection, but it is not included as matching funds so the value has not been determined in any exact manner.

VATI Grant Application: Documentation supporting project costs

The vendors providing equipment to CVEC, from consulting companies to material vendors, have private contracts and proprietary pricing agreements in place with the cooperative. The cost estimates are based on the pricing from these documents, but CVEC cannot disclose the confidential pricing directly.

VATI Grant Application: Documentation of source of match funding

CVEC will provide matching funds in cash. CVEC has a loan from RUS for \$66.5 million in smart grid construction which provides for fiber construction across the CVEC electric distribution system. The loan commitment letter is attached. The Virginia State Corporation Commission has approved this loan and the new debt for CVEC. The final order from the SCC is also attached.



Rural Development

Rural Utilities Service

1400 Independence
Ave SW, Room 5135
Stop 1510
Washington, DC
20250

Voice 202.720.9540

Mr. H. T. Brown, Jr.
Chair
Central Virginia Electric Cooperative
P.O. Box 247
Lovingsston, Virginia 22949-0247

SEP 06 2018

Dear Mr. Brown:

We are pleased to advise you that a loan guarantee commitment in the amount of \$66,545,000 has been approved for Central Virginia Electric Cooperative (Central Virginia Electric Coop) by the Rural Utilities Service (RUS). Under this commitment, RUS will guarantee a loan of \$66,545,000 to Central Virginia Electric Coop from the Federal Financing Bank (FFB) under the terms and conditions set forth in the Note Purchase Commitment and Servicing Agreement dated as of January 1, 1992, as amended, between RUS and FFB. The proceeds of the guaranteed loan, designated "BD8", are to be used by Central Virginia Electric Coop to finance only the system extensions and additions described in the RUS Form 740c, Cost Estimates and Loan Budget for Electric Borrowers, dated May 23, 2018, enclosed and made a part hereof. Written approval by RUS must be obtained prior to the advancement of any loan proceeds for use for system extensions and additions that are not specifically listed on the enclosed RUS Form 740c.

The "BD8" Loan Contract and related documents, together with instructions, will be forwarded in the future for execution. The "BD8" loan is approved with the understanding that the loan documents will be authorized and executed by your organization and returned to us by the date set forth in the letter transmitting the documents.

Please note that this letter does not constitute an approval to advance the loan proceeds. Proceeds are eligible for advancement on the "BD8" loan after all conditions below have been met and the proper advance request documentation has been submitted to RUS:

1. RUS has entered into a contract of guarantee with Central Virginia Electric Coop and the FFB has agreed, with RUS approval, to make Central Virginia Electric Coop a guaranteed loan of \$66,545,000 to finance the system extensions and additions described on the enclosed RUS Form 740c;
2. Central Virginia Electric Coop has submitted evidence, in form and substance satisfactory to the Administrator, that the conditions in the contract of guarantee have been satisfied to the extent and in the manner prescribed by the Administrator;
3. Central Virginia Electric Coop has submitted evidence, in form and substance satisfactory to the Administrator, that Central Virginia Electric Coop has duly authorized, executed, and has delivered to the Administrator the RUS Loan Contract, the FFB Note and the Reimbursement Note in the manner prescribed by the Administrator; and

- 4. Central Virginia Electric Coop has submitted evidence, in form and substance satisfactory to the Administrator, that Central Virginia Electric Coop has duly authorized, executed, delivered, recorded, and filed a mortgage or other security instrument, if required, which is in form and substance satisfactory to the Administrator.

Please note that the approval of this loan guarantee commitment is an offer to Central Virginia Electric Cooperative of the "BD8" guaranteed loan. Your acknowledgement and acceptance of the "BD8" guaranteed loan is subject to the specified terms and conditions identified above.

This award is subject to the provisions contained in the Consolidated Appropriations Act, 2016, P.L. 114-113, Division E, Title VII, Sections 745 and 746, as amended and/or subsequently enacted for USDA agencies and offices regarding corporate felony convictions and corporate federal tax delinquencies. Please see the attached certification for compliance with these requirements.

