

Application to DHCD Submitted through CAMS

Brunswick County

Brunswick County-Mecklenburg Elec./EMPOWER Broadband Expansion

Application ID: 64508142019123137
Application Status: Pending
Program Name: Virginia Telecommunications Initiative 2020
Organization Name: Brunswick County
Organization Address: 100 Tobacco Street
Lawrenceville, VA 23868-1825
Profile Manager Name: Leslie Weddington
Profile Manager Phone: (434) 848-3107
Profile Manager Email: lweddington@brunswickco.com

Project Name: Brunswick County-Mecklenburg Elec./EMPOWER Broadband Expansion
Project Contact Name: George Morrison
Project Contact Phone: (434) 848-0882
Project Contact Email: gmorrison@brunswickco.com
Project Location: P.O. Box 399
Lawrenceville, VA 23868-0399
Project Service Area: Brunswick County

Total Requested Amount: \$444,259.00
Required Annual Audit Status: Accepted

Application to DHCD Submitted through CAMS

Brunswick County

Brunswick County-Mecklenburg Elec./EMPOWER Broadband Expansion

Budget Information:

Cost/Activity Category	DHCD Request	Other Funding	Total
Telecommunications	\$444,259.00	\$366,206.00	\$810,465.00
Construction	\$444,259.00	\$227,692.00	\$671,951.00
Other: Network Equipment	\$0.00	\$138,514.00	\$138,514.00
Total:	\$444,259.00	\$366,206.00	\$810,465.00

Budget Narrative:

The proposed budget is based on the verified capital needs required for passing 388 residences and businesses in Brunswick County. The proposed budget was created by examining the cost to build out a fiber broadband system in this selected project area. Once the project cost was established, the project team worked collaboratively with Brunswick County officials to acquire the other sources of funding. The sources include an in-kind service contribution of \$366,206 from Mecklenburg Electric Cooperative and EMPOWER Broadband, LLC. The cost for the State for DHCD VATI grant funds are \$1,151 per passing.

Questions and Responses:

1. Project Area

Explain why and how the project area(s) was selected. Describe the proposed geographic area including specific boundaries of the project area (e.g. street names, local and regional boundaries, etc.). Attach a copy of the map of your project area(s). Label map: Attachment 1 –Project Area Map.

Answer:

These projects are located in the southern portion of Brunswick County; Brunswick is in the heart of Southside Virginia along the border of North Carolina. Fiber deployment will utilize foundational backbone infrastructure and VATI funds will serve to expand off the already funded backbone to decrease the number of individuals that currently do not have access to broadband internet. The fiber will be built along the 3-phase Mecklenburg Electric Cooperative (MEC) electric infrastructure that runs along the following roads: Baird Rd. and Gasburg Rd. These projects propose the deployment of 5.03 miles of Distribution and Access class-fiber, by MEC, with EMPOWER Broadband extending fiber-to-the-premises with-in the project boundary.

This area was selected to maximize the advantage of being adjacent to MEC's Substation Fiber Backbone that is being constructed with matching funds through a 2018 TRRC Grant and is part of a larger nine (9) county joint-project to provide fiber-to-the-premises. Additionally, this route passes many rural residents and will provide broadband opportunities to 388 homes in Brunswick County. Most important to this grant, this area is unserved and is not part of any other existing or proposed high-speed system build-out. Relatively low-speed mobile and high-latency satellite are currently available to all in this area; there is a no portion of this project area that has any other service provider's broadband service that would constitute any type of coverage overlap.

Application to DHCD Submitted through CAMS

Brunswick County

Brunswick County-Mecklenburg Elec./EMPOWER Broadband Expansion

2.

Describe your outreach efforts to identify existing providers in the selected project area. Provide a detailed explanation of how this information was compiled and the source(s). Provide a map and list of all existing providers (fixed and wireless) and speeds offered within the project area. Label Map: Attachment 2 – Existing Provider Map; label documentation: Attachment 3 – Documentation on CAF Funding Area.

Answer:

Brunswick County and its residents are engaged in the Center for Innovative Technology (CIT) ongoing broadband survey; these results are documented in the Virginia Broadband Availability Map. The CIT broadband map also provided the current existing providers for each census block in Brunswick County. Data was also collected from the Federal Communications Commission's (FCC) "Fixed Broadband Deployment" as an additional source to determine the current providers in the project areas. From that information provided, it was discovered that at the time of application submittal, there were no known service providers in the proposed project area. Additional efforts were made by reaching out to known service providers in surrounding areas to inquire if there was any type of service being provided that was not reported by the sources mentioned above. These outreach efforts confirmed the results from the earlier listed sources, as no service provider contacted reported having services available in this area.

The included coverage map documents the need in this area and the outcry from members within the county overall. Teachers within a local school indicate that less than 50 percent of students have broadband at home, which is a barrier to families and students in today's technology-driven educational system.

In reference to Attachment 3 - Documentation on CAF Funding Area, it is important to note that the accounts passed are indicated by a green dot; due diligence was given to select those potential subscribers that were located outside of designated CAF areas in locations adjacent to a CAF block.

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 percent service overlap within the project area. Describe any anticipated service overlap with current providers within the project area. Provide specific information as to how you determined the percentage overlap. Label Attachment: Attachment 4 – Documentation Unserved Area VATI Criteria.

Answer:

Data was gathered from the CIT's Integrated Broadband Availability Map and Integrated Broadband Planning and Analysis Toolbox, the most recent FCC 477 data and the FCC Broadband Map. As of the time of the application submittal, there are no current providers, other than satellite, that have reported coverage within the proposed project areas. Upon further investigation by utilizing the company's address availability entry field on their website and by reaching out to those providers, it was discovered that these areas, indeed, were deficient of any current internet service provider. This information was further verified by reaching out to MEC members who live along the proposed project area who reported the lack of a service provider in this project area. Additionally, over 100 area residents had signed a petition to bring EMPOWER Broadband fiber to this area due to lack of current internet providers. This petition can be found at <https://www.change.org/p/empower-broadband-bring-empower->

Application to DHCD Submitted through CAMS

Brunswick County

Brunswick County-Mecklenburg Elec./EMPOWER Broadband Expansion

fiber-broadband-to-brunswick-delbridge-estates.

The goal of the VATI grant is to provide broadband services to residents of Virginia, and given the lack of any current service provider in the Gasburg area of Brunswick Co. as verified by the Sources listed above; this area qualifies as unserved by all standards provided by the VATI definition.

4. Provide the number of residential serviceable units in the project area(s). Describe the eligible premises that will be served by the proposed project and the basis for these projections.

Answer:

According to maps from internal GIS systems, the area proposed has 388 MEC accounts located within the project area, 13 of those being businesses. Converting this to actual population using an estimated 2.5 consumers per household, this grant area encompasses an estimated population of 970 rural residents. As previously stated, these residences lack access to the minimum 10/1 Mbps speed due to a lack of any current internet service provider. According to data received from the Brunswick County Public School System and Brunswick Academy, these proposed project areas will provide broadband access to 31 residences that have school-aged children. An estimated 45% take rate within the first year is expected based on household income, level of education and the age of those along the proposed routes based off research data adopted by the Pew Research Institute and the feasibility study conducted by Pulse Broadband for the entire MEC service territory. This would mean that within the first year of project completion, 175 locations are expected to have broadband services provided. It is also important to note that this particular project is just one of three application submissions that cover multiple jurisdictions and will expand off of a 135-mile fiber backbone deployed across six Southside Virginia counties delivering broadband access to over 2,900 locations.

5. Indicate the numbers of businesses and community anchor institutions the proposed project will pass in the project area. Also indicate the number of home-based businesses. Provide specific information.

Answer:

Along the proposed route there are 2 churches, 13 stores / businesses with two of those being home-based businesses, one restaurant and 10 public / community facilities including Peahill Storage, Gasburg Volunteer Fire Department, Central Life Saving Crew, The Lake Gaston Resort, S & S Golfing Enterprises, LLC., Sanders Super Stop, Country Club Shores Association, Aqua Virginia Water Utilities and a Brunswick County facility.

6. Understanding that projected take rates are an estimate, provide the anticipated take rate for the proposed service within one year of project completion and describe the basis for the estimate. Also detail all actions (e.g. marketing activities, outreach plan) to be implemented to reach the identified potential serviceable units within the project area.

Answer:

MEC's initial broadband feasibility study, conducted by Pulse Broadband, covered our entire service area, and furnished results based on national statistics from cooperative and rural areas with a similar average density, educational attainment, and financial ability. Consequently, Pulse estimated the take rate for this area to be at 45 percent within one year of project completion. Accordingly, from the 388 accounts passed, an estimated 176

Application to DHCD Submitted through CAMS

Brunswick County

Brunswick County-Mecklenburg Elec./EMPOWER Broadband Expansion

homes would take service, within the first year. After discussions with multiple subdivisions in this area of Brunswick County, considering its proximity to Lake Gaston, the 45 percent take rate is both easily obtainable and a conservative estimate.

Once field engineering for the electrical make-ready work begins in the designated area, potential EMPOWER customers will be notified by direct mail that fiber internet services are forthcoming. Once fiber deployment begins, those same prospective customers will receive another direct mail letter, including pricing structures and a contract for early sign-up. All members who sign up prior to construction are eligible to receive free installation, a \$100 value for bundled services (internet and fiber) or half-off for internet services only. Additionally, postcard reminders will be mailed three-weeks following the second direct mailer. Once installations begin, door to door visits will begin with doorknob hangers being placed on all doors at those accounts not already signed up for service. Where allowed, yard signs will be displayed at the properties already receiving EMPOWER broadband services.

In addition to the above direct marketing activities, EMPOWER will set up at local community functions to educate potential customers on the project as well as information to increase digital literacy. Such community meeting and functions will be open to other prospective customers in the area, as well as the public; additionally, staff will distribute brochures and promotional items. Social Media platforms for both EMPOWER and MEC, as well as both websites, will be used to notify potential customers.

Information regarding EMPOWER, its services and construction progress are also available at each district location or by telephone.

Please see Appendix – for a summarized version of EMPOWER’s existing Marketing Plan and marketing materials to be utilized to promote services within this project area.

7. 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?

Answer:

N/A. This is application for a fiber-to-the-premises construction project.

8. Provide the proposed download and upload speeds for the project area. Detail whether that speed is based on dedicated or shared bandwidth, and detail the technology that will be used. This description can be illustrated by a map or schematic diagram, as appropriate. 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:

EMPOWER Broadband, Inc. is using the Calix implementation of Gigabit Passive Optical Network (GPON). GPON is a fiber-to-the-premises (FTTP) technology that implements point-to-multipoint architecture to serve residential and business customers and provide up to 1 Gbps service per subscriber. This technology utilizes fiber optic splitters to enable up to 64 customer locations to be served by a single optical line terminal (OLT) port. Below is an example of how the bandwidth is shared utilizing the preferred 1:32 fiber split:

Application to DHCD Submitted through CAMS

Brunswick County

Brunswick County-Mecklenburg Elec./EMPOWER Broadband Expansion

Upstream (1.2 Gbps total)/(32 customers) = 37.5 Mbit/customer

Downstream (2.4 Gbps total)/(32 customers) = 75 Mbit/customer

Residential packages offered to residents along the proposed project route would be as follows:

50 Mbps/50 Mbps - \$69.95/month (optional VOIP telephone service at \$30/month)

100 Mbps/100 Mbps - \$119.95/month (optional VOIP telephone service at \$30/month)

1 GB - \$269.95/month (optional VOIP telephone service at \$30/month)

Business packages offered to enterprises along the proposed project route would be as follows:

50 Mbps/50 Mbps - \$89.95/month (optional VOIP telephone service at \$34.95/month)

100 Mbps/100 Mbps - \$139.95/month (optional VOIP telephone service at \$34.95/month)

All business packages larger than 100Mbps/100Mbps would require a consultation for a customized quote designed to meet the business' total broadband needs.

9. 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. Label Map: Attachment 5 – Propagation Map Wireless Project

Answer:

Last Mile Service Delivery will use Calix customer premise equipment. The fiber drop terminates to a Network Interface Device (NID) outside the premises. From there, single-mode fiber with Angled Physical Connectors (APC) is used to connect to a Calix 844G Optical Network Terminal (ONT) and router inside the premises. The 844G Gigacenter provides wired and Wi-Fi connections inside the premise for internet service. The Gigacenter's Wi-Fi service provides both 2.4 Ghz and 5.0 Ghz bands. An optional wireless mesh device, the 804 Mesh Extender, can be used in large homes or businesses to extend the range of the wireless service. The 844G ONT/router also provides two POTS (Plain Old Telephone Service) voice jacks which can connect to an existing telephone NID via RJ-11 cable for the optional Voice over IP (VoIP) service. The ONT is powered from either a standard AC wall outlet or also can be connected to an optional Lithium-ion battery back-up unit. The last mile network uses an overall tree and branch design for the access network. Each end customer has a fiber connection in the home or business. Layer 2 switching connects the end-user back to a Calix E7-2 access device which transmits light on the fiber with a GPON small form-factor plug (SFP). E7 SFP's have a 32-way split capable of reaching 32km, which puts all accounts within range of the Gasburg substation serving the area and is also the location of the E7-2's and an edge router. Layer 2 segments are trunked to the edge router and then to one of the centralized aggregation routers. Aggregation routers are being installed in our Chase City Office and Gasburg substation. Aggregation routers are connected to a redundant Internet Data Provider using multiple 10Gb connections across a Mid-Atlantic Broadband (MBC) open-access network. The diagram below is the physical

Application to DHCD Submitted through CAMS

Brunswick County

Brunswick County-Mecklenburg Elec./EMPOWER Broadband Expansion

infrastructure and long-term plan, ultimately showing the location of all major network nodes, creating a highly redundant network. Each of the nine (9) larger highlighted substations contain a major network node with a locally -ringed Layer 3 router with 10Gb fiber uplinks.

It should be noted that MEC's network can support small business broadband service across the GPON network; however, such businesses can be offered higher priority and better performance through Calix's Assured Forwarding configuration.

MEC/EMPOWER's network also affords unique opportunities to large businesses requiring 1 Gbps service. The network provides high speed dedicated, unshared, connections to those with critical quality of service needs and ensures impeccable data access. This connection is not oversubscribed or split at the access level but rather uses a dedicated port.

Additionally, The MEC fiber network connects to Mid-Atlantic Broadband's middle-mile facilities to access our data provider, Pixel Factory. This connectivity maximizes existing infrastructure and facilities owned by both MBC and Pixel Factory.

10. Project Readiness

What is the current state of project development (e.g. planning, preliminary engineering, identifying easements/permits, final design, etc.)? Prepare a detailed project timeline or construction schedule which identifies specific tasks, staff, contractor(s) responsible, collection of data, etc., and estimated start and completion dates. Provide any Memorandums of Understanding (MOUs) or Memorandums of Agreement (MOAs) (drafts are allowable), letters of support, etc. The timeline should include all activities being completed within 12 months of contract execution with DHCD. Label Attachments: Attachment 6 – Timeline/Project Management Plan; Attachment 7 – Relationship between Applicant/Co-Applicant; Attachment 8 – Letters of Support;

- 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, co-applicant, and any additional partners.
- iii. If applicant is not a locality(s) in which the project will occur, please provide a letter of support from that locality.

Answer:

This project is ready to enter the final design phase as planning and preliminary engineering are complete. Each segment of this project has been included in MEC's overall fiber network "tree and branch" design; this includes anticipation of substation network hardware, fiber splitting, and fiber loops. Additionally, through our knowledge of the area, each project area has been selected to maximize existing main line pole infrastructure and minimize make ready work. These areas have also been selected to reach further into these unserved areas by creating the next fiber class for MEC's fiber expansion. The first tier or class, Backbone, is substantially underway while this application focuses more on the deployment of Distribution Class (FTTH Mid-Mile) fiber along with the required

Application to DHCD Submitted through CAMS

Brunswick County

Brunswick County-Mecklenburg Elec./EMPOWER Broadband Expansion

Access Class fiber (last mile) and Drops.

All fiber cable will follow the electrical system and will be installed on or adjacent to existing distribution facilities within the existing right-of-way. This allows the use of MEC's Geographic Information System for the determination of required fiber length along with classification as Distribution, Access, or Drops to facilitate the determination of fiber count for each respective use. Typically, the MEC-EMPOWER system uses 144-count fiber for Backbone, 48- and 24- count fiber for Distribution, and 12- count for routes deemed as Access.

Within 30 days of the notice of Grant award, MEC staff will complete the final fiber layout in each project area. This will include detailed GPON fiber splits, splice can location, and final material list to proceed with purchase orders. VDOT and railroad crossings have been identified and permit requests will be filed and substantially completed within this allocated time period. Residents benefiting from an awarded grant will be notified by letter of the pending deployment and the use of construction crews to complete the work.

MEC's Senior Field Engineering Technician will confirm the final design layout, checking clearances, splice can size, and splice can location to ensure future fiber deployment to other unserved homes and businesses. As a part of the confirmation process, MEC will assign contract staking engineers, with Booth & Associates LLC. Consulting Engineers, to visit each pole to confirm height and space for cable placement. Additionally, each pole will be checked to confirm selection of appropriate mounting hardware for the line angle and for review of modifications needed for cross arm or vertical pole construction.

As a result of the field review, technicians will identify all make ready work and associated poles requiring replacement. This final layout will be assigned to Davis H. Elliot or River City Construction crews to complete all make ready work followed by Distribution and Access Class fiber installation. Make ready and fiber installation activities are scheduled for 20 weeks.

Each 144-count fiber reel is 9,000 feet in length; such higher count fiber splicing will be performed by S&N Communications while Distribution class lower count cables will be spliced by MEC's fiber technicians. It is expected fiber splicing will require four – six weeks.

While construction crews perform make ready work and install fiber, Booth & Associate field technicians will visit each subscriber's location to plan for the Drop installation. MEC crews will then perform the Drop installation to the home. Next Generation Electronics will install the NID (Network Interface Device) and the Router/ONT. Drop and ONT installation is set for 20 weeks as it will be completed concurrently with Distribution and Access fiber construction deployment.

Both Brunswick County and Mecklenburg Electric Cooperative have the common goal and responsibility of serving the citizens of Brunswick County. We share the objective to resolve the complication and plight of the massive digital divide between Southside Virginia and other areas of the Commonwealth. Collectively, we have heard from residents calling for resolution to this significant dilemma; our teams, including the County Administrator, the Board of Supervisors, the County's Broadband Committee Chair, MEC CEO, MEC's Board of Directors, and MEC staff have elected to work together to deliver a needed solution. Accordingly, MEC created EMPOWER Broadband to effect just such a change.

Application to DHCD Submitted through CAMS

Brunswick County

Brunswick County-Mecklenburg Elec./EMPOWER Broadband Expansion

As MEC-EMPOWER are jointly applying with Brunswick County, Brunswick shall administer the grant and serve in a project oversight role to accomplish the grant's goals and objectives.

11. 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 percent of total project cost). The Funding Sources Table must be completed. Label Attachments: Attachment 9 - Documentation of Match Funding; Attachment 10 – Funding Sources Table;
 - i. For each element of matching funds in the description, indicate the type of match (e.g. 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.

Answer:

The total cost of the proposed project areas is \$810,466 to provide broadband service to 388 locations. For this project, the applicant and co-applicant are requesting \$444,259 in VATI grant monies which constitute 55% of the total project cost and breaks down to \$1,145 per location passed. The co-applicant, Mecklenburg Electric Cooperative and EMPOWER Broadband, is contributing \$366,206 in in-kind funds towards the project to be used for network equipment and towards construction efforts to complete the project build-out. The applicant Brunswick Co. is contributing in the assistance of data collection, consulting services and waiver of county permits and fees, while also helping secure any state permits that are needed for the construction of the project.

12. 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, easements, and other issues that may hinder or delay timely construction and increase cost. Provide

Application to DHCD Submitted through CAMS

Brunswick County

Brunswick County-Mecklenburg Elec./EMPOWER Broadband Expansion

detail if this project includes additional partners such as municipal providers, middle-mile providers, or investor-owned utilities

Answer:

The local government applicant for the proposed project area is Brunswick County with Mecklenburg Electric Cooperative (MEC) and EMPOWER Broadband serving as the co-applicant. The members from the Brunswick County Board of Supervisors and members of MEC and EMPOWER Broadband entered into an agreement to partner and pursue DHCD VATI grant funds to provide broadband services to areas of the county that were devoid of reliable, useful broadband services. This agreement is reflected in minutes of the August 21, 2019 Brunswick County Board of Supervisors meeting. Brunswick County is providing assistance and support to the project by helping assist in obtaining all needed state and local permits, by waiving all local permit fees, providing consultation guidance and services and aiding in the collection of data.

Mecklenburg Electric Cooperative's board of directors has agreed to provide the in-kind funds in the amount of \$366,206 for the proposed project area as reflected in the attached letter in Attachment #9.

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

Answer:

The executive team at Mecklenburg Electric Cooperative is responsible for the management of the project. This team is well-positioned and prepared to implement, manage, operate, and sustain the services proposed. Members of the team are included in the table below.

Name	Title	Project Role	Project Responsibilities
Dr. Charlette T. Woolridge	County Administrator, Brunswick County	Project Liaison	Project Oversight and serves as a liaison with Brunswick County
John C. Lee, Jr.	President and CEO Mecklenburg Electric Cooperative (MEC)	Project manager	Manager of Overall Project
Carol Ann Jones	Vice President of Finance and Accounting, MEC	Grant Accounting	Tracks grant expenses and prepares reports

Application to DHCD Submitted through CAMS

Brunswick County

Brunswick County-Mecklenburg Elec./EMPOWER Broadband Expansion

Sherry Harris	Administrative Assistant, EMPOWER Broadband, INC.	Administrative	Performs administrative tasks as necessary
Brian Woods	Director of Engineering, MEC	Engineering Coordinator	Coordinates engineering plans of fiber infrastructure for project
Robert Lankford	Director of Operations, MEC	Construction Coordinator	Coordinates construction of fiber infrastructure for project
B. J. Seamans	Vice President of Engineering and Operations, MEC	Engineering & Construction Manager	Oversees all engineering and construction duties for project
George Morrison	Director of Planning, Brunswick County	Permit Coordinator	Obtains necessary permits for project and serves as liaison with Brunswick County

14. Project Budget and Cost Appropriateness

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. Label Attachment: Attachment 11 – Derivation of Costs; Attachment 12 - Documentation of Supporting Costs; Attachment 13 – Supporting Documentation of Cost Estimates.

Answer:

The funds requested by both the applicant and co-applicant from VATI funds will be used for the costs of aerial (\$220,570), underground (\$15,316) and aerial (\$208,373) construction of the proposed fiber system for a total amount of \$444,259. MEC and EMPOWER Broadband will provide an in-kind match of \$366,206 that will be used for the remaining construction costs, as well as, the following:

Outdoor Wall Mount Labor

Outdoor Wall Mount Materials

Splicing Labor

Application to DHCD Submitted through CAMS

Brunswick County

Brunswick County-Mecklenburg Elec./EMPOWER Broadband Expansion

Splicing Materials

Staking Labor

ONT (router) labor

ONT (router) materials

E7-2 Package Chassis

GPON SFP OIM, Class B+ 1490/1310nm

E7-2 8 Card PON Unit

These costs are listed in detail in the derivation of costs that is attached.

15. 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. Please provide the following three pieces of information:
- Total State funding requested / Total Project cost
 - Number of serviceable units
 - Highest residential speed available

Answer:

- State Share for total project cost: \$444,259 / Total project cost: \$810,466
- 388 units passed / \$444,259 = \$1,145 per unit passed
- Internet Speed: The maximum available speed is One Gigabit per second upload and download.

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

Answer:

Mecklenburg Electric Cooperative and Empower Broadband Inc. are currently administering a \$2.62 Million grant for the TRRC's R&D Last-Mile Broadband Project sponsored by Mecklenburg County. Mecklenburg Electric Cooperative was also a recipient of previous TRRC grant funds in partnership with Greensville County, whereby the county was the administrator of the grant. Additionally, Mecklenburg Electric Cooperative has extensive experience in managing utility infrastructure projects similar in scope to the project proposed in this application. As a current provider of electric distribution services, MEC is required to maintain detailed records and is held accountable for proper project and data management as MEC is a borrower in good standing with USDA's RUS (Rural Utilities Services). Mecklenburg Electric Cooperative will be enforcing similar accountability and due

Application to DHCD Submitted through CAMS

Brunswick County

Brunswick County-Mecklenburg Elec./EMPOWER Broadband Expansion

diligence with the DHCD grant program as well.

MEC to date has constructed 50 miles of fiber backbone and delivered FTTP (fiber-to-the-premise) to 50 residences and businesses. For decades, MEC has maintained a significant communication network to maintain connectivity to three district offices and 26 electrical distribution substations across Southside Virginia. This network includes fiber optic, microwave, and cloud sections. MEC and its team collectively have vast experience in maintaining a highly sophisticated data and communications network in serving over 31,000 electric accounts across portions of nine Virginia Counties.

17. Commonwealth Priorities

Additional points will be awarded to proposed projects that reflect Commonwealth priorities. Please describe if the project fits into a larger locality or regional universal broadband plan.

Answer:

The proposed project area included in this application constitutes one part of a three-part submittal including three counties: Mecklenburg, Halifax and Brunswick. These project areas are also an expansion to a fiber backbone construction project consisting of 135 miles of fiber backbone serving portions of six Southside Virginia counties (Pittsylvania, Halifax, Charlotte, Mecklenburg, Brunswick and Greenville). Additionally, approving these applications compounds the \$2.99 Million awarded by the Virginia Tobacco Region Revitalization Commission.

In addition to TRRC funds, MEC has received Federal Communication Commission (FCC) Connect America Funds (CAF) in the amount of \$1.86 million to provide service to 848 residents and businesses in southern Brunswick County. Collectively, these projects represent the commitment of both MEC and EMPOWER Broadband to provide reliable high-speed broadband service to residents of Southside Virginia.

The proposed project areas, along with the current backbone project, will provide the foundation to ultimately deploy fiber-to-the-home across nine different Virginia counties that MEC serves. Since receiving clearance from the Virginia State Corporation Commission (SCC), 50 miles of backbone fiber has been constructed and residents in those areas have already begun receiving the best in high-speed fiber broadband services.

Additionally, Southside Virginia is perhaps the Commonwealth's most disadvantaged region; this project promotes both education and economic development, of which both are required to deliver desperately needed jobs. It should be further noted that in a 2014 Weldon Cooper study, Virginia's Southside Region was the only region to lose population. Regretfully, our region also demonstrated the highest levels of poverty. Subsequently, one cannot understate the value of delivering Mainline Fiber Distribution facilities into the rural areas of Southside Virginia. Accordingly, this grant request must be considered none other than one of the Commonwealth's highest priorities.

18. Additional Information

Any other equitable factor that the applicant desires to include. Applicants are limited to four additional attachments. Label Additional Attachments as:

Application to DHCD Submitted through CAMS

Brunswick County

Brunswick County-Mecklenburg Elec./EMPOWER Broadband Expansion

- a. Attachment 14 – Two most recent Form 477 submitted to the FCC or equivalent
- b. Attachment 15 – Copy of Public Notice
- c. Attachment 16 – XXXXXXXX
- d. Attachment 17 – XXXXXXXX
- e. Attachment 18 – XXXXXXXX
- f. Attachment 19 – XXXXXXXX

Answer:

Closing Remarks

Brunswick County and Mecklenburg Electric Cooperative / EMPOWER Broadband jointly submit this VATI application to deploy much needed high-speed fiber broadband to homes and business in the unserved areas in and around Gasburg, Virginia. Providing such services, to both its Members and communities, is a part of MEC's DNA. The Cooperative is known for providing outstanding service to Southside Virginia, in both electrical utility service and by being actively involved in the communities we serve. This reputation of excellent customer service allows MEC / EMPOWER an unparalleled recognition in expanding the delivery of rural broadband.

Mecklenburg Electric Cooperative is a member-owned electric distribution utility certificated to provide electric service to portions of nine southern Virginia counties. We currently serve over 31,000 meters across Pittsylvania, Halifax, Charlotte, Mecklenburg, Lunenburg, Brunswick, Greensville, Southampton and Sussex counties. We are one of twelve electric cooperatives in Virginia and a member of the Old Dominion Electric Cooperative, that consists of 11-member distribution cooperatives across Virginia, Maryland and Delaware.

Mecklenburg Electric Cooperative was chartered in 1938 as a part of the Rural Electrification Act to provide electric service to rural areas, by the members – for the members. After 80 years, our legacy of providing our member-owners with safe, reliable, affordable and environmentally responsible electric service continues. We operate under the jurisdiction of the Virginia State Corporation Commission (SCC) and administrated by the U.S. Department of Agriculture's (USDA) Rural Utilities Service (RUS).

