

Application to DHCD Submitted through CAMS

Southside Planning District Commission

Southside Regional Fiber Broadband Phase 3

Application ID: 107411012023110544

Application Status: Pending

Program Name: Virginia Telecommunication Initiative 2024

Organization Name: Southside Planning District Commission

Organization Address: 200 South Mecklenburg Avenue
South Hill, VA 23970

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Project Name: Southside Regional Fiber Broadband Phase 3

Project Contact Name: Deborah Gosney

Project Contact Phone: (434) 447-7101

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Project Location: 200 S MECKLENBURG AVE
SOUTH HILL, VA 23970-2620

Project Service Area: Brunswick County, Charlotte County, Greensville County, Halifax County,
Mecklenburg County

Total Requested Amount: \$28,752,302.16

Required Annual Audit Status: Accepted

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Budget Information:

Cost/Activity Category	DHCD Request	Other Funding	Total
Telecommunications	\$28,752,302.16	\$28,777,798.07	\$57,530,100.23
Administration	\$200,000.00	\$0.00	\$200,000.00
Construction	\$28,552,302.16	\$28,777,798.07	\$57,330,100.23
Total:	\$28,752,302.16	\$28,777,798.07	\$57,530,100.23

Budget Narrative:

Questions and Responses:

1. Project Description and Need

Describe 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:

This is the third such regional initiative being pursued jointly by the Southside Planning District Commission (SPDC), Mecklenburg Electric Cooperative (MEC)/EMPOWER Broadband (EMPOWER), the Counties of Brunswick, Halifax, Mecklenburg, Charlotte, and Greenville in partnership with Dominion Energy and Mid-Atlantic Broadband. This project will attempt to achieve universal coverage throughout Halifax, Mecklenburg, and Brunswick Counties. It will also provide blanket coverage south of Kings Hwy (360) in Charlotte County, where EMPOWER has already constructed mainline fiber and is already serving customers, as well as fill remaining gaps in Greenville County as it supplements the County's universal plan to serve remaining unserved or underserved locations.

EMPOWER Broadband is the wholly owned subsidiary of MEC, a member-owned utility that has proudly and successfully served its members in Southside Virginia for over 85 years. In August 2021, the SPDC, MEC/EMPOWER, the Participating Counties, and Dominion Energy entered into agreements to develop a comprehensive regional strategy to achieve universal fiber to the premise coverage. Collectively, we submit this application to support a project that was developed as part of a regional planning process and will further expand coverage from the 2021 - 2023 VATI awards received.

The proposal would accomplish universal broadband coverage as defined by the DHCD grant criteria (any area that cannot receive internet speeds greater than 100/20 Mbps) for those in Halifax, Mecklenburg, and Brunswick Counties and further expand both Charlotte and Greenville Counties attempt towards universal coverage for those who are currently unserved or underserved. This fiber expansion project will utilize the foundational fiber backbone deployed on MEC's electric infrastructure and, where needed, utilize the facilities of Dominion Energy and Mid-Atlantic Broadband to expand broadband coverage outside of MEC's territory. VATI funds will be utilized to further expand the backbone's reach and increase service availability to those that currently have no access, or limited access, to true broadband internet.

The project areas will maximize the advantage of being adjacent to MEC's Substation Fiber Backbone that has been constructed with matching funds through a 2018 Virginia Tobacco Region Revitalization Commission (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, businesses, and community anchor institutions and will provide broadband opportunities to 13,091 locations passed throughout the five defined counties.

All unserved and underserved locations within these areas were mapped, and MEC/EMPOWER, with the assistance of

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engineering consultants, has undertaken the design process to develop a last-mile, fiber-to-the-premises network that will extend service to all unserved and underserved locations. The principal engineering and design process for the entire project is complete, and the components of that work are included with this application.

These areas have also been selected because current internet services across the region are far too typical of those found in rural areas. They are, at best, insufficient and, at worst, non-existent. These inadequate options include wireless, cellular, and wired access via major commercial carriers, satellite, or DSL. Additionally, this project would include CAF II regions in which providers have yet to begin efforts of providing fixed broadband options to the residents in four of the five Counties in this project. These remaining unbuilt and defaulted CAFII areas remain the region's single largest barrier in its efforts to realize universal coverage. Hence, this rural region increasingly faces significant communication challenges due to slow, sporadic, or non-existent broadband services.

This critical infrastructure is a high priority of each locality, the SPDC, and MEC/EMPOWER for the betterment of residents and businesses, affording the much-needed opportunities regarding education, the receipt of reasonable and necessary services, and the ability to work in a healthy and safe environment. This expansion, or completion in some counties, of the Southside Regional Fiber Broadband Phase 3 Project will disintegrate the digital divide in the project area by providing world-class fiber infrastructure that allows residents to work from home, participate in virtual classrooms, access remote healthcare, and provide economic development opportunities for the region. This Project will also improve the region's infrastructure and sustain communities, enhance local opportunities, and support local business and industry growth.

The Southside Planning District Region is rural and sparsely populated, with just over 81,000 total residents. It has suffered a 6.07% decline in population since 2010 as society gravitates towards areas with modern amenities, such as the internet. Three-quarters of District residents live outside of incorporated town limits, which offer some internet services, making expanding broadband infrastructure into the rural communities imperative to its lifeline. The District has a 45% minority population and reported a five-year average median household income of \$43,228 from 2015 through 2019. During this time, the Virginia median household income was \$74,222 while the national average was \$62,843. The per capita income average for the Region was \$23,900, with an 18.4% poverty rate, which is nearly double Virginia's average poverty rate of 9.9%.

Ten small localities in southern Virginia, which includes Greensville County, comprise the Crater Economic Development District, home to 186,938 people according to the 2020 US Census. Population growth is stagnant, with an increase shy of 7,000 since 2010. A lack of investment in modernization of infrastructure and services like broadband internet accompanies this lack of growth. Unemployment rates in these ten localities range from 4.1% - also the rate for the Commonwealth as a whole - to 10.3%. Per capita income in the Crater Economic Development District was \$39,684, nearly \$20,000 less than Virginia's per capita income in 2019 according to the US Bureau of Economic Analysis. See Attachment 1 – Project Area Map

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2. List existing providers in the proposed project area and the speeds offered. Describe your outreach efforts to identify existing providers and how this information was compiled with source(s).

Answer:

The Counties and their residents are substantially represented in the Commonwealth's broadband surveys; the results are documented in the Commonwealth Connection Virginia Broadband Availability Map. This map provides the existing providers for each census block in the proposed project areas. 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.

County officials have also discussed this expansion project with existing providers, including those who have received CAF II funding and requested updates on previous and potential upgrade areas; to date this information has not been provided, which has been the case since VATI 2022 filings. As is widely known, most of these providers are not forthcoming with regards to their service areas, services offered or potential timelines for providing services to residents.

For the proposed projects included in this application, below is a breakdown of availability for each county, according to the Virginia DHCD and the Commonwealth Connection website:

Brunswick: There are nine internet service providers within the county, including EMPOWER Broadband. When looking at each census block for the proposed project areas, and by speaking directly to MEC members and county officials, we determined that the current providers listed for those areas either did not provide any services, or the service that is currently provided is less than the 100/20 Mbps range and defined by the DCHD to be unserved areas. The included coverage map documents the need in this area and reinforces the statements from members.

Halifax: There are 12 internet service providers throughout portions of Halifax County, including EMPOWER Broadband. When reviewing the census blocks in the proposed project areas, and by speaking directly to MEC members and county officials, we determined that the current providers listed for those areas either did not provide any services, or the service that is currently provided is less than the 100/20 Mbps range and defined by the DCHD to be unserved areas. The included coverage map documents the need in this area and reinforces the statements from members.

Mecklenburg: There are nine internet service providers throughout Mecklenburg County, including EMPOWER Broadband. When looking at each census block for the proposed project areas, and by speaking directly to MEC members and county officials, we determined that the current providers listed for those areas either did not provide any services, or the service that is currently provided is less than the 100/20 Mbps range and defined by the DCHD to be unserved areas. The included coverage map documents the need in this area and reinforces the statements from members.

Charlotte (south of Highway 360): There are five listed internet providers throughout portions of Charlotte County, including EMPOWER Broadband. When looking at each census block for the proposed project areas, and by speaking directly to MEC members and county officials, we determined that the current providers listed for those areas either did not provide any services, or the service that is currently provided is less than the 100/20 Mbps range and defined by the DCHD to be unserved areas. The included coverage map documents the need in this area and reinforces the statements from members.

Greenville: There are only five internet service providers in Greenville County, including EMPOWER Broadband, none of which offer 100/20 Mbps in the rural areas defined in this proposed project area. When reviewing the census blocks in the proposed project areas, and by speaking directly to MEC members and county officials, we determined that the current providers listed for those areas either did not provide any services, or the service that is currently provided is less than the 100/20 Mbps range and defined by the DCHD to be unserved areas. The included coverage map documents the need in this area and reinforces the statements from members.

Source: <https://commonwealth-connection.com/>
<https://broadbandmap.fcc.gov/#/>

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3. Describe if any areas near the project have received funding from federal grant programs, including but not limited to Connect America Funds II (CAF II), ACAM, ReConnect, Community Connect, and Rural Digital Opportunity Funds (RDOF). If there have been federal funds awarded near the project area(s), provide a map showing these areas, verifying the proposed project area does not conflict with these areas. Label Map: Attachment 2 – Documentation on Federal Funding Area.

Answer:

Federal funding has not been provided to any of the proposed project areas under any of the following programs: ACAM and Community Connect. According to the Universal Service Administration's Connect America Fund Broadband Map, CenturyLink (Brightspeed), RiverStreet, and MEC/EMPOWER were awarded CAF-II funding for sections of the proposed project area. CenturyLink accepted funding through CAF-II, Phase II, in August of 2015, and the subsequent six-year deployment period has concluded. Additionally, they informed the FCC on January 15, 2020, that they did not anticipate meeting required support milestones in every area... including parts of Virginia. Further, the requirements of this FCC program required broadband service at a lower tiered 10Mbps/1Mbps. In 2018, MEC/EMPOWER and RiverStreet received auction awards with similar speed requirements; VATI regulations have now allowed all CAF-II areas within the five-county application to be included.

Source: <https://data.usac.org/publicreports/caf-map/>

RDOF blocks are not included in the project area that were awarded to RiverStreet or CenturyLink (Brightspeed). Since the map below dated December 2020, RiverStreet Networks has forfeited all RDOF blocks in Halifax, Mecklenburg, and southern Charlotte Counties.

Source: <https://www.fcc.gov/reports-research/maps/r dof-phase-i-dec-2020/>

Federal funding in the form of a ReConnect grant was awarded to MEC/EMPOWER for Brunswick and Halifax Counties for areas that are excluded from this application.

Source: <https://ruraldevelopment.maps.arcgis.com/apps/webappviewer/index.html>

Note: This map shows both Reconnect grants and loans and the only grant award for all three counties belongs to MEC.

This project also includes passings that are adjacent and partially or wholly located within Connect America Fund (CAFII) blocks won by an inactive provider. Although several years into the CAFII project, no construction efforts have been initiated to bring broadband service to residents in these impacted areas. After conversations with SPDC, the County Administrators and leaders for these impacted counties, it was discovered that numerous attempts to converse and create strategic plans for these areas have been met with little to no response. This lack of communication demonstrates to county leadership and citizens within these areas a genuine disinterest and unwillingness to provide these services.

See Attachment 2-Documentation on Federal Funding Area

4. Overlap: 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 below 100/20 Mbps and with less than 25% service overlap within the project area for wireless projects and 20% for wireline projects. Describe any anticipated service overlap with current providers within the project area. Provide a detailed explanation as to how you determined the percentage overlap. Label Attachment: Attachment 3 – Documentation Unserved Area VATI Criteria.

Answer:

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Data was gathered by MEC/EMPOWER's engineering firm utilizing the Commonwealth Connection Broadband Availability Map and Integrated Broadband Planning and Analysis Toolbox, the most recent FCC 477 data, and the FCC Broadband Map, to determine unserved and underserved coverage areas, and any possible overlap. As of the time of this application submittal, there are only three providers, other than satellite, that have reported coverage within the proposed project areas, Brightspeed, Verizon, and MEC/EMPOWER. According to the research carried out, service was either not available or did not meet the 100/20 Mbps requirement.

Maps documenting only unserved and underserved areas are included in the application as all measures to avoid overlap were undertaken. By utilizing these maps, only areas with service less than 100/20 Mbps were included in the proposed design for each County.

Southern Brunswick County's unserved and underserved areas encompass 2458 total passings with all addresses lacking access to broadband of 100/20 Mbps or greater. According to the Virginia Commonwealth Connection map, all 2458 locations lack access to speeds of 100/20 Mbps. Current MEC/EMPOWER fiber-to-the-premise service areas and ongoing projects were excluded from the locations passed; including a CARES project passing 127 locations, ILEC areas covered by E-ACAM passing 1,014 locations, VATI projects (2022 and 2023) that will serve over 1,400 locations passed, and an estimated 164 locations removed from the 1,000-foot buffer along the Fiber Backbone. Also excluded are MEC/EMPOWER's ReConnect grant passing 308 locations.

Halifax County's unserved and underserved areas include 5,397 total passings with all addresses lacking access to broadband of 100/20 Mbps or greater. According to the Virginia Commonwealth Connection map, all 5,397 locations lack access to speeds of 100/20 Mbps. Current MEC/EMPOWER fiber-to-the-premise service areas and ongoing projects were excluded from the locations passed; including a CARES project passing 475 locations, VATI projects (2020, 2021, 2022, and 2023) that will serve almost 6,000 locations passed, and an estimated 32 route miles were removed from the 1,000-foot buffer along the Fiber Backbone.

Mecklenburg County's unserved and underserved areas encompass 4,192 total passings with all addresses lacking access to broadband of 100/20 Mbps or greater. According to the Virginia Commonwealth Connection map, all 4,192 locations lack access to speeds of 100/20 Mbps. Current MEC/EMPOWER fiber-to-the-premise service areas and ongoing projects were excluded from the locations passed; including areas already deployed or designated within the ILEC passing 4,939 locations, CARES projects that will serve 255 locations passed, VATI projects (2021, 2022, and 2023) passing over 10,500 locations, and related route miles were removed per the 1,000-foot buffer along the Fiber Backbone.

Southern Charlotte County's unserved and underserved areas, south of Highway 360, encompass 693 total passings with all addresses lacking access to broadband of 100/20 Mbps or greater. According to the Virginia Commonwealth Connection map, all 693 locations lack access to speeds of 100/20 Mbps. Current MEC/EMPOWER fiber-to-the-premise service areas and ongoing projects were excluded from the locations passed; including VATI projects (2022 and 2023) that will serve over 500 locations passed.

Greensville County's unserved and underserved encompass 351 total passings with all addresses lacking access to broadband of 100/20 Mbps or greater. According to the Virginia Commonwealth Connection map, all 351 locations lack access to speeds of 100/20 Mbps. The current MEC/EMPOWER fiber-to-the-premise project underway was excluded from the locations passed; including the CARES project which serves 124 locations passed and the 2023 VATI project that will serve over 2000 locations passed.

Recognizing the primary objective of the VATI program is to provide broadband services to all residents of the Commonwealth; there are providers who have previously claimed to serve portions of this proposed project area. However, in contrast and by their own admission, through company website and customer service sources, indicate they are unable to provide service along this proposed route when residents inquire. Subsequently, these areas must be regarded as unserved.

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Total Passings: Provide the number of total serviceable units in the project area. Applicants are encouraged to prioritize areas lacking 25 Megabits per second download and 3 Megabits per second upload speeds, as they will receive priority in application scoring. For projects with more than one service area, each service area must have delineated passing information. Label Attachment: Attachment 4 – Passings Form.

- a. Of the total number of VATI passings, provide the number of residential, business, non-residential, and community anchors in the proposed project area.
- b. If applicable, of the total number of RDOF passings, provide the number of residential, business, non-residential, and community anchors in the proposed project area.
- c. If applicable, provide the number of passings that will require special construction costs, defined as a one-time fee above normal service connection fees required to provide broadband access to a premise . Describe the methodology used for these projections.
- d. If applicable, provide the number of passings included in the application that will receive broadband access because special construction costs have been budgeted in the VATI application. Describe the methodology used for determining which passings with special construction costs were budgeted in the application.
- e. Provide the number of passings in the project area that have 25/3 Mbps or less. Describe the methodology used for these projections. (up to 15 points)

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Passings for all five Counties total 13,091. Following is a breakdown per County:

The total unserved and underserved locations within Brunswick County are numbered at 2,458. Of these, 1,943 are formerly awarded but unbuilt CAF-II locations. All are eligible under VATI's 100/20 Mbps minimum threshold; 2,362 are deemed unserved or less than 25/3.

The total unserved and underserved locations within southern Charlotte County are numbered at 693. Of these, 661 are formerly awarded but unbuilt CAF-II locations. All are eligible under VATI's 100/20 Mbps minimum threshold; 689 are deemed unserved or less than 25/3.

The total unserved and underserved locations within Greensville County are numbered at 351. Of these, 0 are formerly awarded but unbuilt CAF-II locations. All are eligible under VATI's 100/20 Mbps minimum threshold. 264 are deemed unserved or less than 25/3.

The total unserved and underserved locations within Halifax County are numbered at 5,397. Of these, 1,304 are formerly awarded but unbuilt CAF-II locations. All are eligible under VATI's 100/20 Mbps minimum threshold; 4,812 are deemed unserved or less than 25/3.

The total unserved and underserved locations within Mecklenburg County are numbered at 4,192. Of these, 2,640 are formerly awarded but unbuilt CAF-II locations. All are eligible under VATI's 100/20 Mbps minimum threshold; 4,129 are deemed unserved or less than 25/3.

- a. To determine the number of residential, business, non-residential, and community anchors in the project area, county GIS data was cross-referenced with the serviceable locations in the project area. This analysis indicated that the project area contains 12,296 residences, 419 non-home-based businesses, 60 businesses believed to be home-based, 60 community anchors, and 209 other non-residential passings (mainly churches).
 - b. Our analysis indicates that of the total number of 1,221 RDOF passings, 1,160 are residential, 42 are home-based businesses, 1 non-home-based business, and 18 community anchors.
 - c. Not applicable.
 - d. Not applicable.
 - e. Based on a detailed comparison of field verification data, the Virginia Commonwealth Connection map, information collected by the county from impacted residents, and other public data, we estimate that 12,256 locations in the project area lack access to 25/3 Mbps service. See Reference Attachment 3 – Documentation Unserved Area VATI Criteria
6. Describe if any blocks awarded in Rural Digital Opportunity Fund (RDOF) are included in the VATI application area. If RDOF areas are included in the VATI application, provide a map of these areas and include information on number of passings in RDOF awarded areas within the VATI application area, and Census Block Group ID number for each block group in the project area. Label Attachment: Attachment 5 – RDOF Awarded Areas Form in VATI Area

Answer:

RDOF auction blocks won by MEC/EMPOWER include 1,221 locations passed. Note: RiverStreet Networks forfeited all RDOF blocks in Halifax and Mecklenburg Counties, and those in southern Charlotte County.

RDOF blocks as follows:

510259303001, 510259303002, 510259303003, 510259303004, 510259303005, 510818801011, 510818801012, 510818801013, 510818802001, 510839302023, 510839304002, 511179301011, 511179302001, 511179303001, 511179303002, 511179308001, 515958901001, 515958901002, 515958902004

Source: <https://www.fcc.gov/reports-research/maps/rdof-phase-i-dec-2020/>

Please reference the attachments below:

Attachment 5 – RDOF Awarded Areas Form in VATI Area

Attachment 18 - Stage II Detailed Technical Submission

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7. **For wireless projects only:** Please explain the ownership of the proposed wireless infrastructure. Please describe if the private co-applicant will own or lease the radio mast, tower, or other vertical structure onto which the wireless infrastructure will be installed.

Answer:

Not applicable.

8. **Network Design:** 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. Provide a detailed explanation of how this information was determined with sources. Provide information on how capacity for scalability, or expansion, of how the network can adapt to future needs. If using a technology with shared bandwidth, describe how the equipment will handle capacity during peak intervals. For wireless projects, provide a propagation map for the proposed project area with a clearly defined legend for scale of map. Label Map: Attachment 6 – Propagation Map Wireless Project.

Answer:

The project is "shovel ready" as planning and preliminary engineering are complete. Each segment of this project is designed to utilize MEC/EMPOWER's overall fiber network. This project leverages existing main-line pole infrastructure to minimize make-ready work. Fiber deployed will follow the MEC electric distribution system, where applicable, and will be installed on, or near, existing facilities within the right-of-way; both overhead and underground deployment will be utilized to gain the most cost-effective resolution. This allows the use of MEC's GIS to determine of required fiber length along with classification as Distribution, Access, or Drops, to determine the fiber count utilized for each route. 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. Similar opportunities will be exercised utilizing Dominion's middle-mile fiber within its service area, and through the executed MOU.

Virginia Code § 56-585.1 :9 permits electric utilities to pursue programs with broadband providers and local counties and municipalities to facilitate such expansion. For this application, Dominion Energy and MEC/EMPOWER have executed an agreement for Dominion to deploy middle-mile service to facilitate MEC/EMPOWER extending last-mile service to previously unserved and underserved populations. Both Parties believe their partnership can dramatically expand broadband access to presently unserved areas throughout Brunswick, Halifax, Mecklenburg, Greenville and southern Charlotte Counties.

Dominion will locate its backbone and middle-mile fiber in a manner that enables MEC/EMPOWER to build last-mile fiber to serve unserved and underserved locations, while also supporting Dominion's grid-management objectives. MEC/EMPOWER will lease strands from Dominion's backbone and middle-mile fibers in the five participating Counties to provide a continuous fiber-optic connection between end users and an upstream demarcation point in each respective area. At this demarcation point, traffic will connect to third party middle-mile fiber, connecting the network to MEC/EMPOWER's network core, where MEC/EMPOWER traffic is routed to key internet peering points and upstream transit providers. Dominion's mainline fiber will be 144-count ADSS engineered to adequately manage its electrical grid and to support its current and future needs. Dominion's middle-mile laterals will be 72-count ADSS fiber. Dominion will provide MEC/EMPOWER access to the Dominion fiber at strategically located splice points throughout the network, which will enable MEC/EMPOWER to connect its last-mile infrastructure in the project area to its network core. Pursuant to the requirements of the Middle Mile Statute, Dominion's infrastructure will not be used to provide service to presently served locations outside of the project area.

Additionally, MEC/EMPOWER has executed and maintains agreements with MBC to utilize their middle mile network to enable MEC/EMPOWER to expand last mile network plans, saving time and money. Both relationships will assist with the construction of middle-mile fiber in areas outside MEC's service territory.

Upon notice of grant award, engineers will begin executing the tasks outlined within the project timeline. This includes confirming the final design layout, and field technicians will commence field design and the collection of related field data.

While construction crews install fiber, field technicians will visit each scheduled subscriber's location to plan for and stake the drop installation. Crews will then perform the drop installation to the premises and inside contractors will install and test the NID (Network Interface Device), and the Router/ONT for each subscriber.

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Last Mile service delivery will use Calix Customer Premise Equipment (CPE). The fiber drop will terminate at the Network Interface Device (NID) outside the premises. A single-mode fiber with Angled Physical Connectors (APC) will be used to connect to a Calix U6 Optical Network Terminal (ONT) device inside the premise. MEC also has older devices including the Calix 844G and Calix U4 ONT devices currently in use as well. The 844G, U4, and U6 provide wired and Wi-Fi connections inside the location for internet service. These units provide Wi-Fi service using both 2.4 Ghz and 5.0 Ghz bands. The U4 and U6 devices provide WIFI 6 capabilities. Optional wireless mesh devices, the 804 or GigaSpire Mesh Extender, can be used in large homes or businesses to extend the range of the wireless service. Each ONT/Router also contains a voice port, which provides digital telephone services through the optional Voice over IP (VoIP) service.

Aggregation routers are connected to a redundant Internet Data Provider using four 10Gb connections across an MBC open-access network. Each of the nine larger substations contain a major network node with a Layer 3 router that is locally ringed together with 10Gb fiber uplinks. In preparation for anticipated growth, MEC/EMPOWER's local network has been upgraded to provide 100, 200, and 400G capacity. A 100G conversion with upgraded capacity is scheduled at the end of 2024 and the first quarter of 2025.

EMPOWER Broadband's network design makes 1Gbps down/1Gbps up speed available to each home or business. Sizeable gains in speed are obtainable for an incremental investment to accommodate the need of future families and businesses with simple electronic changes. This grant will serve as a continued investment for current and future internet needs. To further ensure future scalability, 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.

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9. Speeds: Describe the internet service offerings, including download and upload speeds, to be provided after completion of the proposed project. 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. List the private co-applicant's tiered price structure for all speed offerings in the proposed project area, including the lowest tiered speed offering at or above 100/20 Mbps. (up to 10 points)

Answer:

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

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

MEC/EMPOWER Broadband, Inc. is using the Calix implementation of Gigabit Passive Optical Network (GPON). GPON is a 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. However, MEC/EMPOWER has opted to limit splitter assignment to 32.

See Attachment 18 for an example of how the bandwidth is shared utilizing the preferred 1:32 fiber split.

Residential packages offered to subscribers within the proposed area are as follows:

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

100 Mbps/100 Mbps - \$89.95/month (optional VOIP telephone service at \$30/month)

500 Mbps/500 Mbps - \$109.95/month (optional VOIP telephone service at \$30/month)

1 GB - \$129.95/month (optional VOIP telephone service at \$30/month)

In August of 2023, all pricing packages for 100 Mbps and higher were substantially decreased allowing more families to take advantage of the limitless possibilities provided by high-speed broadband. Following the announcement, 228 accounts upgraded their speeds during the first week.

· 100 Mbps went from \$119.95 to \$89.95.

· 300 Mbps was increased to 500 Mbps and the price went from \$199.95 to \$109.95.

· 1 Gig went from \$269.95 to \$129.95.

Business packages offered to enterprises within the proposed area are 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.

EMPOWER's ONT devices are set to certain specifications with the speed requirement chosen by the consumer. These speeds are verified by the installation technician on the day of installation by using a third-party company who is not affiliated with EMPOWER Broadband. EMPOWER also utilizes software (Calix Cloud solutions) which is able to test service speeds on a regular basis. This method is approved by the Federal Communications Commission (FCC) as a preferred method of regulation.