Your acknowledgement and acceptance must be received by RUS, by signature, within 14 calendar days from the date of this letter; otherwise the commitment will be VOID. The Chairman or the Board President authorized by your organization to execute the loan documents must execute, date, and return this commitment and the attached Felony Form (AD-3031) via an E-Mail attachment to:

Karen Hargrove
E-Mail Address: LoanCommitment@wdc.usda.gov

If E-Mail is not possible, the signed document can be faxed to 1-844-875-8076. The original executed and dated commitment will remain in your files.

Sincerely,



Christopher A. McLean
Administrator
Rural Utilities Service

ACKNOWLEDGED AND ACCEPTED BY:

Name: _____

Title: _____

Date: _____

Enclosures RUS Form 740c
AD-3031

AD-3031

**U.S. Department of Agriculture
ASSURANCE REGARDING FELONY CONVICTION
OR TAX DELINQUENT STATUS FOR CORPORATE APPLICANTS**

NOTE: *The following statement is made in accordance with the Privacy Act of 1974 (5 USC 552(a)–as amended). The authority for requesting the following information for USDA agencies and offices is in sections 745 and 746 of the Consolidated Appropriations Act, 2016, Pub. L. 114-113, as amended and/or subsequently enacted. The information will be used to document compliance with appropriations restrictions.*

According to the Paperwork Reduction Act of 1995 an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number of this information collection is 0505-0025. The time required to complete this information collection is estimated to average 3 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The provisions of appropriate criminal and civil fraud, privacy, and other statutes may be applicable to the information provided.

This award is subject to the provisions contained in the Consolidated Appropriations Act, 2016, Pub. L. 114-113, Division E, Title VII, sections 745 and 746, as amended and/or subsequently enacted for U.S. Department of Agriculture (USDA) agencies and offices regarding corporate felony convictions and corporate federal tax delinquencies.

Accordingly, by accepting this award the corporation recipient acknowledges: (1) that it does not have a Federal tax delinquency, meaning that it is not subject to any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability, **and** (2) that it has not been convicted of a felony criminal violation under any Federal law within 24 months preceding the award, unless a suspending and debarring official of the USDA has considered suspension or debarment of the recipient corporation based on these convictions and/or tax delinquencies and determined that suspension or debarment is not necessary to protect the interests of the Government. If the recipient fails to comply with these provisions, the agency will annul this agreement and may recover any funds the recipient has expended in violation of the above cited statutory provisions.

APPLICANT'S SIGNATURE (BY)

TITLE/RELATIONSHIP OF THE INDIVIDUAL IF SIGNING IN A REPRESENTATIVE CAPACITY

BUSINESS NAME

DATE SIGNED (MM-DD-YYYY)

The U.S. Department of Agriculture (USDA) prohibits discrimination in all of its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, political beliefs, genetic information, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Assistant Secretary for Civil Rights, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, S.W., Stop 9410, Washington, DC 20250-9410, or call toll-free at (866) 632-9992 (English) or (800) 877-8339 (TDD) or (866) 377-8642 (English Federal-relay) or (800) 845-6136 (Spanish Federal-relay). USDA is an equal opportunity provider and employer.

SECTION A. COST ESTIMATES (cont.)

500 e. Substation, Switching Station, Metering Point Changes

Station Designation	Description of Changes
501	
502	
503	
504	
505	
506	
507	
508	
509	
Subtotal From Page 2A	
Subtotal	

BORROWER'S COST ESTIMATES	RUS USE ONLY
\$0	
0	
0	
0	
0	
0	
0	
0	
0	
0	
0	
0	
0	
0	
\$0	

600 f. Miscellaneous Distribution Equipment

601 Transformers and Meters

Construction	Overhead	Underground
Transformers	0 \$0	0 \$0
Meters	0 \$0	
Meters - AMR/AMI	0 \$0	
Subtotal code 601 (included in total of all 600 codes below)		