Mecklenburg Electric Cooperative and Brunswick County's Objectives for VATI Grant Funding

With this grant, we will provide fiber based broadband service to an area that has 388 homes including multiple home-based businesses. The service will allow Mecklenburg Electric Cooperative / EMPOWER to offer both broadband and VoIP services. Broadband will allow the residents of this area access to previously unavailable high-speed internet that will afford multiple new opportunities including, but not limited to, educational, home based businesses, telemedicine, video streaming, gaming and overall improved communications.

Defining Brunswick County and Mecklenburg Electric Cooperative's Grant Need

Brunswick County and Mecklenburg Electric Cooperative are applying for these funds because, without VATI grant assistance, this area would fall further behind in the "digital divide" compared to areas that already have access to high speed broadband. The lack of VATI funds would also further delay the construction of an asset that has now become a requirement for everyday life in the 21st-century. Brunswick County is a very rural area and does not have the population density to offer a substantial payback on an investment by investor-owned internet service providers. Mecklenburg Electric Cooperative is a not for profit entity that focuses on providing service to areas that otherwise would not receive that service. In this case, the service is broadband. MEC has experience in providing service on this basis. We were formed to provide electricity to rural areas when other for- profit utilities could/would not provide it. Being owned by those that we serve, our members, require that we hold ourselves to a higher standard of service for our Members.

Application to DHCD Submitted through CAMS

Brunswick County

Brunswick County-Mecklenburg Elec./EMPOWER Broadband Expansion

Why Serve this Area of Brunswick County?

This project area offers several key attributes for providing high speed broadband service. First, it is considered unserved by the grant guidelines and the FCC. Second, the area has accessibility to previously constructed Mecklenburg Electric Cooperative fiber backbone and would serve as an extension off existing infrastructure to be used in the most beneficial and economical fashion. Finally, the project would help establish Smart Grid communications between Mecklenburg Electric Cooperative's facilities, creating a more reliable power service to our customer/member.

Fiber Technology Offers an Unparalleled Bandwidth Platform... 10 Gig, 40 Gig, and 80 Gig

In response to the exponential growth of consumer demand for bandwidth, MEC / EMPOWER's existing electronics provider, Calix, delivers off the shelf next generation passive optical network (PON) technologies that provide 10Gbps symmetrical broadband over existing fiber cable. Additionally, Calix also produces NG-PON2 which can deliver 40 Gbps — with 80 Gbps possible in the future — all on a single fiber.

This project will make 1Gbps speed available to each home and business. By changing electronics, sizeable gains in speed are obtainable for an incremental investment to accommodate the need of future families and businesses. This grant sets up the foundational investment in both fiber and the labor for its deployment.

It should be further noted that fiber technology simply rivals the highest speeds deliverable by any other technology and creates a tremendous value for both MEC / EMPOWER and VATI.

An Enduring Financial Investment for Brunswick County and Southside Virginia

The economic benefits of this project will continue to deliver advantages in support of broadband growth as MEC is a not for profit electric cooperative owned by its Members. All margins or profits will first be utilized to expand broadband into additional unserved areas. Monetary gains will remain in the Commonwealth and County as future profits generated by EMPOWER, a wholly owned subsidiary of Mecklenburg Electric Cooperative and its members, will be utilized to reduce the cost of electricity for the cooperative member.

Summary

Considering speed, expandability, delivery from a vested locally owned and locally controlled company, at competitive pricing sets this project apart from other applications. In a related observation, a 2014 Weldon Cooper Center for Public Service Demographic Study found Southside Virginia to be the only region of eight (8) within the Commonwealth that lost overall population. Our region, our County, our Cooperative, must strive to retain our youth and our employers, and create an environment to promote every advantageous resource. Broadband is a significant factor in leveling the playing field for this rural community.

Attachments:

Map(s) of project area, including proposed infrastructure

BrunswickCoAttachment1ProjectAreaMap823201912114.pdf

Application to DHCD Submitted through CAMS

Brunswick County

Brunswick County-Mecklenburg Elec./EMPOWER Broadband Expansion

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

BrunswickCoAttachment2ExistingProviderMap822201933722.docx

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

BrunswickCoAttachment3DocumentationofCAFFundingArea823201912118.pdf

Documentation that proposed project area is unserved based on VATI criteria

BrunswickCoAttachment4DocumentationUnservedAreaVATICriteria822201933729.docx

Project Management Plan

Attachment6TimelineProjectManagementTimelinewithDateDetailSheet18262019121917.pdf

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

BrunswickCoAttachment7RelationshipbetweenApplicantCoApplicant822201933742.pdf

Letters of Support

BrunswickCoAttachment8LettersofSupport8262019122932.pdf

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

BrunswickCoAttachment9DocumentationofMatchFunding822201933748.pdf

Funding Sources Table

BrunswickCoAttachment10FundingSourcesTable822201933752.docx

Derivation of Cost (Project Budget)

BrunswickCoAttachment11DerivationofCosts828201992305.xlsx

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

BrunswickCoAttachment12DocumentationofSupportingCosts823201912133.pdf

Supporting documentation for costs estimates

BrunswickCoAttachment13SupportingDocumentationofCostEstimates822201933801.pdf

Application to DHCD Submitted through CAMS

Brunswick County

Brunswick County-Mecklenburg Elec./EMPOWER Broadband Expansion

Two most recent Form 477 submitted to FCC

Attachment14VATI2020MecklenburgElectricCooperativeEMPOWERBroadbandForm477andEquivalent8262019122003.pdf

Copy of Public Notice

Scanof2020VATIPublicNoticeBrunswickHalifaxandMecklenburgCountiesMECEMPOWER828201992332.pdf

Optional

MarketingPlanMarketingMaterialsVATI20208262019122044.pdf

Optional

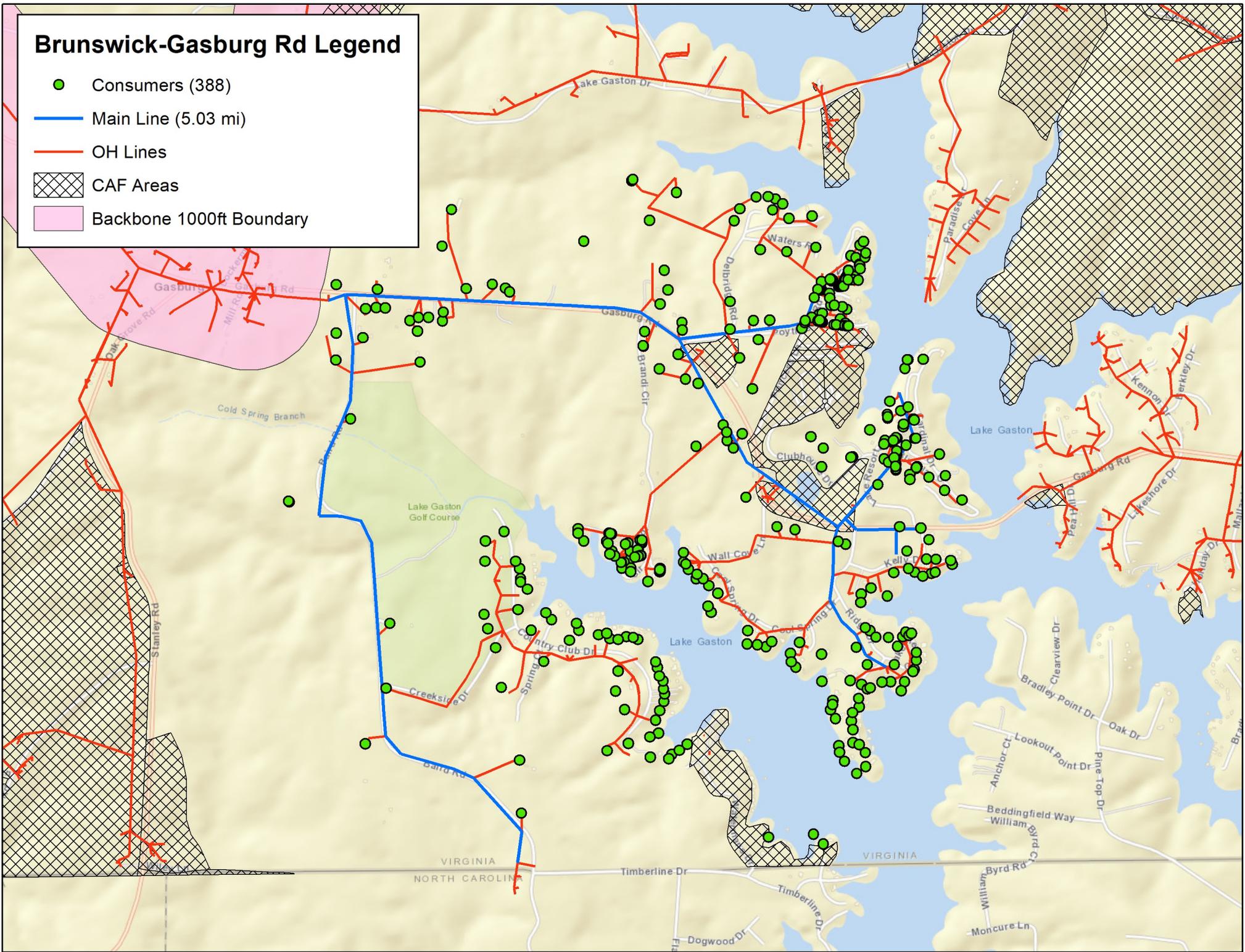
brunswickchamber827201930729.docx

Optional

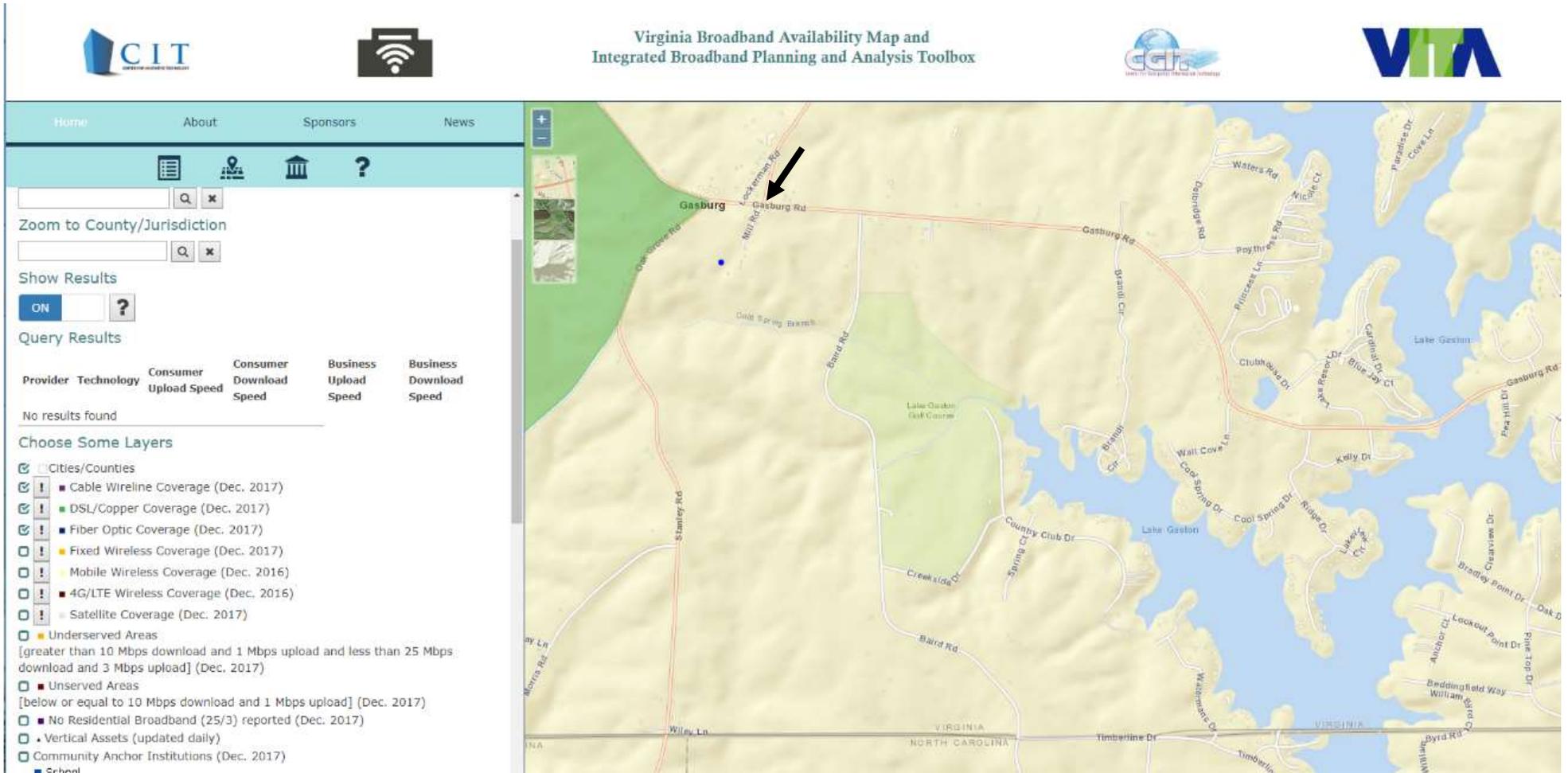
AdditionalCalixAttachment829201983838.pdf

Brunswick-Gasburg Rd Legend

- Consumers (388)
- Main Line (5.03 mi)
- OH Lines
- ▨ CAF Areas
- Backbone 1000ft Boundary

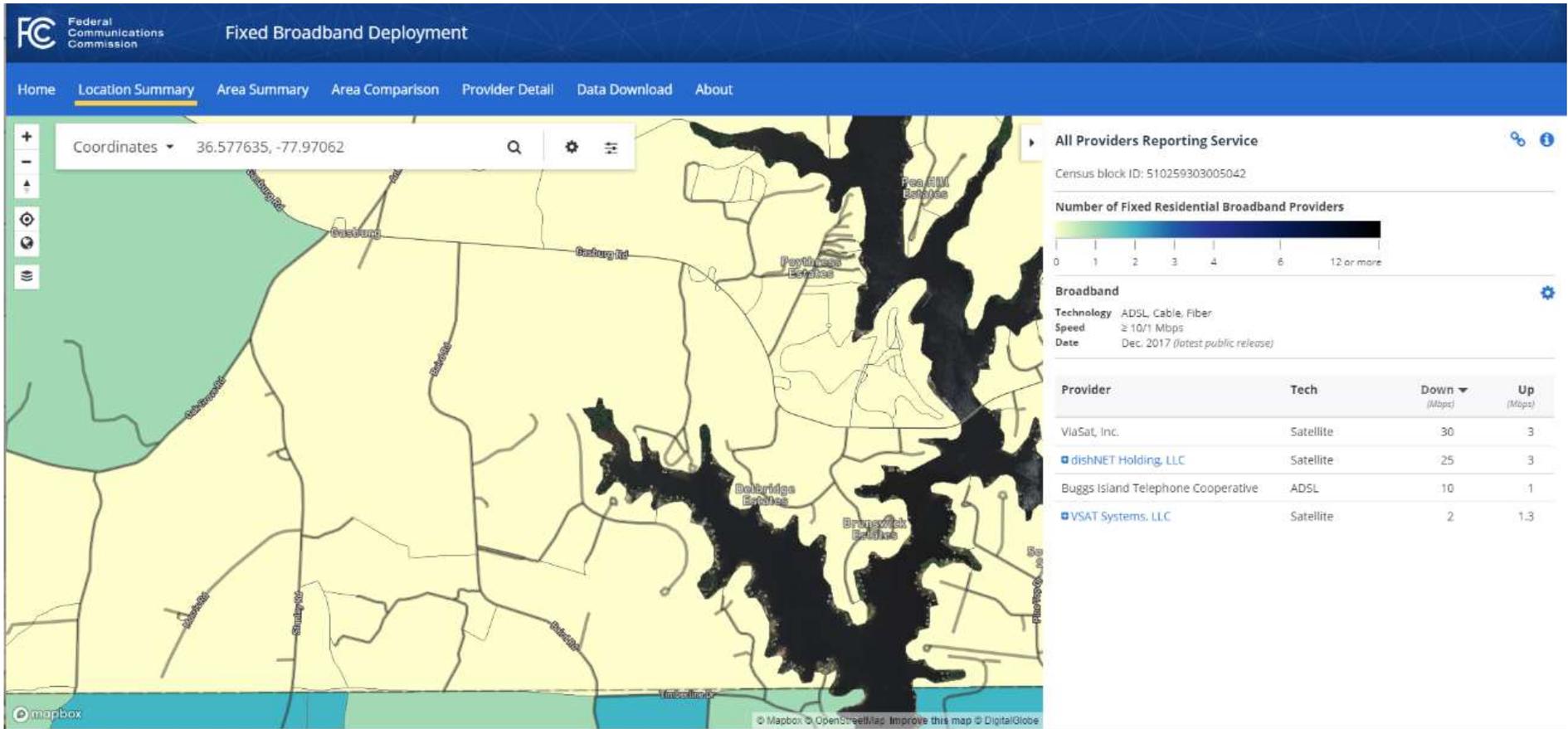


Brunswick Co.



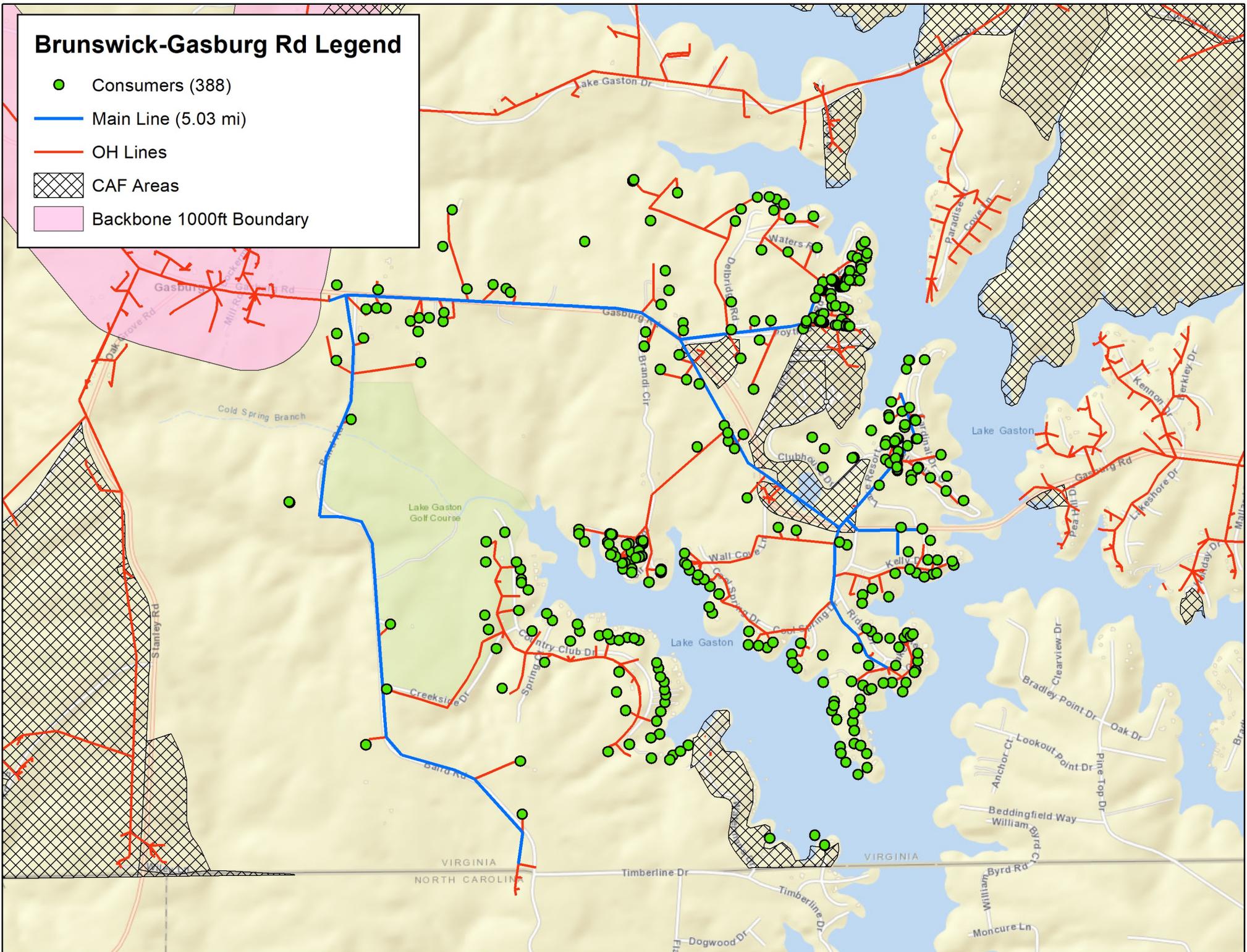
The proposed project area will be an extension off MEC backbone at the black arrow and continue to the east into an area that both the FCC & CIT maps represent as having no current providers, other than satellite services. Outreach efforts to other known service providers in the area confirmed what the maps represent, that there is no known service provider in the proposed project area.

Brunswick Co.



Brunswick-Gasburg Rd Legend

- Consumers (388)
- Main Line (5.03 mi)
- OH Lines
- ▨ CAF Areas
- Backbone 1000ft Boundary



Brunswick Co.

Virginia Broadband Availability Map and Integrated Broadband Planning and Analysis Toolbox

Home About Sponsors News

Zoom to County/Jurisdiction

Show Results ON

Provider	Technology	Consumer Upload Speed	Consumer Download Speed	Business Upload Speed	Business Download Speed
COMCAST	Cable	4 Mbps	25 Mbps	Unavailable	Unavailable
BUGGS ISLAND TELEPHONE COOPERATIVE	DSL	1 Mbps	10 Mbps	1 Mbps	10 Mbps

Choose Some Layers

- Cities/Counties
- Cable Wireline Coverage (Dec. 2017)
- DSL/Copper Coverage (Dec. 2017)
- Fiber Optic Coverage (Dec. 2017)
- Fixed Wireless Coverage (Dec. 2017)
- Mobile Wireless Coverage (Dec. 2016)
- 4G/LTE Wireless Coverage (Dec. 2016)
- Satellite Coverage (Dec. 2017)
- Underserved Areas [greater than 10 Mbps download and 1 Mbps upload and less than 25 Mbps download and 3 Mbps upload] (Dec. 2017)
- Unserved Areas [below or equal to 10 Mbps download and 1 Mbps upload] (Dec. 2017)

Multiple broadband availability maps (CIT, FCC, BroadbandNow, etc.) report the entire proposed project area to be unserved with no current ISP providers. To further verify this, contact was made with known service providers in the region and by speaking to residents in the area which confirmed that at this time, there are no service providers in the area for broadband.

MEC-EMPOWER 2020 VATI Timeline

Task Name	Assigned MEC Manager	Responsible Individual	Responsible Entity	Start Date	Finish Date	Duration
Finalize VATI Bid award	D.Lipscomb			12/15/2019	12/18/2019	1 Week
Press Release of Award Notification to Local Newspaper	D. Lipscomb	D. Winn	MEC	12/15/2019	12/20/2019	1 Week
Social Media Release	D. Lipscomb	P. Whirley	MEC	12/15/2019	12/20/2019	1 Week
Finalize Engineering Design						
Edit Basemap with final route fiber count, splice can location, splitter diagram	D. Long	D. Long	MEC	12/15/2019	12/22/2019	1 Week
Finalize fiber count, splice can location, and splitter diagram	D. Long	D. Long	MEC	12/15/2019	12/22/2019	1 Week
Create permit application drawings, VDOT/Railroad	B. Woods	J. Blair	MEC	2/3/2020	2/28/2020	1 Month
Engineering design assigned to Field Engineers for field review	J. Blair	B. Buckner	Booth & Associates	1/13/2020	2/28/2020	1.5 Months
Finalize network electronic equipment list and release RFP	D.Long	B. Soles	MEC/EMPOWER	1/15/2020	1/22/2020	1 Week
Award electronics vendor bid	D. Long	B. Soles	MEC/EMPOWER	2/28/2020	2/29/2020	2 Days
Generate and release Construction and Materials RFP package	B. Seamans	R. Lankford	MEC	3/16/2020	3/20/2020	5 Days
Social Media Project Progress Update	D. Lipscomb	P. Whirley	MEC	3/16/2020	3/20/2020	5 Days
Community Meetings: Brunswick, Halifax, Mecklenburg Update & Digital Literacy	D. Lipscomb	D. Francis	MEC/EMPOWER	3/15/2020	3/22/2020	1 Week
Award construction and materials bid	B. Seamans	R. Lankford	MEC	4/1/2020	4/1/2020	1 Day
Fiber Design and Make Ready Design - Integration						
Complete Fiber Engineering Design Edits	B. Woods	J. Blair	MEC	1/13/2020	2/28/2020	1.5 Months
Make Ready Engineering	B. Seamans	J. Blair	MEC	1/13/2020	2/28/2020	1.5 Months
Details of poles collected using Work Studio	J. Blair	B. Buckner	Booth & Associates	1/13/2020	2/28/2020	1.5 Months
Details of all underground fiber route using Work Studio	J. Blair	B. Buckner	Booth & Associates	1/13/2020	2/28/2020	1.5 Months
Make ready engineering evaluated for fiber placement	B. Seamans	B. Woods	MEC	1/13/2020	2/28/2020	1.5 Months
Make ready engineering finalized by MEC Field Engineering	B. Woods	J. Blair	MEC	3/2/2020	3/6/2020	5 Days
Final Construction Dept. and Engineering Field Review	B. Seamans	R. Lankford	MEC	3/9/2020	3/13/2020	5 Days
Detailed Design Complete/Make Ready Construction						
Make Ready Construction Work Orders generated	J. Blair	B. Buckner	Booth & Associates	3/2/2020	3/6/2020	5 Days
Permit drawings and Applications filed	B. Woods	J. Blair	MEC	3/2/2020	3/6/2020	5 Days
Splice sheets generated	B. Woods	J. Belknap	MEC	5/1/2020	5/29/2020	1 Month
Bill of materials finalized	B. Seamans	J. Blair	MEC	3/16/2020	3/20/2020	5 Days
Direct Mailer #1 to Premises on pending make ready construction	D. Lipscomb	P. Whirley	MEC	2/15/2020	2/22/2020	1 Week
Make Ready Construction	B. Seamans	B. Woods	MEC	3/2/2020	5/30/2020	3 Months
Press Release of Award Notification to Local Newspaper	D. Lipscomb	D. Winn	MEC	4/15/2020	4/20/2020	1 Week
Social Media Release	D. Lipscomb	P. Whirley	MEC	4/15/2020	4/20/2020	1 Week
Community Meetings: Brunswick, Halifax, Mecklenburg Update & Digital Literacy	D. Lipscomb	D. Francis	MEC/EMPOWER	5/15/2020	5/22/2020	1 Week
Construction of Outside Plant (OSP)						
Overall Construction of Outside Plant (OSP)	R. Lankford	P. Sopko	DHE	6/1/2020	12/15/2020	6.5 Months
Stringing Block deployment to pull in Overhead ADSS Cable	R. Lankford	P. Sopko	DHE	6/1/2020	10/30/2020	5 Months
ADSS overhead cable deployment	R. Lankford	P. Sopko	DHE	6/15/2020	11/20/2020	5 Months
Underground cable deployment	R. Lankford	R. Lankford	MEC	6/15/2020	11/20/2020	5 Months
Community Meetings: Brunswick, Halifax, Mecklenburg Update & Digital Literacy	D. Lipscomb	D. Francis	MEC/EMPOWER	7/15/2020	7/22/2020	1 Week
Installation of downline Splice Cans and Splitters	J. Belknap	A. Gibson	N & S	8/3/2020	12/15/2020	4.5 Months
Direct Mailer #2 to Premises for early sign-up with \$50 or \$100 installation incentive	D. Lipscomb	P. Whirley	MEC	8/15/2020	8/22/2020	1 Week
Site racks and equipment installed	B. Woods	J. Belknap	MEC	9/14/2020	9/25/2020	2 Weeks
Test Network Electronics	D. Long	B. Soles	MEC/EMPOWER	9/15/2020	9/26/2020	2 Weeks
Commission data network for ONT Connection	D. Long	B. Soles	MEC/EMPOWER	9/26/2020	10/2/2020	1 Week
Installation of Access Class FTTH (Back Haul from Main Line to Drop)	B. Seamans	R. Lankford	MEC	8/3/2020	12/15/2020	4.5 Months
Drop, NID, ONT Installation						
Direct Mailer #3 Sign-up reminder	D. Lipscomb	P. Whirley	EMPOWER	9/7/2020	9/14/2020	1 Week
Drop Installation	B. Seamans	R. Lankford	MEC	8/3/2020	12/15/2020	4.5 Months
Home installation of ONT and NID	J. Belknap	L. Fleshman	Next Generation Electronics	9/1/2020	12/15/2020	3.5 Months
Door to Door visits with door knob hanger for remaining eligible	D. Lipscomb	P. Lawson	EMPOWER	9/1/2020	9/15/2020	1 Week
Press Release of Award Notification to Local Newspaper	D. Lipscomb	D. Winn	MEC	8/15/2020	8/20/2020	1 Week
Social Media Release	D. Lipscomb	P. Whirley	MEC	8/15/2020	8/20/2020	1 Week
Community Meetings: Brunswick, Halifax, Mecklenburg Update & Digital Literacy	D. Lipscomb	D. Francis	EMPOWER	9/15/2020	9/22/2020	1 Week
Yard Sign Deployment at installed users	D. Lipscomb	D. Francis	EMPOWER	9/1/2020	12/15/2020	3.5 Months



County of Brunswick

POST OFFICE BOX 399
LAWRENCEVILLE, VA 23868
PHONE - (434) 848-3107
FAX - (434) 848-0424

Resolution

Virginia Department of Housing and Community Development 2020 Virginia Telecommunications Initiative Grant Application

WHEREAS, the Brunswick County Board of Supervisors has received a request from Mecklenburg Electric Cooperative/EMPOWER to be a co-applicant for funding from the Virginia Department of Housing and Community Development for 2020 Virginia Telecommunication Initiative (VATI) grant, and;

WHEREAS, the request is to seek funding under the VATI grant which will assist in building a reliable internet service for the County's rural residents, and;

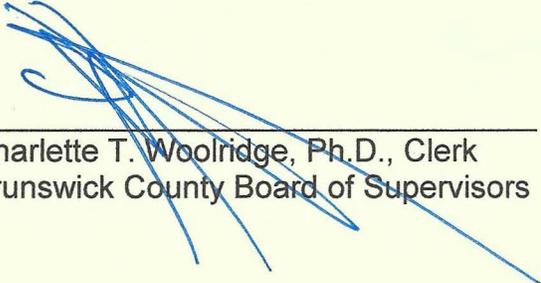
WHEREAS, effective internet access is an essential part of any community's infrastructure and since Cooperatives were formed to provide essential services to rural localities, such as Brunswick County, this is in keeping with its mission, and;

WHEREAS, this grant will be used in Brunswick County to provide high speed internet service to approximately 175 homes and businesses, which will assist EMPOWER to grow its internet footprint to other areas of our locality, and;

WHEREAS, the Virginia Telecommunications Initiative extends broadband service to currently unserved areas, and prepares communities to build, utilize, and capitalize on telecommunications infrastructure with the goal of creating strong, competitive communities,

NOW THEREFORE BE IT RESOLVED that the Brunswick County Board of Supervisors does hereby request approval of our Virginia Department of Housing and Community Development 2020 Virginia Telecommunication Initiative (VATI) grant to bring needed internet service to Brunswick County.