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10. Explain how the proposed project achieves universal broadband coverage for the locality or fits into a larger plan to achieve universal broadband coverage for the locality. If applicable, explain the remaining areas of need in the locality and a brief description of the plan to achieve universal broadband coverage. (up to 50 points)

Answer:

This project is a continuation of MEC/EMPOWER's ongoing attempts to achieve universal broadband; closing the gap completely for three counties and further expanding to achieve universal coverage for two additional counties. Through a unique regional initiative between the SPDC, five participating Counties, a last-mile ISP, and two electric utilities, universal coverage is being realized across EMPOWER's system.

To expand and achieve universal coverage, MEC/EMPOWER will utilize its already constructed fiber backbone, along with Dominion Energy and Mid-Atlantic Broadband's middle-mile fiber contributions.

The project is designed to achieve universal broadband coverage throughout all five counties. This project does not take an incremental, "cherry picking" approach, and will leave no remaining unserved or underserved areas, including those CAF II areas that have yet to be deployed. The project is the region's plan to achieve universal, high quality, fiber-to-the-home broadband to every presently unserved and underserved location through a single, regionally coordinated initiative involving multiple vested partners. Achieving universal broadband access throughout the participating Counties significantly leverages the coordination of efforts of Dominion Energy and MEC/EMPOWER through ongoing fiber-and facilities deployment.

The project maximizes MEC/EMPOWER's existing network core and related data-center infrastructure, as well as MEC/EMPOWER's customer service, support, and billing capabilities. MEC currently serves as a substantial electric service provider to this five-county area and has the infrastructure currently in place to continue the fiber network to achieve universal coverage to the unserved and underserved residences, businesses, and CAI's. This project presents a once-in-a-generation opportunity to provide universal access to high-quality broadband throughout this five-county area representing one of Virginia's most economically challenged regions.

This project serves as the final phase to the 2022 - 2024 VATI awards and fills the gaps of unserved or underserved residences, businesses, and CAI's. Upon completion and apart from areas already served, universal broadband coverage will be available to all premises of these counties.

11. **Project Readiness**

Describe the current state of project development, including but not limited to: planning, preliminary engineering, identifying easements/permits, status of MOU or MOA, and final design. Prepare a detailed project timeline or construction schedule, identifying specific tasks, staff, contractor(s) responsible, collection of data, etc., and estimated start and completion dates. Applicants are encouraged to extensively discuss, where applicable, easements relating to railroad crossings, federally-owned lands and parks, partnerships with the Virginia Department of Transportation, and mobile home parks. Applicants must include Memorandums of Understanding (MOUs) or Memorandums of Agreement (MOAs) between applicants (drafts are allowable). Label Attachments: Attachment 7 – Timeline/Project Management Plan; Attachment 8 – MOU/MOA between Applicant/Co-Applicant; (up to 10 points)

Answer:

This project's next step will be the final design phase as planning and preliminary engineering are completed. The system's first phase (Backbone) is complete, and this application focuses more on the deployment of Distribution Class (FTTP Mid-Mile) fiber, along with the required Access Class fiber (last mile) and drops. Where needed, MEC/EMPOWER has agreements in place to utilize middle-mile fiber from Dominion Energy and MidAtlantic Broadband (MBC) to expand last-mile fiber deployment.

MEC/EMPOWER and Dominion Energy have executed a MOU and have an executed fiber lease providing MEC/EMPOWER access to Dominion's network elements.

Dominion will scope any additional mainline route throughout the project area and is presently preparing environmental permits for the mainline route. With the SCC's Final Order approval on the Dominion Energy SCC Petition, Dominion Energy's fiber construction will commence promptly. Dominion is currently constructing its middle-mile infrastructure concurrently with mainline construction and projects completion of middle-mile construction at the conclusion of phase 3 of the current 2023 VATI award project. EMPOWER will commence construction of its last-mile infrastructure

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concurrently with Dominion's construction.

MEC/EMPOWER will deploy and light last-mile fibers in conjunction with Dominion's construction schedule so that end users can be connected to the last-mile network as soon as upstream middle-mile and backbone fiber are in place. To ensure the network is successfully and effectively utilized by unserved locations, EMPOWER will market the network to potential subscribers as soon as the SCC has ruled on the submitted petition.

It should be noted that MEC/EMPOWER has over 500 miles of fiber cable in stock, with additional shipments strategically scheduled in order to remain stocked and mitigate potential delays as supply chain issues increase. MEC/EMPOWER has also secured Magellan Advisors to serve as our Owner's Engineer firm to assist in the 2022 VATI grant award design and construction oversight. Magellan will also assist in all future grant projects. Contract negotiations have reached completion to ensure labor for said awards.

Within 30 days of the notice of grant award, MEC/EMPOWER will commence the completion of the final fiber design and execution of contracts with contractor to commence construction in the five-county project area. This will include GPON fiber splits, splice can locations, and a final material list to proceed with purchase orders. VDOT and railroad crossings have been identified and permit requests will be promptly filed and substantially completed through the project timeline. Premises benefiting from this grant will be notified by letter of the pending zone deployment.

Contract field engineers will immediately visit all phase one construction areas to confirm required permits, material requirements, material acquisition, and to designate pending make-ready work. As a result of the field review, technicians will detail all make-ready work including associated poles requiring replacement. This final layout will be assigned to contracted construction crews to complete these tasks, followed by distribution and access class fiber installation. Additional make-ready and fiber installation activities will be scheduled for all 2024 VATI work within 20 weeks of executing the contract between all parties.

Both 144-count fiber and distribution class lower-count cables will be spliced by contractors with quality control managed by EMPOWER's fiber technicians. While construction crews perform overhead make-ready work, or complete directional boring for underground sections of the line; contractors under MEC/EMPOWER's supervision will visit each subscriber's location and plan the drop installation. Crews will then perform the drop installation to the premise installing the NID (Network Interface Device), and the Router/ONT.

MEC/EMPOWER's last-mile infrastructure will primarily be located within existing public rights of way and on the property of subscribers who have requested service. MEC/EMPOWER's easement requirements are anticipated to be minimal.

Given the size and scope of the project, it is anticipated that 36 months (about three years) will be required to achieve substantial universal completion, and a work plan/timeline has been created.

Both the Southside Planning District Commission (SPDC) and MEC/EMPOWER share the mission of serving the citizens of Brunswick, Halifax, Mecklenburg, Charlotte, and Greenville Counties. We share the objective to resolve the complication and plight of the remaining 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 Administrators, the Board of Supervisors, the County's Broadband Committees, SPDC Executive Director, MEC/EMPOWER CEO, Board of Directors, and staff have elected to work together to deliver a needed solution. Accordingly, MEC created EMPOWER Broadband to effect just such a change.

As MEC/EMPOWER are jointly applying with the SPDC, the SPDC shall administer the grant and serve in a project oversight role to accomplish the grants goals and objectives. Included as an attachment is a copy of the unexecuted agreement between the SPDC, MEC/EMPOWER, and the partnering counties. The SPDC and MEC/EMPOWER will expand the terms of the existing agreement with approval of the proposed 2024 VATI grant.

The Counties' Board of Supervisors has also approved this grant application; see their letters of support included with this application.

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12. Has the applicant or co-applicant received any VATI grants? If so, provide a list of these grants, with a detailed summary of the status of each.

Answer:

The Southside Planning District Commission has received two VATI grants:

- 2022 VATI Grant with EMPOWER Broadband in partnership with Halifax, Charlotte, Mecklenburg and Brunswick Counties (\$69,281,635.37)

The three-year contract term began on July 22, 2022. Construction continues and crews will work simultaneously throughout all four counties.

- 2023 VATI Grant with EMPOWER Broadband in partnership with Brunswick, Charlotte, Halifax, Greenville, and Mecklenburg Counties (\$8,556,028.00)

The three-year contract term began on September 26, 2023. Design is underway and construction has begun.

The co-applicant, EMPOWER Broadband, has partnered on several VATI grants which are listed below:

- 2020 VATI Grant with Halifax County (\$2,896,709)

This project included 37 miles of fiber, passing 679 locations and has been completed and currently serves 242 customers.

- 2021 VATI Grant with Mecklenburg County (\$449,381)

This project included 23.5 miles of fiber, passing 2,480 locations and has been completed and currently serves 974 customers.

- 2021 VATI Grant with Halifax County (\$313,629)

The 2021 VATI grant partnering with the County of Halifax in the amount of \$313,629 is on track for completion by December 31, with 26.8 miles of fiber and passes 197 locations.

- 2022 VATI Grant with Southside Planning District Commission in partnership with Halifax, Charlotte, Mecklenburg and Brunswick Counties (\$69,281,635.37)

The three-year contract term began on July 22, 2022. Construction continues and crews will work simultaneously throughout all four counties.

- 2023 VATI Grant with Southside Planning District Commission in partnership with Brunswick, Charlotte, Halifax, Greenville, and Mecklenburg Counties (\$8,556,028.00)

The three-year contract term began on September 26, 2023. Design is underway and construction has begun.

13. Matching funds: Complete the funding sources table indicating the cash match and in-kind resources from the applicant, co-applicant, and any other partners investing in the proposed project (VATI funding cannot exceed 80 percent of total project cost). In-kind resources include, but are not limited to: grant management, acquisition of rights of way or easements, waiving permit fees, force account labor, etc. Please note that a minimum 20% match is required to be eligible for VATI, the private sector provider must provide 10% of the required match. If the private co-applicant cash match is below 10% of total project cost, applicants must provide financial details demonstrating appropriate private investment. If applicants and co-applicants are seeking to include prior expended funds as matching funds, Attachment 11 must be completed. Label Attachments: Attachment 9 - Funding Sources Table; Attachment 10 – Documentation of Match Funding; Attachment 11 - Prior Expended Match Form

Answer:

The total cost of the project area is \$57,530,100.23 to pass 13,091 locations. For this project, the applicant and co-applicant are requesting \$28,752,302.16 in VATI grant funds, constituting 50% of the total project cost at \$2,197.31 per location passed. The co-applicant, Mecklenburg Electric Cooperative and EMPOWER Broadband, are contributing \$23,924,722.20 of in-kind funds towards the project to be used for network equipment and towards construction efforts to complete the project build-out. Additional matching funds include monies from Dominion Energy's middle-mile fiber build \$1,896,893.47, Brunswick County \$933,130.63, Halifax County \$1,110,752.68, Mecklenburg County \$864,448.09, Greenville County \$41,894.00 and the southern portion of Charlotte County \$5,957.00.

Documentation of committed match can be found in Attachment 10

14. Leverage: Describe any leverage being provided by the applicant, co-applicant, and partner(s) in support of the proposed project. (up to 10 points)

Answer:

A significant component of EMPOWER's universal fiber coverage plan comes via Virginia Code § 56-585.1 :9, effective July 1, 2019, as the Commonwealth of Virginia sought to expand broadband services into unserved areas of the Commonwealth. This statute permits electric utilities to pursue programs with broadband providers, local counties, and

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municipalities to facilitate such expansion. Under this legislation, Dominion and EMPOWER have agreed to a deployment plan where Dominion constructs middle mile service to facilitate EMPOWER extending last-mile service to unserved populations throughout Virginia.

Dominion has also participated in the regional planning process at no cost to the project and has provided internal analysis and results of previous broadband planning studies in support of the project's development. Dominion will also incur the expenses of easement acquisition and other related permitting necessary to bring the overall project to completion ... these costs are not reflected in project construction costs.

In a similarly important partnership, EMPOWER also has an agreement with MBC to utilize their middle-mile fiber facilities, where needed. The two entities also have a fiber sharing/trading agreement which has saved EMPOWER \$5 million dollars. MBC and MEC/EMPOWER have worked in coordination over the last few years to leverage the middle mile fiber network made possible by investments from the Commonwealth of Virginia.

The project will leverage EMPOWER's existing network core and related data-center infrastructure, as well as EMPOWER's customer service, support, and billing expertise.

Additionally, EMPOWER Broadband was awarded \$5,053,915 in Federal funds received as part of the RDOF auction for Brunswick, Halifax, Greensville and Mecklenburg counties, that will be paid out over the next 9 years to support the buildout as revenues and subscribers grow to become self-sustaining. These RDOF blocks are strategically located in areas adjacent to its foundational fiber backbone.

EMPOWER has established a strong and valuable partnership with its current contractors and supply chain vendors, all of whom will play a critical role in this project. Discussions with these partners, among others, are ongoing with regards to this comprehensive buildout and deployment. Accordingly, EMPOWER is ahead of the game by placing large fiber orders in the queue to mitigate lead time.

Several other factors played a vital role in the selection of the proposed project area and should be considered beneficial to the project. Pre-existing resources that have already been built by MEC and its subsidiaries EMPOWER Broadband and EMPOWER Telecom constitute a major factor in this project. The proposed project areas can easily utilize the pre-existing fiber backbone that includes a 135-mile fiber backbone section funded in partnership with MEC and the Virginia Tobacco Region Revitalization Commission. This round of VATI funding creates the opportunity to "fill in the gaps" and deliver service to all portions of the counties considered unserved or underserved.

Additionally, having more than one VATI-funded project under construction at a time would allow for more economical use of funds and crews. The addition of this project will allow for crews to make better use of any permits needed for mainline construction to ensure that work can be completed before the permits expire, eliminating unneeded costs. Approval of this project will also allow for a more economical use of available manpower; by operating multiple VATI projects at one time, it will allow for an area and its residents to gain access to fiber broadband and the needed speeds, by moving crews into an area at one given time, as opposed to relocating crews time and again to complete a portion of the area, only to return to serve outlying addresses at another time as funding becomes available. An additional benefit from having multiple VATI projects under construction at one time is that it will also allow for timely and well-managed use of DHCD's LECAP program as any homes not covered by any project could be referred and service drops constructed, while fiber crews and construction are taking place in their neighborhoods.

Other factors that led to our decision to pursue additional construction in these areas was the direct and loyal support of the staff at Brunswick, Halifax, Mecklenburg, Charlotte, and Greenville Counties, and the representatives on their respective Boards of Supervisors. These requests converged with numerous and urgent requests from those within our communities...both Cooperative Members and those representing inadequately served individuals. Mecklenburg Electric Cooperative is recognized as a community leader and has demonstrated the ability to deliver on the construction and maintenance of large capital projects. Additionally, EMPOWER has followed in the footsteps of its parent company and is delivering a much-needed service and delivering on its commitments.

The Southside Planning District Commission has provided personnel, including GIS staff and resources, to support the application process. That support will continue through final design and construction. The participating Counties will also participate in joint marketing events, and public meetings to inform our region, and encourage adoption by our

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residents.

Furthermore, EMPOWER fiber subscribers provide additional leverage as they share the news of their newly installed robust broadband service with their neighbors. To date, we have written commitments from a significant number of those living in these areas, who have agreed to take the service once the project gains approval. EMPOWER utilizes a business principle of reinvesting revenue generated from those receiving services to further expand broadband expansion in other areas. This community commitment means revenue will be readily available to expand broadband services in other areas yet to receive funding of any type.

15. Communications Plan: Describe efforts to keep the public informed of project progress and the broadband adoption plan.

a. Explain how you plan on communicating the project status to stakeholders, including but not limited to County leadership, project areas residents, etc. (Up to 10 points)

b. Explain how you plan to promote customer take rate, including marketing activities, outreach plan, and other actions to reach the identified serviceable units within the project area. Provide the anticipated take rate and describe the basis for the estimate. (up to 10 points)

c. Describe any digital literacy efforts to ensure residents and businesses in the proposed project area sufficiently utilize broadband. Please list any partnering organizations for digital literacy, such as the local library or cooperative extension office.

Answer:

a. The Southside Planning District Commission organizes and holds monthly project management team meetings for all active projects. Attendees include representatives from the SPDC, EMPOWER, and each of the participating counties. Additionally, MEC/EMPOWER's management team, its owner's engineer team, and construction contractors, holds weekly construction status Zoom calls to ensure all projects are moving forward in an efficient and timely manner. MEC/EMPOWER holds regularly scheduled meetings with county administrators, attends Board of Supervisor meetings to give updates and answer questions. Additionally, MEC/EMPOWER continually updates each county on milestones reached as projects progress. These updates are done through emails, phone calls and in-person meetings.

For potential customers, a construction schedule is updated monthly online at www.empowermec.net to show completed, current and future projects. Social media is also utilized to update the community of ongoing construction and deployment across the six counties served by EMPOWER.

Prior to construction, MEC members receive an automated phone message, mailed letter and e-mail regarding fiber contractors in the area and what to expect during construction. Our partners at Dominion Energy send mailers to their customer base with similar information as well.

Mailers and emails are sent to all residents and businesses in each project area before construction begins. Information includes the start and projected completion date, service options, available discount programs such as Line Extension Customer Assistance (LECAP) and the Affordable Connectivity Program (ACP), an EMPOWER service application and online account management tool information.

Yard signs and door-to-door information packets are also dispersed when necessary to inform members of construction in the area.

b. The original feasibility study conducted by Pulse Broadband for the entire MEC area, based on national statistics from rural cooperative areas, much like Southside Virginia, and with similar service offerings, estimated the take rate (number of homes expected to subscribe for services) for the entire EMPOWER serving area to be 45 percent within two years of project completion. This expected take rate is also based on research conducted and adopted by the Pew Research Institute. Accordingly, from the 13,091 passing's, an estimated 5,890 would take service within 24 months. However, after Broadband discussions with the citizens and businesses in the proposed area and the interest generated by the fiber deployment, it is anticipated that subscribers will exceed the 45 percent take rate. Cooperatives offering broadband in other regions have experienced averages closer to 60 percent.

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As EMPOWER construction crews begin moving into new areas, staff will strategically place EMPOWER “Internet Construction Zone” signs along the route to alert residents of what crews will be doing in the coming weeks. These signs will then be replaced with EMPOWER “APPLY NOW” signs once applications can be accepted in an area.

Packets will also be mailed to residents including an application and self-addressed return envelope. When necessary, packets will be delivered door-to-door along the fiber route and include information about the service, an application to get service and discount opportunities including ACP and LECAP funding. When available, local community gathering spots, or institutions, such as a fire department, Ruritan Club, etc. will be utilized as host for a community “town hall” type meeting where residents can learn more about the process and ask questions about what they can do with the service. This will also aid in helping improve and boost digital literacy. All these steps are promoted on EMPOWER’s social media platform and local printed media outlets.

See Attachment 19 - Marketing Plan

c. Currently, the five County public libraries utilize programs such as basic computer skill classes, promotion of online resources (i.e., videos) through social media and the use of e-books and audio books to promote digital literacy within the community. The County Cooperative Extension Offices also have their own digital literacy programs that are available to county residents.

EMPOWER staff has already worked to create its own digital literacy tool kit to help educate those in the community about access to the world of resources provided by broadband. One of these programs is an effective open house in which the community is invited to one of EMPOWER’s facilities, or a selected location within the community, where staff demonstrates how broadband service can be used to enhance everyday life. Attendees can also speak with staff about any issues/questions they may have about the improvements to their digital lives prompted by fiber service.

Social media is another platform used effectively to increase digital literacy; brief, informative videos are being created that highlight certain aspects of the construction process and the ways that subscribers can use VoIP services, television streaming, etc.

“Seniors helping Seniors” Program is currently under development to aid in digital literacy for the elderly. This is a program that will utilize volunteers from the local high school senior class who would “pair up” with a senior citizen from the community. In this program, students serve as teachers and help explain how to use basic programs not only on a computer, but also on devices such as Firesticks, Roku, etc. that can be utilized with access to broadband.

Virginia Tech also hosts Digital Literacy Symposiums with the most recent having participants exploring online identities through the many roles as students, educators, scholars and more. Resources such as this, though not directly associated with either the applicant or co-applicant, can be easily promoted through the local Cooperative Extension Offices to notify county residents.

16. Project Management: Identify key individuals who will be responsible for the management of the project and provide a brief description of their role and responsibilities for the project. Present this information in table format. Provide a brief description of the applicant and co applicant’s history and experience with managing grants and constructing broadband communication facilities.

Answer:

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The Southside Planning District Commission will be responsible for the management of all grant related projects. Currently, the Southside Planning District Commission (SPDC) is managing two regional VATI projects (2022 and 2023). The SPDC has an extensive history of administering state, local, and private grant funded projects and is very familiar with the VATI program design as well as requirements set forth by the Virginia Department of Housing and Community Development.

A Project Management Team has been developed and meets monthly to ensure the effective and timely management of the project. The Project Management Team includes executive leadership from EMPOWER, members of the Southside Planning District Commission, County Administrators and representatives from Brunswick, Charlotte, Halifax, Greenville, and Mecklenburg. The team will review project activities and propose adjustments to the project management plan, as needed, to ensure the project is professionally designed, built within budget, and is tracking to meet the agreed upon schedule. Any significant revisions to the project activities or budget will be shared as appropriate. Processes for overall project management, including financial management, design, and construction, have already been implemented, and are more than sufficient to accommodate this effort.

Mecklenburg Electric Cooperative and EMPOWER Broadband Inc. have completed two grants for the TRRC's R&D Last-Mile Broadband Project, one sponsored by Mecklenburg County, and another sponsored by Pittsylvania County (note mainline construction is complete but the grant remains active to promote an increased take rate). Mecklenburg Electric Cooperative was also a recipient of a 2020 VATI grant in partnership with Halifax County, 2021 VATI grant funds were received in partnerships with Halifax and Mecklenburg Counties, and 2022 and 2023 VATI grant funds were received in partnerships with the Southside Planning District Commission, Brunswick, Halifax, Charlotte, and Mecklenburg counties to provide universal coverage.

Mecklenburg Electric Cooperative has extensive experience in managing projects similar in scope to the project being proposed in this application. MEC, EMPOWER's parent company, was formed in 1938, over 85 years ago. Currently, MEC operates and manages \$211 Million in utility plant here in Southside Virginia. That system provides services to over 34,000 homes and businesses through 4,500 miles of electric line. As a current borrower in good standing with USDA's RUS (Rural Utilities Service), Mecklenburg Electric Cooperative is required to maintain highly detailed records and is stringently held accountable for proper data and project management. Mecklenburg Electric Cooperative and EMPOWER Broadband will implement the same degree of accountability standards, and due diligence measures, for the DHCD grant program as well. MEC has also received Federal Communication Commission (FCC) Connect America Funds (CAF) to provide service to residences and businesses in southern Brunswick County; and a USDA Reconnect loan to build fiber-to-the-premise in southern Brunswick County.

MEC has also received an RUS ReConnect Grant that will provide broadband to two underserved areas within southcentral Brunswick County, and northern Halifax County, through fiber-to-the-premise access. This project integrates with current funding EMPOWER received from the CAF-II auction, last year's low interest ReConnect loan, and the 2020 VATI grant. EMPOWER also partnered with all five counties in receiving CARES funding that expanded service into additional areas where fiber had been previously deployed.

EMPOWER was awarded RDOF census block groups in all three respective counties and collectively, these projects represent the commitment of both MEC, and EMPOWER Broadband, to provide affordable, reliable high-speed broadband service to residents of Southside Virginia.

Today, MEC and its subsidiary, EMPOWER Broadband, are building and deploying hundreds of miles of new fiber. EMPOWER is committed to providing high-speed internet and voice services to unserved areas by utilizing its extensive experience in design, installation, and maintenance of electric and broadband infrastructure. Today, EMPOWER has approximately 2,254 access lines, over 800 DSL internet subscribers, and over 5,000 fiber internet subscribers, a number that grows each day.

Additionally, EMPOWER's partnership with the Southside Planning District Commission brings extensive experience in administering grant-funded activities, including projects funded by state and federal agencies.

See Attachment 18 for a Comprehensive Project Management Team Table

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17. Project Budget and Cost Appropriateness

Budget: Applicants must provide a detailed budget that outlines how the grant funds will be utilized, including an itemization of equipment, construction costs, and a justification of proposed expenses. If designating more than one service area in a single application, each service area must have delineated budget information. For wireless projects, please include delineated budget information by each tower. Expenses should be substantiated by clear cost estimates. Include copies of vendor quotes or documented cost estimates supporting the proposed budget. Label Attachments: Attachment 12 – Derivation of Costs; Attachment 13 - Documentation of Supporting Cost Estimates. (up to 10 points)

Answer:

The VATI funds requested by both the applicant and co-applicant will be utilized for the total costs of both aerial and underground mainline construction and drop construction of the proposed fiber system for all five counties to expand and provide universal coverage for a total amount of \$57,530,100.23. The total VATI funding requested equals \$28,752,302.16. MEC, EMPOWER Broadband, Dominion Energy, and the Counties of Halifax, Mecklenburg, Brunswick, Charlotte and Greenville will provide matching funds in the amount of \$28,777,798.07 that will be utilized for the remaining construction costs, as well as the following:

- Outdoor Wall Mount Labor
- Outdoor Wall Mount Materials
- Splicing Labor
- 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 spreadsheet attached and labeled Attachment 12, and supported by Attachment 13, documenting the supporting cost estimates.

18. The cost benefit index is comprised of state cost per unit passed. Individual cost benefit scores are calculated and averaged together to create a point scale for a composite score. Provide the following:
- a. Total VATI funding request

 - b. Number of serviceable units
(up to 125 points)

Answer:

a. The total VATI funding request is \$28,752,302.16. The total project cost is \$57,530,100.23.

b. The number of serviceable units passed is 13,091 which equals \$4,394.63 per unit passed. VATI's cost per passing would be \$2,197.31

19.

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Commonwealth Priorities (Up to 50 points)

Additional points will be awarded to proposed projects that reflect Commonwealth priorities. If applicable, describe the following:

- a. Businesses, community anchors, or other passings in the proposed project area that will have a significant impact on the locality or region because of access to broadband.
- b. Unique partnerships involved in the proposed project. Examples include electric utilities, universities, and federal/state agencies.
- c. Digital equity efforts to ensure low to moderate income households in the proposed project area will have affordable access to speeds at or above 100/20 mbps, include information regarding the internet service provider's participation in the Affordable Connectivity Program
- d. The co-applicant's efforts to mitigate supply chain constraints, including labor shortages and order-to-delivery delays on telecommunications materials required to construct broadband networks.
- e. The applicant's and co-applicant's efforts to promote broadband adoption, including, but not limited to: telehealth, smart farming, e-entrepreneurship, and distance learning.