\$0	
0	
0	
0	
\$0	

602 (2) Sets of Service Wires to increase Capacity	
603 (3) Sectionalizing Equipment	
604 (4) Regulators	
605 (5) Capacitors	
606 (6) Pole Replacements	
607 (7) Conductor Replacements	
608 (8) Miscellaneous Replacements	
609 (9) Miscellaneous Plant Additions	
610 (10) Road Moves	
611 (11) Line Relocations	
612 (12) Step Up/Down Transformers	
613 (13) Min/Max Meters	
614 (14) Storm Damage	
615 (15) Communications	
Subtotal ALL 600 codes	

0	
0	
0	
0	
0	
0	
0	
0	
0	
0	
0	
0	
0	
0	
0	
66,545,200	
\$66,545,200	

700 g. Other Distribution Items

701 (1) Engineering Fees	
702 (2) Security Lights	
703 (3) Reimbursement of General Fund Consumers 0 Miles 0.00	
704 (4) Load Management & SCADA	
705 (5) Automated Meter Reading Equip.	
706 (6) Broadband over Power line (BPL)	
Subtotal	

\$0	
0	
0	
0	
0	
0	
0	
\$0	

TOTAL DISTRIBUTION

\$66,545,200	
--------------	--

800 2. Transmission

a. New Line

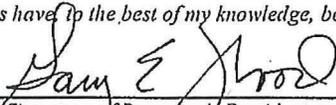
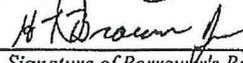
Line Designation	Voltage	Wire Size	Miles
801			
802			
803			
804			
805			
806			
807			
808			
809			
810			

\$0	
0	
0	
0	
0	
0	
0	
0	
0	
0	
0	

Subtotal Code 800 From Page 2A	0.00
Subtotal Code 800 (includes subtotals from Page 2)	0.00

0	
\$0	

SECTION A. COST ESTIMATES (cont.)			BORROWER'S COST ESTIMATES	RUS USE ONLY
900	b. New Substation, Switching Station, etc.			
	<u>Station Designation</u>	<u>kVA</u>	<u>kV TO kV</u>	
901	_____	_____	_____	\$0
902	_____	_____	_____	0
903	_____	_____	_____	0
904	_____	_____	_____	0
905	_____	_____	_____	0
906	_____	_____	_____	0
907	_____	_____	_____	0
908	_____	_____	_____	0
	<i>Subtotal Code 900 From Page 3A</i>			0
	<i>Subtotal Code 900</i>			\$0
1000	c. Line and Station Changes			
	<u>Line/Station Designation</u>	<u>Description of Changes</u>		
1001	_____	_____		\$0
1002	_____	_____		0
1003	_____	_____		0
1004	_____	_____		0
1005	_____	_____		0
1006	_____	_____		0
1007	_____	_____		0
1008	_____	_____		0
1009	_____	_____		0
	<i>Subtotal Code 1000 From page 3B</i>			0
	<i>Subtotal Code 1000</i>			\$0
1100	d. Other Transmission Items			
1101	(1) R/W Procurement	_____		\$0
1102	(2) Engineering Fees	_____		0
1103	(3) Reimbursement of General Funds	Miles	<u>0.00</u>	0
1104	(4) _____	_____		0
	<i>Subtotal</i>			\$0
	TOTAL TRANSMISSION.....			\$0
1200	3. GENERATION (including Step-up Station at Plant)			
1201	a Fuel	Nameplate Rating	_____ kW	\$0
1202	b. _____	_____		0
	TOTAL GENERATION.....			\$0
1300	4. HEADQUARTERS FACILITIES			
1301	a. New or additional Facilities	(Attach RUS Form 740g) _____		\$0
1302	b. _____	_____		0
	TOTAL HEADQUARTERS FACILITIES			\$0