Adopted by the Brunswick County Board of Supervisors this 21st day of August, 2019.



Charlette T. Woolridge, Ph.D., Clerk
Brunswick County Board of Supervisors



SOUTHSIDE VIRGINIA COMMUNITY COLLEGE

August 20, 2019

Department of Housing & Community Development
C/O VATI Grant Administrator
600 East Main Street, Suite 300
Richmond, VA 23219

RE: Virginia Telecommunications Initiative (VATI)

I am writing this letter on behalf of Mecklenburg Electric Cooperative (MEC). As President of Southside Virginia Community College, I would like to express my full support of the Virginia Telecommunications Initiative (VATI) grant application for the surrounding counties, Mecklenburg Electric Cooperative and EMPOWER Broadband. MEC has a long and successful history of providing services in the areas they serve in Virginia for over 75 years, and has a strong reputation for customer service and community commitment. I am confident in Mecklenburg Electric Cooperative's capabilities for enhancing broadband service to this region.

With this grant, Mecklenburg Electric Cooperative and EMPOWER Broadband will enhance our broadband connectivity with a fiber network design. This fiber build will enable us to overcome some geographical distances, empower us through information, and bring the world to us through a simple stroke of a keyboard. As unserved rural areas with limited Internet services, we face many challenges including limited medical resources and distance between patients, physicians, specialists and facilities. Because of the rural nature of our areas, our students do not receive equitable broadband resources as other students in more urban learning centers. We are lacking the research, distance learning, video and other tools that advanced broadband can bring to our students. Therefore, it is extremely important that VATI grant funding be obtained to provide for much needed broadband service to our area.

I strongly urge the Department of Housing and Community Development to fund this VATI grant application, not only will this help with sustaining the future of advanced broadband services in Mecklenburg Electric Cooperative's proposed service area, but also promoting the future economic stability of our community.

Sincerely,

Quentin R. Johnson, Ph.D.
President

QRJ/aj

Christanna Campus 109 Campus Drive, Alberta, VA 23821 434-949-1000 **John H. Daniel Campus** 200 Daniel Road, Keysville, VA 23947 434-736-2000

Southside Virginia Education Center 1300 Greenville County Circle, Emporia, VA 23847 434-634-9358 Lake Country Advanced Knowledge Center... 118 E. Danville Road, South Hill, VA 23970 434-955-2252
Southern Virginia Higher Education Center .. 820 Bruce Street, South Boston, VA 24592 434-572-5451 Occupational Technical Center Pickett Park, 1041 W. 10th Street, Blackstone, VA 23824 .. 434-292-3101
Estes Community Center 316 N. Main Street, Chase City, VA 23924 434-372-0194 Cumberland County Community Center 1874 Anderson Highway, Cumberland, VA 23040 804-492-9275



BRUNSWICK COUNTY PUBLIC SCHOOLS

1718 Farmers Field Road
Lawrenceville, Virginia 23868

Telephone (434) 848-3138 | Fax (434) 848-4001

-Educating Students • Inspiring Success • Improving Tomorrow-

Kristy Somerville-Midgette, Ed.D.
Division Superintendent

Tracey Rogers
Assistant Superintendent

Mr. Erik Johnston
Department of Housing & Community Development
600 East Main Street, Suite 300
Richmond, VA 23219

Dear Mr. Johnson:

I am writing this letter on behalf of Mecklenburg Electric Cooperative. As an Educator and Superintendent of Public Schools in Brunswick County Virginia, I would like to express my full support of the Virginia Telecommunications Initiative (VATI) grant application for Mecklenburg Electric Cooperative. This organization has a long and successful history of providing services in the area for over 75 years and have a strong reputation for customer service and community commitment. We are confident in Mecklenburg Electric Cooperative's capabilities for enhancing broadband service for our County and its students.

With this grant, Mecklenburg Electric Cooperative / EMPOWER Broadband will enhance our broadband connectivity with a fiber network design. This fiber build will enable us to overcome geographical distances, empower us through information, and bring the world to us through a simple stroke of a keyboard. As an unserved rural area with limited Internet services, we face many challenges including limited resources for our children. Because of the rural nature of our area, our students do not receive equitable broadband resources as those in more urban learning centers. We lack opportunities for distance learning, video used in educational tools, like Kahn Academy, and numerous other tools that advanced broadband can bring to our students. Therefore, it is extremely important that DHCD grant funding be obtained to provide this much needed broadband service in our area.

We strongly urge DHCD to fund this VATI grant application, not only will this help with sustaining the future of advanced broadband services in Southside Virginia but it will also promote a strong foundation for Brunswick County students.

Respectfully,

A handwritten signature in blue ink that reads "Kristy N. Somerville-Midgette". The signature is fluid and cursive, written in a professional style.

Kristy N. Somerville-Midgette, Ed.D.
Division Superintendent



SVHEC
Opportunity
Lives Here

Dr. Betty Adams
EXECUTIVE
DIRECTOR

bettyadams@svhec.org
434.572.5551

August 19, 2019

Department of Housing & Community Development
C/O VATI Grant Administrator
600 East Main Street, Suite 300
Richmond, VA 23219

Dear Virginia Department of Housing and Community Development:

I am writing this letter on behalf of Mecklenburg Electric Cooperative (MEC). As a resident of Halifax County, Virginia, and Executive Director of the Southern Virginia Higher Education Center, located in Halifax County, I would like to express my full support of the Virginia Telecommunications Initiative (VATI) grant application for Halifax County, Mecklenburg Electric Cooperative and EMPOWER Broadband. MEC has a long and successful history of providing services in the areas they serve in Virginia for over 75 years and has a strong reputation for customer service and community commitment. I am confident in Mecklenburg Electric Cooperative's capabilities for enhancing broadband service for my neighbors in Halifax County.

With this grant, Mecklenburg Electric Cooperative and EMPOWER Broadband will enhance our broadband connectivity with a fiber network design. This fiber build will enable us to overcome some geographical distances, empower us through information, and bring the world to us through a simple stroke of a keyboard. As an unserved rural area with limited Internet services, we face many challenges including limited medical resources and distance between patients, physicians, specialists and facilities. Because of the rural nature of our area, our students do not receive equitable broadband resources as other students in more urban learning centers. We are lacking the research, distance learning, video and other tools that advanced broadband can bring to our students. Therefore, it is extremely important that VATI grant funding be obtained to provision for much needed broadband service to our area.

I strongly urge the Department of Housing and Community Development to fund this VATI grant application, not only will this help with sustaining the future of advanced broadband services in Mecklenburg Electric Cooperative's proposed service area, but also promoting the future economic stability of our community.

Sincerely,

Betty H. Adams, Ed.D, MBA
Executive Director
Southern Virginia Higher Education Center

Toll-Free 800.283.0098 • Phone 434.572.5440 • www.svhec.org
820 Bruce Street • South Boston, VA • 24592

Regina Brown
16 Holiday Dr.
Valentines, Va. 23887

Department of Housing & Community Development
C/O VATI Grant Administrator
600 East Main Street, Suite 300
Richmond, VA 23219

August 9, 2019

Dear Sir or Madam;

In today's world many of us are moving to more rural areas such as that of Brunswick County Va. With that being said we are in need of reliable yet low cost internet and phone service. Many of us are employed and bring our work home with us which is mostly internet and or phone based. I am requesting that you please approve the grant money to our rural area of Brunswick under VATI grant. Thank you for continuing to assist in Brunswick County's growth.

Sincerley,

A handwritten signature in cursive script that reads "Regina Brown". The signature is written in black ink and has a long, sweeping horizontal line extending to the right.

Joan Benjamin- Foster

15 Penny Lane
Bayville, N.J. 08721

Cell: 973-809-1432

Email: RRGomez205@Gmail.com

August 22, 2019

Department of Housing & Community Development
C/O VATI Grant Administrator
600 East Main Street, Suite 300
Richmond, VA 23219

Subject: Internet at Lake Gaston

I am writing this letter to ask the state of Virginia to access internet at Lake Gaston in Gasburg area of Pea Hill Estates. We have a serious issue with the 911 System and satellite is not that dependable especially when people come to the lake. The service gets strained.

In addition, the cell service also gets strained when people come to the lake

WE NEED A SECURE AND RELIABLE INTERNET!!!!

Joan Benjamin - Foster

William T Brown
16 Holiday Drive
VALENTINES VA 23887

Department of Housing & Community Development
C/O VATI Grant Administrator
600 East Main Street, Suite 300
Richmond, VA 23219

August 18, 2019

Dear Sir or Madam;

In today's world many of us are moving to more rural areas such as that of Brunswick County Va. With that being said we are in need of reliable yet low cost internet and phone service. Many of us are employed and bring our work home with us which is mostly internet and or phone based. I am requesting that you please approve the grant money to our rural area of Brunswick under VATI grant. Thank you for continuing to assist in Brunswick County's growth.

Sincerley,

A handwritten signature in blue ink, appearing to read 'W T B', with a long horizontal flourish extending to the right.

August 19, 2019

Mecklenburg Electric Cooperative

c/o VATI Grant Administrator

600 East Main Street, Suite 300

Richmond VA 23219

RE: Brunswick County broadband in rural areas

Attention Dustin Francis,

I own property in Valentines Virginia 23887.

This letter is to encourage the governor's office to gain grant money under VATI grants to accomplish low cost reliable internet and phone systems available in rural areas such as Brunswick county.

Thank you for your efforts in this regard.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Patricia Lohr', enclosed within a circular scribble.

Patricia Lohr

13400 Torrington Dr., Midlothian VA 23113

804-840-2953 - cell

August 19, 2019

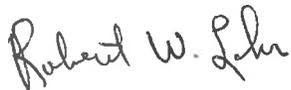
Mecklenburg Electric Cooperative
c/o VATI Grant Administrator
600 East Main Street, Suite 300
Richmond VA 23219

Attention Dustin Francis,

This letter is to encourage the governor's office to gain grant money under VATI grants to accomplish low cost reliable internet and phone systems available in rural areas such as Brunswick county.

Thank you for your efforts in this regard.

Sincerely,

A handwritten signature in cursive script that reads "Robert W. Lohr".

Robert Lohr

295 Pleasant Points Rd., Valentines VA 23887
804-840-2953 - cell

Department of Housing & Community Development
C/O VATI Grant Administrator
600 East Main Street, Suite 300
Richmond, VA 23219

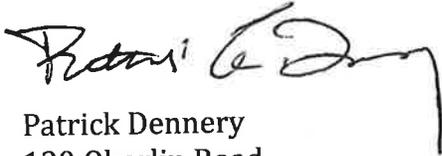
August 22, 2019

To Whom It May Concern:

We own a home in Colony Club in Valentines, New Brunswick County, Virginia. Currently there is no low cost, reliable internet service available in our area. I am writing to request your consideration that a grant be awarded to Mecklenburg Electric Cooperative for broadband services in our area.

Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Patrick Dennery". The signature is written in a cursive style with a long, sweeping tail on the last letter.

Patrick Dennery
130 Oberlin Road
Pennsville, NJ 08070

Department of Housing & Community Development
C/O VATI Grant Administrator
600 East Main Street, Suite 300
Richmond, VA 23219

August 21, 2019

To Whom It May Concern:

We live at Colony Club in Valentines, Brunswick County, Virginia. There are currently no reliable internet services available at a reasonable cost in our area. We are writing to request you consider a grant be awarded to Mecklenburg Electric Cooperative to facilitate their construction of a broadband service in our area.

Broadband services are a necessity in today's busy world. They provide a measure of safety and convenience, in addition to maintaining communication across regional areas.

Thank you for your consideration.

Sincerely,

A handwritten signature in cursive script that reads "Patricia Denney". The signature is written in black ink and is positioned above the typed name.

Patricia Denney
99 Pea Hill Drive
Valentines, VA 23887

Department of Housing & Community Development
C/O VATI Grant Administrator
600 East Main Street, Suite 300
Richmond, VA 23219

August 22, 2019

To Whom It May Concern:

I reside in Colony Club in Valentines, New Brunswick County, Virginia. Currently there is no reliable internet service available in our area. I am writing to request your consideration that a grant be awarded to Mecklenburg Electric Cooperative for broadband services in our area.

Thank you.

Sincerely,

A handwritten signature in black ink that reads "Fred Tetterton". The signature is written in a cursive style with a long horizontal flourish extending to the right.

Fred Tetterton
127 Pea Hill Drive
Valentines, VA 23887

Paul P. Foster

15 Penny Lane
Bayville, N.J. 08721

Cell: 973-809-1432

Email: RRGomez205@Gmail.com

August 22, 2019

Department of Housing & Community Development
C/O VATI Grant Administrator
600 East Main Street, Suite 300
Richmond, VA 23219

Subject: Internet at Lake Gaston

I am writing this letter to ask the state of Virginia to access internet at Lake Gaston in Gasburg area of Pea Hill Estates. We have a serious issue with the 911 System and satellite is not that dependable especially when people come to the lake. The service gets strained.

In addition, the cell service also gets strained when people come to the lake

WE NEED A SECURE AND RELIABLE INTERNET!!!!

A handwritten signature in black ink, appearing to read "Paul P. Foster", with a long horizontal line extending to the right.

HEADQUARTERS

P. O. Box 2451
Chase City, VA 23924
Phone: 434-372-6100/Fax: 434-372-6101

CHASE CITY DISTRICT

P. O. Box 2451
Chase City, VA 23924
Phone: 434-372-6200/Fax: 434-372-6201



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www.meckelec.org

SAFETY FIRST!

EMPORIA DISTRICT

P. O. Box 427
Emporia, VA 23847
Phone: 434-634-6168/Fax: 434-348-7100

GRETNA DISTRICT

P. O. Box 617
Gretna, VA 24557
Phone: 434-656-1288/Fax: 434-656-9200

August 20, 2019

Erik C. Johnston
Virginia Department of Housing and Community Development
ATTN: Virginia Telecommunications Initiative
600 East Main Street, Suite 300
Richmond, VA 23219

Dear Mr. Johnston,

This letter is to document Mecklenburg Electric Cooperative’s (MEC) in-kind match for three Virginia Telecommunications Initiative Last Mile Grant Applications submitted by MEC and our affiliate EMPOWER Broadband, INC.

MEC and EMPOWER Broadband, INC. will provide funding to expand our fiber optic network; these investments are being presented for the in-kind match for each application, respectively. The project area, MEC’s match, and the VATI request are listed below.

<u>Project Area</u>	<u>MEC/EMPOWER Match</u>	<u>VATI Request</u>
Halifax County	\$2,013,819	\$1,033,398
Brunswick County	\$444,259	\$366,206
Mecklenburg County	\$116,061	\$56,200

The Cooperative has approved these expenditures as in-kind matching funds upon a successful grant award.

Respectfully,

John C. Lee, Jr.
President and CEO
Mecklenburg Electric Cooperative

Copy: Glen
12/5/06



**National Rural Utilities
Cooperative Finance Corporation**

2201 Cooperative Way
Herndon, Virginia 20171-3025
703-709-6700 | www.nrucfc.coop

A Touchstone Energy® Cooperative

November 29, 2006

Mr. M. John Bowman
President and CEO
Mecklenburg Electric Cooperative
11633 Hwy 92
Chase City, VA 23924



Re: Line of Credit # VA031-P-5102

Dear Mr. Bowman:

Your cooperative has executed and returned all required CFC documents and supporting papers in connection with the Line of Credit designated above. These documents have been reviewed and found legally acceptable and satisfactory to CFC and thus constitute a binding agreement between CFC and your cooperative.

Enclosed, for your records, is a copy of the fully executed Line of Credit Agreement. Line of Credit funds may now be requisitioned in accordance with the terms of the Line of Credit Agreement.

We at CFC appreciate the opportunity to serve your system and look forward to our continued business relationship.

Sincerely,

David Olah
Associate Vice President

Enclosure

**National Rural Utilities Cooperative Finance Corporation
Perpetual Line of Credit Agreement
("Agreement")**

Name of Borrower: Mecklenburg Electric Cooperative

Address: PO Box 2451, 11633 Hwy 92, Chase City, Virginia 23924

National Rural Utilities Cooperative Finance Corporation ("CFC"), a District of Columbia corporation, has approved Borrower for a revolving line of credit loan in an amount not to exceed Nine Million Two Hundred Thousand Dollars (\$9,200,000.00) (hereinafter referred to as the "CFC Commitment"). Borrower hereby agrees that the terms and conditions herein, plus any additional terms and conditions agreed to in writing by the parties, shall constitute a valid and binding agreement between Borrower and CFC. In consideration of their mutual promises hereunder and other valuable consideration, the receipt and sufficiency of which is hereby acknowledged, CFC and Borrower agree to the following terms and conditions:

- 1. Revolving Credit and Term.** CFC agrees to advance funds to the Borrower pursuant to the terms and conditions hereof (each such advance of funds is referred to herein as an "Advance"), provided, however, that the amount at any time outstanding under this line of credit shall not exceed the CFC Commitment. The Borrower may borrow, repay and reborrow funds at any time or from time to time for a period up to twelve (12) months from the effective date hereof. This Agreement shall thereafter automatically renew for subsequent periods of twelve (12) months each. Either party may terminate this Agreement at the end of any period by providing written notice to the other party at least ninety (90) days prior to the expiration of such period.
- 2. Requisitions.** Requests for Advances shall be in such written form as CFC may reasonably require from time to time.
- 3. Interest Rate and Payment.** The Borrower unconditionally promises and agrees to pay, as and when due, interest on all amounts advanced hereunder from the date of each Advance and to repay all amounts advanced hereunder with interest on the date this Agreement terminates as provided herein. Interest shall be due and payable in accordance with CFC's regular billing cycles as may be in effect from time to time. CFC shall send a payment notice to the Borrower at least five days prior to the due date of any interest payment. All amounts shall be payable at CFC's main office at Woodland Park, 2201 Cooperative Way, Herndon, Virginia 20171-3025 or at such other location as designated by CFC from time to time. The interest rate on all Advances will be equal to the total rate per annum as may be fixed by CFC from time to time, which shall not exceed the Prevailing Bank Prime Rate (as defined herein), plus one percent per annum. Interest will be computed on the basis of a 365 day year for the actual number of days that any

Advance is outstanding. The effective date of an interest rate adjustment will be determined from time to time by CFC, provided that no such adjustment may be effective on a date other than the first or sixteenth day of any month, and any such adjustment shall remain in effect until any subsequent change in the interest rate occurs.

The "Prevailing Bank Prime Rate" is that bank prime rate published in the "Money Rates" column of the eastern edition of *The Wall Street Journal* on the publication day immediately preceding the day on which an adjustment in the interest rate hereof shall become effective. If *The Wall Street Journal* shall cease to be published, then the Prevailing Bank Prime Rate shall be determined by CFC by reference to another publication reporting bank prime rates in a similar manner.

4. **Mandatory Prepayment.** If (a) there is a change in the Borrower's corporate structure (including without limitation by merger, consolidation, conversion or acquisition), and (b) after giving effect to such change, Borrower (i) would not be eligible to receive a loan or commitment for a loan from the Rural Utilities Service or any successor agency, or (ii) would no longer engage in the furnishing of utility services to its members and patrons for their use as ultimate consumers, then upon the effective date of such change, the Borrower shall prepay the outstanding principal balance of all Obligations, together with any accrued but unpaid interest thereon, any unpaid costs or expenses provided for herein, and a prepayment premium prescribed by CFC pursuant to its policies of general application in effect from time to time.

"Obligations" shall mean any and all liabilities, obligations or indebtedness owing by the Borrower to CFC, of any kind or description, irrespective of whether for the payment of money, whether direct or indirect, absolute or contingent, due or to become due, now existing or hereafter arising.

5. **CFC Accounts.** CFC shall maintain in accordance with its usual practices an account or accounts evidencing the indebtedness of the Borrower resulting from each Advance and the amounts of principal and interest payable and paid hereunder. In any legal action or proceeding in respect of this Agreement, the entries made in such account or accounts (whether stored on computer memory, microfilm, payment notices or otherwise) shall be presumptive evidence (absent manifest error) of the existence and amounts of the Borrower's transactions therein recorded.
6. **Corporate and Regulatory Approvals.** Borrower represents and warrants that it has obtained any and all necessary corporate and regulatory approvals for Borrower to execute, deliver and perform its obligations under this Agreement.
7. **Reports.** During the term of this Agreement, Borrower agrees (a) to provide CFC, within 120 days of the end of Borrower's fiscal year, its annual financial statements, prepared in accordance with generally accepted accounting principles ("GAAP") and audited by an independent certified public accountant, or otherwise in form and substance satisfactory to CFC, and (b) to provide CFC with any other reports or information which CFC may from time to time reasonably request.
8. **Fees.** If any amount outstanding and due hereunder shall not be paid when due, Borrower agrees to pay on demand CFC's reasonable costs of collection or enforcement

of this Agreement, or preparation therefor, including reasonable fees of counsel. If payment of any principal and/or interest due under the terms of this Agreement is not received at CFC's office in Herndon, Virginia, or such other location designated by CFC within 5 business days after the due date thereof, then Borrower shall pay to CFC, on demand, and in addition to all other amounts due under the terms of this Agreement, any late-payment and additional interest charges as may then be in effect pursuant to CFC's then current policies without setoff or counterclaim. For purposes of this Agreement, a "business day" means a day that both CFC and the financial institution it employs for funds remittance are open for business.

9. **Limitation on Advances.** While an Advance is outstanding, CFC reserves the right to limit further Advances if the sum of (a) all Advances outstanding, (b) the amount of any further Advance requested, and (c) the total amount of Borrower's other unsecured outstanding debt, would exceed the CFC Commitment. CFC may also, in its sole discretion decline to make any Advance during any period when the Borrower is in default hereunder.
10. **Paydown Requirement.** For each 12-month period while this Agreement is in effect, Borrower shall, for a period of at least five consecutive business days, pay down the entire outstanding principal balance on this line of credit ("Paydown"). Borrower shall make the initial Paydown within 360 days of the first Advance hereunder, and shall make each subsequent Paydown within 360 days of the date of the first Advance following each Paydown.
11. **Credit Support.** With CFC's prior written approval, this Agreement may be used as credit support for other financings.
12. **Notices, Acceleration of Debt and Waivers.** While an Advance is outstanding, Borrower agrees to notify CFC in writing of (a) any delinquency or default on any of its financial obligations, (b) any material adverse change in its financial or business condition, and (c) if any representation or warranty made in this Agreement is no longer true in any material respect. If any delinquency, default, or any other event as a result of which any holder of indebtedness may declare the same due and payable shall occur and continue uncorrected for more than any applicable grace period, or any representation or warranty herein shall no longer be true, or Borrower shall fail to perform or to comply with any term of this Agreement, or if the financial condition of Borrower shall have changed to the extent that such change, in the reasonable judgment of CFC, materially increases CFC's risk of repayment hereunder, then CFC may declare at any time all outstanding principal, interest and other amounts due hereunder immediately due and payable in full with accrued interest, without presentment or demand, and may withhold Advances. The Borrower waives the defense of usury and all rights to setoff, counterclaim, deduction or recoupment.
13. **Survival of Representations and Warranties and Payment Obligations.** Borrower agrees that its obligation to repay principal, interest and all other amounts due hereunder, and the representations and warranties made herein, shall survive termination of this Agreement. Borrower further agrees that such repayment obligations shall be automatically reinstated if and to the extent that for any reason any payment by or on

behalf of the Borrower is rescinded, set aside or must be otherwise restored, whether as a result of any proceeding in bankruptcy or reorganization or otherwise.

14. Representations and Warranties. Borrower represents and warrants that as of the date of its application for this line of credit, and on the date of each Advance hereunder:

- a) the Borrower is not in default of any of its financial obligations;
- b) there has been no material adverse change in the Borrower's business or financial condition from that set forth in its most recent audited financial statements;
- c) no litigation is pending or, to the best of Borrower's knowledge, threatened against the Borrower which, if adversely determined, would have a material adverse effect on the Borrower's ability to perform under this Agreement;
- d) the information contained in Borrower's audited financial statements, its other financial reports and information otherwise submitted in connection with this Agreement is complete and accurate, and said financial statements and financial reports fairly represent the financial condition of the Borrower as of the dates reflected thereon;
- e) the execution, delivery and performance of this Agreement has been duly authorized by the Borrower, which authorization has not been rescinded or modified;
- f) all Advances hereunder will be used only for proper corporate purposes;

15. Conditions of Lending. As a condition to CFC making Advances hereunder, each of the following conditions shall be satisfied at the time of each Advance:

- a) CFC shall have received the Borrower's most recent annual financial statements, prepared in accordance with GAAP and audited by an independent certified public accountant, or otherwise in form and substance satisfactory to CFC;
- b) all representations and warranties set forth herein shall be true and correct; and
- c) the Borrower shall have obtained any and all necessary corporate, regulatory and governmental approvals for the Borrower to execute, deliver and perform its obligations under this Agreement.

16. GOVERNING LAW; SUBMISSION TO JURISDICTION; WAIVER OF JURY TRIAL.

- (a) **THE PERFORMANCE AND CONSTRUCTION OF THIS AGREEMENT SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE COMMONWEALTH OF VIRGINIA.**
- (b) **BORROWER HEREBY SUBMITS TO THE NONEXCLUSIVE JURISDICTION OF THE UNITED STATES COURTS LOCATED IN VIRGINIA AND OF ANY STATE COURT SO LOCATED FOR PURPOSES OF ALL LEGAL PROCEEDINGS ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY. BORROWER IRREVOCABLY**

WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY OBJECTION THAT IT MAY NOW OR HEREAFTER HAVE TO THE ESTABLISHING OF THE VENUE OF ANY SUCH PROCEEDING BROUGHT IN SUCH A COURT AND ANY CLAIM THAT ANY SUCH PROCEEDING HAS BEEN BROUGHT IN AN INCONVENIENT FORUM.

(c) EACH OF THE BORROWER AND CFC HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY.