Answer:

a. If this extension of universal coverage project is approved, ALL unserved and underserved passings will receive access to broadband with speeds of 100/20 Mbps and higher, if they so choose. The project area is overwhelmingly rural and accordingly, is the most challenging and least financially viable areas for broadband deployment. With only 60 community anchor institutions, primarily consisting of churches within this project area, residential passing's is the critical need in these areas. Economic development within the project area has unquestionably been hindered by the lack of broadband access. Completion of this project will support economic development in these areas and encourage both the expansion of existing businesses, as well as attracting new businesses and industries, and prompt the development of additional community anchor institutions.

Scalability: This project endeavors to close the digital divide by achieving universal coverage to three of the five Counties partnering in this regional initiative.

Additionally, fiber networks have the inherent advantage of easily increasing bandwidth capacity by simply changing electronic components, allowing for additional subscribers and ensuring the possibility of physical expansion of EMPOWER's network where needed to achieve universal coverage across all portions of Southside Virginia.

b. Both the applicant and co-applicant recognize this project will require resilient, dedicated partnerships to achieve universal coverage in Virginia. Since the Commonwealth of Virginia is seeking to expand broadband services into unserved areas of the Commonwealth, a Pilot Statute, Virginia Code § 56-585.1 :9, became effective July 1, 2019. The Pilot Statute further permits electric utilities to pursue pilot programs with broadband providers and local counties and municipalities to facilitate such expansion. Dominion Energy and EMPOWER have executed an agreement for Dominion to deploy middle mile service to facilitate EMPOWER extending last-mile service to unserved populations. Both parties understand this partnership can dramatically expand broadband access to presently unserved areas throughout the counties of Brunswick, Halifax, Mecklenburg, Greensville, and southern Charlotte.

EMPOWER will utilize Mid-Atlantic Broadband (MBC) facilities to deliver service, outside of EMPOWER's existing service territory, and the relationship includes a fiber trading agreement that represents \$5 million in savings to EMPOWER. MBC and MEC/EMPOWER have worked in close coordination over the past few years to leverage the middle mile fiber network made possible by investments from the Commonwealth of Virginia.

The VMD Association of Broadband Cooperatives partnership is allowing a large group of Cooperative affiliated broadband providers to take advantage of economies of scale for services and equipment and to secure significant resources to promote large fiber network builds.

Partnerships with Cooperative Finance Cooperation, CoBank, and the USDA Rural Utility Services will provide

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immediate sources of matching funds for MEC/EMPOWER Broadband to utilize for this application.

Critically important to a project of this magnitude is the confidence and support of the localities served by EMPOWER, all of whom have expressed their trust in EMPOWER's demonstrated ability to build and maintain a world-class fiber network. We value our long-term partnerships with Brunswick, Halifax, Mecklenburg, Charlotte, and Greenville Counties which serve as the foundation for this application and facilitate their full support and assistance.

c. At \$69.95 for the Premium package, the monthly cost of this high-quality network will be considerably below what many of the serviceable locations are currently paying for sub-standard satellite service, and therefore provide higher quality broadband at a cost that is a net reduction from what unserved residents are paying today. If the project is approved, the five participating Counties will each engage in extensive community outreach, targeting low- to moderate-income households, to ensure they are aware of, and take advantage of, access to this affordably priced, high-quality broadband service. The project will ensure that all residents of the participating Counties can telework and participate in distance learning, so that no child or family is disadvantaged by lack of broadband.

Additionally, MEC/EMPOWER encourages all potential subscribers to pursue assistance through the FCC's Affordable Connectivity Program. Using newsletters, social media posts, EMPOWER's website, and door hangers, EMPOWER ensures that every household is aware that assistance is available. For VOIP subscribers only, MEC/EMPOWER also encourages assistance through the USAC Lifeline program.

MEC/EMPOWER is also a partner with DHCD's Line Extension Customer Assistance Program (LECAP) for extremely rural household passing's that are not currently funded by previous projects, but are, however, still located along or adjacent to MEC/EMPOWER's fiber network. MEC/EMPOWER has executed its first LECAP application and has three more in process.

Southside Virginia is perhaps the Commonwealth's most economically disadvantaged region; this project promotes both education and economic development, both of which 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 and regretfully, the region also demonstrated the highest levels of poverty. Subsequently, the value of delivering fiber distribution facilities into the rural areas of Southside Virginia cannot be overstated.

Responses to items d. and e. can be found in the Continued Narrative Attachment 18

Application to DHCD Submitted through CAMS

Southside Planning District Commission

Southside Regional Fiber Broadband Phase 3

20. Additional Information

Please attach any letters of support from stakeholders. If the applicant is not a locality(s) in which the project will occur, please provide a letter of support from that locality.

Attachment 14 – Letters of Support.

Provide the two most recent Form 477 submitted to the FCC, or equivalent, as well as point, polygon, and, for wireless providers, RSSI shapefiles for the project area **in .zip file form**. With attachments 17 through 20, attach any other information that the applicant desires to include. Applicants are limited to four additional attachments.

Label Additional Attachments as:

- a. Attachment 15 – Two most recent Form 477 submitted to the FCC or equivalent
- b. Attachment 16 - Point and Polygon shapefiles, in.zip file form, showing proposed passings and project area
- c. Attachment 17 - For wireless applicants: shapefiles, in .zip file form, indicating RSSI projections in the application area
- d. Attachment 18 – XXXXXXXX
- e. Attachment 19 – XXXXXXXX
- f. Attachment 20 – XXXXXXXX

Answer:

Attachments Table of Contents

- 1) Attachment 1 – Project Area map
- 2) Attachment 2 – Documentation of Federal Funding Area
- 3) Attachment 3 – Documentation of Unserved Area VATI Criteria
- 4) Attachment 4 – Passings Form
- 5) Attachment 5 – RDOF Awarded Areas Included in VATI Application
- 6) Not Applicable
- 7) Attachment 7 – Draft Timeline Project Management Plan
- 8) Attachment 8 – Draft MOU Between SPDC / EMPOWER / Participating Counties
- 9) Attachment 9 – Funding Sources Table
- 10) Attachment 10 – Documentation of Match Funding
- 11) Not Applicable
- 12) Attachment 12 – Derivation of Costs
- 13) Attachment 13 – Documentation of Supporting Cost Estimates
- 14) Attachment 14 – Letters of Support
- 15) Attachment 15 – Two most recent Form 477 submitted to the FCC or equivalent
- 16) Attachment 16 – Point and Polygon Shapefiles
- 17) Not Applicable
- 18) Attachment 18 - Continued Narrative
 - a. Question 9: Bandwidth Sharing
 - b. Question 16: Project Management Team Table
 - c. Question 19: d. and e.
- 19) Attachment 19 - Marketing Plan
- 20) Attachment 20 - Stage II Detailed Technical Submission

Application to DHCD Submitted through CAMS

Southside Planning District Commission

Southside Regional Fiber Broadband Phase 3

Attachments:

Map(s) of project area, including proposed infrastructure

Attachment1ProjectAreamap1218202343056.pdf

Documentation of Federal Funding (CAF/ACAM/USDA/RDOF, etc...) in and/or near proposed project area.

Attachment2DocumentationofFederalFundingArea12192023125618.pdf

Documentation that proposed project area is unserved based on VATI criteria

Attachment3DocumentationUnservedAreaVATICriteria1218202340926.pdf

Timeline/Project Management Plan

Attachment7TimelineProjectManagementPlan1218202345500.pdf

MOU/MOA between applicant/co-applicant (can be in draft form)

Attachment8MOUMOAbetweenApplicantCoApplicant1219202385339.pdf

Documentation of Supporting Cost Estimates

Attachment13DocumentationofSupportingCosts1219202393324.pdf

Letters of Support

Attachment14LettersofSupport1219202393129.pdf

Two most recent Form 477 submitted to the FCC or equivalent

Attachment15TwomostrecentForm477submittedtotheFCCCorequivalent1218202340952.pdf

Point and Polygon shapefiles, in.zip file form, showing proposed passings and project area

Attachment16PointandPolygonShapefiles1219202395505.zip

Optional

Attachment18ContinuedNarrative12192023100106.pdf

Application to DHCD Submitted through CAMS

Southside Planning District Commission

Southside Regional Fiber Broadband Phase 3

Optional

Attachment19MarketingPlan1219202395845.pdf

Optional

Attachment20StageIIDetailedTechnicalSubmission1219202395859.pdf

Documentation of Match Funding

Attachment10DocumentationofMatchFunding1219202310331.pdf

Derivation of Cost/Project Budget (Use template provided)

Attachment12DerivationofCosts1218202341023.pdf

Funding Sources Table (Use template provided)

Attachment9FundingSourcesTable1218202341040.pdf

Passings Form (Use template provided)

Attachment4PassingsForm1218202341138.pdf

Documentation of RDOF awarded area in VATI project Area (Use template provided)

Attachment5RDOFAwardedInVATIAreasForm2024Application1218202341204.pdf

VATI 2024

Supplemental Application Question

Applicant: Southside Planning District Commission

Project Name: Southside Regional Fiber Broadband Phase 3

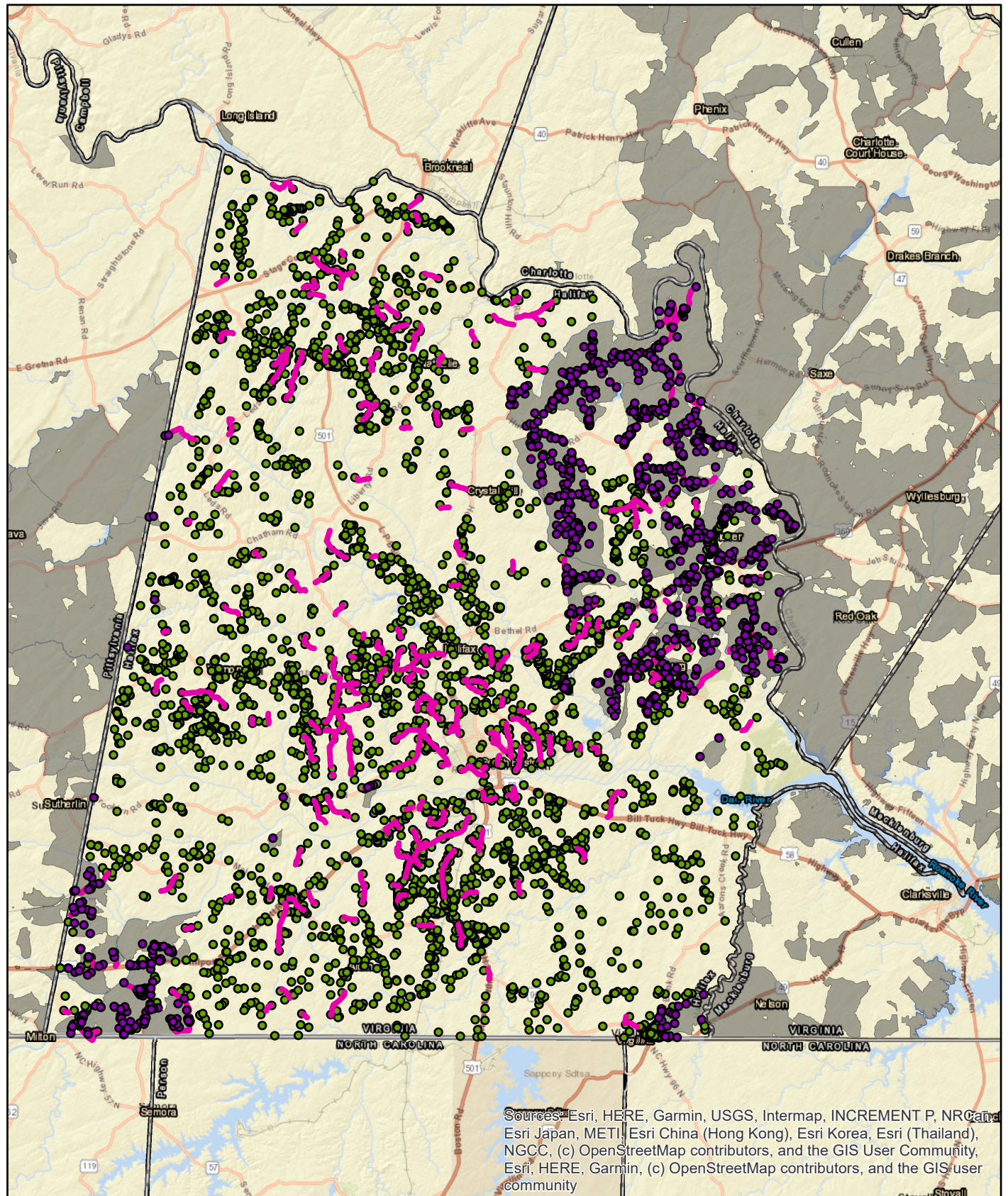
The question below is question e. from the Commonwealth Priorities section of the 2024 Virginia Telecommunication Initiative (VATI) Guidelines. Please answer the question using this form and email to VATI@dhcd.virginia.gov.

Commonwealth Priorities

20. Additional points will be awarded to proposed projects that reflect Commonwealth priorities. If applicable, describe the following:

e. The co-applicant's effort to mitigate costs and delays that may be associated with make-ready and other permitting requirements anticipated for network deployment.

EMPOWER Broadband has worked diligently to stay ahead of all projects and to continue their progress on a strict timeline and schedule. To avoid any unwanted delays, needed materials have been stockpiled as mentioned in section "D" to allow crews to continue working and have the needed materials on hand. EMPOWER also strives to keep costs as economical as possible by utilizing pre-existing mainline fiber in as many of these areas as possible, requiring additional drop construction without the incurred cost of additional mainline fiber. EMPOWER and Mid-Atlantic Broadband have also entered into a fiber trade agreement that allows EMPOWER to access MBC's dark fiber in certain locations to utilize existing infrastructure when possible and efficiently. To further promote a more efficient buildout, great strides are taken on the electric utility side to take advantage of system improvement work orders and make any needed changes (pole replacement, easement acquisition, etc.) while these improvements are being made. This also allows for cost sharing opportunities as the electric utility provider can help offset those make-ready costs. Preliminary evaluations are also conducted ahead of time to determine what, if any, make-ready is required and whether it is in the best interest of the project to proceed with aerial or underground construction. An aggressive approach to permitting has also enabled expedited construction as well; by observing and pursuing permits for difficult to access areas, such as COE wetlands, railway crossings, etc., it allows for those permits to be in place before the low-level technical design is completed, in most cases, and construction begins in the area. It should be noted that 90 percent of USACE wetlands permits have been acquired for VATI 2022 and all VDOT permits through phase two of that project have been submitted and are substantially approved.



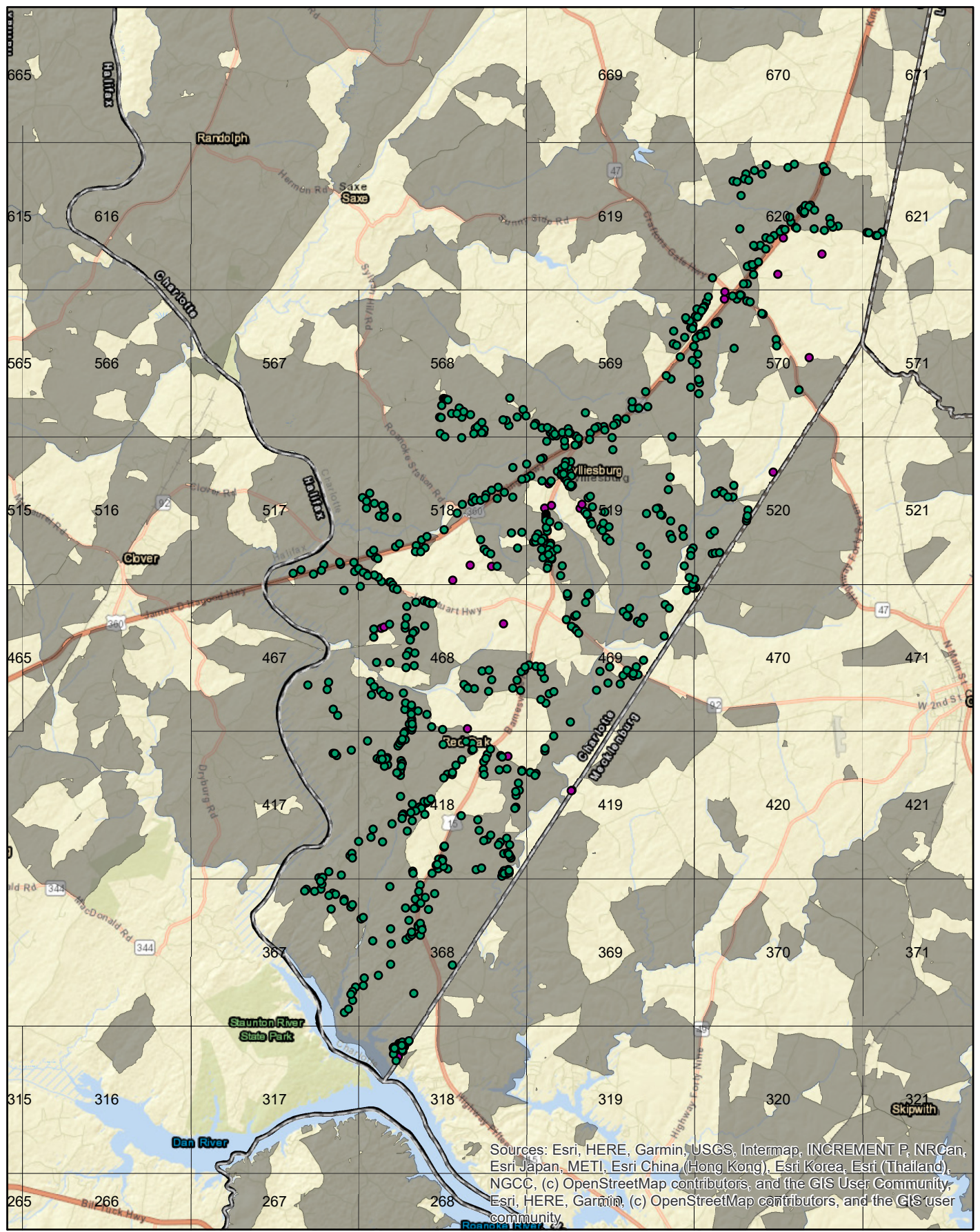
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

Legend

- CAF 2 - Halifax
- Unserved and Underserved Locations Halifax
- Projected Line Design Halifax

Defaulted - CAF 2 Areas bidder

- Wilkes Telephone Membership Corporation



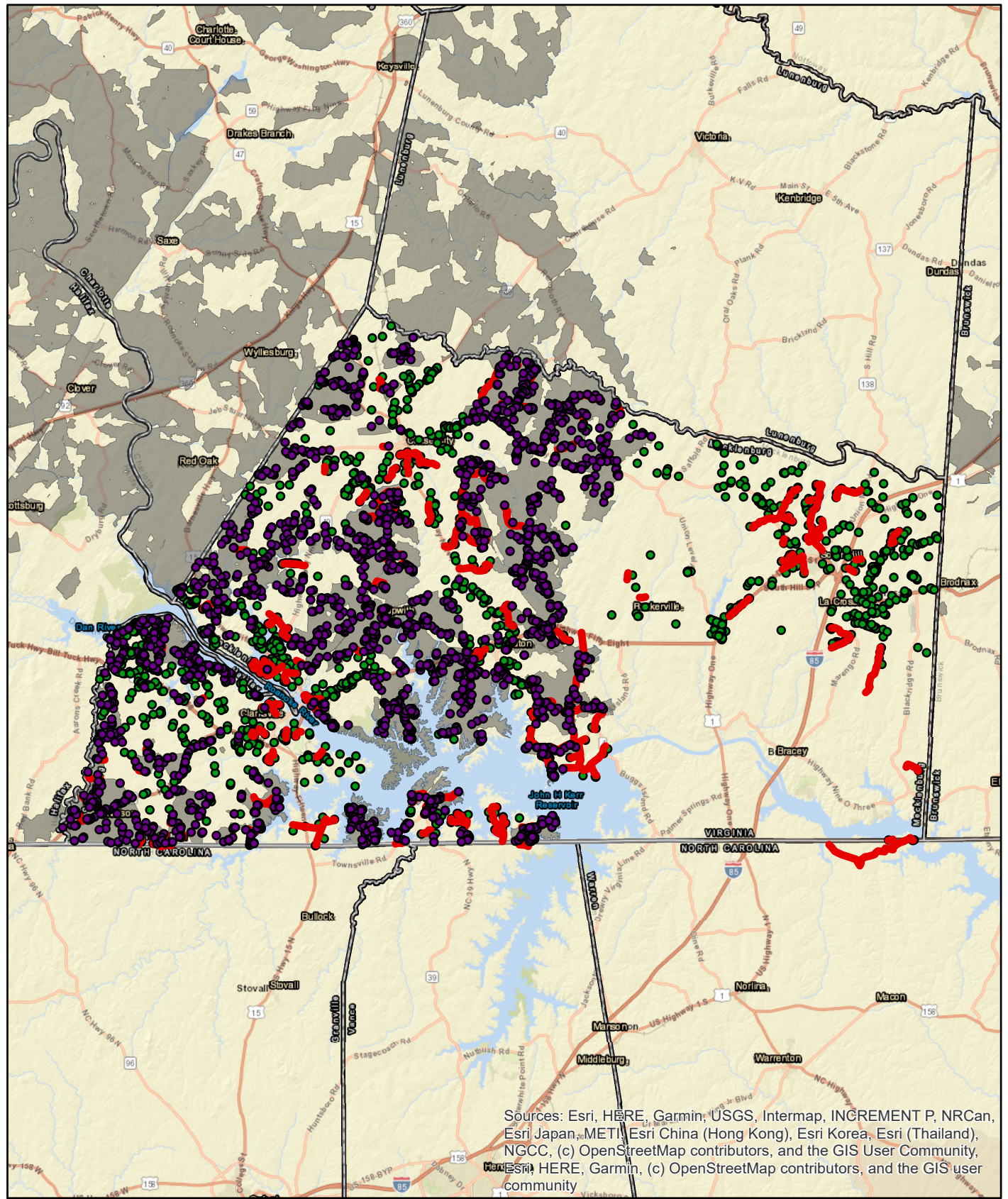
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community.