COST ESTIMATE AND LOAN BUDGET FOR ELECTRIC BORROWERS		BORROWER AND LOAN DESIGNATION	
		Virginia 29 BD8 Nelson	
SECTION A. COST ESTIMATES (cont.)		BORROWER'S COST ESTIMATES	RUS USE ONLY
1400	5. ACQUISITIONS		
1401	a. _____ Consumers _____ Miles	\$0	
1402	b. _____	0	
	TOTAL ACQUISITIONS.....	\$0	
1500	6. ALL OTHER		
1501	a. GIS Computer Hardware	\$0	
1502	b. GIS Computer Software	0	
1503	c. Initial Data Collection Field Inventory Costs	0	
1504	d. Improvements to HVAC Systems (on consumer premises)	0	
1505	e. Ground Source Heat Pump System	0	
1506	f. Appliance Replacements	0	
1507	g. Building Envelope Improvements	0	
1508	h. Load Modifiers	0	
1509	i. Water Heater Upgrades	0	
1510	j. Consumer Contolled Home Energy Networks & Devices	0	
1511	k. Soft Costs	0	
1512	l. Miscellaneous/All Other	0	
	TOTAL ALL OTHER.....	\$0	
SECTION B. SUMMARY OF AMOUNTS AND SOURCES OF FINANCING			
1. GRAND TOTAL - ALL COSTS		\$66,545,200	
2. FUNDS AND MATERIALS AVAILABLE FOR FACILITIES			
a. Loan Funds		\$0	
b. Materials and Special Equipment		0	
c. General Funds			
Purpose 1		\$200	
Purpose 2		\$0	
Purpose 3		\$0	
Purpose 4		\$0	
Purpose 5		\$0	
Purpose 6		\$0	
Total General Funds Applied		\$200	
d. Total Available Funds and Materials		\$200	
3. NEW FINANCING REQUESTED FOR FACILITIES		\$66,545,000	
4. RUS LOAN REQUESTED FOR FACILITIES.....		100%	
5. TOTAL SUPPLEMENTAL LOAN REQUESTED		\$0	
National Rural Utilities Cooperative Finance Corporation			
Name of Supplemental Lender			
6. CAPITAL TERM CERTIFICATE PURCHASES (CFC Loan only) ..		0%	\$0
7. SUPPLEMENTAL LOAN REQUESTED FOR FACILITIES.....		0%	\$0
8. 100% SUPPLEMENTAL LOANS (SEE RUS Bulletin 20-14)*			\$0
* Identify in section A by budget purpose and separate subtotals.			
SECTION C. CERTIFICATION			
We, the undersigned, certify that:			
1. Upon completion of the electrical facilities contained herein and any others uncompleted at this time but for which financing is available, the system will be capable of adequately and dependably serving the projected load for the loan period as contained in our current RUS approved Power Requirement Study and Construction Work Plan.			
2. Negotiations have been or will be initiated with our power supplier, where necessary, to obtain new delivery points and/or additional capacity at existing ones to adequately supply the projected load upon which this loan application is based.			
3. The data contained herein and all supporting documents have to the best of my knowledge, been prepared correctly and in accordance with 7 CFR 1710.401(a)(3)			
<u>23 May 2018</u> Date		 Signature of Borrower's President and CEO	
<u>May 23, 2018</u> Date		 Signature of Borrower's Board Chair	
Central Virginia Electric Cooperative Corporate Name of Borrower			
GFR Initials <u>KS</u>			

Attachment to 740c
Virginia 29 BD8 Nelson
Borrower and Loan Designation

STATEMENT

Statement certifying that at least 90% of the Loan funds are for facilities with a useful life of 33 years or longer as required by 7 CFR 1710.115.

To facilitate the determination of the final maturity for this RUS Loan,
Central Virginia Electric Cooperative
does hereby certify that:

- At least 90% of the Loan funds requested as part of this loan application and included on the RUS Form 740c (Cost Estimates and Loan Budget for Electric Borrowers) are for facilities with an anticipated useful life of 33 years or longer.
- Less than 90% of the Loan funds requested as part of this loan application and included on the RUS Form 740c (Cost Estimates and Loan Budget for Electric Borrowers) are for facilities with an anticipated useful life of 33 years or longer. A schedule has been attached to this statement listing the facilities with an anticipated useful life of less than 33 years, the anticipated useful life of those facilities and the associated cost estimates (see attached).