- 17. Severability.** If any term, provision or condition, or any part thereof, of this Agreement shall for any reason be found or held invalid or unenforceable by any court or governmental agency of competent jurisdiction, such invalidity or unenforceability shall not affect the remainder of such term, provision or condition nor any other term, provision or condition, and this Agreement shall survive and be construed as if such invalid or unenforceable term, provision or condition had not been contained herein.
- 18. Setoff.** Upon the occurrence and during the continuance of any default, CFC is hereby authorized at any time and from time to time without prior notice to the Borrower to exercise rights of setoff or recoupment and apply any and all amounts held, or hereafter held, by CFC or owed to the Borrower or for the credit or account of the Borrower against any and all of the obligations of the Borrower now or hereafter existing hereunder. CFC agrees to notify the Borrower promptly after any such setoff or recoupment and the application thereof, provided that the failure to give such notice shall not affect the validity of such setoff, recoupment or application. The rights of CFC under this section are in addition to any other rights and remedies (including other rights of setoff or recoupment) which CFC may have.
- 19. Additional Terms and Conditions.** Additional terms and conditions as set forth herein or attached hereto are an integral part of this Agreement.
- 20. Termination and Cancellation of Existing Agreement.** Borrower agrees that its existing line(s) of credit No(s). VA031-R-5101 with CFC, and any agreement(s) relating thereto shall be terminated and any outstanding principal, interest and other amounts outstanding thereunder shall be transferred to the line of credit established pursuant to this Agreement and deemed an Advance hereunder.
- 21. Miscellaneous.** (a) This Agreement contains the entire agreement of the parties hereto with respect to the matters covered and the transactions contemplated hereby, and no other agreement, statement or promise made in connection with this line of credit by any party hereto, or by any employee, officer, agent or attorney of any party hereto which is not contained herein shall be valid and binding. (b) Any amendment to this Agreement must be in writing signed by both parties. (c) No failure or delay by CFC in exercising any right or remedy hereunder shall operate as a waiver or preclude the future exercise thereof or of any other right or remedy. (d) If any payment is due from Borrower on a day which CFC is not open for business, then such payment shall be made on the next succeeding day on which CFC is open for business.

- 22. Notices.** All notices, requests and other communications provided for herein including, without limitation, any modifications of, or waivers, requests or consents under, this Agreement shall be given or made in writing (including, without limitation, by telecopy) and delivered to the intended recipient at the "Address for Notices" specified below; or, as to any party, at such other address as shall be designated by such party in a notice to each other party. Except as otherwise provided in this Agreement, all such communications shall be deemed to have been duly given when personally delivered or, in the case of a telecopied or mailed notice, upon receipt, in each case given or addressed as provided for herein. The Address for Notices of the respective parties are as follows:

CFC:

National Rural Utilities
Cooperative Finance Corporation
2201 Cooperative Way
Herndon, Virginia 20171-3025
Attention: Senior Vice President - Member Services
Fax: (703) 709-6776

The Borrower:
Mecklenburg Electric Cooperative
PO Box 2451, 11633 Hwy 92
Chase City, VA 23924
Attention: President and Chief Executive Officer
Fax: (434) 372-6101

23. Additional Terms and Conditions.

- (a) Prior to and as a condition of making the initial Advance, CFC shall have been furnished with an opinion of counsel for Borrower addressing such legal matters as CFC shall reasonably require.
- (b) CFC hereby agrees to reserve \$90,000.00 hereunder to back potential obligations of Borrower to the Virginia Department of Transportation ("VDOT"). To access the reserved funds, Borrower will need to submit documentation in form and substance acceptable to CFC that confirms that proceeds of Advances from the reserved portion are to be used solely to make payment on its obligations to VDOT. Such documentation will include, but not be limited to the appropriate notification from VDOT that Borrower owes payment to VDOT which payment has not been made within a specified timeframe, that such non-payment default has not been cured within any applicable grace period and that VDOT has demanded payment to cure such default.

The reservation in availability will remain in place until Borrower submits a written request in form and substance satisfactory to CFC, confirming that it is no longer necessary for the reservation to remain in effect.

MECKLENBURG ELECTRIC COOPERATIVE

Signed By: 

Title: Chairman of the Board

Date Signed: November 15, 2006

NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION

By: 
Assistant Secretary-Treasurer
DAVID W OLAH

Loan Number: VA031-P-5102

(To be filled in by CFC) The effective date of this Agreement is: 11/29/06.

Attachment #10 – Funding Sources Table

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	\$ 444,259	55.00	Pending
MEC (private)	\$ 366,206	45.00	APPROVED
	\$		
	\$		
	\$		
	\$		
	\$		
TOTAL	\$ 810,466	100 %	

CDBG Derivation of Cost

Brunswick Co. Attachment #11 - Derivation of Costs

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

Product	Total	VATI	Non-VATI	Source of Estimate	Date
Drop Installation Cost	\$ -	\$ -	\$ -		
Outdoor Wall Mount Labor	\$ 9,625		\$ 9,625	MEC based on 2018-19 projects	
Outdoor Wall Mount Materials	\$ 4,345		\$ 4,345	MEC based on 2018-19 projects	
Splicing Labor	\$ 10,847		\$ 10,847	MEC based on 2018-19 projects	
Splicing Materials	\$ 60		\$ 60	MEC based on 2018-19 projects	
Staking Labor	\$ 8,020		\$ 8,020	MEC based on 2018-19 projects	
ONT (router) labor	\$ 61,250		\$ 61,250	MEC based on 2018-19 projects	
ONT (router) materials	\$ 44,368		\$ 44,368	MEC based on 2018-19 projects	
Network Equipment					

CDBG Derivation of Cost

E7-2 Package Chassis	\$ 697		\$ 697	MEC based on 2018-19 projects	
GPON SFP OIM, Class B+ 1490/1310nm	\$ 7,200		\$ 7,200	MEC based on 2018-19 projects	
E7-2 Card PON unit	\$ 19,593		\$ 19,593	MEC based on 2018-19 projects	
Aerial Construction Costs	\$ -	\$ -	\$ -		
Aerial Construction Labor	\$ 148,100	\$ 148,100		MEC based on 2018-19 projects	
Aerial Materials	\$ 72,470	\$ 72,470	\$ -	MEC based on 2018-19 projects	
Underground Construction Costs	\$ -	\$ -	\$ -	MEC based on 2018-19 projects	
Underground Construction Labor	\$ 9,448	\$ 9,448		MEC based on 2018-19 projects	
Underground Materials	\$ 5,868	\$ 5,868	\$ -		
Access Construction Costs	\$ -		\$ -	MEC based on 2018-19 projects	
Access Construction Labor	\$ 275,585	\$ 140,548	\$ 135,036	MEC based on 2018-19 projects	
Access Materials	\$ 132,991	\$ 67,825	\$ 65,166	MEC based on 2018-19 projects	
TOTAL	\$ 810,466	\$ 444,259	\$ 366,206		

HEADQUARTERS

P. O. Box 2451
Chase City, VA 23924
Phone: 434-372-6100/Fax: 434-372-6101

CHASE CITY DISTRICT

P. O. Box 2451
Chase City, VA 23924
Phone: 434-372-6200/Fax: 434-372-6201



Your Touchstone Energy® Partner 

www.meckelec.org

SAFETY FIRST!

EMPORIA DISTRICT

P. O. Box 427
Emporia, VA 23847
Phone: 434-634-6168/Fax: 434-348-7100

GRETNA DISTRICT

P. O. Box 617
Gretna, VA 24557
Phone: 434-656-1288/Fax: 434-656-9200

August 21, 2019

Mr. Erik C. Johnston
Virginia Department of Housing and Community Development
ATTN: Virginia Telecommunications Initiative
600 East Main Street, Suite 300
Richmond, VA 23219

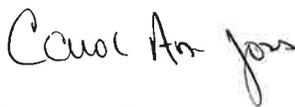
Dear Mr. Johnston,

This letter is to attest to the source of Mecklenburg Electric Cooperative / EMPOWER Broadband's supporting costs for our 2020 Virginia Telecommunications Initiative project areas submitted with Brunswick, Halifax, and Mecklenburg Counties.

The submitted document labeled "Attachment 12 – Documentation of Supporting Costs," provides the totals for each project budget divided into equipment, construction materials, and labor sub-totals.

These budget entries are derived from the detailed analysis of actual costs for our recent build of 50 miles of backbone and including Fiber-To-The-Premise (FTTP) costs for nearly 50 customers. Specifically, actual equipment, material, and labor costs were used as the basis to compose budgets for each project area.

Respectfully submitted,



Carol Ann Jones
Vice President of Finance and Accounting
Mecklenburg Electric Cooperative / EMPOWER Broadband

This institution is an equal opportunity provider and employer.

EMPOWER			0.352	Total Underground Miles		
Capital Budget Details			1,050.00	Back Haul & Drop Feet		
PROJECT:		SERVICE AREA:	175.00	Total Connects		
FTTH Network		EMPOWER	183,750.00	Total Back Haul & Drop Feet		
OUTSIDE PLANT MATERIALS						
Fiber		ADSS 48CT DOUBLE JACKET - HOME	\$0.76250	2,238.25	\$1,706.67	
		ADSS 144CT DOUBLE JACKET	\$1.38840	28,291.05	\$39,279.30	
	Underground	ADSS Single Jacket 144CT	\$0.93920	1,896.25	\$1,780.96	
Aerial		WIRE,GUY ALUM-WELD 5/16" 7STR 8M ON 500'	\$0.20790	864.03	\$179.63	
		DEADEND, PREFORM GUY 8M ALUMOWELD	\$2.41260	41.14	\$99.26	
		CONN., COMP. 8 TO 2/0 ACSR VCSE44 SERVIC	\$1.13010	20.57	\$23.25	
		CONN., COMP. VCP 44 6 TO 1/0 ACSR MAIN &	\$1.66490	20.57	\$34.25	
		ATTACHMENT, GUY HOOK	\$3.65500	20.57	\$75.19	
		Guy Guards	\$3.02740	20.57	\$62.28	
		Washer SQ. Curved 3' X 3' with 11/16 Hole	\$1.08000	20.57	\$22.22	
		ANCHOR, SCREW POWER INSTALLED 3/4" EXP	\$37.21680	11.22	\$417.61	
		ROD, ANCHOR PISA TYPE 5/8" 7 FT.	\$17.39440	11.22	\$195.18	
		ROD, THIMBLE EYE ANCHOR FITTING FOR PISA	\$4.99710	11.22	\$56.07	
		BOLT, MACH 5/8 X 18	\$1.83710	52.52	\$96.49	
		BOLT, MACH 5/8 X 12	\$1.13130	643.90	\$728.44	
		BOLT, MACH 5/8 X 14	\$1.21220	97.45	\$118.13	
		NUT LOCK M.F. TYPE 5/8"	\$0.19800	793.87	\$157.19	
Hardware		WASHER, SQUARE-FLAT 2-1/4 X 2-1/4	\$0.28000	773.30	\$216.52	
		ADSS ALUM.SUPPORT, 144CT Double JCKT	\$30.92060	105.05	\$3,248.17	
		ADSS LIM TENSION DE 144CT DOUBLE JCKT	\$39.11300	38.64	\$1,511.22	
	Underground		Conduit 1" HDPE SDR 13.5 Orange	\$0.30600	1,859.08	\$568.88
			Craftsman Fiber Protection Vault w/Lid	\$493.00000	0.36	\$176.55
			FIBER SPLICE PEDESTAL	\$169.70000	5.29	\$898.09
			4"x2" Pedestal Sticker	\$0.70000	5.29	\$3.70
			Riser Guard 2" (57611325) \$8.86 per 10 foot	\$8.86060	31.59	\$279.94
			SCREW LAG 1/4" X 2" W/MET, FLANGE & NEO	\$0.17900	1,237.82	\$221.57
			Buried Fiber Marker	\$14.60000	7.92	\$115.61
	Technical		FIBER SPLICE CAN 12-450 A4 CLOSURE - HOME	\$93.73550	97.45	\$9,134.39
			FIBER SPLICE CAN 48-450 A4 CLOSURE - HOME	\$150.00000	9.15	\$1,372.79
			FIBER SPLICE CAN 144-450 C CLOSURE	\$244.19850	13.77	\$3,362.06
			A TRAY - HOME	\$12.03680	134.06	\$1,613.61
		C TRAY	\$15.46870	55.07	\$851.88	
		Gel Drop Seal Kit	\$23.64000	106.60	\$2,520.04	
		DOWNLEAD CUSHION FOR ADSS 144CT DBL JCKT	\$7.37110	13.77	\$101.48	
		DOWNLEAD CUSHION FOR ADSS 48CT DBL JCKT	\$7.37110	9.15	\$67.46	
		Pole Mount Kit (.5 per A Enclosure and 1 per C Enclosure)	\$26.15810	67.07	\$1,754.37	
		ERICO CADDY 4" DIA. J HOOK - CAT64HP	\$5.73000	460.94	\$2,641.19	
		30" CABLE TIE	\$0.83230	1,551.42	\$1,291.24	
		FIBERLIGN DIELECTRIC DAMPERS FOR ADSS CABLE	\$8.80000	45.52	\$400.59	
		1x4 Symmetrical Splitter Field Installable	\$27.68130	26.74	\$740.19	
		1x8 Symmetrical Splitter Field Installable	\$32.30550	3.34	\$107.98	
		Splice Protector (Fusion Splice Sleeve)	\$0.17000	628.38	\$106.82	
				Total	78,338.480	

EMPOWER

Capital Budget Details

			0.352	Total Underground Miles	
			1,050.00	Back Haul & Drop Feet	
			175.00	Total Connects	
			183,750.00	Total Back Haul & Drop Feet	
PROJECT:		SERVICE AREA:			
FTTH Network		EMPOWER			
DROP TO THE HOME					
Labor					
		BMUDD [Trench Conduit]		5,951.65	\$0.00
		BMUDD [Bore Conduit]		661.32	\$0.00
		Install Fiber Plow In - 12 Count	\$1.45	6,612.97	\$9,588.80
	95001005	ADSS 12CT DOUBLE JACKET - HOME	\$1.00	141,644.55	\$141,644.55
		Field Staking per Drop	\$117.88	131.38	\$15,488.00
	95001001	MINI LT FLAT DROP CABLE, AT-3BE8T7X-002	\$0.45	42,105.45	\$18,947.45
	EFBDE.12.24.48	Override from C Can Enclosure to Drop take off Pole	\$60.00	131.38	\$7,883.03
	EFBSH.12.24.48	Override in line from C Can Enclosure Pole to Drop take off Pole	\$33.00	131.38	\$4,335.67
	EFBDDE.12.24.48	Drop Take off Pole to A Can Enclosure Pole	\$92.00	131.38	\$12,087.31
	EFBDE.12.24.48 (X)	A Can Enclosure Pole to House Drop	\$60.00	131.38	\$7,883.03
	EFB.12DJLOOP	FIBER LOOP 150FT 12CT	\$118.00	131.38	\$15,503.29
	EFB.DROPLOOP	FIBER DROP 2CT 150FT LOOP	\$118.00	131.38	\$15,503.29
	EFBDE.2.12	DEADEND FIBER 2 & 12CT TO HOUSE	\$57.00	262.77	\$14,977.76
	EFBSH.2.12	ADSS LITE SUPPORT CLAMP 2 & 12CT DROP	\$30.00	0.00	\$0.00
	EFBDDE.2.12	DOUBLE DEADEND 2 & 12CT TO HOUSE	\$89.00	0.00	\$0.00
	EFB.JHOOK	DRIVE JHOOK FLAT DE HOME	\$1.00	131.38	\$131.38
	EFB.2.1	Wireholder Service Woodscrew with 3" SCR	\$22.00	131.38	\$2,890.44
		Splicing (3 Splices)	\$30.99	281.33	\$8,718.41
Materials					
		ADSS 12CT DOUBLE JACKET - HOME	0.61440	164,185.02	\$100,875.28
		MINI LT FLAT DROP CABLE, AT-3BE8T7X-002	0.11890	62,655.13	\$7,449.70
		ADSS ALUM SUPPORT 48CT DOUBLE JCKT	28.48360	131.38	\$3,742.28
		ADSS LIM TENSION DE 48CT DOUBLE JCKT	36.96020	525.54	\$19,423.89
		ADSS DROP CABLE FLAT DEAD END	3.63290	262.77	\$954.61
		Hubbell Drive Hook C2050190	1.03200	131.38	\$135.59
		Wireholder Service Woodscrew with 3" SCR	3.11640	131.38	\$409.44
Ongoing/Home Installation					
		Field Staking per Home	\$45.83	175.00	\$8,020.25
	EFB.OWM	OUTDOOR WALL MOUNT Labor	\$55.00	175.00	\$9,625.00
		OUTDOOR WALL MOUNT Materials	\$24.83	175.00	\$4,345.22
		Contracted Installation Labor Home	\$350.00	175.00	\$61,250.00
		Calix 844 Series ONT Electronics	\$215.53	175.00	\$37,717.75
		Miscellaneous Materials (w/cable \$38)	\$38.00	175.00	\$6,650.00
		Splice Protector (Fusion Splice Sleeve)	\$0.17	350.00	\$59.50
		Splicing (2 Splices)	\$30.99	350.00	\$10,846.50
				Total	\$547,087.44
EQUIPMENT					
Devices					
		Fusion Splicer	\$20,000.00		
		Computers, iPads	\$500.00		
		OTDR	\$15,000.00		
		Power Meter	\$1,000.00		
		Light Source	\$2,000.00		
Vehicles					
		Pickup Trucks	\$35,000.00		
		Bucket Trucks	\$40,000.00		
		Trailer	\$26,000.00		
		Trench Machine	\$75,000.00		
		Bore Machine	\$125,000.00		
		Wenches, tool boxes, etc.	\$10,000.00		
		ATV's	\$5,000.00		
				Total	\$0.00

GRAND TOTAL 810,463.32

Office	\$27,489.50	
Aerial	\$144,151.25	
Make Ready	\$76,414.48	\$220,565.74
Underground	\$15,320.65	
Back Haul & Drop	\$408,573.22	
Ongoing/Home	\$138,514.22	
Equipment	\$0.00	
Total	\$810,463.32	

Attachment 14 - 2020 DHCD VATI Grant Application

Mecklenburg Electric Cooperative / EMPOWER Broadband

18. Additional Information

Any other equitable factor that the applicant desires to include. Applicants are limited to four additional attachments. Label Additional Attachments as:

a. Attachment 14 – Two most recent Form 477 submitted to the FCC or equivalent

On January 30, 2019 EMPOWER Broadband received approval from the Virginia State Corporation Commission (SCC) for the formation of EMPOWER and for the management agreement between EMPOWER Broadband Incorporated and Mecklenburg Electric Cooperative. This was the final regulatory hurdle required for EMPOWER to deliver Fiber-To-The-Premise in addition to ultra high-speed broadband to rural Southside Virginia.

On August 19, 2019 EMPOWER Broadband, INC. and Mecklenburg Electric Cooperative filed their first Form 477 with the Federal Communications Commission (FCC). Accordingly, a copy follows.

DCHD staff has granted permission for Mecklenburg Electric Cooperative to submit two years of its United States Department of Agriculture (USDA), Rural Utilities Service (RUS), Financial and Operating Report, or Form 7, as an equivalent to the FCC Form 477 for this application.

As you review Mecklenburg Electric Cooperative's Form 7, year-end 2017 and 2018, Part A demonstrates our financial strength in providing electric service to those in high cost rural settings while maintaining a well-balanced budget. Part B. represents the number of new services connected and details the extensive electrical infrastructure that MEC has built and maintains to provide reliable service to its members. Additionally, in Part E, you will note Mecklenburg Electric Cooperative's experience in constructing, maintaining and managing \$187 Million in electric distribution plant which serves the most rural and remote areas of Southside Virginia.

Part G tracks electric service interruptions for each calendar year by average minutes out and by cause; these interruption indices are also compared to the five-year average for further evaluation. This information demonstrates Mecklenburg Electric Cooperative's ability to competently review and proactively manage the quality of service it provides to its members.

Mecklenburg Electric Cooperative also has vast experience in serving and maintaining accounts of all sizes. As shown in Part O, MEC services over 29,000 residential accounts and over 1,800 Commercial and Industrial accounts across portions of nine southern Virginia Counties.

In summary, this report validates MEC's ability to maintain and manage a capital-intensive rural utility system, serve a growing and changing customer base, manage and maintain a robust quality of service, and serve 31,000 rural homes, farms, and businesses. Subsequently, MEC has demonstrated the skill, experience, and capability to proficiently build and deliver last mile high speed broadband across its communities.



(RETAIN FOR YOUR RECORDS)
Form 477 Filing Summary

FRN: 0027843333 | Data as of: Jun 30, 2019 | Operations: Non-ILEC | Submission Status: Original - Submitted | Last Updated: Aug 19, 2019 10:43:38

Filer Identification

Section	Question	Response
Filer Information	Company Name	EMPOWER Broadband
	Holding Company Name	Mecklenburg Electric Cooperative
	SAC ID	199022
	499 ID	832934
Data Contact Information	Data Contact Name	Dwayne L Long
	Data Contact Phone Number	(434) 373-6125
	Data Contact E-mail	dlong@meckelec.org
Emergency Operations Contact Information	Emergency Operations Name	Dwayne L Long
	Emergency Operations Phone Number	(434) 372-6125
	Emergency Operations E-mail	dlong@meckelec.org
Certifying Official Contact Information	Certifying Official Name	John Lee
	Certifying Official Phone Number	(434) 372-6111
	Certifying Official E-mail	jlee@meckelec.org

Data Submitted

Form Section	File Name	Date & Time	Number of Rows
Fixed Broadband Deployment	EmpowerBBdeploy63019.csv	Aug 19, 2019 10:37:16	75
Fixed Broadband Subscription	EMPOWERBBSpeeds063019.csv	Aug 19, 2019 10:38:28	3

Fixed Broadband Deployment

Census Block Counts by State, DBA Name and Technology

State	DBA Name	Technology	Blocks
Virginia	EMPOWER Broadband	Optical Carrier/Fiber to the End User	75
Total			75

Fixed Broadband Subscription

Fixed Broadband Subscriptions by State, Technology and End-user Type

State	Technology	Census Tracts	Subscriptions		
			Consumer	Business / Govt	Total

State	Technology	Census Tracts	Subscriptions		
			Consumer	Business / Govt	Total
Virginia	Optical Carrier/Fiber to the End User	3	23	2	25
Total		3	23	2	25

Fixed Broadband Subscriptions by Bandwidths and End-user Type

Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
50.000	50.000	22	2	24
100.000	100.000	1	0	1
Total		23	2	25

Fixed Broadband Subscriptions by Technology, Bandwidths and End-user Type

Technology	Downstream Bandwidth (in Mbps)	Upstream Bandwidth (in Mbps)	Consumer	Business / Govt	Total
Optical Carrier/Fiber to the End User	50.000	50.000	22	2	24
	100.000	100.000	1	0	1
Total			23	2	25

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	VA0031
	PERIOD ENDED	December, 2017
	BORROWER NAME	Mecklenburg 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.

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	67,886,914	63,990,391	64,618,515	6,251,864
2. Power Production Expense	0	0	0	0
3. Cost of Purchased Power	43,594,110	38,382,977	39,408,258	2,804,575
4. Transmission Expense	11,177	12,975	13,319	885
5. Regional Market Expense	0	0	0	0
6. Distribution Expense - Operation	3,479,151	3,485,010	3,556,261	253,238
7. Distribution Expense - Maintenance	4,454,980	4,650,791	4,603,456	754,607
8. Customer Accounts Expense	1,818,875	1,784,665	1,829,911	156,779
9. Customer Service and Informational Expense	243,404	235,990	236,554	16,633
10. Sales Expense	0	0	0	0
11. Administrative and General Expense	4,138,931	4,364,646	4,363,951	453,497
12. Total Operation & Maintenance Expense (2 thru 11)	57,740,628	52,917,054	54,011,710	4,440,214
13. Depreciation and Amortization Expense	5,574,872	5,736,150	5,745,653	483,489
14. Tax Expense - Property & Gross Receipts	0	0	0	0
15. Tax Expense - Other	855	259	0	0
16. Interest on Long-Term Debt	3,835,069	3,680,893	3,838,848	233,504
17. Interest Charged to Construction - Credit	0	0	0	0
18. Interest Expense - Other	6,272	38,091	6,313	5,972
19. Other Deductions	82,785	68,774	35,800	10,700
20. Total Cost of Electric Service (12 thru 19)	67,240,481	62,441,221	63,638,324	5,173,879
21. Patronage Capital & Operating Margins (1 minus 20)	646,433	1,549,170	980,191	1,077,985
22. Non Operating Margins - Interest	219,601	237,956	180,334	4,982
23. Allowance for Funds Used During Construction	0	0	0	0
24. Income (Loss) from Equity Investments	(520)	(545)	0	(545)
25. Non Operating Margins - Other	22,030	31,015	6,243	30,368
26. Generation and Transmission Capital Credits	855,655	1,300,964	618,841	1,306,065
27. Other Capital Credits and Patronage Dividends	188,648	192,832	159,350	25,900
28. Extraordinary Items	0	0	0	0
29. Patronage Capital or Margins (21 thru 28)	1,931,847	3,311,392	1,944,959	2,444,755

UNITED STATES DEPARTMENT OF AGRICULTURE
RURAL UTILITIES SERVICE

**FINANCIAL AND OPERATING REPORT
ELECTRIC DISTRIBUTION**

BORROWER DESIGNATION

VA0031

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	279	262	5. Miles Transmission	18.41	18.41
2. Services Retired	153	165	6. Miles Distribution - Overhead	4,217.11	4,208.70
3. Total Services in Place	33,995	34,096	7. Miles Distribution - Underground	234.85	246.81
4. Idle Services (Exclude Seasonals)	2,670	2,761	8. Total Miles Energized (5 + 6 + 7)	4,470.37	4,473.92

PART C. BALANCE SHEET

ASSETS AND OTHER DEBITS		LIABILITIES AND OTHER CREDITS	
1. Total Utility Plant in Service	182,636,985	30. Memberships	0
2. Construction Work in Progress	4,536,209	31. Patronage Capital	55,261,678
3. Total Utility Plant (1 + 2)	187,173,194	32. Operating Margins - Prior Years	0
4. Accum. Provision for Depreciation and Amort.	60,378,607	33. Operating Margins - Current Year	2,850,383
5. Net Utility Plant (3 - 4)	126,794,587	34. Non-Operating Margins	8,191,380
6. Non-Utility Property (Net)	0	35. Other Margins and Equities	2,501,589
7. Investments in Subsidiary Companies	7,664	36. Total Margins & Equities (30 thru 35)	68,805,030
8. Invest. in Assoc. Org. - Patronage Capital	27,818,649	37. Long-Term Debt - RUS (Net)	5,594,670
9. Invest. in Assoc. Org. - Other - General Funds	0	38. Long-Term Debt - FFB - RUS Guaranteed	62,610,952
10. Invest. in Assoc. Org. - Other - Nongeneral Funds	1,811,325	39. Long-Term Debt - Other - RUS Guaranteed	0
11. Investments in Economic Development Projects	120,545	40. Long-Term Debt Other (Net)	23,840,345
12. Other Investments	1,915	41. Long-Term Debt - RUS - Econ. Devel. (Net)	120,545
13. Special Funds	908,178	42. Payments - Unapplied	809,801
14. Total Other Property & Investments (6 thru 13)	30,668,276	43. Total Long-Term Debt (37 thru 41 - 42)	91,356,711
15. Cash - General Funds	2,116,759	44. Obligations Under Capital Leases - Noncurrent	0
16. Cash - Construction Funds - Trustee	100	45. Accumulated Operating Provisions and Asset Retirement Obligations	1,253,282
17. Special Deposits	0	46. Total Other Noncurrent Liabilities (44 + 45)	1,253,282
18. Temporary Investments	1,676,984	47. Notes Payable	0
19. Notes Receivable (Net)	47,232	48. Accounts Payable	5,616,620
20. Accounts Receivable - Sales of Energy (Net)	4,912,346	49. Consumers Deposits	1,986,199
21. Accounts Receivable - Other (Net)	2,141,426	50. Current Maturities Long-Term Debt	6,757,121
22. Renewable Energy Credits	1,250	51. Current Maturities Long-Term Debt - Economic Development	47,232
23. Materials and Supplies - Electric & Other	1,638,703	52. Current Maturities Capital Leases	0
24. Prepayments	151,192	53. Other Current and Accrued Liabilities	1,868,912
25. Other Current and Accrued Assets	4,388,344	54. Total Current & Accrued Liabilities (47 thru 53)	16,276,084
26. Total Current and Accrued Assets (15 thru 25)	17,074,336	55. Regulatory Liabilities	0
27. Regulatory Assets	0	56. Other Deferred Credits	16,771
28. Other Deferred Debits	3,170,679	57. Total Liabilities and Other Credits (36 + 43 + 46 + 54 thru 56)	177,707,878
29. Total Assets and Other Debits (5+14+26 thru 28)	177,707,878		

**MECKLENBURG ELECTRIC COOPERATIVE
CASH FLOW REPORT
FOR THE MONTH ENDING DECEMBER 2017**

PAGE 3

TOTAL CASH GENERAL FUNDS (RUS Form 7-Part C, L-15,16 &18) as of	11/30/17	5,156,256
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ADDITIONS:

Deposits-General	4,900,776	
Deposits-Emporia	174,223	
Deposits-Gretna	244,634	
Interest Earned on Investments	15,508	
Interest Earned on Checking Accounts	9	

TOTAL ADDITIONS		<u>5,335,150</u>
TOTAL CASH AVAILABLE		10,491,406

EXPENDITURES:

Routine	894,427	
Wholesale Power Bills - ODEC and SEPA	3,279,734	
Anthem Bluecross Blueshield	111,216	
NRECA	106,451	
Payroll and Payroll Taxes	646,127	
Customer Refunds	28,336	
VMD	25,726	
Inventory	72,642	
Asplundh Tree Expert - (tree trimming)	202,959	
Alliance Forestry	10,712	
Patterson & Dewar Engineers - (Hickory Grove and Island Creek)	25,337	
Lee Electrical - (Island Creek)	103,756	
Federated Rural Electric Insurance Exchange	66,740	
Fire and Rescue Squad donations	10,700	
Carter Baldwin - (consulting services)	18,333	
Vantage Point Solutions - (grant application project)	5,300	
LeClair Ryan - (consulting services)	35,409	
Capital Credit - (general retirement)	1,053,659	

TOTAL EXPENDITURES		6,697,564
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TOTAL CASH GENERAL FUNDS (RUS Form 7-Part C, L-15,16 &18) as of	12/31/17	3,793,843
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SPECIAL FUNDS (RUS Form 7, Part C, Line 12 & 13)		910,093
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TOTAL CASH GENERAL FUNDS AND SPECIAL FUNDS		4,703,936
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Note: Long term debt payment to RUS in the amount of \$42,539.49 and FFB in the amount of \$ 1,068,830.61 were deducted from RUS Cushion of Credit Account on December 31, 2017.

UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION	BORROWER DESIGNATION VA0031
INSTRUCTIONS - See help in the online application.	PERIOD ENDED December, 2017

PART D. NOTES TO FINANCIAL STATEMENTS

1. Part C, line 28, Other Deferred Debits, consists of the following:

- a. Preliminary Investigation Charges for the Work Plan - \$131,119
- b. Retirement Security Pension Plan Prepayment - \$2,837,808
- c. Deferred Fuel - \$201,752

2. Part C, line 25, Other Current & Accrued Assets includes unbilled revenue in the amount of \$ 4,169,356

3. Part C, line 56, Other Deferred Credits, consists of the following:

- a. Sales Tax Surcharge - \$16,771

CONFIDENTIAL

<p>UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE</p> <p>FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION</p>	<p>BORROWER DESIGNATION</p> <p>VA0031</p>
<p>INSTRUCTIONS - See help in the online application.</p>	<p>PERIOD ENDED</p> <p>December, 2017</p>
<p>PART D. CERTIFICATION LOAN DEFAULT NOTES</p>	

CONFIDENTIAL

**FINANCIAL AND OPERATING REPORT
ELECTRIC DISTRIBUTION**

BORROWER DESIGNATION VA0031

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	151,491,031	5,615,910	1,468,931		155,638,010
2. General Plant	16,606,162	650,057	726,245		16,529,974
3. Headquarters Plant	5,347,354	12,794	2,535		5,357,613
4. Intangibles	1,119,641				1,119,641
5. Transmission Plant	3,595,842	55,253	43,425		3,607,670
6. Regional Transmission and Market Operation Plant	0				0
7. All Other Utility Plant	388,877		4,800		384,077
8. Total Utility Plant in Service (1 thru 7)	178,548,907	6,334,014	2,245,936		182,636,985
9. Construction Work in Progress	2,300,567	2,235,642			4,536,209
10. Total Utility Plant (8 + 9)	180,849,474	8,569,656	2,245,936		187,173,194

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	1,770,495	1,833,065	165,737	2,131,211		617	1,638,703
2. Other	6,613			6,613			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	11.530	28.350	4.710	149.770	194.360
2. Five-Year Average	2.870	117.150	7.690	186.090	313.800

PART H. EMPLOYEE-HOUR AND PAYROLL STATISTICS

1. Number of Full Time Employees	98	4. Payroll - Expensed	5,472,566
2. Employee - Hours Worked - Regular Time	214,713	5. Payroll - Capitalized	2,992,491
3. Employee - Hours Worked - Overtime	14,896	6. Payroll - Other	88,277

PART I. PATRONAGE CAPITAL

ITEM	DESCRIPTION	THIS YEAR (a)	CUMULATIVE (b)
1. Capital Credits - Distributions	a. General Retirements	1,011,550	33,689,417
	b. Special Retirements	81,920	4,114,779
	c. Total Retirements (a + b)	1,093,470	37,804,196
2. Capital Credits - Received	a. Cash Received From Retirement of Patronage Capital by Suppliers of Electric Power	363,001	
	b. Cash Received From Retirement of Patronage Capital by Lenders for Credit Extended to the Electric System	50,946	
	c. Total Cash Received (a + b)	413,947	

PART J. DUE FROM CONSUMERS FOR ELECTRIC SERVICE

1. Amount Due Over 60 Days	\$ 9,202	2. Amount Written Off During Year	\$ 124,542
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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 VA0031
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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	Old Dominion Electric Coop	40229			607,957,350	36,717,927	6.04	(170,201)	25,783
2	Southeastern Power Admin	29304			22,992,007	1,664,520	7.24		770,381
3	*Miscellaneous	700000	GREENCO	Solar - photovoltaic		530	0.00		
	Total				630,949,357	38,382,977	6.08	(170,201)	796,164

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UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION		BORROWER DESIGNATION VA0031
INSTRUCTIONS - See help in the online application		PERIOD ENDED December, 2017
PART K. kWh PURCHASED AND TOTAL COST		
No	Comments	
1		
2		
3	Renewable Energy Credits	

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UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION	BORROWER DESIGNATION VA0031
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			

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UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION	BORROWER DESIGNATION VA0031
INSTRUCTIONS - See help in the online application.	PERIOD ENDED December, 2017

PART M. ANNUAL MEETING AND BOARD DATA

1. Date of Last Annual Meeting 6/21/2017	2. Total Number of Members 31,165	3. Number of Members Present at Meeting 451	4. Was Quorum Present? Y
5. Number of Members Voting by Proxy or Mail 3,288	6. Total Number of Board Members 11	7. Total Amount of Fees and Expenses for Board Members \$ 137,415	8. Does Manager Have Written Contract? Y

RUS Financial and Operating Report Electric Distribution

Revision Date 2014

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UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION	BORROWER DESIGNATION VA0031
INSTRUCTIONS - See help in the online application.	PERIOD ENDED December, 2017

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)	5,594,670	111,363	397,900	509,263
2	National Rural Utilities Cooperative Finance Corporation	22,237,528	1,049,201	1,817,263	2,866,464
3	CoBank. ACB				
4	Federal Financing Bank	62,610,952	2,459,034	1,816,819	4,275,853
5	RUS - Economic Development Loans	120,545		76,862	76,862
6	Payments Unapplied	809,801			
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				
10	Farmer Mac	1,602,817	103,239	223,930	327,169
	TOTAL	91,356,711	3,722,837	4,332,774	8,055,611

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UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION	BORROWER DESIGNATION VA0031
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	29,449	29,437	
	b. kWh Sold			346,673,661
	c. Revenue			44,162,057
2. Residential Sales - Seasonal	a. No. Consumers Served	0	0	
	b. kWh Sold			0
	c. Revenue			0
3. Irrigation Sales	a. No. Consumers Served	0	0	
	b. kWh Sold			0
	c. Revenue			0
4. Comm. and Ind. 1000 KVA or Less	a. No. Consumers Served	1,516	1,517	
	b. kWh Sold			64,995,560
	c. Revenue			6,540,392
5. Comm. and Ind. Over 1000 KVA	a. No. Consumers Served	24	23	
	b. kWh Sold			153,147,627
	c. Revenue			9,681,157
6. Public Street & Highway Lighting	a. No. Consumers Served	0	0	
	b. kWh Sold			0
	c. Revenue			0
7. Other Sales to Public Authorities	a. No. Consumers Served	346	345	
	b. kWh Sold			32,636,342
	c. Revenue			2,911,354
8. Sales for Resale - RUS Borrowers	a. No. Consumers Served	0	0	
	b. kWh Sold			0
	c. Revenue			0
9. Sales for Resale - Other	a. No. Consumers Served	0	0	
	b. kWh Sold			0
	c. Revenue			0
10. Total No. of Consumers (lines 1a thru 9a)		31,335	31,322	
11. Total kWh Sold (lines 1b thru 9b)				597,453,190
12. Total Revenue Received From Sales of Electric Energy (lines 1c thru 9c)				63,294,960
13. Transmission Revenue				0
14. Other Electric Revenue				695,431
15. kWh - Own Use				824,830
16. Total kWh Purchased				630,949,357
17. Total kWh Generated				0
18. Cost of Purchases and Generation				38,395,952
19. Interchange - kWh - Net				0
20. Peak - Sum All kW Input (Metered) Non-coincident Coincident <u> x </u>				165,684

UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION	BORROWER DESIGNATION VA0031
INSTRUCTIONS - See help in the online application.	PERIOD ENDED December, 2017

PART P. ENERGY EFFICIENCY PROGRAMS

CLASSIFICATION	ADDED THIS YEAR			TOTAL TO DATE		
	No. of Consumers <i>(a)</i>	Amount Invested <i>(b)</i>	Estimated MMBTU Savings <i>(c)</i>	No. of Consumers <i>(d)</i>	Amount Invested <i>(e)</i>	Estimated MMBTU Savings <i>(f)</i>
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

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UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE		BORROWER DESIGNATION VA0031			
FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION INVESTMENTS, LOAN GUARANTEES AND LOANS		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)
2	Investments in Associated Organizations				
	NRUCFC Capital Term		1,426,905	64,007	
	ODEC Patronage Capital		26,735,322	1,300,964	
	VMD Association of Electric Cooperatives	33,920			
	NRUCFC Membership Certificates		1,000		
	NRTC Membership Certificates	1,000			
	United Utility Supply Patronage Capital	35,882			
	Electrical Research & Mfg Cooperative	55,808		10,370	
	Tarheel Electric Membership Association, Inc.	38,291		19,000	
	NRUCFC Patronage Capital		615,372	101,892	
	National Rural Telecommunications Cooperative	19,072			
	Touchstone Energy Cooperative	487			
	TEC Trading, Inc.	347,500			
	Federated Rural Electric Insurance Exchange	268,925		37,372	
	Mecklenburg Communications Services, Inc.	7,665		(545)	
	Arkansas Electric Cooperative, Inc.	3,354			
	Co-Bank		1,000		
	National Information Solutions Cooperative	45,093		24,197	
	GRESKO Utility Supply, Inc.	100			
	Buggs Island Telephone Cooperative	942			
	Totals	858,039	28,779,599	1,557,257	
3	Investments in Economic Development Projects				
	Economic Development Project-Oran Safety Glass	69,635			X
	Economic Development Project-Good Earth Peanut Co.	50,910			X
	Totals	120,545			
4	Other Investments				
	Contracts	907			
	Charter Communications	1,008			
	Totals	1,915			
5	Special Funds				
	NRECA Deferred Compensation	720,558			
	NRECA Deferred Compensation-Directors	187,620			
	Totals	908,178			
6	Cash - General				
	Checking Accounts		2,116,759		
	Totals		2,116,759		
8	Temporary Investments				
	Member Prepayment-Old Dominion Electric	1,676,984			
	Totals	1,676,984			
9	Accounts and Notes Receivable - NET				
	Accounts Receivable-Other	117,492			
	Notes Receivable-Oran Safety Glass	19,452			X
	Notes Receivable-Good Earth Peanut Co.	27,780			X
	Accounts Receivable - ODEC	2,023,934			
	Totals	2,188,658			
11	TOTAL INVESTMENTS (1 thru 10)	5,754,319	30,896,358	1,557,257	

UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION INVESTMENTS, LOAN GUARANTEES AND LOANS	BORROWER DESIGNATION VA0031
	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)				

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UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION INVESTMENTS, LOAN GUARANTEES AND LOANS	BORROWER DESIGNATION VA0031
	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]	3.07 %
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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	12/31/2018	1,232	1,232	
2	Energy Resources Conservation Loans				
	TOTAL		1,232	1,232	

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PART R. POWER REQUIREMENTS DATA BASE

CLASSIFICATION	SALES AND REVENUE DATA	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE
		(a)	(b)	(c)	(d)	(e)	(f)
1. Residential Sales (excluding seasonal)	a. No. Consumers Served	29,429	29,408	29,418	29,422	29,440	29,435
	b. KWH Sold	36,684,988	33,873,560	21,206,973	21,195,790	22,488,221	27,678,925
	c. Revenue	\$ 4,414,793	\$ 4,136,493	\$ 2,926,243	\$ 2,900,394	\$ 3,083,645	\$ 3,538,447
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	1,508	1,511	1,513	1,517	1,519	1,522
	b. KWH Sold	4,986,617	4,804,069	4,016,633	4,490,034	4,844,561	5,599,332
	c. Revenue	\$ 511,314	\$ 494,555	\$ 439,487	\$ 471,878	\$ 512,745	\$ 557,522
5. Comm. and Ind. Over 1000 KVA	a. No. Consumers Served	23	23	23	23	23	23
	b. KWH Sold	12,794,010	12,963,971	11,340,474	10,921,816	13,188,778	12,866,476
	c. Revenue	\$ 795,761	\$ 816,617	\$ 695,903	\$ 714,210	\$ 839,166	\$ 806,949
6. Public Street & Highway Lighting	a. No. Consumers Served						
	b. KWH Sold						
	c. Revenue						
7. Other Sales to Public Authority	a. No. Consumers Served	344	344	344	345	345	345
	b. KWH Sold	2,805,328	2,775,531	2,267,925	2,404,794	2,630,969	2,804,450
	c. Revenue	\$ 257,181	\$ 247,457	\$ 209,299	\$ 219,428	\$ 235,861	\$ 244,142.0
8. Sales for Resales-REA Borrowers	a. No. Consumers Served						
	b. KWH Sold						
	c. Revenue						
9. Sales for Resales-Other	a. No. Consumers Served						
	b. KWH Sold						
	c. Revenue						
10. TOTAL No. of Consumers (lines 1a thru 9a)		31,304	31,286	31,298	31,307	31,327	31,325
11. TOTAL KWH Sold (lines 1b thru 9b)		57,270,943	54,417,131	38,832,005	39,012,434	43,152,529	48,949,183
12. TOTAL Revenue Received From Sales of 'Electric Energy (line 1c thru 9c)		\$ 5,979,049	\$ 5,695,122	\$ 4,270,932	\$ 4,305,911	\$ 4,671,416	\$ 5,147,060
13. Other Electric Revenue		\$ 60,938	\$ 59,748	\$ 61,443	\$ 56,605	\$ 55,931	\$ 52,895
14. KWH - Own Use		95,999	60,986	65,978	58,258	50,565	72,361
15. TOTAL KWH Purchased		60,181,661	46,533,581	51,458,408	41,146,831	45,442,920	51,336,069
16. TOTAL KWH Generated							
17. Cost of Purchases and Generation		\$ 3,859,314	\$ 3,086,959	\$ 3,147,305	\$ 2,776,976	\$ 2,937,039	\$ 3,204,495
18. Interchange - KWH - Net							
19. Peak - Sum All KW Input (Metered)		165,684	115,736	127,471	91,684	93,228	105,499
() Coincident () Non-Coincident		170,029	124,675	136,491	99,435	108,923	120,195

BORROWER DESIGNATION
Mecklenburg Electric Cooperative

PERIOD ENDING
 December 2017

REA USE ONLY

PART R. POWER REQUIREMENTS DATA BASE

	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL
	(g)	(h)	(i)	(j)	(k)	(l)	(Columns a thru l)
	a 29,436	29,457	29,433	29,454	29,460	29,449	
	b 36,766,515	31,763,011	24,670,369	23,467,618	29,102,629	37,775,062	346,673,661
1	c \$ 4,516,892	\$ 3,973,645	\$ 3,252,682	\$ 3,137,355	\$ 3,702,181	\$ 4,579,287	\$ 44,162,057
	a						
	b						-
2	c						\$ -
	a						
	b						-
3	c						\$ -
	a 1,523	1,522	1,517	1,517	1,517	1,516	
	b 6,565,369	6,995,810	6,383,235	5,953,494	4,879,914	5,476,492	64,995,560
4	c \$ 642,509	\$ 664,825	\$ 616,936	\$ 577,402	\$ 507,510	\$ 543,710	\$ 6,540,392
	a 22	23	23	23	23	24	
	b 13,114,959	13,583,470	12,673,293	13,614,193	13,008,650	13,077,537	153,147,627
5	c \$ 805,368	\$ 886,419	\$ 791,180	\$ 868,289	\$ 827,773	\$ 833,522	\$ 9,681,157
	a						
	b						-
6	c						\$ -
	a 345	345	346	346	347	346	
	b 3,148,055	3,078,425	2,745,262	2,646,800	2,676,873	2,651,930	32,636,342
7	c \$ 269,741	\$ 270,070	\$ 243,509	\$ 237,640	\$ 238,608	\$ 238,417	\$ 2,911,354
	a						
	b						-
8	c						\$ -
	a						
	b						
9	c						\$ -
10	31,326	31,347	31,319	31,340	31,347	31,335	-
11	59,594,898	55,420,716	46,472,159	45,682,105	49,668,066	58,981,021	597,453,190
12	\$ 6,234,510	\$ 5,794,959	\$ 4,904,307	\$ 4,820,685	\$ 5,276,072	\$ 6,194,936	\$ 63,294,959
13	\$ 54,900	\$ 56,264	\$ 57,814	\$ 61,170	\$ 60,796	\$ 56,928	\$ 695,431
14	78,646	79,492	67,071	62,716	62,021	70,737	824,830
15	62,736,205	58,089,753	48,500,952	48,216,276	52,614,015	64,692,686	630,949,357
16							-
17	\$ 3,668,867	\$ 3,565,130	\$ 3,075,027	\$ 3,011,671	\$ 3,245,617	\$ 2,804,575	\$ 38,382,976
18							-
19	114,510	125,013	101,151	91,146	106,008	139,739	165,684
	137,185	134,119	113,791	105,283	118,666	147,647	170,029

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 VA0031

PERIOD ENDED December, 2018

BORROWER NAME Mecklenburg 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.

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	63,990,391	74,403,945	71,228,981	6,497,982
2. Power Production Expense	0	0	0	0
3. Cost of Purchased Power	38,382,977	46,646,134	45,654,153	4,047,619
4. Transmission Expense	12,975	15,248	12,723	1,026
5. Regional Market Expense	0	0	0	0
6. Distribution Expense - Operation	3,485,010	3,329,369	3,461,891	225,713
7. Distribution Expense - Maintenance	4,650,791	5,934,718	4,879,912	451,272
8. Customer Accounts Expense	1,784,665	1,795,354	1,738,539	167,540
9. Customer Service and Informational Expense	235,990	191,970	289,264	15,507
10. Sales Expense	0	0	0	0
11. Administrative and General Expense	4,364,646	4,323,745	4,504,022	372,109
12. Total Operation & Maintenance Expense (2 thru 11)	52,917,054	62,236,538	60,540,504	5,280,786
13. Depreciation and Amortization Expense	5,736,150	5,837,845	6,056,529	501,316
14. Tax Expense - Property & Gross Receipts	0	0	0	0
15. Tax Expense - Other	259	264	0	(2,625)
16. Interest on Long-Term Debt	3,680,893	3,785,174	3,777,636	330,952
17. Interest Charged to Construction - Credit	0	0	0	0
18. Interest Expense - Other	38,091	45,922	48,601	1,762
19. Other Deductions	68,774	68,063	38,600	531
20. Total Cost of Electric Service (12 thru 19)	62,441,221	71,973,806	70,461,870	6,112,722
21. Patronage Capital & Operating Margins (1 minus 20)	1,549,170	2,430,139	767,111	385,260
22. Non Operating Margins - Interest	237,956	355,021	241,811	24,926
23. Allowance for Funds Used During Construction	0	0	0	0
24. Income (Loss) from Equity Investments	(545)	(128,373)	0	(128,373)
25. Non Operating Margins - Other	31,015	11,859	32,374	216
26. Generation and Transmission Capital Credits	1,300,964	644,004	613,291	644,004
27. Other Capital Credits and Patronage Dividends	192,832	209,712	190,000	22,048
28. Extraordinary Items	0	0	0	0
29. Patronage Capital or Margins (21 thru 28)	3,311,392	3,522,362	1,844,587	948,081

UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION	BORROWER DESIGNATION VA0031
INSTRUCTIONS - See help in the online application.	PERIOD ENDED December, 2018

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	262	233	5. Miles Transmission	18.41	18.41
2. Services Retired	165	98	6. Miles Distribution - Overhead	4,208.70	4,201.93
3. Total Services in Place	34,096	34,232	7. Miles Distribution - Underground	246.81	262.33
4. Idle Services (Exclude Seasonals)	2,761	2,880	8. Total Miles Energized (5 + 6 + 7)	4,473.92	4,482.67

PART C. BALANCE SHEET

ASSETS AND OTHER DEBITS		LIABILITIES AND OTHER CREDITS	
1. Total Utility Plant in Service	190,387,041	30. Memberships	0
2. Construction Work in Progress	2,801,573	31. Patronage Capital	57,116,889
3. Total Utility Plant (1 + 2)	193,188,614	32. Operating Margins - Prior Years	0
4. Accum. Provision for Depreciation and Amort.	62,880,732	33. Operating Margins - Current Year	3,074,144
5. Net Utility Plant (3 - 4)	130,307,882	34. Non-Operating Margins	7,677,377
6. Non-Utility Property (Net)	0	35. Other Margins and Equities	2,811,240
7. Investments in Subsidiary Companies	5,000	36. Total Margins & Equities (30 thru 35)	70,679,650
8. Invest. in Assoc. Org. - Patronage Capital	28,573,626	37. Long-Term Debt - RUS (Net)	5,186,069
9. Invest. in Assoc. Org. - Other - General Funds	0	38. Long-Term Debt - FFB - RUS Guaranteed	72,682,689
10. Invest. in Assoc. Org. - Other - Nongeneral Funds	1,808,902	39. Long-Term Debt - Other - RUS Guaranteed	0
11. Investments in Economic Development Projects	823,313	40. Long-Term Debt Other (Net)	21,945,227
12. Other Investments	855	41. Long-Term Debt - RUS - Econ. Devel. (Net)	823,313
13. Special Funds	771,295	42. Payments - Unapplied	3,608,384
14. Total Other Property & Investments (6 thru 13)	31,962,991	43. Total Long-Term Debt (37 thru 41 - 42)	97,028,914
15. Cash - General Funds	2,678,453	44. Obligations Under Capital Leases - Noncurrent	0
16. Cash - Construction Funds - Trustee	100	45. Accumulated Operating Provisions and Asset Retirement Obligations	2,036,840
17. Special Deposits	0	46. Total Other Noncurrent Liabilities (44 + 45)	2,036,840
18. Temporary Investments	4,344,461	47. Notes Payable	0
19. Notes Receivable (Net)	48,936	48. Accounts Payable	5,499,080
20. Accounts Receivable - Sales of Energy (Net)	4,861,434	49. Consumers Deposits	1,963,684
21. Accounts Receivable - Other (Net)	1,075,897	50. Current Maturities Long-Term Debt	4,381,431
22. Renewable Energy Credits	1,009	51. Current Maturities Long-Term Debt - Economic Development	47,232
23. Materials and Supplies - Electric & Other	2,068,689	52. Current Maturities Capital Leases	0
24. Prepayments	164,162	53. Other Current and Accrued Liabilities	2,358,158
25. Other Current and Accrued Assets	4,607,986	54. Total Current & Accrued Liabilities (47 thru 53)	14,249,585
26. Total Current and Accrued Assets (15 thru 25)	19,851,127	55. Regulatory Liabilities	0
27. Regulatory Assets	0	56. Other Deferred Credits	703,292
28. Other Deferred Debits	2,556,281	57. Total Liabilities and Other Credits (36 + 43 + 46 + 54 thru 56)	184,698,281
29. Total Assets and Other Debits (5+14+26 thru 28)	184,698,281		

**MECKLENBURG ELECTRIC COOPERATIVE
CASH FLOW REPORT
FOR THE MONTH ENDING DECEMBER 2018**

PAGE 3

TOTAL CASH GENERAL FUNDS (RUS Form 7-Part C, L-15,16 &18) as of	11/30/18	9,021,482
 <u>ADDITIONS:</u>		
Deposits-General	6,081,434	
Deposits-Emporia	171,426	
Deposits-Gretna	281,491	
Interest Earned on Investments	39,210	
Interest Earned on Checking Accounts	28	
 TOTAL ADDITIONS		 <u>6,573,589</u>
TOTAL CASH AVAILABLE		15,595,071
 <u>EXPENDITURES:</u>		
Routine	1,168,175	
Wholesale Power Bills - ODEC and SEPA	3,680,300	
RUS Cushion of Credit (Investment)	1,000,000	
Commercial Paper Investment	650,000	
Health Insurance - Anthem	125,636	
NRECA	87,162	
Customer Refunds	16,384	
Payroll and Payroll Taxes	647,543	
Inventory	186,634	
Asplundh Tree Experts	183,970	
Federated Rural Electric - insurance	73,283	
Leclair Ryan PLLC - legal fees	7,898	
Pee Dee Eelctric Co-Op, Inc. - Hurricane Michael	39,248	
Sandra P. LangfordTreasurer - Real & Property Tax	199,210	
Capital Credit Retirement	799,975	
 TOTAL EXPENDITURES		 8,865,418
TOTAL CASH GENERAL FUNDS (RUS Form 7-Part C, L-15,16 &18) as of	12/31/18	6,729,652
SPECIAL FUNDS (RUS Form 7, Part C, Line 12 & 13)		772,150
TOTAL CASH GENERAL FUNDS AND SPECIAL FUNDS		7,501,802

Note: Long term debt payment to RUS in the amount of \$42,940.48 and FFB in the amount of \$1,144,925.29 were deducted from RUS Cushion of Credit Account on December 2018.

UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION	BORROWER DESIGNATION VA0031
INSTRUCTIONS - See help in the online application.	PERIOD ENDED December, 2018

PART D. NOTES TO FINANCIAL STATEMENTS

1. Part C, line 28, Other Deferred Debits, consists of the following:
 - a. Preliminary Investigation Charges for the Work Plan - \$123,874
 - b. Retirement Security Pension Plan Prepayment - \$2,432,407

2. Part C, line 25, Other Current & Accrued Assets includes unbilled revenue in the amount of \$4,356,137

3. Part C, line 56, Other Deferred Credits, consists of the following:
 - a. Sales Tax Surcharge - \$54,708
 - b. Deferred Energy - \$648,584

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UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION	BORROWER DESIGNATION VA0031
INSTRUCTIONS - See help in the online application.	PERIOD ENDED December, 2018
PART D. CERTIFICATION LOAN DEFAULT NOTES	

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UNITED STATES DEPARTMENT OF AGRICULTURE
RURAL UTILITIES SERVICE

**FINANCIAL AND OPERATING REPORT
ELECTRIC DISTRIBUTION**

BORROWER DESIGNATION VA0031

PERIOD ENDED December, 2018

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	155,638,010	8,982,574	2,963,329		161,657,255
2. General Plant	16,529,974	1,801,602	82,537		18,249,039
3. Headquarters Plant	5,357,613	13,641			5,371,254
4. Intangibles	1,119,641				1,119,641
5. Transmission Plant	3,607,670	9,604	11,499		3,605,775
6. Regional Transmission and Market Operation Plant	0				0
7. All Other Utility Plant	384,077				384,077
8. Total Utility Plant in Service (1 thru 7)	182,636,985	10,807,421	3,057,365		190,387,041
9. Construction Work in Progress	4,536,209	(1,734,636)			2,801,573
10. Total Utility Plant (8 + 9)	187,173,194	9,072,785	3,057,365		193,188,614

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	1,638,703	2,443,454	57,971	2,067,059	0	(4,380)	2,068,689
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	0.000	1,259.220	6.660	214.650	1,480.530	
2. Five-Year Average	10.340	305.280	7.530	187.840	510.990	

PART H. EMPLOYEE-HOUR AND PAYROLL STATISTICS

1. Number of Full Time Employees	104	4. Payroll - Expensed	5,867,531
2. Employee - Hours Worked - Regular Time	203,931	5. Payroll - Capitalized	3,019,163
3. Employee - Hours Worked - Overtime	22,680	6. Payroll - Other	119,276

PART I. PATRONAGE CAPITAL

ITEM	DESCRIPTION	THIS YEAR (a)	CUMULATIVE (b)
1. Capital Credits - Distributions	a. General Retirements	904,917	34,594,334
	b. Special Retirements	89,490	4,204,269
	c. Total Retirements (a + b)	994,407	38,798,603
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	48,399	
	c. Total Cash Received (a + b)	48,399	

PART J. DUE FROM CONSUMERS FOR ELECTRIC SERVICE

1. Amount Due Over 60 Days	\$ 14,823	2. Amount Written Off During Year	\$ 226,772
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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 VA0031
INSTRUCTIONS - See help in the online application	PERIOD ENDED December, 2018

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	Old Dominion Electric Coop	40229			616,211,484	44,529,773	7.23	1,506,447	25,783
2	Southeastern Power Admin	29304			44,750,626	2,116,120	4.73		849,253
3	*Miscellaneous	700000	GREENCO	Solar - photovoltaic		241	0.00		
	Total				660,962,110	46,646,134	7.06	1,506,447	875,036

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UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION		BORROWER DESIGNATION VA0031	
INSTRUCTIONS - See help in the online application		PERIOD ENDED December, 2018	
PART K. kWh PURCHASED AND TOTAL COST			
No	Comments		
1			
2			
3	Renewable energy Credits		

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UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION		BORROWER DESIGNATION VA0031	
INSTRUCTIONS - See help in the online application.		PERIOD ENDED December, 2018	
PART L. LONG-TERM LEASES			
No	NAME OF LESSOR (a)	TYPE OF PROPERTY (b)	RENTAL THIS YEAR (c)
TOTAL			

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UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION		BORROWER DESIGNATION VA0031 PERIOD ENDED December, 2018	
INSTRUCTIONS - See help in the online application.			
PART M. ANNUAL MEETING AND BOARD DATA			
1. Date of Last Annual Meeting 6/20/2018	2. Total Number of Members 25,593	3. Number of Members Present at Meeting 362	4. Was Quorum Present? Y
5. Number of Members Voting by Proxy or Mail 3,070	6. Total Number of Board Members 11	7. Total Amount of Fees and Expenses for Board Members \$ 147,554	8. Does Manager Have Written Contract? Y

RUS Financial and Operating Report Electric Distribution

Revision Date 2014

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UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION			BORROWER DESIGNATION VA0031		
INSTRUCTIONS - See help in the online application.			PERIOD ENDED December, 2018		
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)	5,186,069	104,235	404,855	509,090
2	National Rural Utilities Cooperative Finance Corporation	20,589,587	1,008,598	1,692,015	2,700,613
3	CoBank, ACB				
4	Federal Financing Bank	72,682,689	2,557,479	1,875,537	4,433,016
5	RUS - Economic Development Loans	823,313		47,232	47,232
6	Payments Unapplied	3,608,384			
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				
10	Farmer Mac	1,355,640	91,904	235,265	327,169
	TOTAL	97,028,914	3,762,216	4,254,904	8,017,120

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UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE		BORROWER DESIGNATION VA0031		
FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION		PERIOD ENDED December, 2018		
INSTRUCTIONS - See help in the online application.				
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	29,480	29,449	
	b. kWh Sold			380,673,537
	c. Revenue			51,737,101
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	1,496	1,504	
	b. kWh Sold			68,064,964
	c. Revenue			7,469,870
5. Comm. and Ind. Over 1000 KVA	a. No. Consumers Served	26	25	
	b. kWh Sold			149,630,795
	c. Revenue			11,037,278
6. Public Street & Highway Lighting	a. No. Consumers Served			
	b. kWh Sold			
	c. Revenue			
7. Other Sales to Public Authorities	a. No. Consumers Served	350	348	
	b. kWh Sold			34,023,760
	c. Revenue			3,421,699
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)		31,352	31,326	
11. Total kWh Sold (lines 1b thru 9b)				632,393,056
12. Total Revenue Received From Sales of Electric Energy (lines 1c thru 9c)				73,665,948
13. Transmission Revenue				
14. Other Electric Revenue				737,997
15. kWh - Own Use				879,498
16. Total kWh Purchased				660,962,110
17. Total kWh Generated				
18. Cost of Purchases and Generation				46,661,382
19. Interchange - kWh - Net				
20. Peak - Sum All kW Input (Metered) Non-coincident ___ Coincident <u>X</u>				174,725

UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION	BORROWER DESIGNATION VA0031
INSTRUCTIONS - See help in the online application.	PERIOD ENDED December, 2018

PART P. ENERGY EFFICIENCY PROGRAMS						
CLASSIFICATION	ADDED THIS YEAR			TOTAL TO DATE		
	No. of Consumers <i>(a)</i>	Amount Invested <i>(b)</i>	Estimated MMBTU Savings <i>(c)</i>	No. of Consumers <i>(d)</i>	Amount Invested <i>(e)</i>	Estimated MMBTU Savings <i>(f)</i>
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

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UNITED STATES DEPARTMENT OF AGRICULTURE
RURAL UTILITIES SERVICE

**FINANCIAL AND OPERATING REPORT
ELECTRIC DISTRIBUTION
INVESTMENTS, LOAN GUARANTEES AND LOANS**

BORROWER DESIGNATION
VA0031

PERIOD ENDED
December, 2018

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				
	NRUCFC		1,424,482	63,775	
	ODEC Patronage Capital		27,379,326	644,004	
	VMD Association of Electric Cooperatives	33,920			
	NRUCFC Membership Certificates		1,000		
	NRTC Membership Certificates	1,000			
	United Utility Supply Patronage Capital	35,882			
	Electrical Research & Mfg Cooperative	58,043		14,321	
	Tarheel Electric Membership Association, Inc.	49,600		18,874	
	NRUCFC Patronage Capital		667,003	125,309	
	National Rural Telecommunications Cooperative	18,363			
	Touchstone Energy Cooperative	487			
	TEC Trading, Inc.	347,500			
	Federated Rural Electric Insurance Exchange	300,645		51,208	
	EMPOWER Broadband, Inc.	5,000		(128,373)	
	Arkansas Electric Cooperative, Inc.	3,354			
	Co-Bank		1,000		
	National Information Solutions Cooperative	59,882		22,048	
	Buggs Island Telephone Cooperative	942			
	GRESKO Utility Supply, Inc.	100			
	Totals	914,718	29,472,811	811,166	
3	Investments in Economic Development Projects				
	Economic Development Project-Oran Safety Glass	800,183			X
	Economic Development Project-Good Earth Peanut Co.	23,130			X
	Totals	823,313			
4	Other Investments				
	Charter Communications	855			
	Totals	855			
5	Special Funds				
	NRECA Deferred Compensation	591,019			
	NRECA Deferred Compensation-Directors	180,276			
	Totals	771,295			
6	Cash - General				
	Checking Accounts		2,678,453		
	Totals		2,678,453		
8	Temporary Investments				
	Member Prepayment-Old Dominion Electric	4,344,461			
	Totals	4,344,461			
9	Accounts and Notes Receivable - NET				
	Accounts Receivable-Other	871,113			
	Notes Receivable-Oran Safety Glass	19,452			X
	Notes Receivable-Good Earth Peanut, Inc.	27,780			X
	Accounts Receivable - ODEC	206,487			
	Totals	1,124,832			
11	TOTAL INVESTMENTS (1 thru 10)	7,979,474	32,151,264	811,166	

UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION INVESTMENTS, LOAN GUARANTEES AND LOANS	BORROWER DESIGNATION VA0031
	PERIOD ENDED December, 2018

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)				

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UNITED STATES DEPARTMENT OF AGRICULTURE RURAL UTILITIES SERVICE FINANCIAL AND OPERATING REPORT ELECTRIC DISTRIBUTION INVESTMENTS, LOAN GUARANTEES AND LOANS	BORROWER DESIGNATION VA0031
	PERIOD ENDED December, 2018

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]	4.13 %
--	--------

SECTION IV. LOANS

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

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PART R. POWER REQUIREMENTS DATA BASE

CLASSIFICATION	SALES AND REVENUE DATA	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE
		(a)	(b)	(c)	(d)	(e)	(f)
1. Residential Sales (excluding seasonal)	a. No. Consumers Served	29,434	29,411	29,404	29,419	29,411	29,448
	b. KWH Sold	47,924,355	29,604,712	35,132,449	21,985,136	25,235,068	30,533,296
	c. Revenue	\$ 6,014,881	\$ 4,195,289	\$ 4,705,256	\$ 3,233,915	\$ 3,682,840	\$ 4,123,771
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	1,513	1,509	1,509	1,508	1,512	1,504
	b. KWH Sold	5,784,299	4,942,592	5,215,425	4,452,316	5,437,482	5,754,298
	c. Revenue	\$ 626,444	\$ 577,296	\$ 599,460	\$ 510,844	\$ 615,821	\$ 632,636
5. Comm. and Ind. Over 1000 KVA	a. No. Consumers Served	24	24	24	24	25	25
	b. KWH Sold	13,182,940	12,218,296	13,303,345	12,542,095	13,703,308	13,014,348
	c. Revenue	\$ 915,051	\$ 1,018,869	\$ 955,222	\$ 906,086	\$ 1,015,715	\$ 918,994
6. Public Street & Highway Lighting	a. No. Consumers Served						
	b. KWH Sold						
	c. Revenue						
7. Other Sales to Public Authority	a. No. Consumers Served	346	344	344	345	345	345
	b. KWH Sold	3,091,761	2,875,307	2,631,617	2,355,540	3,092,203	2,867,388
	c. Revenue	\$ 303,474	\$ 301,865	\$ 273,354	\$ 241,000	\$ 311,058	\$ 282,894.3
8. Sales for Resales-REA Borrowers	a. No. Consumers Served						
	b. KWH Sold						
	c. Revenue						
9. Sales for Resales-Other	a. No. Consumers Served						
	b. KWH Sold						
	c. Revenue						
10. TOTAL No. of Consumers (lines 1a thru 9a)		31,317	31,288	31,281	31,296	31,293	31,322
11. TOTAL KWH Sold (lines 1b thru 9b)		69,983,355	49,640,907	56,282,836	41,335,087	47,468,061	52,169,330
12. TOTAL Revenue Received From Sales of 'Electric Energy (line 1c thru 9c)		\$ 7,859,850	\$ 6,093,319	\$ 6,533,292	\$ 4,891,846	\$ 5,625,433	\$ 5,958,295
13. Other Electric Revenue		\$ 55,440	\$ 65,881	\$ 65,879	\$ 60,154	\$ 61,716	\$ 49,345
14. KWH - Own Use		95,046	75,003	62,350	58,575	65,350	77,339
15. TOTAL KWH Purchased		74,178,983	49,635,124	58,236,613	43,480,892	49,839,271	54,272,581
16. TOTAL KWH Generated							
17. Cost of Purchases and Generation		\$ 5,033,258	\$ 3,793,086	\$ 3,397,745	\$ 3,299,277	\$ 3,601,111	\$ 3,953,752
18. Interchange - KWH - Net							
19. Peak - Sum All KW Input (Metered)		174,725	136,896	113,703	84,405	98,548	116,791
() Coincident () Non-Coincident		190,041	143,092	126,511	107,657	118,266	130,541

BORROWER DESIGNATION
Mecklenburg Electric Cooperative

PERIOD ENDING
 DECEMBER 2018

REA USE ONLY

PART R. POWER REQUIREMENTS DATA BASE

	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL
	(g)	(h)	(i)	(j)	(k)	(l)	(Columns a thru l)
	a 29,465	29,488	29,469	29,466	29,498	29,480	
	b 32,846,340	34,793,983	33,758,209	19,849,539	30,520,594	38,489,856	380,673,537
1	c \$ 4,451,811	\$ 4,639,590	\$ 4,547,425	\$ 2,994,164	\$ 4,314,744	\$ 4,833,416	\$ 51,737,101
	a						
2	b						-
	c						\$ -
	a						
3	b						-
	c						\$ -
	a 1,503	1,497	1,498	1,498	1,497	1,496	
4	b 5,899,996	7,543,379	7,221,336	5,426,128	5,179,522	5,208,191	68,064,964
	c \$ 645,200	\$ 784,740	\$ 756,264	\$ 585,232	\$ 585,661	\$ 550,273	\$ 7,469,870
	a 25	25	25	26	26	26	
5	b 12,855,279	13,621,657	13,119,179	9,220,616	10,979,283	11,870,449	149,630,795
	c \$ 962,568	\$ 1,020,619	\$ 962,996	\$ 718,635	\$ 861,521	\$ 781,002	\$ 11,037,278
	a						
6	b						-
	c						\$ -
	a 348	350	350	351	352	350	
7	b 2,954,018	3,271,804	3,134,462	2,395,889	2,573,869	2,779,902	34,023,760
	c \$ 292,354	\$ 324,257	\$ 311,028	\$ 242,957	\$ 267,091	\$ 270,366	3,421,699
	a						
8	b						-
	c						\$ -
	a						
9	b						-
	c						\$ -
10	31,341	31,360	31,342	31,341	31,373	31,352	-
11	54,555,633	59,230,823	57,233,186	36,892,172	49,253,268	58,348,398	632,393,056
12	\$ 6,351,932	\$ 6,769,206	\$ 6,577,713	\$ 4,540,988	\$ 6,029,017	\$ 6,435,056	\$ 73,665,948
13	\$ 56,062	\$ 60,073	\$ 64,050	\$ 67,507	\$ 68,961	\$ 62,925	\$ 737,995
14	76,820	81,628	80,474	69,801	63,378	73,734	879,498
15	58,368,480	60,299,606	53,669,587	45,396,591	52,788,569	60,795,813	660,962,110
16							-
17	\$ 4,182,672	\$ 4,172,271	\$ 4,009,926	\$ 3,324,970	\$ 3,830,447	\$ 4,047,619	\$ 46,646,134
18							-
19	123,341	116,827	118,780	100,735	115,798	118,340	174,725
	134,064	129,652	129,281	110,425	124,307	134,292	190,041

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Run your classified word ad for \$15.00.
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are just .55 cents per word.

Deadline for weekly paper
Mondays by 10:00 AM

Contact Amy Today!

434-634-4153

Email

ads@brunswicktimes-gazette.com

HELP WANTED

FISCAL ASSISTANT

BRUNSWICK COUNTY TREASURER'S OFFICE
To perform clerical, fiscal and accounting-related work in Brunswick County Treasurer's Office.

QUALIFICATIONS INCLUDE:

- Related experience in governmental accounting/bookkeeping
- Ability to communicate effectively with the public
- Good reasoning/analytical skills and ability to handle multiple tasks simultaneously
- Ability to use effectively, with speed and accuracy, various office machines including calculator, typewriter, and computer
- Ability to work with large sums of money with speed and accuracy
- Strong eye for detail and eagerness to learn
- Computer knowledge and experience - IBM System AS400
- Associates degree preferred

Applicants may apply by sending a completed state application to Treasurer of Brunswick County, 228 N Main Street, Room 104, Lawrenceville, VA 23868. Deadline for submitting applications is Friday, August 9, 2019 at 5:00 P.M.

An Equal Opportunity Employer

PUBLIC NOTICE

BIDS REQUESTED

The Town of Alberta is accepting bids for grass cutting for the 2019/2020 fiscal year, beginning July 1, 2019. Please stop by the Town office for a list of locations. All bidders must be insured and provide a copy of their insurance certificate.

Bid deadline: August 7, 2019 by 2:00 p.m.
Contact: 434-949-7443 for information.

HELP WANTED

Chip Man Log Truck driver minimum 2 years experience with a positive driving record. Call 804-586-7198 (TFN)

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AUCTION

Saturday – August 3, 2019
10:00 A.M.

auction conducted at
Daniel Auction Warehouse,
Alberta, VA

- Coins, Salvage & Household
- Husqvarna & Poulan Saws
- Carson City Silver Dollars
- 20 ICG Graded Silver Eagles
- Whirlpool Washer & Dryer
- Bosch Rotary Cutter
- Ryobi Miter Saws
- Grill Propane Tanks
- Ladders

To view a more complete listing visit our website
www.danielauction.com
and click on the gavel

Daniel Auction Service
Alberta – 434-949-7565
Gasburg – 434-577-2971
Mobile – 434-594-4400

George Daniel - Va. A.R. # 35 and N.C. #290

PUBLIC NOTICE

Mecklenburg Electric Cooperative (MEC) and EMPOWER Broadband, in conjunction with Brunswick County, are preparing an application to the Department of Housing and Community Development (DHCD) for Virginia Telecommunication Initiative (VATI) Grant Funding to extend high-speed broadband to Gasburg area residents along Baird Road and Gasburg Road. Approximately 256 households will be passed with fiber to the home. This advertisement is notice of a 30-day public comment period as required. For additional information regarding this project please contact: David Lipscomb, Vice President Member and Energy Services. MEC/EMPOWER Office Hours are Monday – Friday 8:00 AM – 5:00 PM
Phone: 434.372.6244
P.O. Box 2451, Chase City VA 23924
EMPOWER@MECKELEEC.ORG



FAIR HOUSING NOTICE

We are pledged to the letter and spirit of Virginia's and HUD's equal opportunity housing policies. Virginia's fair housing law makes it illegal to advertise any preference, limitation or discrimination based on race, color, religion, national origin, sex, elderliness, familial status or handicap.

This newspaper will not knowingly accept advertising for real estate that violates the fair housing law. Our readers are hereby informed that all dwellings advertised in this newspaper are available on an equal opportunity basis. For more information about Virginia's Fair Housing Law or to file a fair housing complaint call the Virginia Fair Housing Office at (804) 367-8530. Toll free call (888) 551-3247. For TDD users, please call the Virginia Relay by dialing 7-1-1.

HELP WANTED



Firefighter/Medic

Dinwiddie County is seeking a Firefighter/Medic to perform advanced human support work responding to emergency calls, providing emergency medical services and fire suppression, preparing and maintaining detailed records, and related work as assigned.

Visit www.dinwiddieva.us for detailed information and how to apply by 08/09/2019.

Equal Opportunity Employer (EOE)

SEE YOUR AD HERE

Sell it Today by Advertising it right here in the Brunswick Times-Gazette classifieds

LEGAL

TRUSTEE'S SALE OF 226 TWIN PONDS RD, LAWRENCEVILLE, VA 23868. In execution of a certain Deed of Trust dated April 5, 2016, in the original principal amount of \$166,794.00 recorded in the Clerk's Office, Circuit Court for Brunswick County, Virginia as Instrument No. 160000682. The undersigned Substitute Trustee will offer for sale at public auction in the front of the Circuit Court building for Brunswick County, Virginia, 202 North Main Street, Lawrenceville, Virginia on September 3, 2019, at 4:00 PM, the property described in said Deed of Trust, located at the above address, and more particularly described as follows: ALL THOSE CERTAIN LOTS OR PARCEL OF LAND, LYING AND BEING IN TOTARO MAGISTERIAL DISTRICT, BRUNSWICK COUNTY, VIRGINIA, NEAR THE TOWN OF LAWRENCEVILLE, VIRGINIA, WHICH LOTS ARE SHOWN ON A CERTAIN PLAT OF A SUBDIVISION REFERRED TO AS "LAWRENCEVILLE HILLS" MADE BY J.W. TAYLOR, DATED MAY 19, 1952, AND RECORDED IN THE CLERK'S OFFICE OF THE CIRCUIT COURT OF SAID COUNTY IN PLAT BOOK 10136, THE LOTS HEREBY CONVEYED BEING DESCRIBED BY METES AND BOUNDS ON SAID PLAT AND THEREON PARTICULARLY NUMBERED AS LOT 21, LOT 22, LOT 23, LOT 24, LOT 25, LOT 26, LOT 27, LOT 28, LOT 29, LOT 30, AND LOT 31, IN BLOCK "F". ALSO KNOWN AS 226 TWIN PONDS ROAD, LAWRENCEVILLE, VA 23868. TERMS OF SALE: ALL CASH. A bidder's deposit of ten percent (10%) of the sale price or ten percent (10%) of the original principal balance of the subject Deed of Trust, whichever is lower, in the form of cash or certified funds payable to the Substitute Trustee must be present at the time of the sale. The balance of the purchase price will be due within fifteen (15) days of sale, otherwise Purchaser's deposit may be forfeited to Trustee. Time is of the essence. If the sale is set aside for any reason, the Purchaser at the sale shall be entitled to a return of the deposit paid. The Purchaser may, if provided by the terms of the Trustee's Memorandum of Foreclosure Sale, be entitled to a \$50 cancellation fee from the Substitute Trustee, but shall have no further recourse against the Mortgagor, the Mortgagee or the Mortgagee's attorney. A form copy of the Trustee's memorandum of foreclosure sale and contract to purchase real property is available for viewing at www.bwwsales.com. Additional terms, if any, to be announced at the sale. This is a communication from a debt collector and any information obtained will be used for that purpose. The sale is subject to seller confirmation. Substitute Trustee: Equity Trustees, LLC, 2101 Wilson Blvd., Suite 1004, Arlington, VA 22201. For more information contact: BWW Law Group, LLC, attorneys for Equity Trustees, LLC, 6003 Executive Blvd, Suite 101, Rockville, MD 20852, 301-961-6555, website: www.bwwsales.com. VA-339191-1.

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SMALL BATCH ROASTERS

Top Top Friday
at THE HOMEPLACE VINEYARD
Friday, June 14
6-10pm
Huckleberry Jam

KANAWHA VALLEY ARENA RESORT

CLASSIFIEDS

ERRORS
Please read your ad carefully the first time it appears in the paper. If it needs a correction as a result of our error, please call us and we will correct your ad for the next available edition.
The Enterprise cannot make allowances for errors after the first publication.
The Enterprise shall not be held responsible for untyped ads for any reason.
The Enterprise reserves the right to censor, reclassify, revise, or reject any advertisement at any time.

HOW TO CLASSIFY
1. If selling, have all the information ready with details in order of importance.
2. If selling merchandise, include your asking price, phone number and best time to call.
3. Call us for help in presenting your ad clearly and effectively.
4. If paying by credit card, please have the account number handy.

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LEGALS

NOTICE

Mecklenburg Electric Cooperative (MEC) and EMPOWER Broadband, in conjunction with Mecklenburg County, are preparing an application to the Department of Housing and Community Development (DHCD) for Virginia Telecommunication Initiative (VATI) Grant Funding to extend high-speed broadband to Bracey area residents just off Highway 903, along Beechwood Road, McKayla Lane, Rachel Court, Anna Lane, Hicks Drive, and Waynes Court. Approximately 50 households will be passed with fiber to the home.

This advertisement is notice of a 30-day public comment period as required. For additional information regarding this project please contact:

David Lipscomb, Vice President Member and Energy Services

MEC/EMPOWER Office Hours are Monday - Friday 8:00 AM - 5:00 PM. Phone: 434.372.6244 P.O. Box 2451, Chase City VA 23924.

EMPOWER@MECKELEEC.ORG
(7/31c)

NOTICE OF TRUSTEE'S SALE
VARIOUS LOTS - RIVER RIDGE GOLF AND CAMPING CLUB
LACROSSE MAGISTERIAL DISTRICT MECKLENBURG COUNTY, VIRGINIA
SALE DATE: SATURDAY, AUGUST 10, 2019 10:00 a.m.

As a result of delinquent assessments and/or other charges owed to River Ridge Association, Inc., and pursuant to the Declaration of Protective Covenants and Agreement of River Ridge Golf and Camping Club, and pursuant to Virginia Code Section 55-508, et seq., the undersigned Trustee will offer for sale the following lots at public auction at the

- CLUBHOUSE OF RIVER RIDGE GOLF AND CAMPING CLUB, 705 LARAMIE DRIVE, BRACEY, VIRGINIA ON SATURDAY, AUGUST 10, 2019 at 10:00 a.m.
- Lot 25A, Adventure Village - TMP 201A02-01-025
 - Lot 52B, Buffalo Village - TMP 201A02-05-052B
 - Lot 86B, Buffalo Village - TMP 201A03-01-086B
 - Lot 116B, Buffalo Village - TMP 201A03-01-116B
 - Lot 28D, Deer Chase Village - TMP 201A06-01-028D
 - Lot 37D, Deer Chase Village - TMP 201A03-03-037D
 - Lot 62F, Fox Hollow Village - TMP 201A05-04-062F
 - Lot 63F, Fox Hollow Village - TMP 201A05-04-063F
 - Lot 16G, Groundhog Village - TMP 201A05-03-016G
 - Lot 72H, Hare Village - TMP 201A02-02-072H
 - Lot 94H, Hare Village - TMP 201A02-02-094H
 - Lot 114H, Hare Village - TMP 201A02-02-114H
 - Lot 1K, Kangaroo Village - TMP 201A02-02-158H
 - Lot 30L, Leisure Village - TMP 201A01-01-030L
 - Lot 61L, Leisure Village - TMP 201A01-01-061L
 - Lot 62L, Leisure Village - TMP 201A01-01-062L
 - Lot 121M, Moose Village - TMP 201A01-02-121M
 - Lot 134M, Moose Village - TMP 201A01-02-134M

TERMS OF SALE
NOTICE: A MINIMUM OF 10% OF BID AMOUNT WILL BE REQUIRED TO BE PAID IN CASH OR CERTIFIED FUNDS PAYABLE TO THE TRUSTEE NAMED BELOW AT THE TIME AND PLACE SAID BID AMOUNT IS ACCEPTED - NO OTHER FORM OF DEPOSIT WILL BE ACCEPTED; balance due within thirty (30) days of sale. Title will be con-

Notice of Intent and Public Meeting

The Town of Brodnax will file an application with the USDA Rural Development for financial assistance to purchase a pumper truck to be utilized by the Fire Department. A Public meeting for comments will be held at 7:00 p.m. on Wednesday August 5, 2019 at the Brodnax Town Office to discuss the proposed project and to provide the opportunity for public comment. (7/31c)

TRUSTEE SALE
401 West High St, South Hill, VA 23970
Mecklenburg County

In execution of a Deed of Trust in the original principal amount of \$99,500.00, dated October 29, 2004 recorded in the Clerk's Office of the Circuit Court of the Mecklenburg County, Virginia, in Document No. 040006613, at Page 0028, default having occurred in the payment of the Note thereby secured and at the request of the holder of said Note, the undersigned Substitute Trustee will offer for sale at public auction at the entrance to the Circuit Court of Mecklenburg County, 393 Washington Street, Boydton, on August 9, 2019 at 10:30 AM the property described in said deed, located at the above address and briefly described as:

Beginning at a point on the South line of High Street which point is 441 feet Northwest of Lunenburg Avenue; thence along High Street N. 65-34 degrees W. 89 feet to a point with property formerly C. H. Moseley; thence with Moseley property S. 24-25 degrees W. 210 feet to a corner stake; thence S. 65-34 degrees 89 feet to a corner stake; thence N. 244-26 degrees E. 210 feet to the point of beginning on High Street, Map Number 078A12 A 124, with improvements thereon.

Subject to any and all covenants, conditions, restrictions, easements, and all other matters of record taking priority over the Deed of Trust, if any, affecting the aforesaid property.

TERMS OF SALE: CASH: A deposit of \$20,000.00 or 10% of the sales price, whichever is lower, cash or certified check will be required at the time of sale, but no more than \$10,000.00 of cash will be accepted, with settlement within fifteen (15) days from the date of sale. Sale is subject to post sale confirmation that the borrower did not file for protection under the U.S. Bankruptcy Code prior to the sale which affects the validity of the sale, as well as to post-sale confirmation of the status of the loan with the loan servicer including, but not limited to, determination of whether the borrower entered into any repayment agreement, reinstated or paid off the loan prior to the sale. In any such event, the sale shall be null and void, and the Purchaser's sole remedy, in law or equity, shall be the return of his deposit without interest. Additional terms may be announced at the time of sale. Pursuant to the Federal Fair Debt Collection Practices Act, we advise you that this firm is a debt collector attempting to collect the indebtedness referred to herein and any information we obtain will be used for that purpose.

SAMUEL I. WHITE, P.C., Substitute Trustee. This is a communication from a debt collector.