Legend

- CAF 2 - Charlotte
- Unserved and Underserved Locations Charlotte
- Projected Line Design Charlotte

CAFII Areas from FCC bidder

- Wilkes Telephone Membership Corporation



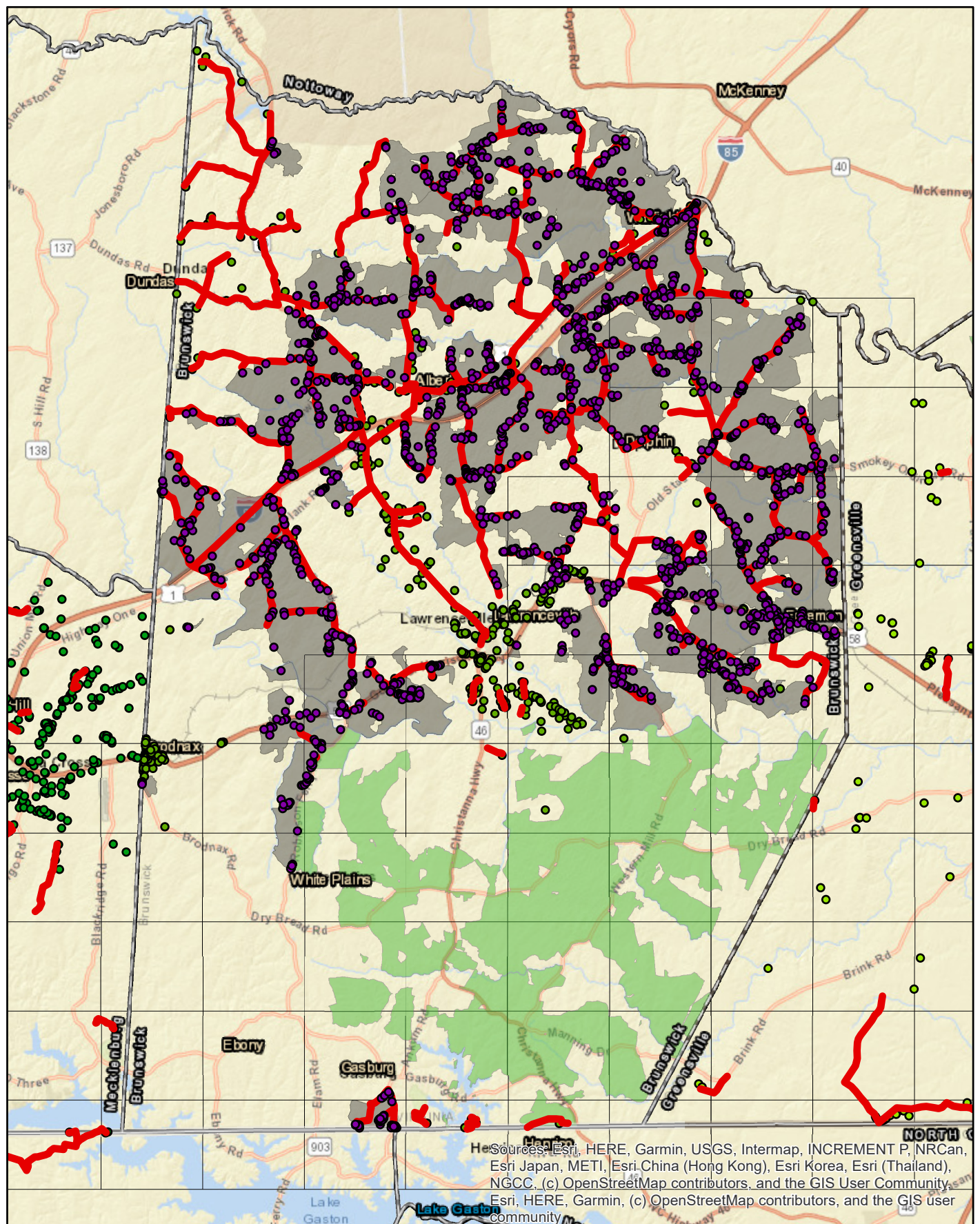
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

Legend

- CAF 2 - Mecklenburg
- Unserved and Underserved Locations Mecklenburg
- Projected Line Design Mecklenburg

Defaulted - CAF 2 Areas bidder

- Wilkes Telephone Membership Corporation



Legend

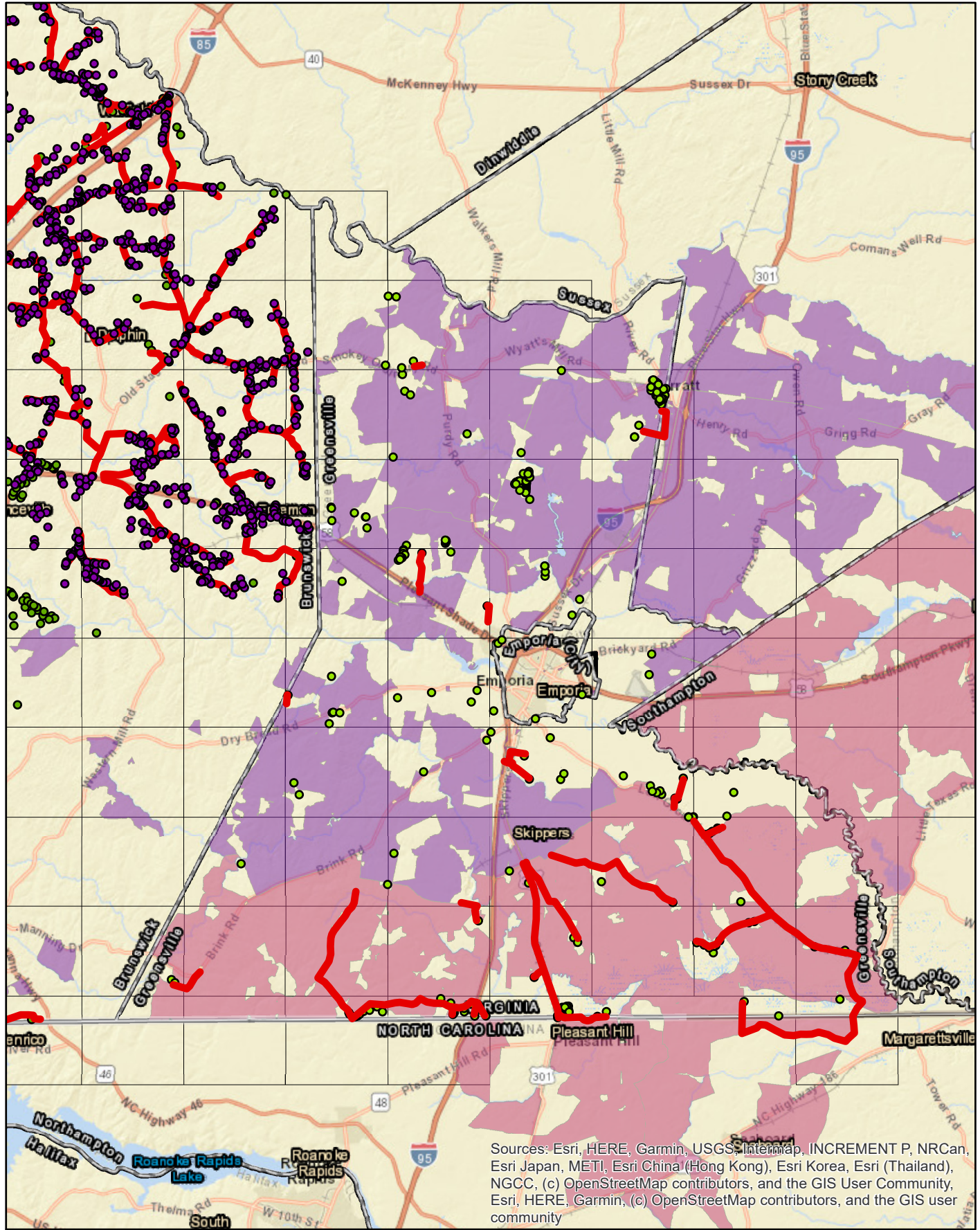
- Projected Line Design Brunswick
- CAF 2 - Brunswick
- Unserved and Underserved Locations Brunswick

CAFII Areas from FCC

bidder

- Rural Electric Cooperative Consortium
- Wilkes Telephone Membership Corporation

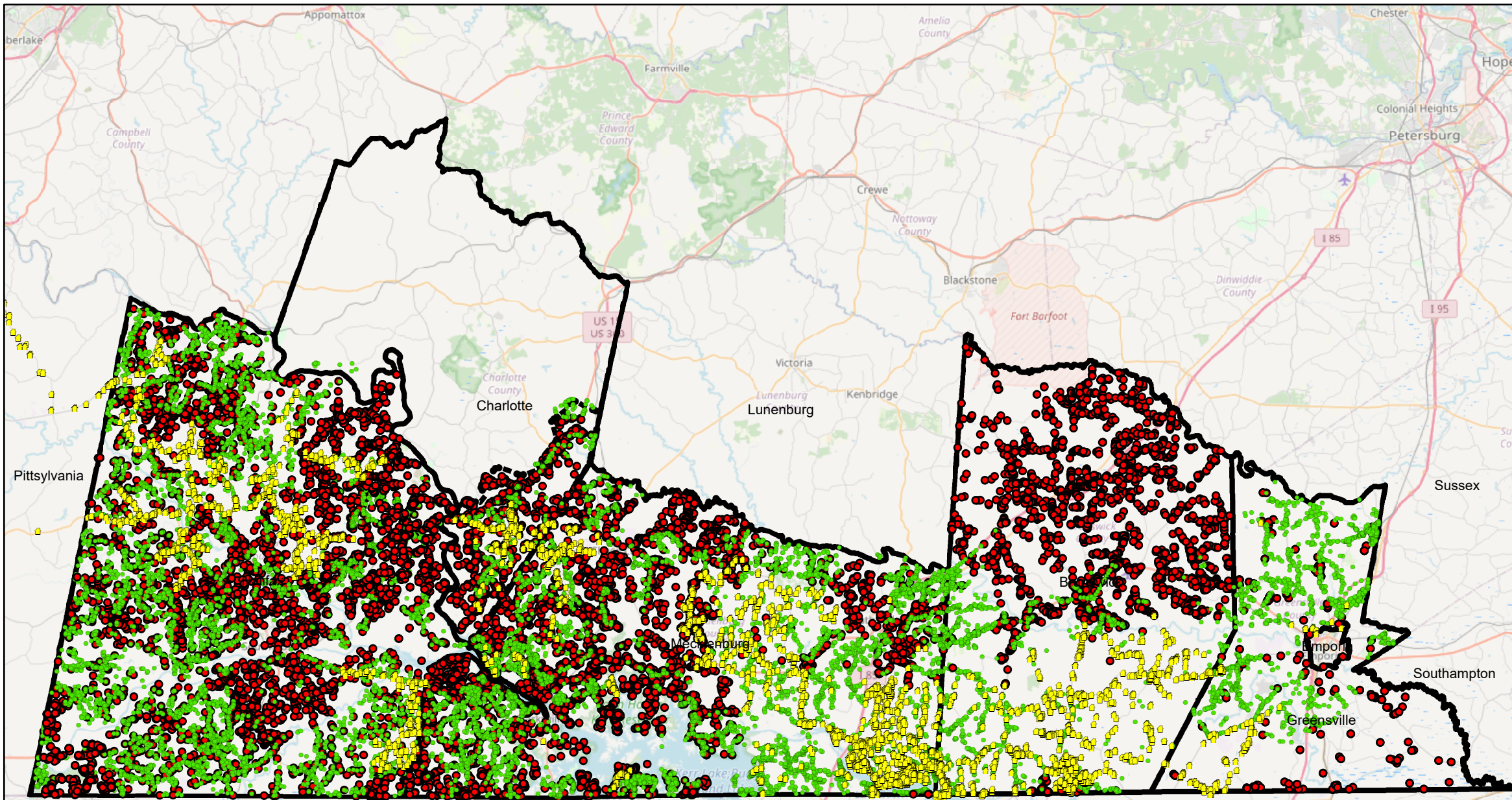
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

Legend

- Projected Line Design Greensville
- Unserved and Underserved Locations Greensville
- RDOF Auction Results bidder**
- CCO Holdings, LLC (4)
- Rural Electric Cooperative Consortium (10)



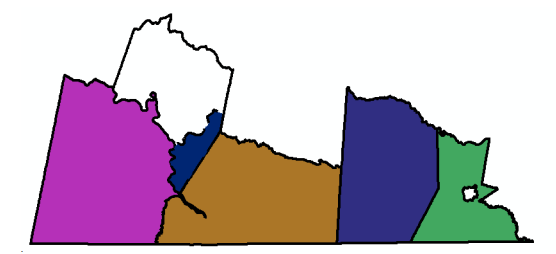
Notice the proximity of locations in the 2024 application request to nearly 20,000 previously awarded addresses through VATI 2022 and 2023. In many cases, these locations are just next door or across the street from currently awarded and even existing EMPOWER service locations. Universal Coverage is being realized across EMPOWER's system and with the majority of the expensive mainline built ... the cost per passing continues to be driven downward. This process, and EMPOWER's 2024 request, is making the Commonwealth's Broadband Priorities a reality. All the while, Universal Coverage is an obtainable certainty for southern Virginia, the SPDC's region, and the larger application consortium of partnering Counties.



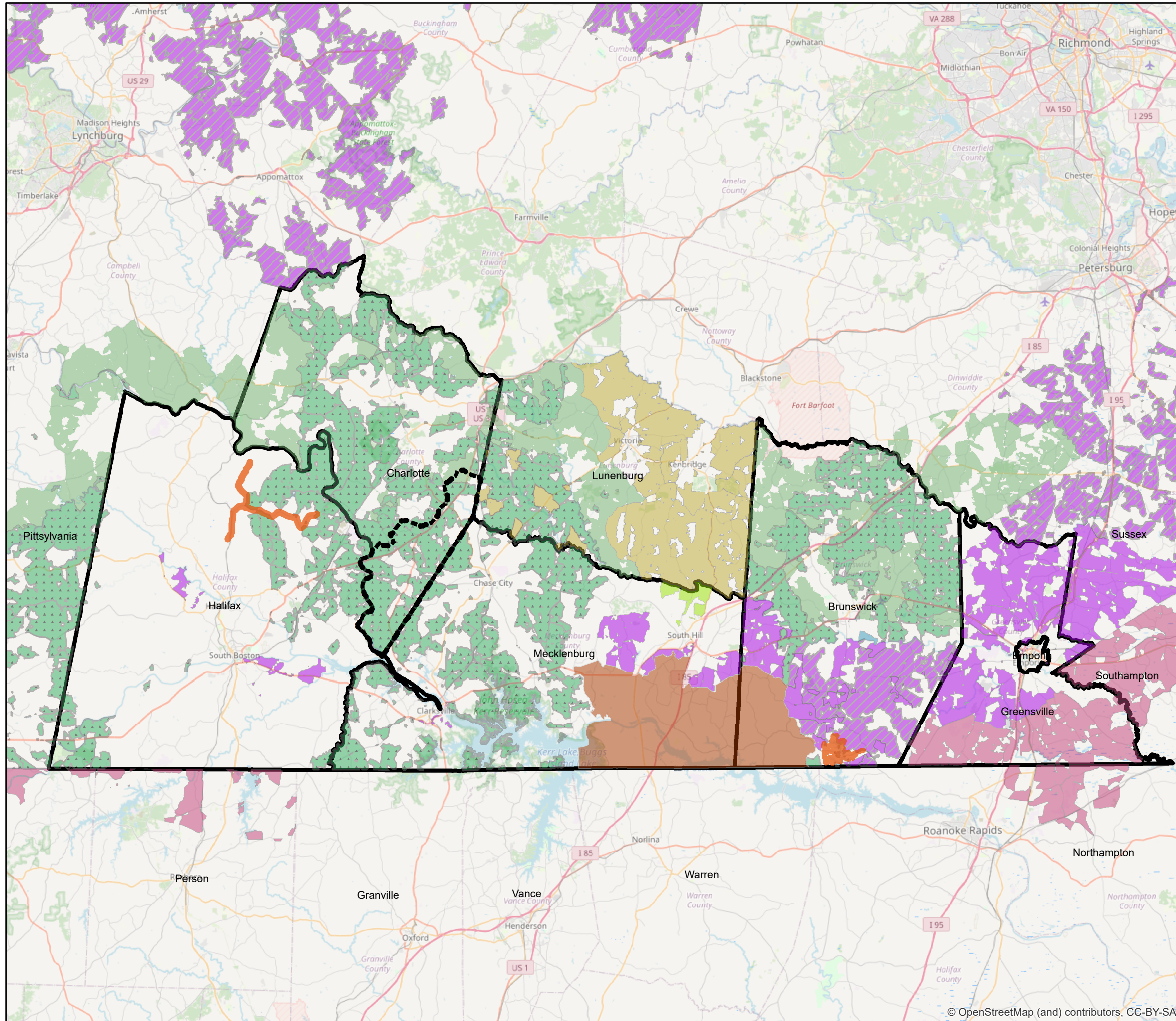
Legend

- Existing EMPOWER Subscribers
- 2024 VATI Application Locations
- Addresses Awarded in Previous Grant Cycles

High Level Project Area



Document Name: 2024 VATI Application Universal Coverage
Project: 2024 VATI Application
Work Order:
User Name: dlipscomb
Date: 12/17/2023
Disclaimer: Map is intended for planning & discussion purposes only. Not to be used for construction.

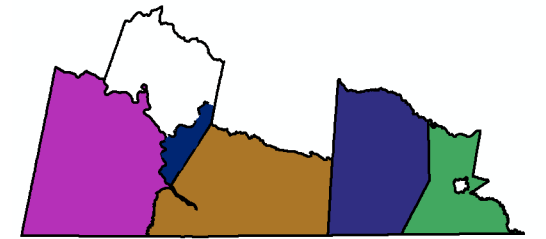


Map Description: Federally Funded Areas with within 2024 SPDC VATI Application Area

Legend

- USDA ReConnect Grant
- E-ACAM EMPOWER ILEC
- RDOF Auction 904 Results**
- CCO Holdings, LLC
- CenturyLink, Inc.
- NexTier Consortium
- Rural Electric Cooperative Consortium
- Space Exploration Technologies Corp.
- Wilkes Telephone Membership Corporation
- CAFII Auction 903 Results**
- Rural Electric Cooperative Consortium
- Wilkes Telephone Membership Corporation

High Level Project Area



Document Name: 2024 VATI Application SPDC CAF and RDOF
Project: 2024 VATI Application
Work Order:
User Name: dlipscomb / d.montgomery
Date: 12/8/2023
Disclaimer: Map is intended for planning & discussion purposes only. Not to be used for construction.



BRUNSWICK COUNTY
POST OFFICE BOX 399
LAWRENCEVILLE, VIRGINIA 23868



HALIFAX COUNTY
1050 MARY BETHUNE STREET
HALIFAX, VIRGINIA 24558



MECKLENBURG COUNTY
POST OFFICE BOX 307
BOYDTON, VIRGINIA 23917

August 1, 2023

FILED VIA ECFS

Jessica Rosenworcel, Chairwoman
Federal Communications Commission
45 L Street, N.E.
Washington, DC 20554

Dear Chairwoman Rosenworcel:

As you know, carriers that were awarded Connect America Fund – Phase II (“CAF II”) Auction funding by the Federal Communications Commission’s (“FCC”) were required to provide high-speed broadband and voice services to 40% of eligible locations located within their awarded CAF II census blocks, on a statewide basis, by December 31, 2022.¹ Carriers were required to report and self-certify all location data with the Universal Service Administrative Company (“USAC”) by March 1, 2023.² This was the first enforceable buildout milestone for carriers authorized to receive CAF II funding.

RiverStreet Communications of Virginia, Inc. (“RiverStreet” or the “Company”), a provider based in Wilkesboro, North Carolina, was awarded a total of \$32,140,887.10 in CAF II

¹ See 47 C.F.R. § 54.310(c) (available at: <https://www.law.cornell.edu/cfr/text/47/54.310>) (“An Auction 903 support recipient is required to complete construction and begin commercially offering service to 40 percent of the requisite number of the locations in a state by the end of the third year of funding and to an additional 20 percent in each subsequent year, with 100 percent by the end of the sixth year”).

² See 47 CFR § 54.316(b)(4) (“Recipients of Connect America Phase II auction support shall provide: By the last business day of the second calendar month following each service milestone in § 54.310(c), a certification that by the end of the prior support year, it was offering broadband meeting the requisite public interest obligations specific in § 54.309 to the required percentage of its supported locations in each state as set forth in § 54.310(c).”).

funding over the course of 10 years to bring 1000/500 Mbps, low latency³ broadband and voice services over a fiber network to a total of 13,518 eligible locations in the following nine Virginia counties:⁴

Virginia County	CAF II Funding Award	CAF II Location Count
Bedford	\$1,611,366.30	774
Brunswick	\$4,754,435.00	1,772
Campbell	\$34,498.90	11
Charlotte	\$6,359,723.80	2,567
Halifax	\$3,438,725.00	1,327
King and Queen	\$5,071,635.10	1,615
Lunenburg	\$2,030,876.70	644
Mecklenburg	\$7,782,777.50	2,396
Pittsylvania	\$4,056,848.80	2,412

RiverStreet was required to serve 40% of its CAF II locations in Virginia – a total of 5,408 locations by December 31, 2022.⁵ Yet, as of December 31, 2022, RiverStreet reported only serving 825 locations in Virginia. A CAF II support recipient is deemed to be commercially offering broadband or voice service to a location if it provides service to the location or could provide it, upon request, within 10 business days.⁶

As of the date of this letter (approximately 7 months after RiverStreet’s first enforceable CAF II milestone), RiverStreet’s website indicates that the Company still is not in compliance with its 40% CAF II milestone in Virginia.⁷ In addition, according to USAC’s website,

³ To comply with the CAF II Auction low latency requirement, at least 95 percent or more of all peak period measurements of roundtrip latency must be at or below 100 milliseconds.

⁴ See *Connect America Fund Phase II Auction Support Authorized for 2,413 Winning Bids*, Public Notice, Attachment A, 34 FCC Rcd. 5966, 6090 (2019). Wilkes Telephone Membership Corporation was the winning bidder in Virginia and subsequently assigned its CAF II obligation to its subsidiary, RiverStreet Communications of Virginia, Inc.

⁵ See *In re CAF Phase II Auction Support Authorized for 2,413 Winning Bids*, Public Notice, 34 FCC Rcd. 5966, 6032 (2019), Attachment A.

⁶ See *Connect America Fund Phase II Auction Scheduled for July 24, 2018; Notice and Filing Requirements and Other Procedures for Auction 903*, Public Notice, 33 FCC Rcd 1428, 1435 (2018).

⁷ See <https://myriverstreet.net/>. RiverStreet’s website indicates that the Company is only providing broadband and voice services in King and Queen County, Virginia – not in any other Virginia county. The information on RiverStreet’s website about the Company’s broadband service availability appears to be in conflict with information on the FCC’s National Broadband Map, which is based upon broadband deployment information filed by RiverStreet with the FCC as part of its Broadband Data Collection (“BDC”). In the BDC, RiverStreet reports providing high-speed broadband using fiber technology in Danville, Virginia, as well as the following four Virginia counties: Charles City, King and Queen, Nelson, and Pittsylvania. See <https://broadbandmap.fcc.gov/data->

RiverStreet is only providing federal Lifeline benefits to a total of six (6) subscribers in Virginia,⁸ despite being designated as an Eligible Telecommunications Carrier (“ETC”) by the Virginia State Corporation Commission more than four years ago.⁹

In a letter filed earlier this year by RiverStreet with the FCC regarding the status of RiverStreet’s CAF II deployment in Virginia, RiverStreet acknowledged the Company’s failure to meet its CAF II 40% milestones in North Carolina and Virginia, stating:

The FCC’s CAF Phase II auction rules specify that the first interim milestone for CAF II support recipients is the end of year three, when recipients must deploy broadband to 40 percent of the total CAF II-supported locations in the state. For RiverStreet, the end of year three was December 31, 2022. By that date, the Company should have deployed broadband to at least 147 locations in CAF II-supported areas in North Carolina and to at least 5,407 locations in the CAF II-supported areas in Virginia. In both states, the Company missed these milestones by more than 50 percent.¹⁰

In this same letter, RiverStreet represented that “[b]y the March 1, 2023 HUBB filing deadline, the Company will report in USAC’s HUBB portal that by December 31, 2022, the Company has deployed broadband service to 12 locations in CAF II-supported areas in North Carolina and 1,005 locations in CAF II-supported areas in Virginia.”¹¹ Yet, according to USAC’s Connect America Fund Broadband Map, RiverStreet only deployed broadband and voice services to a total of 825 CAF II locations in Virginia, as of December 31, 2022. These 825 CAF II locations constitute only approximately 6.1% of RiverStreet’s CAF II locations in Virginia that the Company is required to serve with gigabit-tier broadband and voice services. According to USAC data, RiverStreet is more than 4,500 locations short of its obligation to serve at least 5,408 CAF II locations in Virginia by December 31, 2022.

[download/data-by-provider?version=dec2022](#). The discrepancy between the broadband service location information on RiverStreet’s website and the information RiverStreet has filed with the FCC in the BDC merits the Commission’s investigation.

⁸ See <https://opendata.usac.org/Lifeline/Lifeline-Disbursements-Tool/rink-mije> (search: RiverStreet Communications of Virginia, Inc.).

⁹ See Application of RiverStreet Communications of Virginia, Inc. for designation as an eligible telecommunications carrier, Final Order, Case No. PUR-2018-00172 (dated Feb. 7, 2019).

¹⁰ Letter from Eric S. Cramer, President / CEO, RiverStreet Management Services, LLC, to Ms. Marlene H. Dortch, Secretary, Federal Communications Commission, WC Docket No. 10-90, AU Docket No. 17-182 (Jan. 16, 2023), at 2.

¹¹ *Id.*, at FN 6.

RiverStreet's failure to comply with its 40% CAF II milestone obligation has put the Company in a "Tier 4" non-compliance status with respect to the Company's CAF II buildout obligations in North Carolina and Virginia, which triggers quarterly reporting, a 50 percent reduction in monthly CAF II support, and a six-month timeframe to decrease the compliance gap to below 50 percent.¹² More importantly, RiverStreet's failure to meet its initial – and, arguably, easiest CAF II milestone obligation – harms rural communities in southern Virginia that should already have access to RiverStreet's gigabit-tier, fiber broadband service, yet still remain either unserved or underserved.¹³

In its application for designation as an ETC filed with the Virginia State Corporation Commission following the Commission's CAF II Auction, RiverStreet stated that the Company "...takes its service commitment seriously and does so proudly."¹⁴ RiverStreet also certified that it would comply with the service requirements that are applicable to the supported voice and broadband services that it will be offering in its CAF II winning areas, including the requirements for the CAF II program.¹⁵

The Commission is tasked with reviewing a CAF II winning bidder's compliance with its CAF II buildout and service obligations and deciding whether a CAF II winning bidder remains financially and technically capable of meeting those obligations. In light of the meager state to date of RiverStreet's CAF II buildout, as well as the discrepancies between the broadband deployment information on RiverStreet's website and the information filed by RiverStreet in the BDC, the Commission should investigate the status of RiverStreet's fiber broadband deployment in Virginia, particularly in areas where RiverStreet is receiving CAF II support.

After investigation, if the Commission determines that RiverStreet has misrepresented the status of its buildout in Virginia to the FCC or is unable to meet its CAF II buildout obligations, the Commission should declare RiverStreet to be in default so that these areas are eligible for other federal and/or state broadband funding. Then, the rural communities harmed by RiverStreet's failure

¹² See 47 C.F.R. § 54.320(d). If RiverStreet is not able to decrease the compliance gap to below 50% in North Carolina and Virginia by June 30, 2023, USAC will withhold 100 percent of RiverStreet's CAF II support for each state and will commence recovery action for a percentage of support that is equal to RiverStreet's compliance gap plus 10 percent of RiverStreet's CAF II support that has been paid to date. RiverStreet will then have six months to pay back the amount of support that USAC seeks to recover. See *Connect America Fund et al.*, Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 5949, ¶ 190 (2016).

¹³ The concerns of the undersigned counties have been further aggravated by RiverStreet's failure or refusal to respond to or even acknowledge persistent inquiries from the county executives. A catalog of frustrated inquiries by the county executives is enclosed as Exhibit A.

¹⁴ See Application of RiverStreet Communications of Virginia, Inc. for Designation as an Eligible Telecommunications Carrier, Virginia State Corporation Commission Case No. PUR-2018-00172 (dated Oct. 9, 2018), at 8.

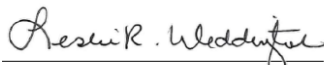
¹⁵ *Id.*, at 6-7.

Jessica Rosenworcel, Chairwoman
Federal Communications Commission
August 1, 2023
Page 5 of 6

to perform can focus their efforts on attracting another broadband provider to the area to bring the high-speed broadband services they so desperately need.

Thank you for your considerate attention to this important matter.

Sincerely,




Leslie Weddington

*Brunswick County
Administrator*



Scott Simpson

*Halifax County
Administrator*



Wayne Carter

*Mecklenburg County
Administrator*

Copies: The Honorable Mark R. Warner, United States Senate
The Honorable Timothy M. Kaine, United States Senate
The Honorable Jehmal T. Hudson, Virginia State Corporation Commission
William Chambliss, Esquire, Virginia State Corporation Commission
Raymond Doggett, Esquire, Virginia State Corporation Commission
Mr. Bryan Horn, Director, Virginia Department of Housing and Community
Development
Dr. Tamarah C. Holmes, Director, Virginia Office of Broadband

Exhibit A

Catalog of Frustrated County Executive Inquiries Since September 2020






Date of Contact	Type	Person Initiating Contact	County	Response from RiverStreet
9/10/2020	Email	George Morrison	Brunswick	Response received. No commitment to provide concrete schedule. Stated CAFII provides for six-year buildout beginning January 2020.
2021	Encounter at industry conferences	Leslie Weddington	Brunswick	Asked about buildout and received same answer as in 9/10/20 email to George Morrison. No further contact.
8/9/2022	Email	Scott Simpson	Halifax	Response received that they would meet deadline.
8/11/2022	Email	Scott Simpson	Halifax	No Response as of Letter Date.
5/3/2023	Email	Scott Simpson	Halifax	No Response as of Letter Date.
5/3/2023	Email	Scott Simpson	Halifax	No Response as of Letter Date.
6/26/2023	Email	Scott Simpson	Halifax	No Response as of Letter Date.
6/26/2023	Email	Scott Simpson	Halifax	No Response as of Letter Date.
7/27/2023	Email	Scott Simpson	Halifax	No Response as of Letter Date.
7/27/2023	Email	Scott Simpson	Halifax	Response received. No specific schedule for implementation.
7/31/2023	-none-	Wayne Carter	Mecklenburg	No communication nor updates provided by RiverStreet. Subsequently, County staff has not initiated other contact.