24 May 2018
Date

Title: 
President and CEO

Power Supply Contracts

Application Id: 3005631 | Borrower Name: CENTRAL VIRGINIA ELECTRIC COOPERATIVE

Source of Supply

Power Purchase Contract or Other Source of Power Supply	Contract Date	Expiration Date	Comments
EXELON	08/20/2010	05/20/2022	10 MW 7X24
MACQUARIE	12/21/2012	12/21/2019	10 MW 7X24
MORGAN STANLEY	02/07/2014	12/07/2024	10 MW 7X24
MACQUARIE	05/18/2015	12/31/2018	4.1 MW 7X24
SHELL	05/18/2015	12/31/2018	2.3 MW 5X16
CONSTELLATION/EXELON	11/23/2015	12/31/2018	3.6 MW 7X24
MERCURIA	11/23/2015	12/31/2018	2.5 MW 5X16
BP	11/23/2015	12/31/2018	5.0 MW 7X24 JAN,FEB AND DEC 2018
MORGAN STANLEY	11/23/2015	08/31/2018	3.3 MW 5X16 JUNE THRU AUGUST 2018
EDF	05/12/2016	12/31/2018	30.4 MW 7X24 JAN, FEB AND DEC 2018
TRANSALTA	05/12/2016	12/31/2019	6.2 MW 7X24
MORGAN STANLEY	06/30/2016	12/31/2021	14 MW 7X24 CY 2020-2021
CITI (AMP)	06/30/2016	12/31/2025	21 MW 7X24 CY 2022-2025
EDF	10/26/2016	08/31/2018	16.4 MW 7X24 JUNE - AUGUST 2018
EDF	10/26/2016	12/31/2019	6.3 MW 7X24 CY 2019
MORGAN STANLEY	06/30/2017	12/31/2019	26.8 MW 7X24 JAN, FEB AND DEC 2019
SHELL	06/30/2017	12/31/2018	LOAD SHAPE AEP
BP	06/30/2017	12/31/2018	LOAD SHAPE DOM
AEPEP	10/19/2017	12/31/2019	5.9 MW 7X24 JAN, FEB AND DEC 2019
MORGAN STANLEY	10/19/2017	08/31/2019	5.5 MW 5X16 JUNE -AUG 2019
MORGAN STANLEY	10/19/2001	12/31/2025	5 MW 7X24 JUNE 2022-DEC 2025
MORGAN STANLEY	10/20/2017	12/31/2020	6.4 MW 7X24 CY 2020
MORGAN STANLEY	10/20/2017	08/31/2019	7.0 MW 5X16 JUNE - AUGUST 2019
DOSWELL LIMITED PARTNERSHIP	01/27/2014	06/04/2018	30 MW CAPACITY

OFFICIAL

AMP FREEMONT ENERGY CENTER	07/01/2011	12/31/2050	27.982 MW GENERATION
BLUE CREEK WIND	04/01/2012	06/30/2022	4 MW GENERATION
SEPA HYDRO	10/01/1998	12/31/2099	7.956 MW GENERATION ONGOING CONTRACT
MARTIN SOLAR CENTER	04/01/2016	12/31/2043	5 MW SOLAR GENERATION
PALMER SOLAR CENTER	08/01/2016	12/31/2043	5 MW SOLAR GENERATION

COMMONWEALTH OF VIRGINIA
STATE CORPORATION COMMISSION
AT RICHMOND, DECEMBER 3, 2018

SEC-CLERK'S OFFICE
DOCUMENT CONTROL CENTER
2018 DEC -3 P 2: 57

181210022

JOINT APPLICATION OF

CENTRAL VIRGINIA ELECTRIC COOPERATIVE

CASE NO. PUR-2018-00152

and

CENTRAL VIRGINIA SERVICES, INC.