FOR INFORMATION CONTACT: SAMUEL I. WHITE, P.C. (68334), 5040 Corporate Woods Drive, Suite 120, Virginia Beach, Virginia 23462 757-457-1460 - Call Between 9:00 a.m. and 5:00 p.m. or visit our website at www.siwc.net (7/24, 7/31c)

AUCTIONS

AUCTION
Saturday - August 2, 2019

AUCTIONS

ONLINE AUCTION: CONSTRUCTION EQUIPMENT, TRUCKS AND TRAILERS. Primoris Fleet Re-alignment Auction. Items located in Chesapeake, VA. Bid online Sun. Aug 4 - Tues. Aug 6 at 11 a.m. at motleys.com. Motleys Industrial. 1-877-MOTLEYS. VA16. (7/31nc)

ATTN. AUCTIONEERS: Advertise your upcoming auctions statewide or in other states. Affordable Print and Digital Solutions reaching your target audiences. Call this paper or Landon Clark at Virginia Press Services 804-521-7576, landonc@vpa.net (7/31nc)

MISCELLANEOUS

CHARLOTTEVILLE COIN, CURRENCY & STAMP SHOW Charlottesville, VA LOCATION: ELKS LODGE #389, 389 ELK DRIVE CHARLOTTEVILLE, VA (64-Exit 250 follow signs) SATURDAY, AUGUST 10, 2019 9:00 AM - 5:00 PM FREE ADMISSION/PARKING Contact Jackie Dean (540) 832-0024 (7/31nc)

AIRLINES ARE HIRING - Get FAA approved hands on Aviation training. Financial aid for qualified students - Career placement assistance. CALL Aviation Institute of Maintenance SCHEV certified 877-204-4130 (7/31nc)

Need CDL Drivers? Advertise your JOB OPENINGS statewide or in other states. Affordable Print and Digital Solutions to reach truck drivers. Call Landon Clark at Virginia Press Services 804-521-7576, landonc@vpa.net (7/31nc)

ATTN. REALTORS: Advertise your listings regionally or statewide. Affordable Print and Digital Solutions that get results! Call Landon Clark at Virginia Press Services 804-521-

SERVICES

Elder's Private Detective Agency 24 hour service & reasonable price 434-432-0001 Lic. # 11-1159* (7/17 - 7/31nc)

DIVORCE-Uncontested, \$395+\$86 court cost. WILLS \$150.00. No court appearance. Estimated completion time twenty-one days. Hilton Oliver, Attorney (Facebook). 757-490-0126. Se Habla Espanol. BBB Member. <https://hiltonoliverattorneyva.com>. (7/31nc)

WANTED

Comic Books Wanted: Older ones that sold for 10 - 35 cents. Make a list before you contact me. Call or Text (540) 223-0924 iwantcomicbooks@earthlink.net (7/31nc)

FOR RENT

Mountain Home for rent by owner in Linville, NC. 4 BR, gated community. 7 day minimum, \$6,000. Limited dates available. Call 434-792-6993 (7/31nc)



PUBLISHER'S NOTICE

We are pledged to the letter and spirit of Virginia's policy for achieving equal housing opportunity throughout the Commonwealth. We encourage and support advertising and marketing programs in which there are no barriers to obtaining housing because of race, color, religion, national origin, sex, age, disability, familial status or handicap. All real estate advertised herein is subject to Virginia's fair housing law which makes it illegal to advertise any preference, limitation, or discrimination because of race, color, religion, national origin, sex, age, disability, familial status or handicap or intention to make any such preference, limitation, or discrimination. This newspaper will not knowingly accept advertising for real estate that violates the fair housing law. Our readers are hereby informed that all dwellings advertised in this newspaper are available on an equal opportunity basis. For more information or to file a housing complaint call the Virginia Fair Housing Office at (804) 367-8530. Toll free call (888) 551-3247. For the hearing impaired call (804) 367-9753. Email: fairhous-

HELP WANTED

Chip Man Log Truck driver minimum 2 years experience with a positive driving record. Call 804-586-7198 (3/6fjn - p)

Bethlehem Baptist Church is seeking a pastor. Please send inquiries to: Pastor Search Committee PO Box 164, Wise NC 27594 (7/10 - 7/31p)

Supervisor for Warehouse - Kenbridge, VA - must have experience in supervising 10 to 30 employees, must be a team player, send resume to jessica.williams@penmac.com (7/24, 7/31p)

Class A CDL Drivers Wanted. Road and Regional, must pass DOT drug and background screening. Two years experience. Call 252-532-4403. (7/31, 8/7p)

Firefighter/Medic

Dinwiddie County is seeking a Firefighter/Medic to perform advanced human support work responding to emergency calls, providing emergency medical services and fire suppression, preparing and maintaining detailed records, and related work as assigned.

Visit www.dinwiddieva.us for detailed information and how to apply by 08/09/2019.

Equal Opportunity Employer (EOE)

Out of Work?

Improve your job prospects with these tips.

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- Expand your skills.
- Polish your cover letter.
- Research potential employers.
- Stay positive...and don't forget to browse The South Hill Enterprise for comprehensive job listings.

The South Hill Enterprise

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series race, including the Grand Sport (GS) and Touring Car (TCR) classes, showcasing the newest high-performance sports cars, coupes and sedans. VIR is a large driver of tourism for the state throughout the year. A recent study by The Washington Economics

Group, Inc. found approximately 270,000 visitors head to VIR on a yearly basis, generating a significant \$237 million in total economic impact each year within the Commonwealth of Virginia.

"We're thrilled to have the Virginia Tourism Corporation be part of this invigorating IMSA race weekend and honored for our track to be home to the Virginia is for Racing Lovers Grand Prix," said Connie Nyholm, owner and CEO of VIR.

"This race weekend brings out our biggest crowds of the year, thanks to a jam-packed schedule of high-speed events, family fun and more. It's a weekend folks don't want to miss, and we can't wait to welcome both Virginians and visitors to the track this August."

This year marks the 50th anniversary of the Virginia is for Lovers slogan. Virginia Tourism Corporation is celebrating 50 Years of Love across the state with special lovers lagers at breweries and lovers blends at wineries, 1969 inspired meals and prices at restaurants, special 50 Years of Love events, 1969-themed contests, giveaways and more.

"VIR is a sought-after destination for both visitors and Virginians alike,

and we are proud to add our support during the track's largest race of the year," said Rita McClenny, president and CEO of Virginia Tourism Corporation. "We're excited to celebrate racing in Virginia at such an iconic course and looking forward to fans discovering for themselves why Virginia is for Racing Lovers."

Race weekend activities don't stop on the track - the entertainment continues with a skydiver performance, Michelin hot lap ride-alongs, practice and qualifying, car corrals and more. Visitors also can supplement their weekend with many activities like karting, autograph sessions, fan forum or dining at the Oak Tree Tavern.

Advanced tickets for the IMSA WeatherTech Sports-Car Championship race weekend are \$50 for Friday-only, \$55 for Saturday-only, \$60 for Sunday-only, \$70 for a two-day Saturday and Sunday ticket and \$80 for a three-day ticket. All tickets will be an additional \$10 if purchased at the gate. Children 16 and under are admitted free of charge with a paying adult, and parking is also free. Active military are admitted free of charge, and veterans receive a 50 percent discount with valid military ID.

»SPORTS NOTES

HCHS volleyball team tryouts start Monday

Tryouts for the Halifax County High School varsity and junior varsity volleyball teams will begin Monday, and continue through Wednesday with tryouts being held from 2 p.m. until 4 p.m. each day at the Halifax County High School gym.

Students must have a completed Virginia High School League physical exam form on file at Halifax County High

»TO PLACE AN AD: CALL (434) 572-3945, COME BY OUR OFFICE AT 3201 HALIFAX ROAD IN SOUTH BOSTON OR CLICK YOURGV.COM

CLASSIFIEDS



SERVICES

LAKESIDE HOME IMPROVEMENTS INC Siding, windows, seamless gutters, roofing, decks, free estimates. Call 579-6274. 12-18-xc

MISCELLANEOUS

FOR SALE Twin beds, day-bed, bookcase bed frame, small wood stove, chest of drawers, total gym, cuckoo clock, upholstered chaise. Call 434-579-1375. 8-2-1p

FOR SALE Kimball spinet piano, beautiful cherry finish. Bench included. \$250. 434-222-4852. 8-2-1p

FOR RENT/LEASE

FOR RENT 1 bedroom apartment in Halifax, furnished, \$430/ mo., water included. Call 434-349-6807. 8-2-1c

FOR RENT: Mobile home for rent in Clarksville area. 3 bedroom, 2 bath - all utilities included. 434-738-8004. 7-31-2c

FOR RENT: 2 bedroom, 1 bath house in Turbeville area. \$500 plus deposit. 8-2-1c

YARD SALES

BIG YARD SALE: Aug. 2 and 3. 1092 Wolf Trap Road - Friday - 4 to 7 p.m. Saturday 7 a.m. until. Lots of items. Something for everyone. Cheap prices. 8-2-1p

HELP WANTED

EMERGENCY MEDICAL TECHNICIAN - Job duties will include operation of ambulances and wheelchair vans. Position requires positive attitude, integrity and work ethic. Strongly prefer EMT certifications. We offer full set of benefits including vacation and sick leave, health insurance and retirement plan. Please mail handwritten summary of work history and certifications to Patient Transport, PO Box 698, Halifax, VA 24558. 3-14-EOFxc

HELP WANTED Residential Care Facility is seeking a licensed administrator. Must have completed at least 30 credit hours at an accredited college, 15 of which should be business or human services. Must have at least a year of administrative or supervisory experience caring for adults in a residential group facility. Retired nurses welcomed. Contact 434-476-7086. 8-2-2p

HELP WANTED Small residential care facility is seeking a certified medication aide. Must also be a certified nursing assistant and be able to pass a background check. Call 434-476-7086. 8-2-2p

HELP WANTED: Bookkeeper with QuickBooks Experience. Must have bank and Credit Card Reconciliation, Payroll, Tax and Back Office Experience. Please call 434-470-7070. 7-26-4c

NOW HIRING: Angel Wings Home Care hiring CNA's and PCA's. Apply in person. Serious inquiries only. 434-476-8710. 7-31-2p

TRUCK DRIVERS WANTED CDL license required 336-599-0074. 7-22-6c

PUBLIC NOTICE

OFFICIAL NOTICE Mecklenburg Electric Cooperative (MEC) and EMPOWER Broadband, in conjunction with Halifax County, are preparing an application to the Department of Housing and Community Development (DHCD) for Virginia Telecommunication Initiative (VATI) Grant Funding to extend high-speed broadband to six areas to include a portion of members along the following roads: Howard P. Anderson Rd., Hunting Creek Rd., Clarkton Rd., Mt. Laurel Rd., Stage Coach Rd., Bull Creek Rd., Chatham Rd., Leda Rd., Bill Tuck Hwy. and Aaron's Creek Rd. Approximately, 741 premises will be passed with fiber-optic cable. This advertisement is notice of a 30-day public comment period as required. For additional information regarding this project please contact: David Lipscomb, Vice President Member and Energy Services. MEC/EMPOWER Office Hours are Monday - Friday 8:00 AM - 5:00 PM Phone: 434.372.6244 P. O. Box 2451, Chase City VA 23924 EMPOWER@MECKELEEC.ORG. 8-2-1c

LEGALS

NOTICE OF SUBSTITUTE TRUSTEE'S SALE OF 1052 1st St., South Boston, Virginia 24592 (Halifax Co., VA) In execution of a Deed of Trust, from DORIS ELLIOTT LLOYD, dated April 28, 2000, in the original principal amount of \$33,775.01, recorded in the Circuit Court Clerk's Office of the County of Halifax, Virginia, in Deed Book 749, at page 567, (Seth E. Twery, P. C. having been appointed Substitute Trustee by Instrument of record in the aforesaid Clerk's Office in Deed Book 1206, at page 800), due to default in payment of the debt secured, the undersigned Substitute Trustee will offer for sale at public auction in front of the Courthouse for the Circuit Court of Halifax County, Virginia, on the 6th day of August, 2019, at 10:45 a.m., the following described real estate known as 1052 1st St., South Boston, Virginia 24592, situated in the County of Halifax, Virginia: All that certain lot or parcel of land located and being in Black Walnut District, Halifax County, Virginia, in the Village of Riverdale, and more particularly described as follows: Commencing at an iron pipe at the corner of Lots 314 and 320 as per plat of survey of Riverdale Park, of record in the Clerk's Office of Halifax County, Virginia, in Plat Book 1, at Page 18 1/2; thence along the southern end of Lots 320 and 341, inclusive, N. 86 degrees 3' E. 546.76 feet to middle of a branch; thence

30' W. 33.12 feet to a point; thence N. 88 degrees 30' W. 413.91 feet to an iron pipe at the southeast corner of Lot #319; thence Lot #319 to 315, inclusive, N. 3 degrees 12' W. 144.44 feet to the point of beginning, and containing 2.40 acres, more or less, according to a plat of survey made by J. Walter Jones, Jr., CLS, dated April 23, 1954, and recorded in the Clerk's Office of the Circuit Court of Halifax County, Virginia, in Deed Book 247, page 397. Tax Map Reference #07EN61MM228E911. Included with the sale is a 2000 Clayton Manufactured Home - VIN No. CW-P008425TN. Sale subject to

all conditions, restrictions, reservations and easements, if any of record and now applicable thereto. Terms: At least 10% cash on day of sale; balance due within 30 days. FOR INFORMATION CONTACT: Seth E. Twery, Esq. Seth E. Twery, P. C. P. O. Box 185 Lynchburg, VA 24505-0185 (434)845-5285. 7-19-3c



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nter, Inc.

MARKETING PLAN

EMPOWER



BROADBAND

Powered by MEC

2020 VATI GRANT

EMPOWER BROADBAND
11633 Hwy 92 W, Chase City, VA 23924

Table of Contents

I.	Executive Summary	2
II.	Marketing Plan Summary	2
	1. The Business	2
	2. The Future	2
	3. The Market	3
	4. The Finances	3
III.	Business Overview	4
IV.	The Future	4
	1. Vision Statement	4
	2. Mission Statement	4
	3. Goals	5
V.	The Market	5
	1. Unique Selling Position	5
	2. Market Research	6
	3. Target Market	6
	4. Marketing Strategy	7
VI.	The Finances	8
	1. Price	8
	2. Expected Sales	9
	3. Monitoring/Measurement Activities	9

I. Executive Summary

EMPOWER Broadband, Inc. is a wholly-owned subsidiary of Mecklenburg Electric Cooperative (MEC) created to bridge the digital divide in rural Southside Virginia by bringing ultra-high-speed fiber-to-the-premise to those under-served regions across MEC's service territory and its surrounding communities.

II. Marketing Plan Summary

1. The Business

Name: Empower Broadband

Structure: Wholly-owned subsidiary of Mecklenburg Electric Cooperative

Location: 11633 Hwy 92 West, Chase City, VA 23924

Established: 2018

Owner: Mecklenburg Electric Cooperative

Experience: MEC was established in 1938, by the members, for the members, at a time when rural Southside Virginia did not have access to electricity. For 80 years, MEC has provided power to the rural citizens across portions of nine southern Virginia counties and five northern North Carolina Counties. MEC understands the needs of rural citizens and how to operate a successful business with limited funds and lower density per mile. MEC has the infrastructure in place to hang fiber and a workforce that can capably design and implement fiber deployment. The MEC team has significant experience in line construction – having already strung portions of fiber to the offices and substations. Additionally, MEC's IT team has experience in network and fiber-to-the-premise broadband.

Products/Services: EMPOWER Broadband will offer ultra-high-speed broadband internet as well as telephone services to the members and communities served by MEC with an anticipated take-rate of forty percent.

2. The Future

Vision Statement:

To further enhance the quality of life for the members and communities served by Mecklenburg Electric Cooperative by providing fiber-to-the-premise (FTTP).

EMPOWER Broadband's initial goal is to complete the deployment of the fiber backbone reaching 135 miles across MEC's service territory – connecting 14 substations, the three district offices (Emporia, Chase City and Gretna) and the headquarters' office together within 36 months by utilizing MEC employees to provide needed smart grid technology for MEC's distribution system and to extend FTTP to MEC members, or citizens that live within 1,000 foot of the backbone by utilizing MEC employees installing the backbone and initiating a foundation for the EMPOWER Broadband subsidiary.

Additionally, MEC continues planning fiber deployment to its remaining substations, as well as unserved and underserved routes extending from that backbone, while EMPOWER Broadband seeks to secure funding for additional FTTP customers along and adjacent to those routes.

Empower Broadband's long-term goal is extending fiber throughout MEC's service territory.

3. The Market

EMPOWER's target market begins with the members of MEC. There are nearly 3,000 members within the initial 1,000-foot backbone project. At an estimated 45.3% take rate, EMPOWER anticipates a minimum of 1,318 customers within the first 36 months of operation. Additionally, EMPOWER will deploy fiber passing approximately 840 homes in southern Brunswick County with CAF funding, and 174 more with the 2019 TRRC grant near Mount Airy and Grit in Pittsylvania County.

Following the initial backbone phase, MEC has the potential to serve a minimum of 29,616 homes, farms, and businesses across six counties, including those specifically outlined in this grant proposal as well as other proposed locations, which MEC currently provides electric utility services.

- Brunswick County – 388 homes passed
- Mecklenburg County – 49 homes passed
- Halifax County – 886 homes passed

EMPOWER Broadband will utilize cost-saving measures by soliciting to only prospective customers throughout the build. Items such as direct-mailers, brochures, yard signs, rack cards and door hangers will be purchased and used to contact members as fiber is being installed along those lines within 1,000 feet of their home. Additionally, this targeted approach directly and specifically engages those homes within the initial 1,000 foot.

4. The Finances

Mecklenburg Electric Cooperative is spending \$2.6 million dollars to build the fiber optic backbone across its utility infrastructure to connect its substations and district offices to

each other – creating a fiber ring. The cost to supply high-speed fiber optic cables to the entire MEC service area is estimated at \$85 million.

Additional funds will be pursued with grant funding from organizations, such as the Virginia Tobacco Region Revitalization Commission (VTRRC), The Virginia Telecommunication Initiative (VATI), and the Federal Communications Commission’s (FCC) Connect America Funds (CAF), which will be used to fund FTTP installations of EMPOWER Broadband accounts.

III. **Business Overview**

Founded in 2018, EMPOWER Broadband is a wholly-owned subsidiary of Mecklenburg Electric Cooperative (MEC) located in Chase City, Virginia, which offers ultra-high-speed FTTP broadband and telephone services to the members and communities served by MEC as well as those within close proximity to MEC’s utility lines.

IV. **The Future**

1. **Vision Statement:**

To enhance Mecklenburg Electric Cooperative’s grid with a communications network – with a redundant fiber optic backbone at its core – to enable metering, smart grid, distributed generation, and direct connectivity smart home appliances.

To further enhance the quality of life for the members and communities served by Mecklenburg Electric Cooperative by providing fiber-to-the-premise.

2. **Mission Statement:**

To bridge the digital divide for MEC members and the surrounding communities by providing high-speed broadband to create jobs, attract new businesses, improve education and healthcare, and boost the local economy.

- Create Jobs/Attract Business – By providing the local community with the necessary internet speeds to attract businesses to the area, job opportunities will increase.
- Education – By providing students, teachers and administration with the necessary internet speeds to transform both teaching and learning.
- Healthcare – By helping bring physicians state-of-the-art equipment to the rural healthcare facilities of Southside, Virginia. Additionally, ultra-high-speed broadband will deliver world class opportunities for remote patient care in the

home; such bandwidth will support video diagnosis and communication or data downloads from advanced medical equipment.

- Economic Development – By having high-speed internet, rural Southside Virginia will become a hub for industry and growth.

3. Goals:

Short Term

To deploy a fiber backbone reaching 135 miles across MEC's service territory – connecting its substations, the three district offices (Emporia, Chase City and Gretna) and the headquarters' office together within 36 months (December 2020) by utilizing MEC's employees to provide needed smart grid technology for MEC's distribution system.

To extend fiber-to-the-premise (FTTP) to MEC members, or citizens that live within 1,000 foot of the backbone, within awarded Brunswick County FCC Connect America areas, Pittsylvania County 2019 TRRC grant area, and other funded routes along the backbone, by utilizing MEC employees installing the backbone and initiating a foundation for the EMPOWER Broadband subsidiary. Additionally, contract deployment crews have been added to complete construction within the established schedule and strategic plan.

Long Term

EMPOWER Broadband, Inc. will extend fiber throughout MEC's service territory and/or local communities based on a take-rate approach.

V. The Market

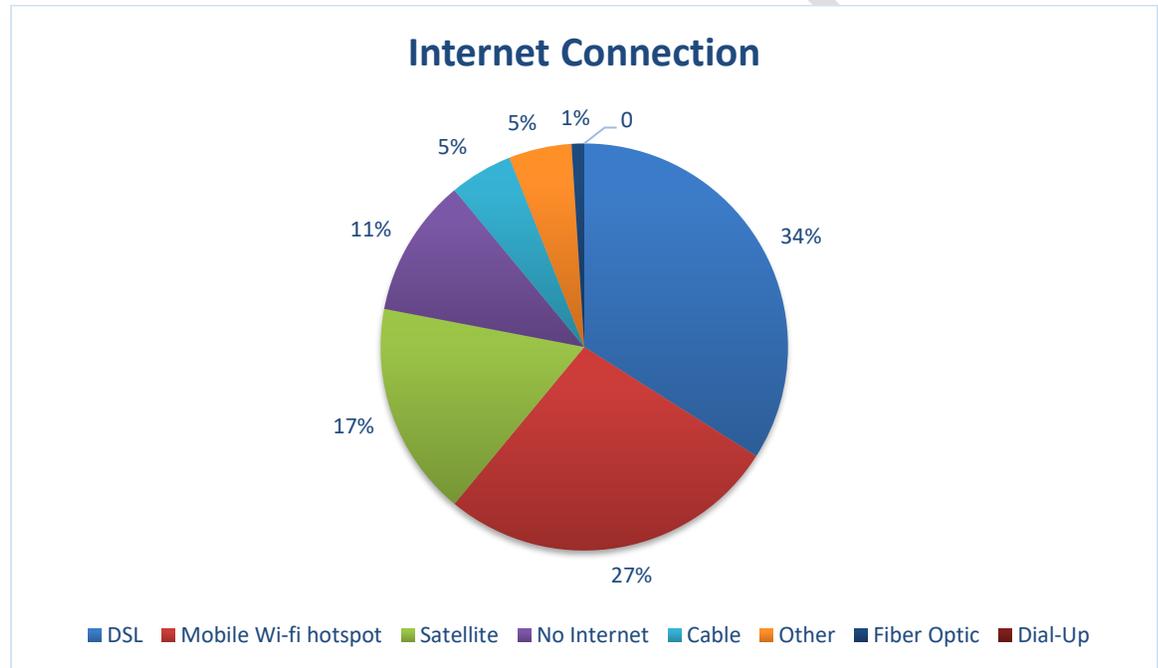
1. Unique Selling Position

Established in 1938, Mecklenburg Electric Cooperative is a not-for-profit, member-owned electric cooperative formed by the community for the sole purpose of providing electricity to the rural citizens of Southside, Virginia. Over that time, MEC has built a reputation of trust, commitment and service excellence from its membership. Today, the members of MEC are unable to acquire affordable, dependable, and sufficiently high-speed internet services. MEC is uniquely situated in the unserved and under-served areas of Southside Virginia where high-speed internet is overpriced, unreliable and in most cases, simply unavailable. Already having the infrastructure in place to easily add fiber cables, a skilled and capable workforce, an established potential customer base, and an established reputation

for service and commitment, EMPOWER Broadband is perfectly situated to provide retail internet services throughout the service territory of MEC.

2. Market Research

Currently, over 60 cooperatives across the nation have, or are in the process, of providing their rural members with high-speed fiber-optic internet. According to MEC's most recent Residential Energy Survey conducted by Olson, 83% of MEC members use their PC/Laptop to connect to the internet with the following internet connections:



Internet service from satellite and dial-up are too slow, latency laden, and unreliable for modern applications while DSL is well oversubscribed. With only one percent of our members having access to fiber-optic internet service, it is imperative that MEC share with its membership high-speed internet using the fiber optic cables installed along its system.

3. Target Market

Members of MEC

MEC has nearly 3,000 members within the initial 1,000-foot initial backbone buildout. At an estimated 45.3% take rate, EMPOWER forecast 1,318 customers within the first 36 months of operation.

Following the initial backbone phase, MEC has the potential to serve a minimum of 29,616 members across the following six counties, which MEC currently serves:

- * Pittsylvania – 6,526
- * Halifax – 5,890
- * Charlotte – 1,146
- * Mecklenburg – 9,796
- * Brunswick – 3,659
- * Greenville – 2,599

It should be further noted that this backbone creates the infrastructure to deliver a tree and branch approach for deploying fiber services to more unserved homes deeper into rural Southside Virginia.

Accordingly, MEC/EMPOWER will construct facilities passing 840 homes in southern Brunswick County as part of an FCC Connect America Fund grant to deliver ultra-high-speed fiber internet and to nearly 200 homes in the Mount Airy and Grit areas of Pittsylvania County.

**Totals as of April 2018*

Communities in close proximity to MEC lines

Although the initial priority of EMPOWER Broadband is to provide high-speed internet access to the members of MEC, community interest/need will be the driving factor of broadband cable placement and access following the initial backbone build.

4. Marketing Strategy - 2020 VATI Project Areas

Marketing Activity	Person Responsible	Date of expected completion
Introduction Letter (services coming) Direct Mail to eligible members	Member & Energy Services Team	Mail once make-ready construction begins at location
Letter to include services and contract Direct Mail to eligible members	Member & Energy Services Team	Mail when make ready work is complete
Postcards	Member & Energy Services Team	Mailed 3-weeks after contract letter
Door Hangers/Door to Door	Member & Energy Services Team	Used during installation phase

Yard Signs	Member & Energy Services Team	Displayed at property where services are connected
Rack Cards	Member & Energy Services Team	June 2018
Brochures	Member & Energy Services Team	June 2018
Website	Member & Energy Services Team	July 2018
Giveaways	Member & Energy Services Team	June 2018
Branding Materials (shirts, tent, table cover, display stand)	Member & Energy Services Team	June 2018

VI. The Finances

1. Price

The residential pricing structure will be as follows:

EMPOWER BROADBAND
Powered by MEC

Now offering Fiber-to-the-Home Broadband Service.

Get the fastest and most dependable internet speeds available today.

CALL TODAY TO SIGN-UP!
Also offering home telephone service.

Residential Pricing		
Premium Package	Ultra Package	Lightning Package
\$69.95 Month	\$119.95 Month	\$269.95 Month
Add home phone for \$30.00	Add home phone for \$30.00	Add home phone for \$30.00
Total \$99.95	Total \$149.95	Total \$299.95
Up to 50/50 Mbps	Up to 100/100 Mbps	Up to 1Gbps

*All prices include in-home Managed Wireless Router.

Commercial pricing structures will be as follows:

EMPOWER
BROADBAND
Powered by MEC

Now offering
Fiber-to-the-Premise
Broadband Service.

Get the fastest and most dependable
internet speeds available today.
CALL TODAY TO SIGN-UP!

Also offering telephone service.

Business Pricing		
Small Business Premium Solution	Small Business Ultimate Solution	Customized Enterprise Solution
\$89.95 Month	\$139.95 Month	Call Today!
Speeds up to 50 Mbps Help your business reach new heights with premium speeds. 50 Mbps download/50 Mbps upload and employees will no longer have to wait on that buffering symbol to get the job done. Recommended for < 5 employees	Speeds up to 100 Mbps With 100 Mbps internet service, the power is now in your hands. With ultimate speeds. 100 Mbps download/100Mbps upload - your business will have the speeds it needs to accomplish more than ever. Recommended 5-10 employees	In today's business world, you need the fastest, most reliable internet service. We understand that, and at EMPOWER, we can customize a network solution to meet your enterprise data and phone requirements. Call us today for a free quote. Recommended for 10+ employees

2. Expected Sales

Per EMPOWER's VTRRC grant funding guidelines, MEC will provide FTTP services to a minimum of 1,100 customers within 36 months. Additionally, EMPOWER will construct services passing the 840 homes in southern Brunswick County as part of a 2018 FCC Connect America Grant. Assuming an average take rate of 45.3% for EMPOWER's deployment, 1,200 FTTP customers are projected after only 24 months.

EMPOWER's market research indicates the average take rate of 45.3% for these initial installations along the backbone route, as well as additional routes outlined in these proposed VATI grant areas are both obtainable and reasonable .

3. Monitoring/Measurement Activities

EMPOWER Broadband will monitor early customer sign-ups per phase of fiber cable installed. If forecasts are not met with above marketing material, EMPOWER will take more aggressive measures to reach potential customers, i.e. Door-to-door visits, phone calls, etc.

HOW FAST WILL THE INTERNET SERVICE OFFERED BY EMPOWER BROADBAND REALLY BE?



- The basic package will offer 50 Mbps download / 50 Mbps upload.
- Speeds will provide simultaneous video to at least five separate devices with no buffering.
- A four-minute song can be downloaded in 6/10's of a second.
- A 45-minute TV show can be downloaded in 30 seconds.
- For the most demanding user, EMPOWER Broadband's fiber will be capable of delivering speeds up to 1 Gig.