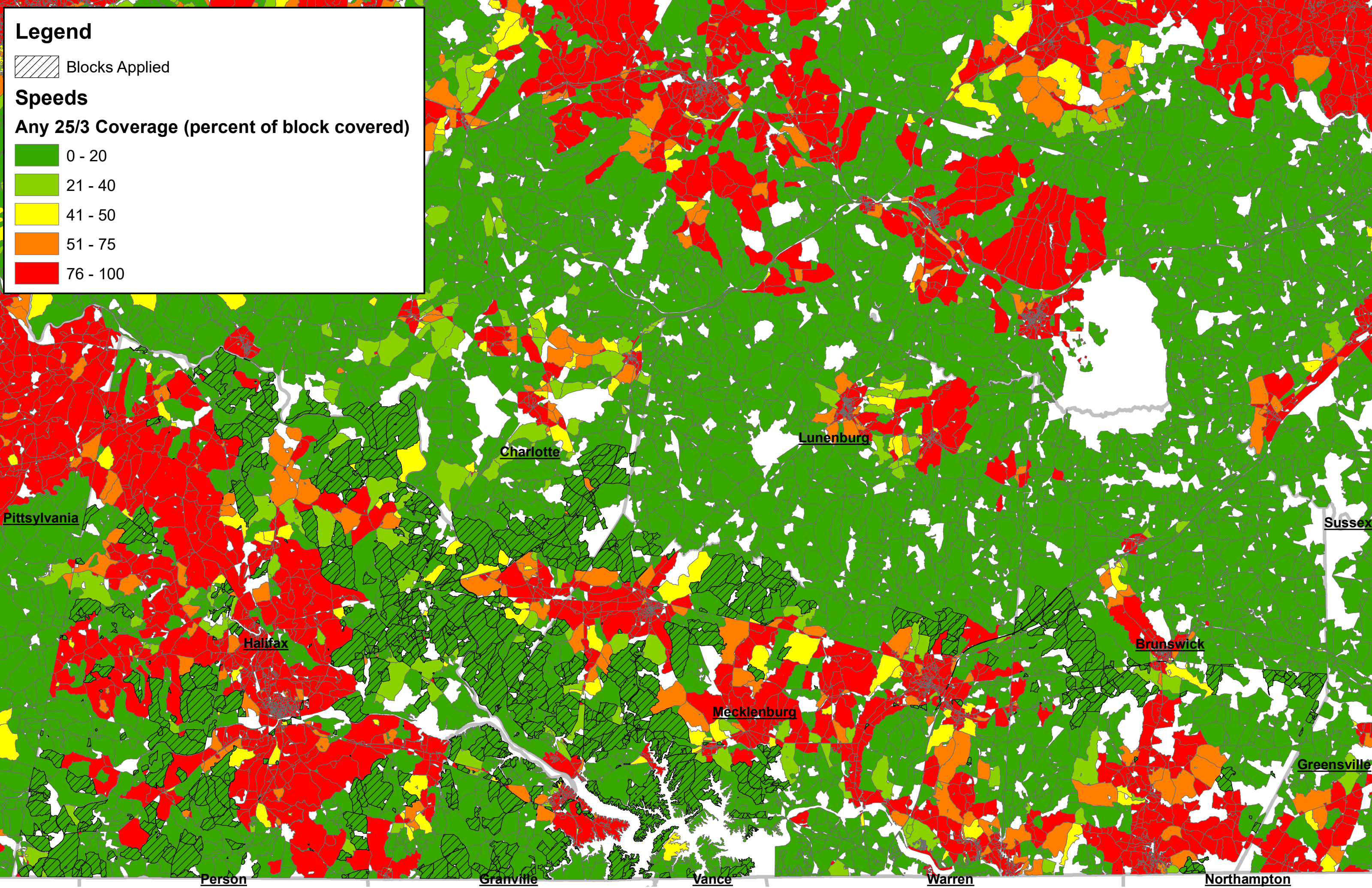
Legend

 Blocks Applied

Speeds

Any 25/3 Coverage (percent of block covered)

-  0 - 20
-  21 - 40
-  41 - 50
-  51 - 75
-  76 - 100



2023 Virginia Telecommunication Initiative (VATI) Passing Form

Type of Passings	Total Number of Passings in the Project Area ¹	Passings in the Project Area, without Special Construction Costs Required ²	Passings with Special Construction Costs budgeted in the Application ³	Number of Passings with Speeds at 25/3 or below in Project Area ⁴
Residential	12,305	12,305	0	11,490
Businesses (non-home based)	392	392	0	392
Businesses (home-based)	130	130	0	122
Community Anchors	59	59	0	56
Non-residential	205	205	0	196
Total	13,091	13,091	0	12,256

Note: The Total Number of Passings **MUST** be equal to the Residential, Business (non-home based), Non-residential and Community Anchors sum.

Note: Do not include passings in RDOF awarded areas that were awarded to the co-applicant; these passings should be included in the RDOF Passings Form. Passings included in this application in RDOF awarded areas that were not awarded to the co-applicant, unless successfully challenged, are considered unserved and should be counted as passings in this form.

¹The total number of structures in the project area that can receive service. See definition of passing below for more detail.

²The number of structures in the project area that will not require special construction costs to provide service to. These passings fall within the broadband provider's standard service connection drop length and do not require nonstandard equipment or any additional fees above normal service connection fees required to provide broadband access to a premise.

³The number of structures in the project area with all construction costs budgeted in the application. These passings will not require any additional special construction costs beyond those budgeted for in the VATI application.

⁴The number of structures in the project area that do not have access to internet at speeds of at least 25 mbps download and 3 mbps upload.

Definitions

Passing – any structure that can receive service. Multi-unit structures may be counted as more than 1 passing, provided individual connections and account are planned at that structure.

Business – An organization or entity that provides goods or services in order to generate profit. Businesses based in residential homes can count if they are a registered business (BPOL, LLC, etc.).

Community Anchor - schools, libraries, medical and health care providers, public safety entities, community colleges and other institutions of higher education, and other community support organizations and agencies that provide outreach, access, equipment, and support services to facilitate greater use of broadband service by vulnerable populations, including low-income, unemployed, and the aged.

Non-Residential Passing – places of worship, federal, state, or local facilities or other potential customers that are neither a residence, business or a community anchor as defined above.

2023 Virginia Telecommunication Initiative (VATI) RDOF Passings Form

Type of Passings	Total Number of Passings in the Project Area that lie within Preliminarily Awarded RDOF Areas ¹
Residential	1,160
Businesses (non-home based)	1
Businesses (home-based)	42
Community Anchors	18
Non-residential	0
Total Number of RDOF Passings	1,221

*Note: The Total Number of RDOF Passings **MUST** be equal to the Residential, Business (non-home based), Non-residential and Community Anchors sum.*

Definitions

Passing – any structure that can receive service. Multi-unit structures may be counted as more than 1 passing, provided individual connections and account are planned at that structure.

Business – An organization or entity that provides goods or services in order to generate profit. Businesses based in residential homes can count if they are a registered business (BPOL, LLC, etc.).

Community Anchor - schools, libraries, medical and health care providers, public safety entities, community colleges and other institutions of higher education, and other community support organizations and agencies that provide outreach, access, equipment, and support services to facilitate greater use of broadband service by vulnerable populations, including low-income, unemployed, and the aged.

Non-Residential Passing – places of worship, federal, state, or local facilities or other potential customers that are neither a residence, business or a community anchor as defined above.

Southside Planning District Commission
South Hill, Virginia

PROJECT MANAGEMENT PLAN

REGIONAL FIBER BROADBAND PROJECT

DEPARTMENT OF HOUSING AND
COMMUNITY DEVELOPMENT
VIRGINIA TELECOMMUNICATIONS INITIATIVE

VATISF #TBD

PREPARED BY:
Southside Planning District Commission
and
EMPOWER Broadband, Inc.

Date: November, 2023

PROJECT DESCRIPTION

This project is a regional initiative led by the Southside Planning District Commission (PDC) as the grant applicant on behalf of the Counties of Brunswick, Charlotte, Greenville, Halifax, and Mecklenburg. Private project partners include EMPOWER Broadband, Dominion Energy, Mid-Atlantic Broadband, and Southside Electric Cooperative. EMPOWER Broadband is the wholly owned subsidiary of Mecklenburg Electric Cooperative (MEC), a member-owned utility that has been proudly and successfully serving its members in Southside Virginia for over 80 years. These partners have worked to develop a comprehensive regional strategy to achieve universal fiber-to-the-premise coverage. On behalf of this partnership, the Southside PDC was awarded a FY 24 VATI grant to support the developed project and provide universal broadband coverage to the Region. Each of the following participating counties has pledged a cash match in support of this project as follows Brunswick \$933,130.63, Charlotte \$5,957.00, Greenville \$41,894.00, Halifax \$1,110,752.68, and Mecklenburg \$864,448.09.

The project area comprises five counties: Brunswick, Charlotte, Greenville, Halifax, and Mecklenburg. The project will result in universal coverage, as defined by the DHCD grant criteria, for those in the project area who are currently unserved or underserved. This fiber expansion project will utilize the foundational fiber backbone deployed on MEC's electric infrastructure, and where needed, utilize the facilities of Dominion Energy, Southside Electric Cooperative, and Mid-Atlantic Broadband to expand broadband coverage outside of MEC's territory. VATI funds will be utilized to expand the backbone's reach and increase service availability to those that currently have no access, or limited access, to high-speed broadband internet.

PROJECT MANAGEMENT TEAM & MEETINGS

The purpose of the Project Management Team (PMT) is to monitor the project's progress and ensure it is on schedule, within budget, and that all contract activities are delivered. PMT meetings will be held monthly at the SPDC Office and/or via Zoom. The PMT will look at the "big picture" and propose adjustments to the Project Management Plan (PMP), as needed, to ensure actions taken, or not taken, will not negatively impact the project's success. Any significant revisions to the PMP or budget will be approved by the PMT.

The PMT shall consist of participating County Administrators, the Grant Administrator, the Grant Manager, the Financial Manager, Project Architect/Engineer, Internet Service Provider (ISP), and other stakeholders as appropriate. The duties will include:

1. Project notifications and communications will be the responsibility of the PMT which will meet at least monthly, or more often as needed. Any communication needed between meetings will be conducted via email.

2. Erika Tanner will schedule, distribute digital access invites (Zoom), and facilitate all PMT meetings. She will also provide an agenda and record and distribute meeting minutes to the PMT. The minutes will be kept in the project files to document the decisions made by the PMT.
3. Each PMT meeting will include the following from EMPOWER: an update from Dwayne Long and/or B.J. Seamans to include project progress to date and timeline status, current activity sites per County, and a budget report from Carol Ann Jones.
4. The PMT will review the project timeline presented to determine if deadlines are being met. If deadlines are not being met, the PMT will determine what, if any actions need to be taken to get the project back on track.
5. David Lipscomb and/or John Lee will keep the EMPOWER Board up to date on the project's progress.
6. Deborah Gosney and/or Mrs. Tanner will keep the SPDC up to date on the project's progress.
7. Each partner County Administrator will keep their respective Board of Supervisors up to date on the project's progress.
8. The project is projected to be completed by September 30, 2026.
9. Mrs. Tanner will prepare, upload, and submit via CAMS all VATI required reports and correspondence documents. EMPOWER will provide all VATI required documents, data, and/or other information requested by Mrs. Tanner to allow VATI reporting to remain in compliance of VATI program guidelines.
10. Any potential contract or budget amendments will be discussed with the PMT. Mrs. Tanner will enter and submit any required amendments in CAMS and provide all appropriate persons a copy of any approved contract amendments.

PROJECT ROLES AND RESPONSIBILITIES

Member	Affiliation	Project Responsibilities
Deborah Gosney, Executive Director	Southside PDC	Grant Administrator - Signatory of the VATI contract. Liaison between EMPOWER, VATI, and County Partners. Broad oversight to ensure that the project is implemented pursuant to the terms of VATI Contract and SPDC MOU.
Erika Tanner, Community Planner	Southside PDC	Grant Manager – Review remittances/reports for accuracy and completeness and submit into CAMS. Maintain project files. Organize and facilitate meetings and record minutes. Assist with project close-out reporting.

Member	Affiliation	Project Responsibilities
John C. Lee, Jr., CEO and President	EMPOWER	ISP Chief Manager - Oversee project implementation and adherence to project timeline. Communication and marketing.
Dwayne Long, Chief Operating Officer	EMPOWER	ISP Manager - Oversee project implementation and adherence to project timeline. Provide project progress report to PMT at monthly meetings.
David Lipscomb, Vice President of Member and Energy Services	EMPOWER	ISP Administrator – Primary Empower contact for SPDC. Oversee project adherence to VATI guidelines. Keep EMPOWER Board abreast of project activities. Liaison between EMPOWER, SPDC, and VATI. Provide all required non-financial project files to SPDC.
Carol Ann Jones, VP of Finance	EMPOWER	ISP Financial Manager – Monitor and record VATI and non-VATI (match) expenditures to ensure project remains within budget. Provide all project financial documents (invoices, receipts, proof of payment). Monitor overall project budget and present financial report at meetings.
Sherry Harris, Administrative Assistant	EMPOWER	ISP Administrative Assistant – Performs administrative tasks as necessary
Brian Woods, Director of Engineering	EMPOWER	ISP Engineering Coordinator – Coordinates engineering plans of fiber infrastructure for project.
B.J. Seamans, VP of Engineering	EMPOWER	ISP Internal Engineer – Oversee project engineering and adherence to project timeline.
Robert Lankford	EMPOWER	ISP Engineering & Construction Manager – Coordinates construction of fiber infrastructure for project.
Jim Guy	EMPOWER	ISP Attorney – Oversee all legal aspects of project and complete any required contract/document review and response.

Member	Affiliation	Project Responsibilities
Leslie Weddington, County Administrator	Brunswick County	County representative- Attend PMT meetings as needed to monitor progress of project, provide input, and keep BOS up to date on project activities.
Daniel Witt, County Administrator	Charlotte County	County representative- Attend PMT meetings as needed to monitor progress of project, provide input, and keep BOS up to date on project activities.
Dr. Charlette Woolridge, County Administrator	Greenville County	County representative- Attend PMT meetings as needed to monitor progress of project, provide input, and keep BOS up to date on project activities.
Scott Simpson, County Administrator	Halifax County	County representative- Attend PMT meetings as needed to monitor progress of project, provide input, and keep BOS up to date on project activities.
Wayne Carter, County Administrator	Mecklenburg County	County representative- Attend PMT meetings as needed to monitor progress of project, provide input, and keep BOS up to date on project activities.

FISCAL MANAGEMENT

The fiscal management and oversight of this project will be provided by the Southside PDC, EMPOWER Broadband, and the Project Management Team (PMT).

The following describes the process for review, approval, and payment of invoices, in addition to remittance procedures related to all project expenditures, including leverage funds:

1. All invoices that Empower receives will be paid directly by Empower in the full amount. No remittances will be paid directly to sub-contractors using VATI funding or County matching funds.
2. Empower staff will review all invoices for correctness and note in writing on the invoice in which County those costs were incurred. If costs were for multiple Counties, Empower staff will provide a per County cost breakdown for that invoice and sign/initial all invoices confirming they have been approved for submission to Erika Tanner with the Southside PDC.
3. Empower staff will be responsible for contacting Dominion Power monthly, or as needed, to confirm the total amount of match they expended and provide that figure to Mrs. Tanner to include in the VATI remittance request.
4. Ms. Jones will be responsible for ensuring that Mrs. Tanner receives copies of all approved invoices, checks, proof of canceled checks, and any other requested financial documentation, by the 15th day of each month.

5. Mrs. Tanner will review each invoice for eligibility, check for the notation stating which County/Counties the work occurred, make note of the date the invoice was received, and sign/initial all invoices confirming they have been approved for remittance request. For each invoice, Mrs. Tanner will notate the breakdown of VATI funds, County match, and Empower match utilizing the appropriate percentages according to the project budget.
6. Mrs. Tanner will prepare all draw remittance requests and budget revisions and submit them through CAMS monthly or as needed.
7. VATI funds are distributed on a reimbursement basis. Upon Southside PDC receipt of VATI funds from draw remittances, Mrs. Tanner will request a reimbursement check be issued by the Southside PDC to EMPOWER. Reimbursement will be issued within ten business days of VATI funds posting to the Southside PDC account.
8. Mrs. Tanner will maintain a detailed project accounting spreadsheet. It will include the following registers, broken out per County and a separate tab to show the overall project: invoices received from EMPOWER, cumulative remittance requests, expenditures summary, match/leverage summary (Counties, Dominion, Empower), EDI notifications, and reimbursements paid to EMPOWER. Mrs. Taylor and/or Empower staff will track these same budget line items and perform a monthly reconciliation with the SPDC.
9. Ms. Tanner will provide a financial report at each PMT meeting to include the total expended VATI and match/leverage funds and any other relevant financial information.
10. Quarterly, Empower will issue an invoice to each County for expenses incurred in that County to date for that fiscal year. Mrs. Tanner will assist Empower with the necessary documentation needed to facilitate this process. The cumulative total of these invoices will not exceed the County's pledged match.
11. **Note: Per the U.S. Treasury, all SLFRF-ARPA dollars must be expended by October 31, 2026. County matches, if they are ARPA funds, must be utilized before this date.**

DESIGN AND CONSTRUCTION

The following outlines the process for the project's design and construction contract administration which will include surveying, preparing and reviewing bid documents and plans, bidding, change order approval, and local government inspection and oversight.

1. EMPOWERs internal and external engineers will design the proposed project area to determine the geographic layout, number of miles, locations passed, overview of materials needed, and estimated total cost.
2. An RFP for the scope of work will be sent to at least three vendors for bids.
3. Once the bids are received, EMPOWER will review and determine the selection of the vendor based on price, equipment availability, time to market, and reference accounts.

4. A vendor will then be selected, notified, and required to sign a contract that includes the description of the work to be performed, price submitted with the bid, and the project time for completion of construction.
5. A pre-construction meeting will be held with the applicable members of the PMT and the selected vendor to thoroughly discuss the project, budget, timeline, and the expected outcomes.
6. The Contractor shall comply with all Federal, State, and Municipal laws, ordinances, and regulations; building and construction codes applicable to the performance of the work; and wage rate documentation will be provided.
7. The contractor shall follow the instructions of government officials regarding maintenance of traffic and protection of the public. The contractor shall obtain a copy of regulations or permit requirements of the appropriate road authorities and make all employees aware of these regulations.
8. EMPOWER will maintain inspectors at the job site on a regular basis and/or as required by the VATI contract.

PROJECT OUTCOMES

The Proposed project proposes to achieve 12,409 passings.

The Southside PDC and EMPOWER will utilize the following process to document how the project will achieve its proposed benefit. The Southside PDC will maintain appropriate documentation on file for five years after project closeout.

1. The Southside PDC and EMPOWER will obtain information on subscribers and speed package selected, as well as speed validation data, from EMPOWER to ensure that the proposed outcomes have been met and broadband speeds meet VATI criteria.
2. The Southside PDC and EMPOWER will retain financial records, supporting documents, statistical records, and all other records pertinent to the VATI award for a period of no less than five years from the date of submission of the final expenditure report.
3. The Southside PDC and EMPOWER will make sure that all grant activities described in the contract documents are complete on or before the project end date.

CERTIFYING OFFICER(S):

The following Certifying Officer(s) will be responsible for approving and signing any official grant-related documents or any document related to project implementation.

Deborah Gosney (Grant Administrator), Southside PDC Executive Director, will serve as the Certifying Officer responsible for signing any grant-related documents on behalf of the of the project partner Counties of Brunswick, Charlotte, Halifax, and Mecklenburg, Virginia.

John Lee (Chief Project Manager), CEO EMPOWER Broadband, Inc, will serve as the Certifying Officer responsible for signing any project implementation-related documents on behalf of the of the project ISP partner EMPOWER.

DRAFT

Project Milestone Timeline

(Attached)

DRAFT

Project Milestone Timeline

Brunswick

SPDC Project Objectives and Activities	2023				2024				2025				2026				2027			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Finalize Design				Phase 1			Phase 2			Phase 3			Phase 4							
Obtain Permits																				
OSP Construction Middle Mile																				
Electronics Construction Middle mile																				
OSP Construction last mile																				
Electronics Construction last mile																				
Test and Turn up																				
DROP and ONT install																				
Customer Install																				
Estimated Number of Locations Past						173	173	173	173	173	173	173	173	173	173	173	173	197	185	2458
% Buildout Achieved						7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	8%		100%

Project Milestone Timeline

Mecklenburg

SPDC Project Objectives and Activities	2023				2024				2025				2026				2027			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Finalize Design				Phase 1			Phase 2			Phase 3			Phase 4							
Obtain Permits																				
OSP Construction Middle Mile																				
Electronics Construction Middle mile																				
OSP Construction last mile																				
Electronics Construction last mile																				
Test and Turn up																				
DROP and ONT install																				
Customer Install																				
Estimated Number of Locations Past						294	294	294	294	294	294	294	294	294	294	294	294	336	328	4192
% Buildout Achieved						7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	8%		100%

Project Milestone Timeline

Halifax

SPDC Project Objectives and Activities	2023				2024				2025				2026				2027			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Finalize Design				Phase 1			Phase 2			Phase 3			Phase 4							
Obtain Permits																				
OSP Construction Middle Mile																				
Electronics Construction Middle mile																				
OSP Construction last mile																				
Electronics Construction last mile																				
Test and Turn up																				
DROP and ONT install																				
Customer Install																				
Estimated Number of Locations Past						378	378	378	378	378	378	378	378	378	378	378	378	432	429	5397
% Buildout Achieved						7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	8%	8%	100%

Project Milestone Timeline

Greenville

SPDC Project Objectives and Activities	2023				2024				2025				2026				2027			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Finalize Design				Phase 1			Phase 2			Phase 3			Phase 4							
Obtain Permits																				
OSP Construction Middle Mile																				
Electronics Construction Middle mile																				
OSP Construction last mile																				
Electronics Construction last mile																				
Test and Turn up																				
DROP and ONT install																				
Customer Install																				
Estimated Number of Locations Past						27	27	27	27	27	27	27	27	27	27	27	27	30	21	375
% Buildout Achieved						7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	8%	8%	100%

**GRANT AGREEMENT
FIBER TO THE PREMISES BROADBAND SERVICE – SOUTHSIDE PDC /
EMPOWER BROADBAND**

Draft to be executed upon notice of award.

THIS AGREEMENT (“Agreement”) is made and entered as of the TBD DATE, by and between the SOUTHSIDE PLANNING DISTRICT COMMISSION (the “SPDC”), a body corporate and politic of the Commonwealth under the provisions of the Regional Cooperation Act, BRUNSWICK COUNTY, VIRGINIA, a political subdivision of the Commonwealth (“Brunswick County”), CHARLOTTE COUNTY, VIRGINIA, a political subdivision of the Commonwealth (“Charlotte County”), GREENSVILLE COUNTY, VIRGINIA a political subdivision of the Commonwealth (“Greensville County”), HALIFAX COUNTY, VIRGINIA, a political subdivision of the Commonwealth (“Halifax County”), MECKLENBURG COUNTY, VIRGINIA, a political subdivision of the Commonwealth (“Mecklenburg County”; each a “County” and collectively the “Counties”), and EMPOWER BROADBAND, INC., a Virginia stock corporation and a wholly- owned subsidiary of Mecklenburg Electric Cooperative, a Virginia consumer utility services cooperative (“EMPOWER”), for the purpose of providing grant funding from the Virginia Telecommunications Initiative (“VATI”), the Virginia Department of Housing and Community Development (“DHCD”), and the Counties to EMPOWER in an effort to expand and improve broadband services to the citizens of the Counties.

The effective date of this Agreement is the date on which DHCD signs the Grant Agreement, as hereinafter defined.

For their Agreement, the Parties state:

Recitals:

WHEREAS, the SPDC and the Counties have been allocated grant funds from the DHCD VATI Program under its rules and regulations; and

WHEREAS, the SPDC and the Counties recognize that in order to attain and maintain a high-quality level of broadband service to the citizens of the Counties, a close working relationship with a private internet provider is desirable and will be made possible in large part through state and federal grant funding opportunities; and

WHEREAS, studies have shown that access to high-quality broadband service stimulates economic activity, creates jobs, promotes industry and trade, increases the values of property, and otherwise serves the lawful purposes of the SPDC and the Counties; and

WHEREAS, the SPDC is a political subdivision of the Commonwealth of Virginia, authorized to carry out the purposes provided herein pursuant to the Regional Cooperation Act, Sections 15.2-4200 *et seq.* of the Code of Virginia, 1950, as amended, and the Counties are political subdivisions of the Commonwealth of Virginia, created by the General Assembly with all powers granted to political subdivisions operating under the traditional county form of

government; and

WHEREAS, EMPOWER is a Virginia stock corporation, with the technical and financial capability to provide telecommunications and information services, including broadband fiber to the home; and

WHEREAS, EMPOWER is a wholly-owned subsidiary of Mecklenburg Electric Cooperative which is also the sole shareholder of EMPOWER Telecom, Inc.; and

WHEREAS, EMPOWER and its Affiliates have issued a request for proposals (“RFP”) from construction contractors to construct the Project; and

WHEREAS, in addition to the funds granted to the SPDC by DHCD under the VATI program, the Counties wish to make certain funds available to the SPDC, and the SPDC wishes to make available funds to EMPOWER, for the purposes of supporting EMPOWER’s commitment to carry out the Project in the Counties, increasing jobs and employment, enhancing learning opportunities for students, and otherwise expanding the tax base of the Counties. This Agreement sets forth the terms and conditions of this grant, in accordance with the Rule, as amended.