For approval pursuant to Chapter 3 and
Chapter 4 of Title 56 of the Code of Virginia

FINAL ORDER

On September 12, 2018, Central Virginia Electric Cooperative ("CVEC") and Central Virginia Services, Inc. ("CVSI") (collectively, "Applicants"), filed a joint application ("Application") with the State Corporation Commission ("Commission") under Chapters 3¹ and 4² of Title 56 of the Code of Virginia ("Code") for authority: (1) to incur long-term debt from the United States Department of Agriculture Rural Utilities Service; (2) to issue a letter of credit through the Cooperative Finance Corporation ("CFC"); (3) for CVEC to provide a guarantee for a lease between CVSI and CoBank; (4) for CVEC to allocate to CVSI \$200,000 of its credit card limit with the CFC One Card Program ("Credit Card Allocation"); and (5) for CVEC to obtain a letter of credit from CFC on behalf of CVSI (collectively, "Fiber Support"). According to the Applicants, the financing and other arrangements described in this Application will assist CVEC

¹ Code § 56-55 *et seq.* ("Chapter 3").

² Code § 56-76 *et seq.* ("Affiliates Act").

and CVSI in implementing the fiber project described in the application filed by CVEC and CVSI in Case No. PUR-2018-00113.³

On October 3, 2018, the Commission issued an Extension Order pursuant to Code § 56-61 to extend the 25-day review period applicable to the Application an additional 30 days, through November 6, 2018.

On October 11, 2018, Nelson County Cablevision Corporation ("Nelson Cable") filed motions, comments, and a request for expedited consideration of its filings ("Nelson Cable Filings"), in which Nelson Cable requested that the Commission: (a) permit Nelson Cable to participate as a respondent in this docket addressing the Application; (b) appoint a Hearing Examiner to rule on any discovery matters that may arise during the course of this proceeding, including any motions related to the protective treatment of confidential information; (c) shorten the discovery response time to five business days; and (d) permit Nelson Cable to file additional comments.

On October 15, 2018, the Commission issued a Procedural Order establishing certain filing dates. Pursuant thereto, on October 17, 2018, the Applicants filed a response to the Nelson Cable Filings, and on October 19, 2018, Nelson Cable filed a reply.

On October 25, 2018, the Commission issued an Order addressing the Nelson Cable Filings and the responses thereto ("October 25 Order"). Pursuant to the October 25 Order, the Commission, in its discretion and based on the specific circumstances of this particular

³On October 23, 2018, the Commission issued a Final Order in Case No. PUR-2018-00113 granting approval of the proposed affiliate arrangements subject to certain requirements adopted therein. *See Application of Central Virginia Electric Cooperative and Central Virginia Services, Inc., For approval of affiliate arrangements*, Case No. PUR-2018-00113, Doc. Con. Cen. No. 181050207, Final Order (Oct. 23, 2018).

proceeding,⁴ granted Nelson Cable's motion to participate as a respondent in this proceeding on the condition that such participation did not prevent the Commission from meeting the statutory deadline in this matter. Accordingly, the Commission established a schedule that directed the filing of a report by the Staff ("Staff Report"), additional comments by Nelson Cable ("Additional Comments"), and a reply to the Staff Report and Additional Comments by the Applicants ("Reply"); assigned a Hearing Examiner to address discovery matters and establish expedited procedures for handling discovery; and extended the statutory review period to December 11, 2018, the maximum permitted under the Code § 56-77.⁵

On November 5, 2018, the Staff Report was filed in which the Staff summarized the results of its investigation of the Application. The Staff determined that: (i) the Fiber Support arrangements described in this Application appear to be in the public interest and reflect market based rates, and (ii) the intended uses of the proceeds from the financing arrangements are consistent with the purposes set out in Chapter 3.⁶ Accordingly, the Staff recommended that the Commission approve the Fiber Support arrangements, subject to the requirements outlined in the Appendix to the Staff Report.⁷ Staff's recommended requirements are as follows:

1. The duration of the Commission's approval of the Credit Card Allocation should be limited to five (5) years from the date of the Order in this case. Should the Applicants wish to continue the Credit Card Allocation after that date, separate Commission approval should be required.