Fiber will provide the absolute fastest and most reliable communication medium for the next generation. In other communities, the deployment of fiber broadband has led to increased property values, fostered economic development and has had a marked impact on educational and training opportunities.

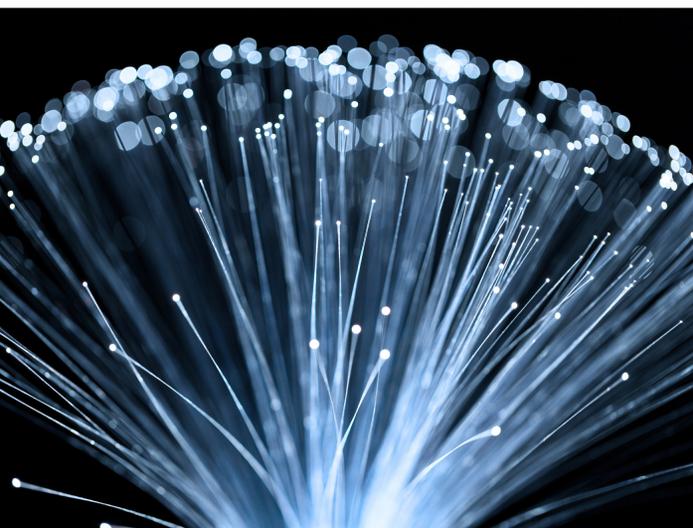


CONTACT US



+1 434-372-6244
EMPOWER@meckelec.org
www.meckelec.org

11633 Hwy 92 W
Chase City, VA 23924



Proposed Backbone Route

What is FTTP?

EMPOWER Broadband, a wholly-owned subsidiary of Mecklenburg Electric Cooperative (MEC), will deploy fiber optic cable to homes and businesses; the connection from the fiber backbone to individual buildings is referred to as “Fiber-to-the-Premises (FTTP).”

What is the EMPOWER Broadband pilot project?

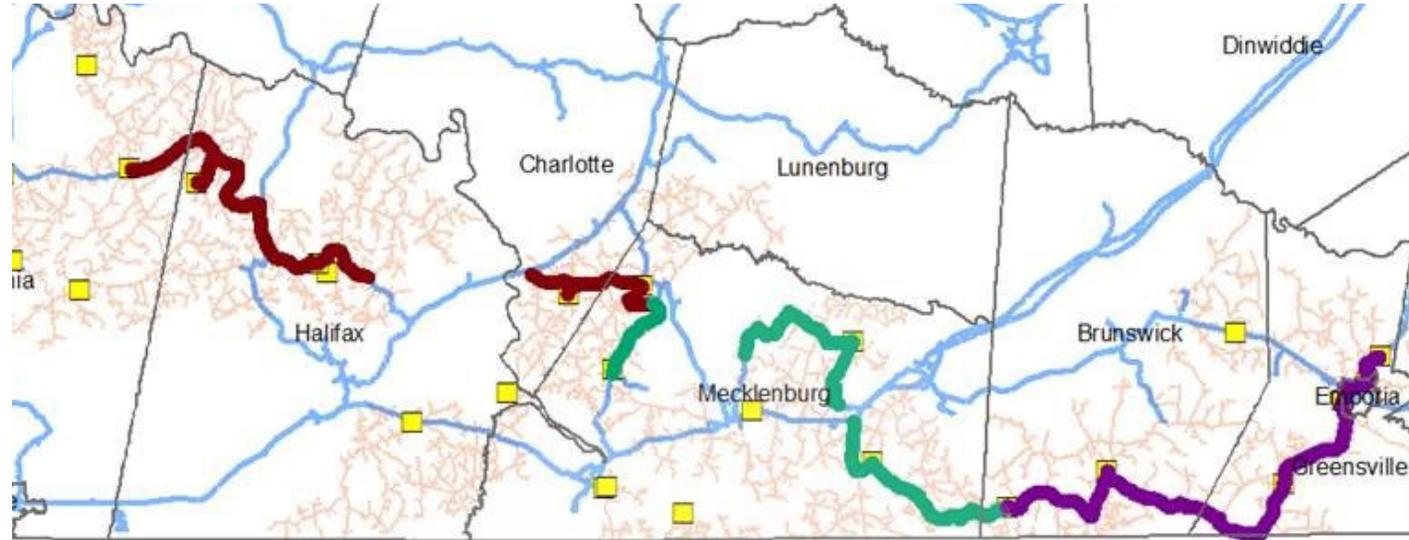
MEC’s EMPOWER Broadband pilot project will utilize \$2.6 million in Tobacco Region Revitalization Commission grant funds to deploy fiber to connect consumers within 1,000 feet of a 135-mile fiber backbone crossing portions of Brunswick, Charlotte, Greenville, Halifax, Mecklenburg, and Pittsylvania counties.

Will my home be within 1,000 feet of the backbone line?

We are currently engineering the exact route the backbone line will traverse; a map showing the most current proposed path is attached. Additional information will be forthcoming at www.meckelec.org.

When will EMPOWER Broadband be available to every MEC member?

The deployment schedule is largely dependent on the availability of funds. EMPOWER Broadband will continue to aggressively seek grant funds to extend services across the MEC system and beyond.



Mecklenburg Electric Cooperative will deploy fiber optic cable across its system to connect its substations and district offices.

Why fiber as opposed to wireless or other technologies?

- ✓ An all-fiber network provides our communities with communications capabilities, educational and training opportunities, and economic development infrastructure resources that rival the best in the world and it can be upgraded without laying new fiber.
- ✓ Wireless internet solutions offer the advantage of quick deployment and a marginally lower cost; however, wireless is challenged in scalability, reliability, and security. Trees, buildings, and weather impact wireless service. Wireless internet can be compared to the reliability of your cell phone. Wireless may be good for mobility, but it does not offer competitive speeds or the unmatched reliability of wired connections.
- ✓ A fiber network provides the foundation for all wireless solutions.

When will construction begin and who will do the work?

Fiber construction has started from our central location in the Chase City Headquarters office to Highway 360. Lines will continue to be built both east and west. The installation of fiber directly connecting to homes and businesses will begin as early as August. The retail fiber deployment will be performed by contractors under the direction of MEC personnel. This method of deployment allows MEC crews to continue critical electric system construction and maintenance while also expediting the installation of FTTP.

How much will this service cost?

The 50 Mbps package will cost between \$65 and \$75 per month for a residential consumer, which also includes a WIFI enabled router. For less than \$100 per month, EMPOWER will also offer a bundle package to include home telephone service.

MORE THAN JUST INTERNET

ACCESS A WORLD OF OPPORTUNITIES

- Telephone
- Television
- Education
- Healthcare
- Gaming
- Security

May require additional subscriptions

PACKAGES
START AT JUST
\$69.95
PER MONTH

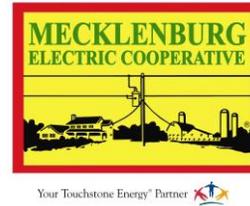
COMING SOON!

Your home is along our FIBER route and will be eligible to receive EMPOWER's *super-fast* internet service! Watch your mailbox for more exciting details.

EMPOWER Broadband, Inc.

434-372-6244 ~ empowermec.net ~ empower@meckelec.org





DATE

ADDRESS

Dear Resident,

This letter is to inform you that Mecklenburg Electric Cooperative's (MEC) fiber optic cable network has been installed within 1,000 feet of your home and you are eligible to receive high-speed internet and phone service from EMPOWER Broadband. Now you too can watch that new show on Netflix that everyone is talking about, and your kids or grandkids can do homework over the internet!

For months we've been touting MEC's fiber "backbone" as we sought approval from the Virginia State Corporation Commission (SCC) for our EMPOWER Broadband Fiber-To-The-Home subsidiary! On January 30, 2019, we cleared the final hurdle as the SCC granted the needed approvals.

GOOD NEWS!

For years, Mecklenburg Electric Cooperative has built and maintained its own complex communications network... our expertise is second to none! We'll use that expertise to build a robust fiber optic network to accommodate the growing need to transfer data between substations and offices. That need will be met through the deployment of fiber optic cable. This fiber "backbone" offers a great opportunity for those who live within 1,000 feet of the backbone to receive ultra-high-speed fiber broadband.

THE BEST NEWS!!

The days of settling for slow internet are over! You asked, and we listened. EMPOWER Broadband, a subsidiary of MEC, will bring you -- not just fast -- but THE FASTEST and most reliable internet available anywhere with the same great customer service you have come to expect from your electric cooperative!

Go Ahead...Get EXCITED!

Let's get started! Sign and return the attached 2-year Residential Service Contract for broadband internet by April 12 and we'll begin designing the fiber connection to your home. Act now and receive a limited-time offer for free installation! Bundle internet with a 2-year home telephone service contract and **we'll waive the \$100 broadband installation and the \$30 phone activation fees.**

Choose EMPOWER Broadband as your service provider today... it's backed by a team you know and trust and who has served Southside Virginia capably and responsibly since 1938. With residential speeds starting at 50 Megabits per second and **unlimited** data usage for \$69.95 a month, you don't have to settle for less anymore!

Sincerely,

David Lipscomb
VP Member & Energy Services

OPEN A WORLD OF OPPORTUNITY

with the fastest, most reliable internet available anywhere.

NO DATA CAPS

NO THROTTLING

NO LIMITS!



START AT JUST

\$69.95

PER MONTH

COMPLETE THE RESIDENTIAL SERVICE CONTRACT
FOR INTERNET SERVICE ONLY
BY APRIL 12

NEW
OFFER

SAVE \$50.00

Bundle EMPOWER BROADBAND'S
INTERNET AND HOME-TELEPHONE SERVICE
BY APRIL 12

SAVE \$100.00

EMPOWER Broadband, Inc.

434-372-6244 ~ empowermec.net ~ empower@meckelec.org

Sorry We Missed You!

EMPOWER

BROADBAND
Powered by MEC

**High-Speed Fiber
Internet is Available to You**

**LIMITED TIME FOR
SPECIAL DISCOUNTS**

COMPLETE THE
RESIDENTIAL SERVICE CONTRACT
FOR INTERNET SERVICE
BY APRIL 15

SAVE \$50
ON INSTALLATION

OR

BUNDLE
INTERNET AND
HOME-PHONE SERVICE
BY APRIL 15

SAVE \$100
ON FREE INSTALLATION

434-372-6244
www.empowermec.net

YOU ARE INVITED

Want to learn more about how **EMPOWER**
can help you **ACCESS THE WORLD?**

Come by our office on Wednesday, April 10
anytime between 3:00 p.m. – 7:00 p.m. for
refreshments and a quick demonstration
on how 50 Mbps can open up a world of
opportunity for you and your family and
SAVE YOU MONEY!

Mecklenburg Electric Cooperative
11633 Hwy 92
Chase City, VA 23924

MORE THAN JUST INTERNET

Come by and see the amazing opportunities
available to your home!

- Telephone
- Television
- Education
- Healthcare
- Gaming
- Security

May require additional subscriptions

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50

Congrats

years

TANGLEWOOD SHORES
GOLF AND COUNTRY CLUB



Empowering Southside Virginia...one fiber at time!

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BROADBAND

Powered by MEC

www.empowermec.net





Brunswick Chamber of Commerce

400 NORTH MAIN STREET
LAWRENCEVILLE, VIRGINIA 23868
PHONE (434) 848-3154



August 22, 2019

Department of Housing & Community Development
C/O VATI Grant Administrator
600 East Main St, Suite 300
Richmond, VA 23219

Dear Virginia Department of Housing and Community Development:

On behalf of Mecklenburg Electric Cooperative (MEC), as a resident of Brunswick County, Virginia and Executive Director of the Brunswick Chamber of Commerce, I would like to express my full support of the Virginia Telecommunications Initiative (VATI) grant application for Brunswick County, Mecklenburg Electric Cooperative and EMPOWER Broadband. MEC has a long and successful history of providing services in the areas they serve in Virginia for over 75 years and has a strong reputation for customer service and community commitment. I am confident in Mecklenburg Electric Cooperative's capabilities for enhancing broadband service for my neighbors in Brunswick County.

With this grant, Mecklenburg Electric Cooperative and EMPOWER Broadband will enhance our broadband connectivity with fiber network design. This fiber build will enable us to overcome some geographical distance, empower us through information, and bring the world to us through a simple stroke of a keyboard. As an unserved rural area with limited internet services, we face many challenges including limited medical resources and distance between patients, physicians, specialists and facilities. Because of the rural nature of our area, our students do not receive equitable broadband resources as other students in more urban learning centers. We are lacking the research, distance learning, video and other tools that advanced broadband can bring to our students. It is extremely important that VATI grant funding be obtained to provision for much needed broadband service to our area.

I strongly urge the Department of Housing and Community Development to fund this VATI grant application, not only will this help with sustaining the future of advanced broadband services in Mecklenburg Electric Cooperative's proposed service area, but also promoting the future economic stability of our community.

Sincerely,

Wendy F. Wright

Wendy F. Wright, Executive Director
Brunswick Chamber of Commerce

Next-Generation PON: Eliminating physical constraints from the access network

ABSTRACT

In response to the voracious consumer demand for bandwidth, two new next-generation passive optical network (PON) technologies have been standardized and are ready for deployment: XGS-PON and NG-PON2.

Like previous PON technologies, both transmit data through fiber-optic cables, offering very high-capacity connections to multiple subscribers. Intentionally designed to use different wavelengths than GPON, XGS-PON and NG-PON2 can co-exist on the same fiber, allowing for the re-use of many portions of the optical distribution network (ODN).

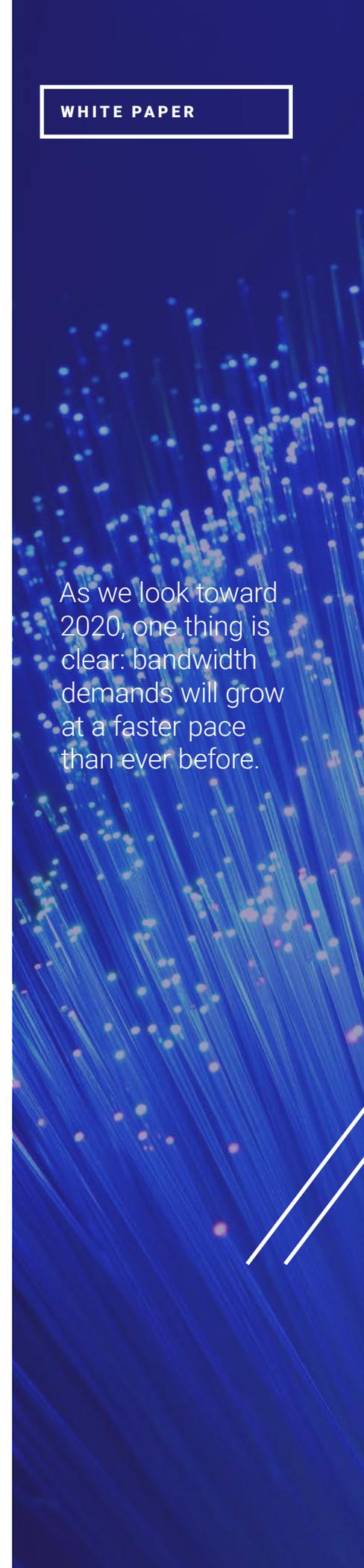
XGS-PON is the most recent standard (ITU G.9807.1) and can deliver up to 10 Gbps of symmetrical bandwidth. NG-PON2 (ITU-T G.989) utilizes multiple wavelengths and can deliver 40 Gbps — with 80 Gbps possible in the future — on a single fiber.

MEET THE NEW PONS; THEY'RE NOT THE SAME AS THE OLD PONS

As we look toward 2020, one thing is clear: bandwidth demands will grow at a faster pace than ever before. Market forecasts predict that, within three years, the number of global Internet users will surpass 4 billion. There will be more than 26 billion networked devices and connections; an average of 3.4 for each person on the planet. Further, it is projected that these devices will be used primarily for watching video content, which will account for 82 percent of all Internet Protocol (IP) traffic by 2020, generating nearly three times the volume of traffic transported in 2015.¹

In response, much progress has been made in the standardization of next-generation passive optical network (PON) standards as communications service providers (CSPs) look to move from Gigabit to 10G services. Developed as successors to Gigabit PON (GPON) — which has been lighting up the world's optical access networks with 2.5 Gbps downstream and 1.25 Gbps upstream for the past decade — the two most recent 10G PON standards are XGS-PON (ITU G.9807.1) and NG-PON2 (ITU-T G.989).

Like previous PON technologies, both transmit data through fiber-optic cables, offering very high-capacity connections to multiple subscribers. Intentionally designed to use different wavelengths than GPON, XGS-PON and NG-PON2 can co-exist on the same fiber, allowing for the re-use of many portions of the optical distribution network (ODN).



As we look toward 2020, one thing is clear: bandwidth demands will grow at a faster pace than ever before.

¹Cisco Visual Networking Index (VNI) Forecast and Methodology, 2015-2020; June 2016; <http://www.cisco.com/c/en/us/solutions/collateral/service-provider/visual-networking-index-vni/complete-white-paper-c11-481360.html>

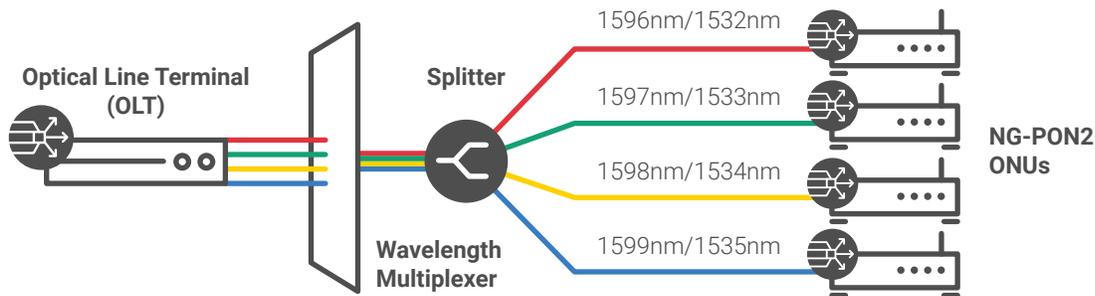


Figure 1: Multi-wavelength NG-PON2 OLT, connected to ONUs with tunable lasers and receivers.

As the voracious consumer appetite for bandwidth continues to grow, the ability to deliver 10 Gbps to individual businesses and households will be paramount for CSPs to deliver the subscriber experience and services required to compete – and win.

FOREVER CHANGING THE ACCESS NETWORK

With either XGS-PON and NG-PON2, CSPs now have technology options that provide more than just significantly enhanced speed. Both technologies offer extensive improvements over previous generations of PON that make them ideal for delivering new advanced services to multi-dwelling units (MDUs), delivering mission-critical business applications, and readying the network for 5G mobile technologies. Their most valuable application, however, may be as a catalyst to access network transformation.

Both XGS-PON and NG-PON2 are being deployed in 2017.

The key difference between the two technologies is the multiple wavelengths supported on NG-PON2 – which can provide some very exciting benefits to CSPs, including the elimination of all remaining physical constraints within the access network.

NG-PON2: USING FOUR WAVELENGTHS TO STAY AHEAD OF THE CURVE

The first of the two next-generation PON standards, NG-PON2 allows for the convergence of multiple services networks onto a single ODN, resulting in significant total cost of ownership (TCO) reduction, while enabling the introduction of new, efficient architectures that are highly tuned to meet emerging subscriber demands.

GPON transmits data using a single wavelength on each fiber. NG-PON2 utilizes time and wavelength division multiplexing (TWDM) and supports a minimum of four wavelengths on each fiber, making it the industry's first multi-wavelength access standard. Each wavelength within a single fiber can deliver 10 Gbps symmetrical speed (upstream and downstream). When four wavelengths are combined, throughput can reach 40 Gbps and, in the future, it will be possible to combine eight wavelengths to deliver 80 Gbps. For this reason, NG-PON2 is often referred to 40G (or 80G) PON.

With the ability to deliver 10 Gbps (and beyond) to an individual subscriber, new business opportunities are possible, including:

- **MDUs and mission-critical business services:** Many existing structures lack in-building fiber optic cabling. When it is not possible to run fiber to each individual unit, existing 'last mile' technology – like G.fast over copper – is used to deliver connectivity. With the continued growth in MDU populations, and as the capacity of copper continues to increase, it becomes increasingly important to have a technology like NG-PON2 to deliver 10 Gbps to the building demarcation point. With the use of channel bonding, throughput can be increased to 40 Gbps and 80 Gbps in the future.
- **G mobile backhaul:** As the industry continues its rapid movement toward 5G cellular technology, wireless data rates may reach as high as 10 Gbps. To backhaul traffic from the mobile base station, connections exceeding 10 Gbps will be required. With NG-PON2, as the demand for bandwidth to a mobile base station increases, adding capacity is simply a matter of utilizing another wavelength over the existing fiber to the tower.

In addition to increased capacity, NG-PON2 has three advantages over other PON technologies.

- On-demand capacity management enables new service delivery opportunities and load balancing improvements.
- Multiple wavelengths can be used to manage PON capacity. As utilization grows, PON capacity can be easily redistributed, with new channels turned on and optical network units (ONUs) switched over to different wavelengths, without impacting the delivery of existing services.
- Support of 8 point-to-point overlay wavelengths that can be used for dedicated services such as enterprise businesses, fronthaul, etc.

These changes can be done instantly, shifting and allocating capacity on demand, enabling new time-of-day services and maintaining load balancing. Physical resources within the access network will be able to meet the dynamic needs of subscribers, without human intervention.

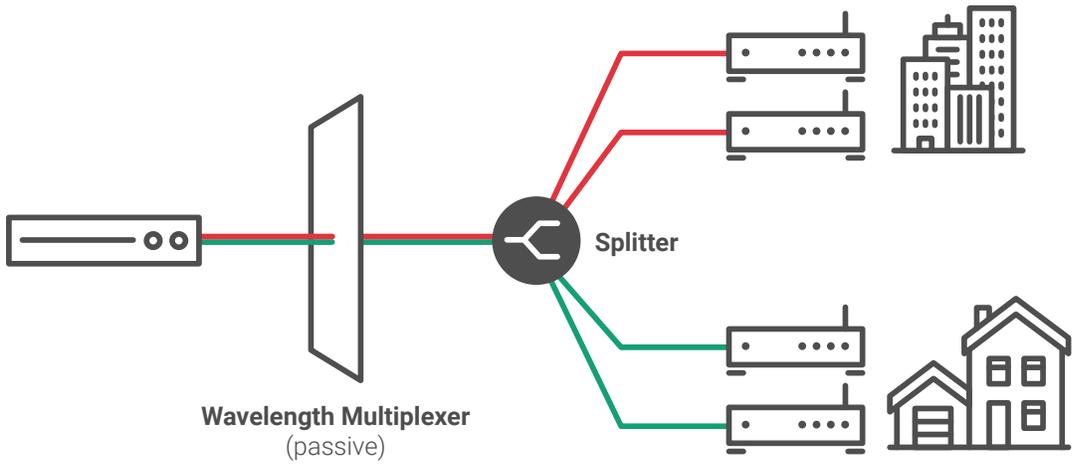


Figure 2: On-demand capacity management allows wavelengths to be redistributed, without impacting existing services.

When migrating from GPON to NG-PON2, there are two primary investments that need to be made:

1. New ONUs with tunable lasers (that can be programmed to different channels, or wavelengths), filters and receivers are required to support compliant wavelength plans. Some existing ONUs are already equipped with tunable lasers, as well as filters that allow for the co-existence of GPON and NG-PON2.
2. New OLT line cards are required to support compliant wavelength plans (as with the ONUs). In some cases, new OLTs are also required to ensure non-blocking support of NG-PON2 and to enable the desired density in the central office (CO).

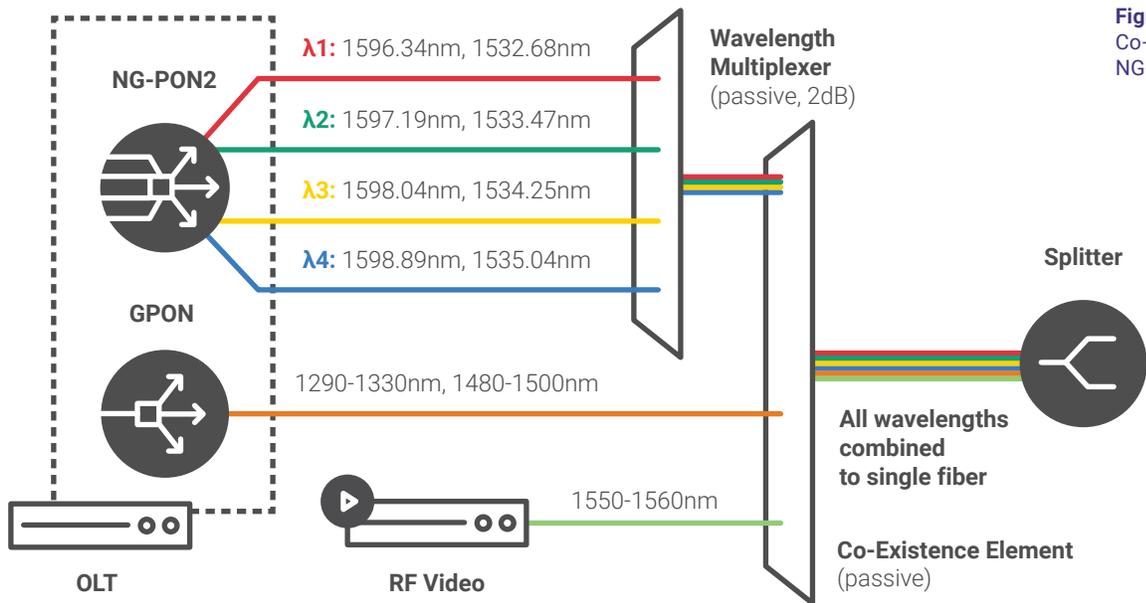


Figure 3: GPON Co-existence with NG-PON2

With the use of NG-PON2 technology, and the ability to converge the services networks onto a single ODN, there is a significant TCO reduction.

XGS-PON: BRIDGING THE GAP BETWEEN GPON AND NG-PON2

XGS-PON (X=10, G=Gigabit, S=symmetrical) is the most recent standard and is very similar to existing GPON technology, except that it can deliver up to 10 Gbps of symmetrical bandwidth. It is considered to be a simplified version of NG-PON2, because the technology uses a fixed wavelength, meaning that it cannot harness multiple wavelengths in a single fiber to deliver more than 10 Gbps.

For some CSPs, XGS-PON will bridge the gap from GPON, providing a temporary solution, with NG-PON2 being the ultimate goal of virtually every global CSP. Because XGS-PON uses wavelengths outside of the spectrum allocated to NG-PON2 or GPON, the three technologies can co-exist on the same fiber. This allows CSPs to deploy XGS-PON to offer 10 Gbps services quickly, immediately capturing 10 Gbps service opportunities. NG-PON2 can be introduced later, without a forklift upgrade to the network and without disrupting existing XGS-PON or GPON services. Alternatively, NG-PON2 can be introduced wavelength by wavelength, allowing for a gradual investment strategy that is linked to customer demand. The Calix AXOS E7-2 Modular Access System supports the deployment of both XGS-PON and NG-PON2 in a single line card.

An overview of the two standards is shown in Table 1.

STANDARD	NG-PON2	XGS-PON
Standard Approved	June 2015	February 2016
PON Wavelengths	Up to 8 down, 8 up	1 down, 1 up
P2P Wavelengths	Up to 8 down, 8 up	None
Bandwidths	10G/10G 10G/2.5G	10G/10G 10G/2.5G (XG-PON1)

Table 1: Next-generation ITU PON standards, comparing NG-PON2 with XGS-PON

TRANSFORMING ACCESS NETWORKS FOR THE NEXT GENERATION

NG-PON2 is gaining momentum around the world. To date, NG-PON2 has been deployed in a live network by Northpower Fibre (New Zealand) and Pilot in Manhattan using the Calix AXOS E7-2 Intelligent Modular System and in advanced testing with Verizon who has indicated intent to deploy NG-PON2 in 2017. All Calix solutions support both XGS-PON and NG-PON2 with the simple change of the optical transceiver, therefore service providers have the opportunity to choose the technology that is right for them at the time they are ready to deploy.

While there are varying rates of adoption between XGS-PON and NG-PON2, NG-PON2 technology is key to the transformation of the access network. With the use of NG-PON2 technology, and the ability to converge the services networks onto a single ODN, there is a significant TCO reduction. Add to NG-PON2 new access network architectures like Central Office Re-defined as the Datacenter (CORD), Software Defined Networking (SDN) and, more specifically for the access network, Software Defined Access (SDA) with Network Functions Virtualization (NFV) and CSPs will have transformed their access network to not only reduce their TCO but also meet the needs of the ever more demanding subscriber.