Witnesseth:

NOW THEREFORE, in consideration of the foregoing premises, the mutual benefits, promises, and undertakings of the Parties to this Agreement as set forth below, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties covenant and agree as follows:

I. Definitions and Incorporations by Reference.

1.1. For the purposes of this Agreement, the following terms have the following meanings, unless context or the manifest purpose of this Agreement indicate otherwise:

Affiliates means, with respect to EMPOWER, Mecklenburg Electric Cooperative and EMPOWER Telecom, Inc.

Capital Investment means a capital expenditure by EMPOWER and its Affiliates or by a third party with a contract with EMPOWER to carry out work related to the Project as set out in the Grant Agreement. The total expected Capital Investment is not less than \$25,821,615.67, composed of \$23,924,722.20 by EMPOWER and its Affiliates and \$1,896,893.47 by Dominion Energy.

Change Order means an agreed change to the scope, schedule, or price of the work on the Project. All change orders must be memorialized by a writing signed by an authorized representative of the person or party to be charged thereon.

Commonwealth means the Commonwealth of Virginia.

Contract Period Performance Date means the deadline for Project completion as required in the Grant Agreement, as may be extended pursuant to the Grant Agreement, the VATI Program, or as may otherwise be provided by law.

County Contribution has the meaning given to it in Section 2.3.

Grant or *Grant Funds* means the \$28,752,302.16 in funds that DHCD will make available to the SPDC, together with the Counties' Contribution in the total amount of \$1,956,182.13 that the Counties will make available to the SPDC for a grant to EMPOWER to carry out the Project.

Project means that broadband expansion project generally described in **Exhibit A**. For the removal of ambiguity, it is expressly agreed by the Parties that EMPOWER, its Affiliates, and Dominion will be the ultimate owners of their respective parts of the infrastructure constructed in the Project.

RFP means the request for proposals from construction contractors to construct the Project.

Targets means EMPOWER's commitment pursuant to this Agreement to make or cause to be made Capital Investments in the Project of at least \$23,924,722.20 as of the Contract Period Performance Date. EMPOWER shall also, as of the Contract Period Performance Date, provide documentation to the SPDC and the Counties of (1) the number of takes and the take rate for the Project; and (2) the speeds achieved by the Project. The Project must have available to customers wireline internet meeting or exceeding 100/20 megabit per second scalable to 100/100 service.

Uniform Guidance means the Uniform Guidance for Grants and Agreements, 2 C.F.R. Part 200.

1.2. The following documents are incorporated by reference, and the requirements thereof are hereby adopted and reimposed on the Parties:

Grant Application means the *Application to DHCD Submitted Through CAMS: Southside Planning District Commission's Universal Broadband Coverage Initiative*.

Grant Agreement means the agreement between the Virginia Department of Housing and Community Development and the SPDC, dated as of **[fill in date agreement is entered]**, for the Project, with DHCD Grant No. VATISF #TBD, a copy of which is attached hereto as **Exhibit D**.

Project Management Plan means the Project Management Plan, Department of Housing and Community Development Virginia Telecommunications Initiative, VATISF

#TBD, dated as of TBD DATE, as amended, a copy of which is attached hereto as **Exhibit E**.

In the event of a conflict among the requirements of the documents incorporated herein by this Section and this Agreement, the provisions of this Agreement, as amended, shall apply.

II. Targets & County Contributions.

2.1. EMPOWER and its Affiliates will construct or cause to be constructed and operate the Project in the Counties and make the Capital Investment by the Contract Period Performance Date. The initial construction of the Project must be complete by the Contract Period Performance Date. EMPOWER must diligently use its commercially reasonable best efforts for community outreach and marketing the services at strategically appropriate times, before and following the Contract Period Performance Date. The SPDC and the Counties will make reasonable efforts, consistent with all provisions of law, to assist EMPOWER in meeting these goals. The Parties understand, however, that the number of customers who choose to subscribe is beyond the Parties' control and is expressly not an item of consideration for this Grant.

2.2. The Counties shall make County Contributions totaling \$1,956,182.13 to the Grant Funds in the following amounts:

- 2.2.1. Brunswick County: \$933,130.63
- 2.2.2. Charlotte County: \$5,957.00
- 2.2.3. Greenville County: \$41,894.00
- 2.2.4. Halifax County: \$1,110,752.68
- 2.2.5. Mecklenburg County: \$864,448.09

County Contributions will be managed and spent as provided in the Project Management Plan.

2.3. Grant disbursements shall be made monthly within 30 days of submission by EMPOWER to the SPDC of detailed invoices verifying expenditure of funds and delivery of goods, services, or construction work in furtherance of the Project. In the event of a dispute concerning any portion of an invoice, timely disbursement shall be made for the undisputed portion of such invoice. Without a Change Order, the total amount of all Grant Funds disbursed shall be not more than \$28,752,302.16.

2.4. Monthly reporting and totals of Grant Funds shall be as set forth in the Grant Agreement.

2.5. The Parties will schedule monthly project management team meetings to discuss, without limitation, payment, progress of the Project, or relations with EMPOWER's contractor(s) and contractor's(s') management of its/their subcontractors. Such meetings shall be at a mutually convenient time and may be held by electronic means or teleconference. Such meetings may be canceled by mutual agreement if there is insufficient information to merit a meeting.

2.6. In the event the Grants are not made due to an event of non-appropriation or

otherwise, EMPOWER's obligations for performance under this Agreement shall be void and of no force and effect.

III. Application of Grant Funds & Reporting.

3.1. EMPOWER agrees to apply the Grant Funds solely and exclusively to the payment, or reimbursement for the payment, of work on the Project. EMPOWER further agrees to provide such receipts, vouchers, statements, bills of sale, or other evidence of the actual payment of the same on a monthly or quarterly basis as are required by the Grant Agreement.

3.2. EMPOWER is responsible for compliance with the applicable provisions of federal, state, and local labor relations guidelines and requirements applicable under the Rule. The Rule suggests compliance with prevailing wage requirements or use of project labor agreements as ways of complying with the requirements of the Rule; however, the manner of compliance is in the discretion of EMPOWER. EMPOWER shall be solely responsible for compliance and certification thereof as provided in the Rule. If EMPOWER chooses to meet its requirements by meeting prevailing wage requirements, it shall use the wage scales provided by the U.S. Department of the Treasury for highway construction trades applicable in the Counties unless otherwise provided by law. Unless otherwise required by the Rule, reporting of labor need not be made to the U.S. Department of Labor or the Virginia Commissioner of Labor of Industry; *provided*, however, that accurate records of wages and benefits must be kept so as to enable the SPDC and the Counties to audit compliance as provided in Section 5.1.

3.3. As more particularly described in the RFP, each construction contractor employed in the accomplishment of any of the Project shall be required in the construction contract to furnish a performance bond and a payment bond. Each contractor shall be required to maintain during the construction period covered by the particular construction contract builder's risk insurance, workers' compensation insurance, public liability insurance, property damage insurance, and vehicle liability insurance in accordance with EMPOWER's policies and procedures set forth in the RFP. SPDC and the Counties find that this requirement adequately protects the federal interest in the Grant Funds.

3.4. Retainage shall be as set forth in the Grant Agreement.

3.5. EMPOWER shall provide monthly progress reports as set forth in the Grant Agreement. Such progress reports will be provided monthly. For the purposes of verifying the accuracy of reports, and for no other purpose, EMPOWER hereby waives its protections under Section 58.1-3 of the Code of Virginia, 1950, as amended, and authorizes the Commissioners of the Revenue for each County to provide verification to the SPDC and the Counties from their records; *provided*, however, that such disclosure shall not waive the protections of Section 58.1-3 as to any other person, nor authorize the SPDC and the Counties to disclose such information to any other person other than DHCD, the Virginia Department of Accounts, the U.S. Department of the Treasury, and other agencies authorized by law to audit or inspect the Project. Further, EMPOWER grants the SPDC and the Counties the right to inspect any site at which work on the Project is or has been carried out or where materials are or have been stored during the term of this Agreement in order to verify work for which an invoice has been submitted.

3.6. EMPOWER may apply for a Change Order at any time. A Change Order shall become effective upon its approval by the SPDC, the Counties, and DHCD; but no County shall be required to approve any change order, and no County shall have any liability by reason of its failure to approve a change order.

3.7. DHCD, in furtherance of the VATI grant, and the Counties, in furtherance of the obligations imposed on them by the Rule and the Uniform Guidance, are expected to conduct Compliance Reviews. EMPOWER must make all records available upon their request.

3.8. If the sum of the Grant Funds and the EMPOWER match are insufficient cost of the total of all the Project, or regulatory burdens materially increase costs, SPDC will facilitate discussions with the Counties involved, DHCD, and EMPOWER to determine the best course of action, including but not limited to seeking additional grant or loan funds, value engineering, changes to the scope of the Project, or extension of timelines, which additional costs or time shall be subject to an equitable change order or a claim as provided in Section 5.5.

IV. Representations of EMPOWER.

4.1. EMPOWER has familiarized itself with the nature and extent of this Agreement and with all local conditions and state, federal, and local laws, ordinances, rules, and regulations, including but not limited to the rules and regulations of the VATI program, the Rule, and the Uniform Guidance.

4.2. EMPOWER shall maintain a financial management system and financial records and shall use funds received pursuant to this Agreement in accordance with this Agreement and all applicable laws. EMPOWER shall maintain detailed, itemized documentation and records of all income received and expenses incurred pursuant to this Agreement.

4.3. Any item of expenditure by EMPOWER under the terms of this Agreement which is determined by auditors, investigators, and other authorized representatives of SPDC or the Counties, the SPDC's or the Counties' Independent Auditors, the U.S. Government Accountability Office or the Comptroller General of the United States, or DHCD or the Virginia Auditor of Public Accounts, or other authorized governmental authority to be improper, unallowable, in violation of federal or state law or the terms of this Agreement, or involving any fraudulent, deceptive, or misleading representations or activities of EMPOWER, must be repaid to SPDC by EMPOWER within 30 days after notification of a final non-appealable determination from funds other than those provided by SPDC and the Counties under this Agreement or any other agreements between EMPOWER and the SPDC and/or the Counties. This provision shall survive the expiration or termination of this Agreement and is intended to be congruent with the repayment provisions of the Grant Agreement.

4.4. EMPOWER's obligations to the SPDC and the Counties under this Agreement shall not terminate until all closeout requirements are completed to the satisfaction of the SPDC and the Counties. Such requirements shall include, without limitation, submitting final reports to the SPDC and the Counties and providing any closeout-related information requested by SPDC and the Counties by the deadlines specified by the SPDC and the Counties.

4.5. EMPOWER shall provide SPDC and the Counties with broadband service and

coverage data and information (“Service Territory Data”) in the time and formats established by DHCD in its Internet Service Provider Territory Data Submission Guidelines (“Data Submission Guidelines”) pursuant to Section P of Item 114 of Chapter 552, 2021 Acts of Assembly, 2021 Special Session I (the “Budget Amendment”). Service Territory Data shall be submitted to SPDC and the Counties simultaneously with its being provided to the Commonwealth of Virginia as required by DHCD.

V. Miscellaneous.

5.1. Audits. EMPOWER must allow the SPDC, the Counties, their auditors, and other persons authorized by them to inspect and copy its books and records upon reasonable notice during regular business hours for the purpose of verifying that monies provided to EMPOWER pursuant to this Agreement were used in compliance with this Agreement and all applicable provisions of federal, state, and local law. EMPOWER will retain all such records for not less than five years after the Contract Period Performance Date.

5.2. Permits and Compliance With Laws. EMPOWER will obtain or cause to be obtained, in a timely manner, all required permits, licenses, and approvals, and will meet all requirements of all local, state, and federal laws, rules and regulations which must be obtained or met in connection with construction of the Project.

5.3. Relationship of the Parties. Nothing contained in this Agreement shall be construed as creating any agency, partnership, joint venture, or other form of joint enterprise, employment, or fiduciary relationship between the Parties. Neither SPDC and the Counties, for their part, nor EMPOWER, shall have any right, power, or authority to act or create any obligation, express or implied, on behalf of the other Party.

5.4. Default and Termination. In general, defaults or potential defaults shall be discussed and informally resolved at monthly progress meetings. In the event of a default of a material term of this Agreement that has not been able to be so resolved following discussion at one or more progress meetings, upon an event of non-appropriation (either by the Commonwealth or one of the Counties), or the bankruptcy, insolvency, a general assignment for the benefit of creditors, or similar action by a Party, the non-defaulting Party shall give prompt written notice to the chief administrator of the defaulting Party at that person’s principal office. The non-defaulting party shall take prompt, reasonable steps to remedy any such default. In the event the defaulting party has not taken prompt, reasonable steps to remedy such default within 30 days, or, if the default is the result of an event of non-appropriation or petition for bankruptcy, has not identified reasonably satisfactory alternative sources of funds, or voluntarily dismissed or vigorously controverted such petition, then the non-defaulting party may take any other action to protect its interests as it deems appropriate, including seeking remedies at law or in equity.

5.5. Limitation on Damages; Time for Asserting Claim.

5.5.1. The Parties hereby expressly waive any right to claim or recover consequential, special, punitive, lost business opportunity, lost productivity, field office overhead, general conditions costs, or lost profits damages of any nature or kind.

5.5.2. Prior to asserting any claim for damages of any kind or nature, EMPOWER

must first provide the SPDC and the Counties with written notice of its claim, the facts and circumstances surrounding and giving rise to the claim, and the total amount of damages sought by the claim. EMPOWER will exert its commercially reasonable best efforts to provide such notice within ninety (90) calendar days of its becoming aware of the facts and circumstances giving rise to the claim.

5.6. Dispute Resolution.

5.6.1. Any claim, controversy, or dispute between the parties, their agents, employees, or representatives shall be resolved first by negotiation between authorized personnel from each party duly authorized to execute settlement agreements. Upon mutual agreement of the parties, the parties may invite an independent, disinterested mediator to assist in the negotiated settlement discussions.

5.6.2. If the parties are unable to resolve the dispute within thirty (30) days from the date the dispute was first raised, then such dispute may only be resolved in a court of competent jurisdiction in compliance with the Choice of Law provisions of this Agreement.

5.7. EMPOWER shall secure insurance coverage through an insurance company or companies duly licensed and authorized to conduct insurance business in Virginia which insures the liabilities and obligations specifically assumed by EMPOWER in this Section.

EMPOWER shall furnish to the SPDC and the Counties an accompanying certificate of insurance and accompanying endorsements in amounts not less than as follows:

- Employers Liability Limits
 - Workers Compensation: Statutory
 - Bodily Injury by Accident: \$2,000,000
 - Bodily Injury by Disease: \$2,000,000 policy limit
- General Liability: \$2,000,000 per occurrence

The obligations of this Section shall survive termination of this Agreement.

5.8. Force Majeure. Neither SPDC and the Counties, for their part, nor EMPOWER, shall be liable or responsible to the other party, or be deemed to have defaulted or breached this Agreement, for any failure or delay in fulfilling or performing any term of this Agreement (except for any obligations to make payments to another party hereunder), when and to the extent that such failure or delay is caused by or results from acts beyond the impacted party's ("Impacted Party") control, including, without limitation, the following force majeure events ("Force Majeure Events"): (a) acts of God; (b) flood, fire, earthquake, winter storm, hurricane, or explosion; (c) war, invasion, hostilities (whether war is declared or not), terrorist threats or acts, riot, or other civil unrest; (d) government order, law, or actions; (e) embargoes or blockades in effect on or after the date of this Agreement; (f) national or regional emergency; (g) strikes, labor stoppages or slowdowns, or other industrial disturbances; (h) telecommunications breakdowns, power outages

or shortages, lack of warehouse or storage space, inadequate transportation services, or inability or delay in obtaining supplies of adequate or suitable materials; and (i) other events beyond the control of the Impacted Party. An Impacted Party shall be entitled to an equitable change order, subject to final approval by DHCD, in the event of a Force Majeure Event.

If a party's performance of any part of this Agreement is prevented, hindered, or delayed due to a Force Majeure Event, then that party must give the other party, within ten (10) days after such cause begins, written notice including a statement of the facts forming the basis for claiming the Force Majeure Event; and when the cause ends, the excused party shall, within ten (10) days, notify the other.

5.9. Attorney's Fees and Costs. In the event it becomes necessary for a party to this Agreement to retain an attorney to enforce any of the terms or conditions of this Agreement or to give any notice required herein, then all parties shall bear their own costs and the American Rule shall apply. In the event the SPDC sues or is sued by EMPOWER in relation to this Agreement, the Counties agree to pay its reasonable attorney's fees and costs related to such litigation to the extent such payment cannot be made out of the Grant Funds. In the event the litigation relates to the Project generally, then all the Counties will split fees as follows: Brunswick County: 29.6%; Charlotte County: 2.3%; Greenville County: 5.5%, Halifax County: 35.2%; Mecklenburg 27.4%. In the event the litigation affects fewer than all of the Counties, then the Counties affected shall split fees in proportion to the percentages above. By way of example only, if litigation fees were incurred relating solely to construction in Halifax and Brunswick Counties, then Halifax County's share would be $35.2\% / (35.2\% + 29.6\%) = 54.3\%$, and Brunswick County's share would be the remainder of 45.7%.

5.10. Subject to Appropriation. Any obligation of a County to pay, set aside, or otherwise appropriate funds for the performance of this Agreement shall be construed to be current accounts that are subject to appropriation for work performed or services rendered, and shall not be construed to be unconditional obligations in derogation of Article VII, § 10 of the Virginia Constitution. The obligations of the SPDC under this Agreement, and the obligations of the SPDC relating to passing through VATI grant funds, are not general obligations of the SPDC but are limited obligations payable solely from revenues and receipts derived by the SPDC from the Counties pursuant to this Agreement or from the Commonwealth under the VATI grant. The obligations of the SPDC and the Counties hereunder shall not be deemed to constitute a debt or pledge of the faith and credit of the Commonwealth of Virginia or any political subdivision thereof, including the SPDC and the Counties.

5.11. Integration and Modification. This document, including the exhibits hereto and documents incorporated herein, contains the entire agreement between the parties and no statements, promises or inducements made by either party or agents of either party not contained in this written Agreement may be considered valid or binding. This Agreement may not be modified except by written agreement signed by all parties.

5.12. No Assignment. EMPOWER may not assign its rights, including the right to Grant payments, or any other rights or duties arising hereunder, without the prior written consent of the SPDC and the Counties.

5.13. No Third-Party Beneficiary. The terms and provisions of this Agreement are

intended solely for the benefit of each party and their respective successors and assigns. It is not the parties' intent to confer third-party beneficiary rights upon any other person or entity.

5.14. Choice of Law. This Agreement shall be governed and construed in accordance with the laws of the Commonwealth of Virginia without regard to conflict of law provisions. The Parties agree to submit to the exclusive jurisdiction of the Circuit Courts of Mecklenburg County, Charlotte County, Halifax County, Greenville County, or Brunswick County.

5.15. Non-Waiver. Failure to insist on strict compliance with any of the terms or conditions of this Agreement shall not be construed to be a waiver thereof and does not limit another party's right to enforce such term or conditions or to pursue any available legal or equitable rights in the event of any subsequent default or breach.

5.16. Severability. If any portion of this Agreement is held to be void or unenforceable, the balance of the Agreement shall continue in effect.

5.17. Counterparts. This Agreement may be executed in any number of counterpart copies, each of which when executed and delivered shall be deemed to be an original and all of which counterparts when taken together shall constitute a single instrument. Facsimile, electronic, or scanned signatures shall be binding as originals in accordance with the Virginia Uniform Electronic Transactions Act, Va. Code §§ 59.1-479, *et seq.*

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day, month, and year first stated in this Agreement:

Signatures on following pages

Date

By: _____
Deborah Gosney
Executive Director, SPDC

Date

By: _____
John Lee
President and CEO, EMPOWER

Date

By: _____
Leslie Weddington
Brunswick County Administrator

Date

By: _____
Charlette Woolridge
Greenville County Administrator

Date

By: _____
Dan Witt
Charlotte County Administrator

Date

By: _____
Scott Simpson
Halifax County Administrator

Date

By: _____
Wayne Carter
Mecklenburg County Administrator

Exhibit A

Specifications & Schedule

The specifications and schedule are as set forth in the Project Management Plan.

DRAFT

Exhibit B

Required Certifications and Disclosures

Certification of Eligibility & Non-Collusion Statement

My signature below certifies that this contract is not the result of, or affected by, any unlawful act of collusion with another person or company engaged in the same line of business or commerce, or any act of fraud punishable under the Virginia Governmental Frauds Act (§§ 18.2-498.1, *et seq.* of the Code of Virginia, 1950, as amended) or the False Claims Act (31 U.S.C. § 3729). I also understand and agree to comply with the provisions of the Virginia Conflict of Interests Act (§§ 2.2-3100, *et seq.*) and the provisions of the Virginia Public Procurement Act relating to Ethics in Public Contracting (§§ 2.2-4367, *et seq.*). Furthermore, I understand that fraud and unlawful collusion are crimes under the Virginia Governmental Frauds Act and the False Claims Act, as well as laws against bid rigging (§§ 59.1-68.6, *et seq.*), the Virginia Antitrust Act (§§ 59.1-9.1, *et seq.*), and Federal laws regarding the same matters. They can result in fines, prison sentences, and civil damages awards.

Furthermore, I hereby certify that (i) all information submitted to SPDC, the Counties and DHCD in connection with this Agreement or the application for funds to fund this Agreement and/or in connection with any contract or agreement that may arise in the future from such application are true and accurate in all material respects, (ii) no principal, shareholder, director, officer, member, manager or other employee of EMPOWER with managerial control or responsibility over EMPOWER or over any significant aspect of its operations in the Commonwealth were employed (a) by DHCD and involved in the evaluation and scoring of applications received for consideration of award within one year prior to the date of the announcement of the project awards, or (ii) by the Governor’s administration during a period of two years prior to the date of execution of this Agreement.

I further certify that my firm is not a debarred entity under the System for Award Management (SAM) or by any agency or political subdivision of the Commonwealth of Virginia.

Name of Firm or Individual: _____

Address: _____

Signature: _____

Name (type/print): _____

Title: _____

Telephone: _____

Email: _____

FEIN: _____

Date: _____

Lobbyist Disclosure

The undersigned certifies, to the best of his or her knowledge or belief, that:

1. No federally appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the award of any federal contract, the making of any federal grant, the making of any federal loan, the modification of any federal contract, the entering of any cooperative agreement, or the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
2. If any funds other than federally appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the federal contract, grant, loan, or cooperative agreement, the undersigned must complete and submit Standard Form LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all subawards of all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly. The certification is a material representation of the fact on which reliance was placed is a prerequisite for making or entering into the transaction imposed by 31 U.S.C. § 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The undersigned shall require that the language of this certification is included in the award documents for all subawards of all tiers (including subgrants, contracts under grants, cooperative agreements, and subcontracts) and that all subrecipients shall certify and disclose accordingly.

Organization

Name of Representative

Title of Representative

Signature of Representative

Exhibit C

American Rescue Plan Act Funds Special Terms and Conditions

- A. Nondiscrimination.** In performing this contract, the Contractor shall not exclude any person from participating in, deny them a benefit of, or discriminate against them because of race, color, religion, national origin, sex, disability, or age. *See* 42 U.S.C. §§ 3601, *et seq.*; 42 U.S.C. §§ 6101, *et seq.*; 29 U.S.C. § 794; 42 U.S.C. § 12132; and 49 U.S.C. § 5332. The Contractor also agrees that it will not discriminate against any employee or applicant for employment because of race, color, religion, national origin, sex, disability, or age. *See* 29 U.S.C. § 623; 42 U.S.C. § 12101. In addition, the Contractor agrees to comply with applicable federal implementing regulations regarding the subject matter of this clause.
- B. Recycled Products.** The Contractor shall comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 C.F.R. Part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.
- C. Clean Air Act (42 U.S.C. §§ 7401–7671q) and the Federal Water Pollution Control Act (33 U.S.C. §§ 1251–1387), as amended.** Contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Clean Air Act (42 U.S.C. §§ 7401–7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. §§ 1251–1387). Violations of these standards by the Contractor shall be reported to the U.S. Department of the Treasury and the Regional Office of the Environmental Protection Agency (EPA).
- D. Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment.** Contractor certifies that it will not use equipment, services, or systems produced by Huawei Technologies Company, ZTE Corporation, Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company, or any subsidiary or affiliate of such entities.

Exhibit D
DHCD Grant Agreement

DRAFT

Exhibit E
Project Management Plan

Exhibit F
Funding Sources Table

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Attachment 9- 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	\$28,752,302.16	50%	Pending
EMPOWER MATCH	\$23,924,722.20	41.59%	SECURED
DOMINION ENERGY MATCH	\$1,896,893.47	3.3%	SECURED
BRUNSWICK CO. MATCH	\$933,130.63	1.62%	SECURED
HALIFAX CO. MATCH	\$1,110,752.68	1.93%	SECURED
MECKLENBURG CO. MATCH	\$864,448.09	1.50%	SECURED
GREENSVILLE CO. MATCH	\$41,894.00	0.07%	SECURED
CHARLOTTE CO. MATCH	\$5,957.00	0.01%	SECURED
TOTAL	\$57,530,100.23	100 %	

Documentation of Match Funding

Southside Regional Fiber Broadband Phase 3 Project

- 1) Brunswick County Letter of Commitment
- 2) Charlotte County Letter of Commitment
- 3) Greenville County Letter of Commitment
- 4) Halifax County Letter of Commitment
- 5) Mecklenburg County Letter of Commitment
- 6) Dominion Energy Letter of Support and MOU
- 7) Mecklenburg Electric / EMPOWER Broadband Letter of Commitment

Memo: In order for the Counties' Board of Supervisors to review the proposed project and commit a match contribution prior to the submission of this application, preliminary project numbers were used to determine the highest expected match. As the project proposal developed, costs per passing in most localities were reduced due to the ability to utilize existing infrastructure. Each County's letter of commitment identifies an "up to" amount that is reflective of the preliminary estimates presented to the Board of Supervisors, however, the expected match included in the Funding Sources Table and throughout the project proposal are lower and reflect the actual project budget.