⁴ See October 25 Order at 4 (noting, for example, that there are specific statutes and rules – that only apply to cooperatives – addressing behavior among a cooperative, its affiliates, and nonaffiliated third parties. See, e.g., Code § 56-231.34:1 and 20 VAC 5-203-10 *et seq.*).

⁵ See October 25 Order at 2-5.

⁶ See Code § 56-58.

⁷ Staff Report at 8.

2. The Commission's approval of the Fiber Support should be limited to those transactions specifically identified in the agreements. Should the Applicants wish to modify the terms and conditions of any Fiber Support transaction, separate Commission approval should be required.
3. The approval granted in this case should have no accounting or ratemaking implications.
4. The Applicants should be required to maintain records demonstrating that CVSI bears the full cost of any Fiber Support transaction on its behalf. Such records should be available for Staff review upon request. CVEC should bear the burden of proving, in any rate proceeding, that it charged the higher of cost or market for all Fiber Support provided to CVSI.
5. The approval granted in this case should not preclude the Commission from exercising its authority under [the Affiliates Act] hereafter.
6. The Commission should reserve the right to examine the books and records of any affiliate in connection with the approval granted in this case, whether or not such affiliate is regulated by this Commission.
7. The Applicants should file an executed copy of the approved Fiber Support agreements within ninety (90) days of their execution.
8. CVEC should be required to include all transactions associated with the Fiber Support agreements in its Annual Report of Affiliate Transactions ("ARAT") submitted to the Commission's Director of the Division of Utility Accounting and Finance ("UAF Director") on May 1 of each year, subject to administrative extension by the UAF Director. The ARAT should include: (a) [t]he case number in which the Fiber Support was approved; (b) [t]he names of all direct and indirect affiliated parties to the Fiber Support; and (c) [a] calendar year annual schedule showing each Fiber Support agreement's transactions by month, FERC account, and amount as they are recorded in CVEC's books.
9. CVEC should file with the Commission within 90 days of the date of this [Order] documentation showing the requirements of Code § 56-231.34:1 and 20 VAC 5-203-30 and -40 of the Commission's regulations are being met with regard to the Fiber Support agreements.

On November 5, 2018, Nelson Cable filed its Additional Comments, which noted that the Commission had entered a Final Order in Case No. PUR-2018-00113, and requested that the

Applicants and the Commission provide guidance to it by answering seven questions set out therein.⁸

On November 13, 2018, the Applicants filed their Reply to the Staff Report and Nelson Cable's Additional Comments. As to the Staff Report, the Applicants stated that they do not object to the requirements recommended by Staff.⁹ The Applicants also described their plan to comply with the requirement for documentation showing that the requirements of Code § 56-231.34:1 and 20 VAC 5-203-30 and -40 will be met.¹⁰ As to Nelson Cable's Additional Comments, the Applicants asserted in part that Nelson Cable failed to address the specific financing and other arrangements described in this Application, and that given that there are no specific arguments or facts in the record of this proceeding that support denying the Application, requested that the Commission approve the Application consistent with the recommendations in the Staff Report.¹¹ The Applicants' Reply also addressed Nelson Cable's request for guidance.¹²

NOW THE COMMISSION, upon consideration hereof, is of the opinion and finds that the Fiber Support arrangements described in this Application are in the public interest and, therefore, should be approved for purposes of Chapter 3 and the Affiliates Act subject to certain requirements set forth in the Appendix attached hereto.

⁸ See Nelson Cable's Additional Comments at 2-4.

⁹ Applicants' Reply at 5.

¹⁰ *Id.*

¹¹ *Id.* at 4-6.

¹² *Id.* at 6-12.

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Accordingly, IT IS ORDERED THAT:

(1) Pursuant to Chapter 3 and the Affiliates Act, the Applicants hereby are granted approval to enter into the Fiber Support arrangements described in this Application subject to the requirements set forth in the Appendix attached to this Final Order.

(2) This case hereby is dismissed.