County of Brunswick

OFFICE OF THE COUNTY ADMINISTRATOR

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

December 15, 2023

Dr. Tamarah Holmes
Director, Office of Broadband
Virginia Department of Housing and Community Development
VATI Program
600 East Main Street, Suite 300
Richmond, Virginia 23219

RE: Letter of Support

Dear Dr. Holmes:

Brunswick County is participating in a regional VATI application this year in collaboration with the Southside Planning District Commission and EMPOWER Broadband. This project will provide reliable broadband infrastructure to our Region and is essential to our communities. The Southside Planning District Commission will be the applicant for this FY 24 VATI Application.

Please be advised that Brunswick County will provide up to \$1,523,625 in matching funds for the application. With up to \$1,424,271 being committed to previously funded CAF-II areas in the application where construction has not begun and up to \$99,354 being committed to areas in the application determined to be unserved or underserved by Broadband Equity, Access, and Deployment (BEAD).

Thank you for your consideration and please let me know if you require additional documentation or have questions regarding our county's participation.

Sincerely,

Leslie R. Weddington
County Administrator



County of Charlotte Board of Supervisors

Post Office Box 608
250 LeGrande Avenue, Suite A
Charlotte Court House, VA 23923-0608

Daniel N. Witt
County Administrator
www.charlottecountyva.gov

Phone 434-542-5117
Fax 434-542-5248

November 30, 2023

Dr. Tamarah Holmes
Director, Office of Broadband
Virginia Department of Housing and Community Development
VATI Program
600 East Main Street, Suite 300
Richmond, Virginia 23219

RE: Letter of Support

Dear Dr. Holmes:

Charlotte County is participating in a regional VATI application this year in collaboration with the Southside Planning District Commission and EMPOWER Broadband. This project will provide reliable broadband infrastructure to our Region and is essential to our communities. The Southside Planning District Commission will be the applicant for this FY 24 VATI application.

Please be advised that Charlotte County will provide up to \$5,957 in matching funds for the application.

Thank you for your consideration and please let me know if you require additional documentation or have questions regarding our county's participation.

Sincerely,

Daniel Witt

County Administrator

Dr. Charlette T. Woolridge
County Administrator

Gary. L. Cifers
Assistant County Administrator

Russell Slayton
County Attorney



Belinda Astrop
Chair
Election District 1

James Brown
Vice-Chair
Election District 2

William Cain
Election District 3

Tony Conwell
Election District 4

December 18, 2023

Dr. Tamarah Holmes, Director, Office of Broadband
Virginia Department of Housing and Community Development
VATI Program
600 East Main Street, Suite 300
Richmond, Virginia 23219

RE: Letter of Support

Dear Dr. Holmes:

On behalf of the County of Greenville, I write this letter in full support of the County's regional VATI application in collaboration with the Southside Planning District Commission and EMPOWER Broadband. This project will provide reliable broadband infrastructure to our region and is essential to promote future economic growth, development and stability for families and businesses. The Southside Planning District Commission will be the applicant for this FY 24 VATI application.

Please be advised that Greenville County will provide up to \$41,894 in matching funds for the application.

Thank you for your consideration and please let me know if you require additional documentation or have questions regarding our County's participation.

Sincerely,



Dr. Charlette Woolridge
County Administrator



SCOTT R. SIMPSON, P.E., MPA
County Administrator
srs@co.halifax.va.us

HALIFAX COUNTY BOARD OF SUPERVISORS

1050 Mary Bethune Street
P. O. Box 699
Halifax, VA 24558-0699
(434) 476-3300
Fax: (434) 476-3384
www.halifaxcountvva.gov

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DEAN THROCKMORTON - ED#5
STANLEY BRANDON - ED#6
W. BRYANT CLAIBORNE - ED#8

December 06, 2023

Dr. Tamarah Holmes
Director, Office of Broadband
Virginia Department of Housing & Community Development
VATI Program
600 East Main Street, Suite 300
Richmond, Virginia 23219

RE: Project Application Support FY2024 VATI
Match Commitment

Dear Dr. Holmes:

Halifax County is participating in a regional VATI application this year in collaboration with the Southside Planning District Commission and EMPOWER Broadband. This project will provide reliable broadband infrastructure to our Region and is essential to the survival of our communities. The Southside Planning District Commission will be the applicant for this FY2024 VATI application. Broadband services with adequate speeds and ISP follow through is vital to our region and specifically Halifax County

Please be advised that Halifax County will provide up to \$1,747,171 in matching funds for the application. With up to \$942,532 being committed to previously funded CAF-II areas in the application where construction has not begun and up to \$804,639 being committed to areas in the application determined to be unserved or underserved by Broadband Equity, Access, and Deployment (BEAD).

Thank you for your consideration and please let me know if you require additional documentation or have questions regarding our County's participation.

Sincerely,

Scott R. Simpson, PE, MPA
County Administrator



H. Wayne Carter III
County Administrator
Emergency Services Director

Mecklenburg County Board of Supervisors

Post Office Box 307 • Boydton, Virginia 23917

BOARD OF SUPERVISORS

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David Brankley
Andy Hargrove
Charles Jones
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Tom Tanner
Sterling Wilkinson

December 13, 2023

Dr. Tamarah Holmes
Director, Office of Broadband
Virginia Department of Housing and Community Development
VATI Program
600 East Main Street, Suite 300
Richmond, Virginia 23219

RE: Letter of Support

Dear Dr. Holmes:

Mecklenburg County is participating in a regional VATI application this year in collaboration with the Southside Planning District Commission and EMPOWER Broadband. This project will provide reliable broadband infrastructure to our Region and is essential to our communities. The Southside Planning District Commission will be the applicant for this FY 24 VATI application.

Please be advised that Mecklenburg County will provide up to \$2,179,697 in matching funds for the application. With up to \$1,875,675 being committed to previously funded CAF-II areas in the application where construction has not begun and up to \$304,022 being committed to areas in the application determined to be unserved or underserved by Broadband Equity, Access, and Deployment (BEAD).

Thank you for your consideration and please let me know if you require additional documentation or have questions regarding our county's participation.

Sincerely,

H. Wayne Carter, III
County Administrator



December 13, 2023

Tamarah Holmes, Ph.D
Director, Office of Broadband
Virginia Department of Housing and Community Development
600 East Main Street, Suite 300
Richmond, Virginia 23219

RE: 2024 VATI Application from Empower

Dear Ms. Holmes:

Dominion Energy Virginia ("Dominion") is pleased to have been a party to several Memoranda of Understanding with Empower, the City of Emporia, and the counties of Mecklenburg, Greensville, Halifax, and Brunswick (each, a "Participating County").

Dominion, Empower, and our electric cooperative partners have developed a unique approach for achieving universal broadband access with individual Counties, and through broader, regional approaches. Dominion's participation in each of these projects will be pursuant to, and in a manner consistent with the provisions of, Virginia Code § 56-585.1:9 (the "Utility Leverage Statute").

This letter confirms Dominion's support for the applications to the 2024 Virginia Telecommunication Initiative to be submitted by Empower and our Participating County partners named above. Dominion's specific investments that will support each proposed project will be set forth in petitions under the Utility Leverage Statute that will be submitted to the State Corporation Commission ("SCC"). Dominion's participation in each project, and its specific level of related investment, will be subject to the approval of the SCC and the terms set forth in the SCC's Final Order related to each project.

Sincerely,

David F Walker

David F. Walker
Director, DEV Strategic Customer Programs

PHASE ONE MEMORANDUM OF UNDERSTANDING

This Phase One Memorandum of Understanding (this “Memorandum”) is made effective as of July 6, 2021, (the “Effective Date”), by and among Virginia Electric and Power Company d/b/a Dominion Energy Virginia, a Virginia public service corporation (“Dominion”), Empower Broadband, Inc., a Virginia corporation (“Empower”), and a wholly-owned subsidiary of Mecklenburg Electric Cooperative, a Virginia electric cooperative (“MEC”), and each of the participating counties who subsequently join this Memorandum in the manner set forth herein (“Participating Counties”). Dominion and Empower are collectively referred to as the “Organizing Parties.” The Organizing Parties and the Participating Counties are each a “Party” and are collectively referred to as the “Parties”.

RECITALS

- A. Pursuant to the Virginia Code § 56-585.1:9, effective July 1, 2019 (the “Pilot Statute”) the Commonwealth of Virginia is seeking to expand broadband services into unserved areas of the Commonwealth. The Pilot Statute further permits electric utilities to pursue pilot programs with broadband providers and local counties and municipalities to facilitate such expansion.
- B. Dominion and Empower have explored the feasibility of Dominion deploying middle mile service to facilitate Empower in extending last-mile service to unserved populations throughout the communities of Virginia and have identified several counties as viable candidates based on the legislative requirements for such a pilot program.
- C. The Organizing Parties believe their partnership as set forth herein (the “Initiative”) can dramatically expand broadband access to presently unserved areas throughout Virginia and are inviting Brunswick, Charlotte, Greensville, Halifax, Mecklenburg and Pittsylvania Counties (“Invited Counties”), to join this Memorandum and become Participating Counties.
- D. The Parties will pursue a relationship whereby: (i) pursuant to the Pilot Statute, Dominion would construct a fiber route that maximizes the number of unserved areas to be served by Empower within each Participating County, (ii) Dominion will leverage the additional fiber installed along the route to connect devices that may not have had fiber connectivity under the original plan pursuant to the Grid Transformation and Security Act, (iii) Empower will collaborate with and invest in each Participating County and use the additional Dominion fiber capacity to serve broadband end users in unserved locations in each Participating County, and (iv) each Participating County will share relevant information with the Organizing Parties and collaborate with the Organizing Parties to advance the Initiative. The efforts of the Parties herein in each such Participating County shall be referred to as a “Project”, and collectively the “Projects”).
- E. It is the intention of the Parties that the Initiative will result in the deployment of a fiber-to-the-premises last-mile broadband network to offer service to all locations within each Participating County that are unserved as of the date hereof. The Parties acknowledge and agree that the specific details and characteristics of each Project will be analyzed and refined as the Initiative proceeds.
- F. The Organizing Parties have divided the Initiative into three phases.

NOW, THEREFORE, the Parties hereby agree as follows:

1. PROCEDURE TO BECOME A PARTICIPATING COUNTY

Any county that is invited to join the Initiative by the Organizing Parties shall have until July 15, 2021 to return a counterpart signature page to this Memorandum to the Organizing Parties; provided the Organizing Parties may extend this deadline for good cause if such extension will not materially delay the Initiative. Upon acceptance of the counterpart signature page by the Organizing Parties, such county shall become a Participating County.

2. INFORMATION SHARING AND COORDINATION; NON-SOLICITATION

- a) Each Participating County and each Organizing Party agrees to share with the Organizing Parties such information as it has in its possession related to broadband deployment and availability that may be useful to the Organizing Parties in conducting their analysis or otherwise facilitate the Initiative.
- b) Empower will serve as the central conduit for all information sharing activities and will be responsible for overall coordination of the Initiative.
- c) The Parties will coordinate any communication releases to the public, and all announcements are subject to the prior written consent of Dominion and prior written or verbal consent of all Parties with the final release being handled by Empower.
- d) Notwithstanding anything to the contrary hereunder, in no event does this sharing of information agreement require any Party to disclose confidential or proprietary information not otherwise authorized for release to any Party or Parties.
- e) Dominion shall not actively market any use of its additional fiber in unserved areas of the Participating Counties directly to a known competitor of Empower for the entire term of this Memorandum, plus a period of three (3) years after the effective date of the Definitive Agreements.

3. PHASE ONE TIMEFRAME AND ACTIVITIES

- a) The Parties anticipate that Phase I of the Initiative will continue until approximately September 14, 2021.
- b) During Phase I:
 - i. The Organizing Parties will conduct community and stakeholder engagement activities in each Participating County.
 - ii. The Organizing Parties will collaborate to develop preliminary plans and design criteria that: (i) are consistent with the Pilot Statute, and (ii) facilitate the extension of broadband availability to as many presently unserved locations as reasonably possible.
 - iii. Empower will perform a last-mile feasibility study (“Initial Feasibility Study”) for the Project within each Participating County.
 - iv. Empower will prepare a preliminary financial analysis for the Project within each Participating County.
 - v. The Participating Counties, and each Organizing Party, as applicable, will agree to support an application for one or more grant programs (“Phase I Grants”) to partially offset the cost of the Initial Feasibility Study and financial analysis. Empower will coordinate and oversee the development and submission of applications for Phase I Grants. The Parties anticipate that the Phase I Grants will not require any local matching of funds, However, such matches are encouraged to aid in the overall advancement of Phase I and all following Projects.
- c) At the Conclusion of Phase I:
 - i. Empower, in coordination with Dominion, will present the results of the Initial Feasibility Study and financial analysis to each Participating County.
 - ii. Empower will identify the cost of Proceeding to Phase II for each Participating County and identify grants and other sources of potential funding to reduce or eliminate each Participating County’s out-of-pocket costs to proceed.

- iii. Each Participating County will decide whether or not to continue to Phase II. Counties that elect to withdraw from the Initiative at the conclusion of Phase I will have no further rights or obligations under this Memorandum.

4. PHASE TWO TIMEFRAME AND ACTIVITIES

- a) The Parties anticipate that Phase II of the Initiative will commence upon the conclusion of Phase I and continue until approximately July 1, 2022.
- b) During Phase II:
 - i. Dominion will prepare a petition (the “Petition”) under the Pilot Statute to the Virginia State Corporation Commission (the “Commission”) seeking approval of the Projects that are then included in the Initiative. Empower will serve as the nongovernmental internet service provider pursuant to the Pilot Statute. Empower and each of the other Parties will provide such information and assistance to Dominion as it may reasonably request to advance the Initiative and will commit to continuing to be involved in the Petition until and after approval of the Petition is received. The Parties agree that implementation of each Project shall be contingent upon Commission approval of such Project on terms and conditions approved by Dominion that are not materially adverse to Dominion.
 - ii. Empower will complete preliminary last-mile designs for each Project based upon the proposed Dominion middle-mile infrastructure. Such last-mile designs will be tailored to maximize each Project’s eligibility for all available state and federal grant, loan, loan guarantee, and other support mechanisms (collectively, “Public Support Mechanisms”).
 - iii. Empower will prepare detailed financial plans for each Project. Each financial plan will address initial capital investment and ongoing operational expenses, and will provide more than one indicative approach for funding each Project through a combination of private capital, Public Support Mechanisms and contributions from Participating Counties.
 - iv. The Participating Counties, and each Organizing Party, as applicable, will agree to support an application for one or more grant programs (“Phase II Grants”) to partially offset the cost of the activities to be conducted during Phase II. Empower will coordinate and oversee the development and submission of applications for Phase II Grants.
 - v. Empower will coordinate and oversee the development and submission of applications for all available Public Support Mechanisms to fund each Project within the Initiative.
- c) At the Conclusion of Phase II:
 - i. Empower will present the last mile design and financial plans to each Participating County.
 - ii. Each Participating County will decide whether or not to continue to Phase III. Counties that elect to proceed to Phase III will enter into negotiations with Empower for one or more binding mutual definitive agreements (“Definitive Agreements”), setting forth their respective commitments and obligations and such particulars as the parties thereto may deem appropriate. Counties that elect to withdraw from the Initiative at the conclusion of Phase II will have no further obligations under this Memorandum.

5. EXPENSES

The Parties understand that various costs will be incurred in relation to activities contemplated herein. The Parties understand that regardless of which Party incurs such costs, none of the Parties herein shall be responsible for reimbursement of expenses to any of the others, unless such reimbursement is to be funded by a Phase I Grant or Phase II Grant, or otherwise agreed to in the Definitive Agreements.

6. GOOD FAITH COMMITMENT TO INITIATIVE

- a) Each Participating County agrees that, for so long as it is a Party to this Memorandum, it shall not participate in any activity or course of conduct that is

inconsistent with or competitive to the Initiative, and that it will devote its broadband-related attention and resources to the Initiative.

- b) The Parties understand and agree that, except as provided in the next sentence, this Memorandum (i) constitutes only a statement of intentions, (ii) does not reflect all matters upon which Definitive Agreements must be reached in order for the transactions contemplated hereby to be consummated, (iii) binding obligations with respect to a Project will only result from the execution of one or more Definitive Agreements and subject to the terms and conditions stated therein, and (iv) does not obligate the Parties to enter into any Definitive Agreement relating to any Project. This Memorandum is not intended to be binding, other than Paragraphs 5,6, 8 and 9(a) and (e).

7. TERMINATION

Any party may terminate its participation in this Memorandum at any time, with or without cause, upon written notice to the other Parties with at least ten (10) days prior notice. In addition, this Memorandum shall terminate and be of no further force and effect if the Commission rejects the petition.

8. LIMITATION OF LIABILITY

No Party shall be liable to the others in contract, tort, or otherwise, for any claims, liabilities or losses arising out of this Memorandum or alleged to result from the failure of the other Party to enter into any Definitive Agreements. The Parties hereby waive, in advance, any claims (whether such claims are based on breach of contract, tort, equity or any other theory) for the failure for any reason to enter into the Definitive Agreements. In no event shall any Party be liable to the other for any incidental, indirect, special, punitive or consequential damages (including without limitation damages for lost profits).

9. GENERAL

a) Governing Law.

This Memorandum shall be governed in all respects by the laws of the Commonwealth of Virginia.

b) Amendments.

No modification, amendment or waiver of any of the provisions of this Memorandum will be binding without the written consent of the Parties hereto.

c) Binding Effect; Assignment.

This Memorandum will inure to the benefit of and be binding upon each of the Parties hereto and their respective successors and permitted assigns to the extent provided in Section 6, but in no respect shall give rise to any third-party beneficiary rights or claims. No Party may assign any of its rights, interests, or obligations hereunder without the prior written consent of the other Parties, except that any of the Organizing Parties may assign this Memorandum to an affiliated entity upon written notice to the other Parties.

d) Counterparts.

This Memorandum may be executed in counterparts, all of which for all purposes shall be deemed to be an original and all of which shall, taken together, constitute one and the same instrument.

e) Relationship of Parties.

Nothing in this Memorandum shall be deemed to constitute, create, give effect to, or otherwise recognize a joint venture, partnership, or formal business entity of any kind.

f) Notices.

All notices, requests and other communications hereunder shall be in writing and delivered by hand, by nationally-recognized delivery service that guarantees overnight delivery, or by first-class registered or certified mail, return receipt requested, postage prepaid, addressed as follows:

If to Dominion:

Dominion Energy Virginia
600 Canal Street
Richmond, Virginia 23219
Attention: Director, Electric Distribution Grid Solutions

with a copy to:

Dominion Energy Services, Inc.
120 Tredegar Street
Richmond, Virginia 23219
Attention: Deputy General Counsel – State Regulatory
Fax: (804) 819-2677

If to Empower:

Empower Broadband
Attention: President and CEO
P.O. Box 325
Chase City, VA 23924

If to a Participating County, to the address set forth on such Participating County's counterpart signature page to this Memorandum.

Any Party may change its address at any time upon notice to the other Parties.

IN WITNESS WHEREOF, the Parties have executed this Memorandum as of the Effective Date.

**VIRGINIA ELECTRIC AND POWER COMPANY
D/B/A DOMINION ENERGY VIRGINIA**


Augustus Johnson IV (Jul 6, 2021 16:51 EDT)

Name: Augustus Johnson
Title: Director – Electric Distribution Grid Solutions

EMPOWER BROADBAND, INC.


John C. Lee, Jr. (Jul 6, 2021 18:01 EDT)

Name: John C. Lee, Jr.
Title: President and CEO

[SIGNATURE PAGE TO PHASE ONE MEMORANDUM OF UNDERSTANDING]

IN WITNESS WHEREOF, the Counties named below have executed this Memorandum as of the Effective Date.

CITY OF EMPORIA

William E. Johnson, III
William E. Johnson, III (Jul 23, 2021 14:56 EDT)

Name: William E. Johnson, III, MBA
Title: City Manager
City of Emporia
201 South Main Street
Emporia, Virginia 23847

MECKLENBURG COUNTY

H. Wayne Carter III
H. Wayne Carter III (Jul 20, 2021 09:18 EDT)

Name: H. Wayne Carter, III
Title: County Administrator
Mecklenburg County, Virginia
P.O. Box 307
Boydton, VA 23917

GREENSVILLE COUNTY

Gary L. Cifers
Gary L. Cifers (Jul 20, 2021 12:41 EDT)

Name: Gary L. Cifers, M.S. Ed.
Title: Acting County Administrator
Greensville County
1781 Greensville County Circle
Emporia, Virginia 23847

HALIFAX COUNTY

Scott R. Simpson
Scott R. Simpson (Aug 5, 2021 17:52 EDT)

Name: Scott R. Simpson, P.E., MPA
Title: County Administrator
Halifax County, VA
1050 Mary Bethune Street
Halifax, VA 24558

IN WITNESS WHEREOF, the Counties named below have executed this Memorandum as of the Effective Date.

BRUNSWICK COUNTY

Leslie Weddington

Name: Leslie Weddington
Title: Interim County Administrator
228 N. Main St
PO BOX 399
Lawrenceville, Va 213868

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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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

December 19, 2023

Dr. Tamarah Holmes
Director, Office of Broadband
Virginia Department of Housing and Community Development
ATTN: Virginia Telecommunications Initiative
600 East Main Street, Suite 300
Richmond, VA 23219

Dear Dr. Holmes,

This letter is to document Mecklenburg Electric Cooperative’s (MEC)/EMPOWER Broadband’s in-kind match for the Virginia Telecommunications Initiative Last Mile Grant Application submitted by MEC and our affiliate EMPOWER Broadband, INC in partnership with the Southside Planning District Commission.

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 universal coverage in this five county regional application. The project area, MEC’s match, and the VATI request are listed below.

<u>Project Areas</u>	<u>Match</u>	<u>VATI Request-50%</u>
MEC/EMPOWER	\$23,924,721.49	\$28,752,302.16
Dominion Energy	\$1,896,893.47	
Brunswick County	\$933,130.63	
Halifax County	\$1,110,752.68	
Mecklenburg County	\$864,448.09	
Charlotte County (southern portion)	\$5,957.44	
Greensville County	\$41,894.27	

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

This institution is an equal opportunity provider and employer.

AMENDMENT TO PERPETUAL LINE OF CREDIT AGREEMENT

AMENDMENT TO PERPETUAL LINE OF CREDIT AGREEMENT, (the "Amendment") dated as of November 16, 2022, by and between MECKLENBURG ELECTRIC COOPERATIVE ("Borrower"), a corporation organized and existing under the laws of the State of Virginia and NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION ("CFC"), a cooperative association organized and existing under the laws of the District of Columbia.

RECITALS

WHEREAS, the Borrower and CFC are parties to that certain Perpetual Line of Credit Agreement, bearing an Effective Date (as defined therein) of November 29, 2006 (the "Original Agreement"), providing for a revolving loan to be made available to Borrower by CFC in the aggregate principal amount of Nine Million Two Hundred Thousand and 00/100 Dollars (\$9,200,000.00) (the "Line of Credit"); and

WHEREAS, the Borrower has requested, and CFC has agreed to, an increase in the amount available for Advance under the Line of Credit to provide for the ability to make Advances up to an aggregate principal amount not to exceed Twenty Million Dollars (\$20,000,000.00); and

NOW, THEREFORE, for and in consideration of the foregoing, and in further consideration of the premises and the mutual covenants herein contained, the parties hereby amend the Original Agreement and agree and bind themselves as follows:

Section 1. Recitals. The foregoing recitals are incorporated herein by reference.

Section 2. Definitions. Capitalized terms that are not defined herein shall have the meanings assigned to them as set forth in the Original Agreement.

Section 3. Amendment. The first paragraph of the Agreement is hereby deleted and amended to read as follows:

"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 Twenty Million and No/100 Dollars (\$20,000,000.00) (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."

Section 4. Conditions to Amendment. The obligation of CFC to enter into this Amendment and to make any Advance pursuant to the terms hereof is subject to the satisfaction of the following conditions:

4.1. Borrower Documents. CFC shall have been furnished with (i) an executed original of this Amendment and (ii) certified copies of all such organizational documents and proceedings of the Borrower authorizing the transactions hereby contemplated as CFC shall require, and (iii) an opinion of counsel of the Borrower, in form and substance reasonably satisfactory to CFC, addressing such matters as CFC shall reasonably require.

4.2. Government Approvals. The Borrower shall have furnished to CFC true and correct copies of all certificates, authorizations and consents necessary for the execution, delivery and performance by the Borrower of this Amendment.

Section 5. Promise to Pay. The Borrower hereby unconditionally promises and agrees to pay, as and when due, interest on all amounts advanced under the Line of Credit from the date of each Advance and to repay all amounts advanced under the Original Agreement, as amended hereby, with interest thereon as provided in the Original Agreement, as amended hereby.

Section 6. Effectiveness of Amendment. This Amendment and the terms hereof shall be effective on the Effective Date set forth on the signature page hereof.

Section 7. Representations and Warranties. As a further inducement for CFC to enter into this Amendment, the Borrower represents and warrants that:

7.1 Good Standing. The Borrower is a corporation organized and validly existing and in good standing under the laws of the state of its incorporation, is duly qualified in those states in which it is required to be qualified to conduct its business and has power to enter into and perform this Amendment. The Borrower is a member in good standing of CFC.

7.2 Authority. The execution, delivery and performance by the Borrower of this Amendment and the performance hereof, have been duly authorized by all necessary corporate action and will not violate any provision of law or of the articles of incorporation or bylaws of the Borrower, or result in a breach of, or constitute a default under, any agreement, indenture or other instrument to which the Borrower is a party or by which it may be bound. The individual executing this Amendment has been duly authorized to act on behalf of the Borrower and has the requisite authority to bind the Borrower to the terms hereof without further action of, and without obtaining any additional approvals from, the Borrower's governing body or any other person or entity.

7.3 Material Adverse Change. There has been no material adverse change in the financial condition or operations of the Borrower since the date of the Original Agreement, except as set forth in the most recent financial statements submitted to CFC or as otherwise disclosed in writing to CFC prior to the date hereof.