AN ATTESTED COPY hereof shall be sent by the Clerk of the Commission to:

Timothy E. Biller, Esquire, Hunton Andrews Kurth LLP, Riverfront Plaza, East Tower, 951 East Byrd Street, Richmond, Virginia 23219; Louis R. Monacell, Esquire, Peter E. Broadbent, Jr., Esquire, and Cliona Mary Robb, Esquire, Christian & Barton, L.L.P., 909 East Main Street, Suite 1200, Richmond, Virginia 23219-3095; and C. Meade Browder, Jr., Senior Assistant Attorney General, Division of Consumer Counsel, Office of the Attorney General, 202 N. 9th Street, 8th Floor, Richmond, Virginia 23219-3424. A copy also shall be delivered to the Commission's Office of General Counsel and Divisions of Utility Accounting and Finance and Public Utility Regulation.

APPENDIX

1. The duration of the Commission's approval of the Credit Card Allocation shall be limited to five (5) years from the date of the Order in this case. Should the Applicants wish to continue the Credit Card Allocation after that date, separate Commission approval shall be required.
2. The Commission's approval of the Fiber Support shall be limited to those transactions specifically identified in the agreements. Should the Applicants wish to modify the terms and conditions of any Fiber Support transaction, separate Commission approval shall be required.
3. The approval granted in this case shall have no accounting or ratemaking implications.
4. The Applicants shall be required to maintain records demonstrating that CVSI bears the full cost of any Fiber Support transaction on its behalf. Such records shall be available for Staff review upon request. CVEC shall bear the burden of proving, in any rate proceeding, that it charged the higher of cost or market for all Fiber Support provided to CVSI.
5. The approval granted in this case shall not preclude the Commission from exercising its authority under the Affiliates Act hereafter.
6. The Commission reserves the right to examine the books and records of any affiliate in connection with the approval granted in this case, whether or not such affiliate is regulated by this Commission.
7. The Applicants shall file an executed copy of the approved Fiber Support agreements within ninety (90) days of their execution.
8. CVEC shall be required to include all transactions associated with the Fiber Support agreements in its ARAT submitted to the UAF Director on May 1 of each year, subject to administrative extension by the UAF Director. The ARAT shall include: (a) the case number in which the Fiber Support was approved; (b) the names of all direct and indirect affiliated parties to the Fiber Support; and (c) a calendar year annual schedule showing each Fiber Support agreement's transactions by month, FERC account, and amount as they are recorded in CVEC's books.
9. CVEC shall file with the Commission within 90 days of the date of this Order documentation showing the requirements of Code § 56-231.34:1 and 20 VAC 5-203-30 and -40 of the Commission's regulations are being met with regard to the Fiber Support agreements.

VATI Grant Application: Documentation that proposed project area is unserved

The incumbent telephone provider in the area is CenturyLink. CenturyLink did accept CAF I funds but has not performed any upgrades to its facilities in the area to improve broadband availability.

There are no fixed wireless providers in the area.

Although CenturyLink covers the entire project area it does not meet the 10/1 standard. By covering the entire area, there is not a need for a map to show that this is the only land-based option for residents in the project area.

Residents were surveyed to provide actual service details. An advertisement listing the project was run in the local newspaper to allow these providers and any others to contact the applicant regarding overlap in service areas.

VATI Grant Application: Documentation that proposed area is not designated for CAF

CVEC participated in the 2018 Connect America Fund auction and was awarded the census block groups adjacent to the grant project area. The project area has been given boundaries to avoid overlap with CAF II funding awarded in 2018.

VATI FUNDING SOURCES TABLE

Please fill in the chart below with a description of the project funding source (local, federal, state, private, other), the amount from that source, the percentage of total project funding that source represents, and a description of the current status of the funds (pending, secured, etc.).

Source	Amount	%	Status
REQUESTED VATI	\$ 641,967.00	26	Pending
CVEC Funding	\$ 1,846,625.00	74	SECURED
	\$		
	\$		
	\$		
	\$		
	\$		
TOTAL	\$ 2,488,592.00	100 %	