7.4 REQUIRED APPROVALS. NO LICENSE, CONSENT OR APPROVAL OF ANY GOVERNMENTAL AGENCY OR AUTHORITY IS REQUIRED TO ENABLE THE BORROWER TO ENTER INTO THIS AMENDMENT, OR TO PERFORM ANY OF THE OBLIGATIONS PROVIDED FOR HEREIN, EXCEPT AS HAVE BEEN OBTAINED BY THE BORROWER AND DELIVERED TO CFC PRIOR TO THE DATE HEREOF.

7.5 Prior Representations and Warranties. All representations and warranties made by the Borrower in the Original Agreement are true and correct as of the date hereof.

Section 8. Miscellaneous.

8.1 Modification. No modification or waiver of any provision of this Amendment, and no consent to any departure by Borrower therefrom, shall in any event be effective unless the same shall be in writing by the party granting such modification, waiver or consent.

8.2 Merger and Integration. This Amendment, the Original Agreement and the matters incorporated by reference contain the entire agreement of the parties hereto with respect to the matters covered and the transactions contemplated hereby.

8.3 Incorporation; Inconsistency with Original Agreement. Except as otherwise amended or modified herein, the terms, conditions and provisions of the Original Agreement are incorporated herein by reference as if set forth in full herein and remain in full force and effect. In the event of any conflict or inconsistency between the terms of this Amendment and the Original Agreement, the terms of this Amendment shall control.

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

(A) THE PERFORMANCE AND CONSTRUCTION OF THIS AMENDMENT SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE COMMONWEALTH OF VIRGINIA.

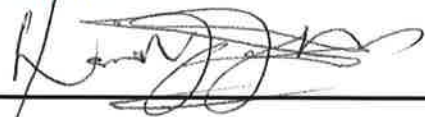
(B) THE BORROWER HEREBY SUBMITS TO THE NON-EXCLUSIVE JURISDICTION OF THE UNITED STATES COURTS LOCATED IN VIRGINIA AND OF ANY STATE COURT SO LOCATED FOR PURPOSES OF ALL LEGAL PROCEEDINGS ARISING OUT OF OR RELATING TO THIS AMENDMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY. THE BORROWER IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY OBJECTIONS THAT IT MAY NOW OR HEREAFTER HAVE TO THE ESTABLISHING OF THE VENUE OF ANY SUCH PROCEEDINGS BROUGHT IN SUCH A COURT AND ANY CLAIM THAT ANY SUCH PROCEEDING HAS BEEN BROUGHT IN AN INCONVENIENT FORUM.

(C) THE BORROWER AND CFC EACH 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 AMENDMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY.

8.5 Counterparts. This Amendment may be executed in one or more counterparts, each of which will be deemed an original and all of which together will constitute one and the same document. Signature pages may be detached from the counterparts and attached to a single copy of this Amendment to physically form one document. The Borrower and CFC agree to electronic contracting and signatures (including DocuSign, Adobe Sign and other electronic platforms acceptable to each party) with respect to this Amendment. Delivery of an electronic signature to, or a signed copy of, this Amendment by facsimile, e-mail (e.g., "pdf" or "tif") or other electronic transmission shall be fully binding on the parties to the same extent as the delivery of the manually signed originals and shall be admissible into evidence for all purposes.

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be executed as of the day and year first above written.

MECKLENBURG ELECTRIC
COOPERATIVE

By: 

Title: Chairman

Attest: Donald L. More

Title: Secretary / Treasurer

NATIONAL RURAL UTILITIES
COOPERATIVE FINANCE CORPORATION

By: _____
Assistant Secretary-Treasurer

Attest: _____
Assistant Secretary-Treasurer

Loan Number: VA031-P-5102

Effective Date: _____ (to be filled in by CFC)

AMENDMENT TO REVOLVING LINE OF CREDIT AGREEMENT

AMENDMENT TO REVOLVING LINE OF CREDIT AGREEMENT, (the "Amendment") dated as of October 19, 2022, by and between EMPOWER BROADBAND, INC. ("Borrower"), a corporation organized and existing under the laws of the State of Virginia and NATIONAL COOPERATIVE SERVICES CORPORATION ("NCSC"), a cooperative association organized and existing under the laws of the District of Columbia.

RECITALS

WHEREAS, the Borrower and NCSC are parties to that certain Revolving Line of Credit Agreement, dated as of November 20, 2019 (the "Original Agreement"), providing for a revolving loan to be made available to Borrower by NCSC in the aggregate principal amount of One Million and 00/100 Dollars (\$1,000,000.00) (the "Line of Credit"); and

WHEREAS, the Borrower has requested, and NCSC has agreed to, an increase in the amount available for Advance under the Line of Credit to provide for the ability to make Advances up to an aggregate principal amount not to exceed Five Million and 00/10 Dollars (\$5,000,000.00); and

NOW, THEREFORE, for and in consideration of the foregoing, and in further consideration of the premises and the mutual covenants herein contained, the parties hereby amend the Original Agreement and agree and bind themselves as follows:

Section 1. Recitals. The foregoing recitals are incorporated herein by reference.

Section 2. Definitions. Capitalized terms that are not defined herein shall have the meanings assigned to them as set forth in the Original Agreement.

Section 3. Amendment. Item 2 of Schedule 1 is hereby deleted in its entirety and is replaced with the following:

"2. The aggregate NCSC Commitment shall mean \$5,000,000.00."

Section 4. Conditions to Amendment. The obligation of NCSC to enter into this Amendment and to make any Advance pursuant to the terms hereof is subject to the satisfaction of the following conditions:

4.1. Borrower Documents. NCSC shall have been furnished with (i) an executed original of this Amendment, (ii) certified copies of all such organizational documents and proceedings of the Borrower authorizing the transactions hereby contemplated as NCSC shall require, and (iii) an opinion of counsel of the Borrower, in form and substance reasonably satisfactory to NCSC, addressing such matters as NCSC shall reasonably require.

4.2. Government Approvals. The Borrower shall have furnished to NCSC true and correct copies of all certificates, authorizations and consents necessary for the execution, delivery and performance by the Borrower of this Amendment.

Section 5. Promise to Pay. The Borrower hereby unconditionally promises and agrees to pay, as and when due, interest on all amounts advanced under the Line of Credit from the date of each Advance and to repay all amounts advanced under the Original Agreement, as amended hereby, with interest thereon as provided in the Original Agreement, as amended hereby.

Section 6. Effectiveness of Amendment. This Amendment and the terms hereof shall be effective on the Effective Date set forth on the signature page hereof.

Section 7. Representations and Warranties. As a further inducement for NCSC to enter into this Amendment, the Borrower represents and warrants that:

7.1 Good Standing. The Borrower is a corporation organized and validly existing and in good standing under the laws of the state of its incorporation, is duly qualified in those states in which it is required to be qualified to conduct its business and has power to enter into and perform this Amendment.

7.2 Authority. The execution, delivery and performance by the Borrower of this Amendment and the performance hereof, have been duly authorized by all necessary corporate action and will not violate any provision of law or of the articles of incorporation or bylaws of the Borrower, or result in a breach of, or constitute a default under, any agreement, indenture or other instrument to which the Borrower is a party or by which it may be bound. The individual executing this Amendment has been duly authorized to act on behalf of the Borrower and has the requisite authority to bind the Borrower to the terms hereof without further action of, and without obtaining any additional approvals from, the Borrower's governing body or any other person or entity.

7.3 Material Adverse Change. There has been no material adverse change in the financial condition or operations of the Borrower since the date of the Original Agreement, except as set forth in the most recent financial statements submitted to NCSC or as otherwise disclosed in writing to NCSC prior to the date hereof.

7.4 REQUIRED APPROVALS. NO LICENSE, CONSENT OR APPROVAL OF ANY GOVERNMENTAL AGENCY OR AUTHORITY IS REQUIRED TO ENABLE THE BORROWER TO ENTER INTO THIS AMENDMENT, OR TO PERFORM ANY OF THE OBLIGATIONS PROVIDED FOR HEREIN, EXCEPT AS HAVE BEEN OBTAINED BY THE BORROWER AND DELIVERED TO NCSC PRIOR TO THE DATE HEREOF.

7.5 Prior Representations and Warranties. All representations and warranties made by the Borrower in the Original Agreement are true and correct as of the date hereof.

Section 8. Miscellaneous.

8.1 Modification. No modification or waiver of any provision of this Amendment, and no consent to any departure by Borrower therefrom, shall in any event be effective unless the same shall be in writing by the party granting such modification, waiver or consent.

8.2 Merger and Integration. This Amendment, the Original Agreement and the matters incorporated by reference contain the entire agreement of the parties hereto with respect to the matters covered and the transactions contemplated hereby.

8.3 Incorporation; Inconsistency with Original Agreement. Except as otherwise amended or modified herein, the terms, conditions and provisions of the Original Agreement are

incorporated herein by reference as if set forth in full herein and remain in full force and effect. In the event of any conflict or inconsistency between the terms of this Amendment and the Original Agreement, the terms of this Amendment shall control.

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

(A) THE PERFORMANCE AND CONSTRUCTION OF THIS AMENDMENT SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE COMMONWEALTH OF VIRGINIA.

(B) THE BORROWER HEREBY SUBMITS TO THE NON-EXCLUSIVE 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 AMENDMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY. THE BORROWER IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY OBJECTIONS THAT IT MAY NOW OR HEREAFTER HAVE TO THE ESTABLISHING OF THE VENUE OF ANY SUCH PROCEEDINGS BROUGHT IN SUCH A COURT AND ANY CLAIM THAT ANY SUCH PROCEEDING HAS BEEN BROUGHT IN AN INCONVENIENT FORUM.

(C) THE BORROWER AND NCSC EACH 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 AMENDMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY.

8.5 Counterparts. This Amendment may be executed in one or more counterparts, each of which will be deemed an original and all of which together will constitute one and the same document. Signature pages may be detached from the counterparts and attached to a single copy of this Amendment to physically form one document. The Borrower and NCSC agree to electronic contracting and signatures (including DocuSign, Adobe Sign and other electronic platforms acceptable to each party) with respect to this Amendment. Delivery of an electronic signature to, or a signed copy of, this Amendment by facsimile, e-mail (e.g., "pdf" or "tif") or other electronic transmission shall be fully binding on the parties to the same extent as the delivery of the manually signed originals and shall be admissible into evidence for all purposes.

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be executed as of the day and year first above written.

EMPOWER BROADBAND, INC.

By: 

Title: Chairman

Attest: Donald J. Moor

Title: Secretary / Treasurer

NATIONAL COOPERATIVE SERVICES CORPORATION

By: _____
Assistant Secretary-Treasurer

Attest: _____
Assistant Secretary-Treasurer

Loan Number: VA401-R-5101

Effective Date: _____ **(to be filled in by NCSC)**

INSTRUCTION LETTER

August 19, 2020

Ms. Carol Jones,
Mecklenburg Electric Cooperative
11633 Hwy. 92 West
Chase City, Virginia 23924

Dear Ms. Jones:

First, we want to thank you for your continued business and support of CoBank. We appreciate the opportunity to serve the financing needs of Mecklenburg Electric Cooperative (the "Borrower"). As discussed in your Credit Agreement with CoBank, this instruction letter will provide details, in the form of a checklist that will assist you in managing the closing process. This instruction letter constitutes a "Loan Document." Capitalized terms used and not defined in this letter have the meanings given to them in the Credit Agreement or any other Loan Document.

Signing instructions for documents that need to be signed are provided below. Please return all signed documents, and other documents to be delivered, to the attention of Loan Processing Closing at your earliest convenience, but no later than September 9, 2020. A Federal Express label has been included for your use. You are welcome to expedite the processing of this transaction by e-mailing the signed documents to riclosing@cobank.com or by faxing the signed documents to Loan Processing Closing Fax No. (877) 222-1603, provided that all documents bearing the original ink signatures are mailed promptly to 6340 S. Fiddlers Green Cir., Greenwood Village, CO 80111.

CONDITIONS PRECEDENT. CoBank's obligation to extend credit pursuant to the documents listed below is conditioned upon the receipt of the following items, all of which must be acceptable in form and substance to CoBank in its sole discretion and in compliance with the requirements of the Loan Documents.

SIGNING AUTHORITY OF BORROWER

- Incumbency Certificate (Update as Needed).** Complete the new incumbency certificate only if authorized signers have changed since the last incumbency certificate was submitted to CoBank. If there are changes, obtain the signatures of all officers authorized by the resolution, and have the Secretary or Assistant Secretary complete the certification at the bottom of the form. If we do not receive a new incumbency certificate, we will rely on the enclosed last incumbency certificate we received from you.

It is important that the documents listed below are executed by an officer authorized by your resolution and who has signed the most recent incumbency certificate (a copy with authorized titles and signatures circled is included).

BORROWER ITEMS TO BE DELIVERED OR COMPLETED

- This Letter.**
- Credit Agreement Amendment No. 12514935SLA-A.** This document amends your existing **Credit Agreement No. 12514935SLA.**
- Promissory Note No. 12514935S01-A.**
- Beneficial Ownership Certificate.** A Beneficial Ownership Certificate may be required to be completed prior to closing. You will receive this form directly from your Relationship Manager. Instructions for completing and returning the Beneficial Owner Certificate are included with the form. Please contact your Relationship Manager with any questions.

COBANK DISCLOSURE MATERIAL

- **Notice Regarding Electronic Signatures.**

When all condition precedent documents have been delivered, and CoBank has determined that all closing conditions have been met and the loan closes (the “Closing Date”), we will send you a copy of the signed document(s) that are countersigned by CoBank for your records.

The Borrower hereby represents that nothing in the Borrower Organizational Documents has changed since such documents were last submitted to CoBank and the Borrower remains in good standing in the jurisdiction of its incorporation or formation.

By signing this letter, Borrower hereby affirms and/or reaffirms each and every representation and warranty set forth herein and in any other Loan Documents.

This Instruction Letter, each Promissory Note and any other Loan Document may be executed in counterparts, each of which will constitute an original, but all of which when taken together will constitute a single contract. Delivery of an executed counterpart of a signature page of this Instruction Letter, each Promissory Note and any other Loan Document by facsimile or other electronic means will be as effective as delivery of a manually executed counterpart of each such agreement.

If you have any questions, contact one of your CoBank team members:

CoBank Associate	Specialty	Phone Number	E-mail Address
Gabriel Labastida	Relationship Manager	(770) 618-3222	glabastida@cobank.com
Chelsey Mayabb	Closer	(800) 542-8072 Ext. 04109	cmayabb@cobank.com
Quin Bowman	Documentation	(800) 542-8072 Ext. 06533	qbowman@cobank.com
John Olson	Responsible Attorney	(800) 542-8072 Ext. 04102	JoOlson@cobank.com

Sincerely,



Quin Bowman

SIGNATURE PAGE FOLLOWS

SIGNATURE PAGE TO INSTRUCTION LETTER

IN WITNESS WHEREOF, the parties have caused this Instruction Letter to the Agreement to be executed by their duly authorized officer(s).

MECKLENBURG ELECTRIC COOPERATIVE

By: _____



Name: _____

John C. Lee, Jr.

Title: _____

President + CEO

APPROVED

By Chelsey at 7:42 am, Sep 01, 2020

SIGNATURE PAGE TO INSTRUCTION LETTER

IN WITNESS WHEREOF, the parties have caused this Instruction Letter to the Agreement to be executed by their duly authorized officer(s).

COBANK, ACB

By: *Fidel Escalante*

Name: Fidel Escalante

Title: Assistant Corporate Secretary



Amendment No. 12514935SLA-A

AMENDMENT TO CREDIT AGREEMENT

THIS AMENDMENT is entered into as of August 19, 2020, between **MECKLENBURG ELECTRIC COOPERATIVE**, Chase City, Virginia, a cooperative (the "**Borrower**"), and **COBANK, ACB**, a federally-chartered instrumentality of the United States ("**Lender**"). Capitalized terms used and not defined herein will have the meanings assigned to such terms in the Agreement (as defined below).

RECITALS

The Borrower and Lender are parties to Credit Agreement Number 12514935SLA dated as of September 3, 2019 (such agreement, as may be amended, is hereinafter referred to as the "**Agreement**"). The Borrower and Lender now desire to amend the Agreement. For that reason, and for valuable consideration (the receipt and sufficiency of which are hereby acknowledged), the Borrower and Lender agree as follows:

1. Section(s) 7.1 under Article 7 of the Agreement is amended and restated to read as follows:

ARTICLE 7 Financial Covenants. Unless otherwise agreed to in writing by Lender, while this Agreement is in effect:

7.1 Debt Service Coverage Ratio. The Borrower and its consolidated subsidiaries, if any, will have at the end of each fiscal year of the Borrower, a Debt Service Coverage Ratio (as defined below) for such year of not less than 1.25 to 1.00. Such ratio will be determined by averaging the two highest annual ratios achieved by the Borrower during the most recent three fiscal years. For purposes hereof, the term "**Debt Service Coverage Ratio**" means the ratio of: (a) net income (after taxes and after eliminating any gain or loss on sale of assets or other extraordinary gain or loss), plus depreciation expense, amortization expense, and interest expense, minus non-cash patronage, and non-cash income from subsidiaries and/or joint ventures; to (b) all principal payments due within the period on all Long-Term Debt (as defined below) plus interest expense (all as calculated on a consolidated basis for the applicable period in accordance with the Accounting Standards). For purposes hereof, "**Long-Term Debt**" means, for the Borrower, on a consolidated basis, the sum of (1) all indebtedness for borrowed money, (2) obligations that are evidenced by notes, bonds, debentures or similar instruments, and (3) that portion of obligations with respect to capital leases or other capitalized agreements that are properly classified as a liability on the balance sheet in conformity with Accounting Standards or that are treated as operating leases under regulations applicable to them but that otherwise would be required to be capitalized under Accounting Standards, in each case having a maturity of more than one year from the date of its creation or having a maturity within one year from such date but that is renewable or extendible, at the Borrower's option, to a date more than one year from such date or that arises under a revolving credit or similar agreement that obligates the lender(s) to extend credit during a period of more than one year from such date, including all current maturities in respect of such indebtedness whether or not required to be paid within one year from the date of its creation.

MECKLENBURG ELECTRIC COOPERATIVE
Chase City, Virginia
Amendment No. 12514935SLA-A of Agreement No. 12514935SLA

2. Except as expressly amended hereby, all of the representations, warranties, terms, covenants and conditions contained in the Agreement and each other Loan Document will remain unamended and otherwise unmodified and in full force and effect.

3. This Amendment, each Promissory Note and any other Loan Document may be executed in counterparts, each of which will constitute an original, but all of which when taken together will constitute a single contract. Delivery of an executed counterpart of a signature page of this Amendment by facsimile or other electronic means will be as effective as delivery of a manually executed counterpart of this Amendment.

SIGNATURE PAGE FOLLOWS

MECKLENBURG ELECTRIC COOPERATIVE
Chase City, Virginia
Amendment No. 12514935SLA-A of Agreement No. 12514935SLA

SIGNATURE PAGE TO AMENDMENT TO CREDIT AGREEMENT

IN WITNESS WHEREOF, the parties hereto, by their duly authorized officers, have executed this Agreement.

MECKLENBURG ELECTRIC COOPERATIVE

By: 

Name: John C. Lee, Jr.

Title: President + CEO

APPROVED
By Chelsey at 7:42 am, Sep 01, 2020

MECKLENBURG ELECTRIC COOPERATIVE
Chase City, Virginia
Amendment No. 12514935SLA-A of Agreement No. 12514935SLA

SIGNATURE PAGE TO AMENDMENT TO CREDIT AGREEMENT

IN WITNESS WHEREOF, the parties hereto, by their duly authorized officers, have executed this Agreement.

COBANK, ACB

By: *Fidel Escalante*

Name: Fidel Escalante

Title: Assistant Corporate Secretary

AMENDED AND RESTATED REVOLVING CREDIT PROMISSORY NOTE

THIS AMENDED AND RESTATED REVOLVING CREDIT PROMISSORY NOTE (this “**Promissory Note**”) to the Credit Agreement dated September 3, 2019 (such agreement, as may be amended, hereinafter referred to as the “**Credit Agreement**”), is entered into as of August 18, 2020 between **COBANK, ACB**, a federally-chartered instrumentality of the United States (“**Lender**”) and **MECKLENBURG ELECTRIC COOPERATIVE**, Chase City, Virginia, a cooperative (together with its permitted successors and assigns, the “**Borrower**”). Capitalized terms not otherwise defined in this Promissory Note will have the meanings set forth in the Credit Agreement.

RECITALS

(A) This Promissory Note amends, restates, replaces and supersedes, but does not constitute payment of the indebtedness evidenced by, the promissory note set forth in the Amended and Restated Revolving Credit Promissory Note numbered 12514935S01, dated as of September 3, 2019, between Lender and the Borrower.

SECTION 1. REVOLVING CREDIT COMMITMENT. On the terms and conditions set forth in the Credit Agreement and this Promissory Note, Lender agrees to make loans to the Borrower during the period set forth below in an aggregate principal amount not to exceed \$9,000,000.00, at any one time outstanding (the “**Commitment**”). Within the limits of the Commitment, the Borrower may borrow, repay and re-borrow.

SECTION 2. PURPOSE. The purpose of the Commitment is to finance interim capital expenditures and the operating needs of the Borrower.

SECTION 3. TERM. The term of the Commitment will be from September 12, 2020, up to and including September 10, 2021, or such later date as Lender may, in its sole discretion, authorize in writing (the “**Term Expiration Date**”). Notwithstanding the foregoing, the Commitment will be renewed for an additional 364-day period only if, on or before the Term Expiration Date, Lender provides to the Borrower a written notice of renewal for an additional 364-day period (a “**Renewal Notice**”). If on or before the Term Expiration Date, Lender grants a short-term extension of the Commitment, the Commitment will be renewed for an additional 364-day period only if Lender provides to the Borrower a Renewal Notice on or before such extended expiration date. All annual renewals will be measured from, and effective as of, the same day as the Term Expiration Date in any year.

SECTION 4. LIMITS ON ADVANCES, AVAILABILITY, ETC. The loans will be made available as provided in Article 2 of the Credit Agreement.

SECTION 5. INTEREST. The Borrower agrees to pay interest on the unpaid balance of the loan(s) in accordance with the following interest rate option(s):

(A) **Weekly Quoted Variable Rate.** At a rate per annum equal at all times to the rate of interest established by Lender on the first Business Day of each week. The rate established by Lender will be effective until the first Business Day of the next week. Each change in the rate will be applicable

MECKLENBURG ELECTRIC COOPERATIVE
Chase City, Virginia
Promissory Note No. 12514935S01-A

to all balances subject to this option and information about the then current rate will be made available upon telephonic request.

Interest will be calculated on the actual number of days each loan is outstanding on the basis of a year consisting of 360 days and will be payable monthly in arrears by the 20th day of the following month or on such other day as Lender will require in a written notice to the Borrower ("**Interest Payment Date**").

SECTION 6. PROMISSORY NOTE. The Borrower promises to repay the unpaid principal balance of the loans on the Term Expiration Date, as the term may be extended from time to time.

In addition to the above, the Borrower promises to pay interest on the unpaid principal balance of the loans at the times and in accordance with the provisions set forth herein.

SECTION 7. SECURITY. Except for Lender's lien on the Borrower's equity in Lender, the Borrower's obligations hereunder and, to the extent related hereto, under the Credit Agreement, will be unsecured.

SECTION 8. FEES. INTENTIONALLY OMITTED.

SECTION 9. LETTERS OF CREDIT. If agreeable to Lender in its sole discretion in each instance, in addition to loans, the Borrower may utilize the Commitment to open irrevocable letters of credit for its account. Each letter of credit will be issued within a reasonable period of time after Lender's receipt of a duly completed and executed copy of Lender's then current form of Application and Reimbursement Agreement or, if applicable, in accordance with the terms of any CoTrade Agreement between the parties, and will reduce the amount available under the Commitment by the maximum amount capable of being drawn under such letter of credit. The Borrower agrees to pay to Lender any fees, administrative expenses, and other customary charges that Lender may charge or incur from time to time in connection with the issuance, maintenance, amendment (if any), assignment or transfer (if any), negotiation, and administration of the letter of credit. Any draw under any letter of credit issued hereunder will be deemed a loan under the Commitment and will be repaid in accordance with this Promissory Note. Each letter of credit must be in form and content acceptable to Lender and must expire no later than the maturity date of the Commitment.

SIGNATURE PAGE FOLLOWS

MECKLENBURG ELECTRIC COOPERATIVE
Chase City, Virginia
Promissory Note No. 12514935S01-A

SIGNATURE PAGE TO PROMISSORY NOTE

IN WITNESS WHEREOF, the parties have caused this Promissory Note to the Credit Agreement to be executed by their duly authorized officer(s).

MECKLENBURG ELECTRIC COOPERATIVE

By: _____

Name: John C. Lee, Jr.

Title: President + CEO

APPROVED
By Chelsey at 7:42 am, Sep 01, 2020

MECKLENBURG ELECTRIC COOPERATIVE
Chase City, Virginia
Promissory Note No. 12514935S01-A

SIGNATURE PAGE TO PROMISSORY NOTE

IN WITNESS WHEREOF, the parties have caused this Promissory Note to the Credit Agreement to be executed by their duly authorized officer(s).

COBANK, ACB

By:



Name:

Fidel Escalante

Title:

Assistant Corporate Secretary



**National Cooperative
Services Corporation**

20701 Cooperative Way
Dulles, Virginia 20166
703-467-1800 | www.ncsc.coop

December 9, 2019

Mrs. Sally Hutcherson
Office Manager
EMPOWER Broadband, Inc.
PO Box 2451
Chase City, VA 23924

Re: Line of Credit # VA401-R-5101

Dear Mrs. Hutcherson:

Your cooperative has executed and returned all required NCSC 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 NCSC and thus constitute a binding agreement between NCSC 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 NCSC appreciate the opportunity to serve your system and look forward to our continued business relationship.

Sincerely,

A handwritten signature in black ink, appearing to read "Elaine MacDonald".

Elaine MacDonald
Associate Vice President

Enclosure

NCSC MASTER
AA001-F-0000 (JABLONJ)
18725-1

REVOLVING LINE OF CREDIT AGREEMENT

REVOLVING LINE OF CREDIT AGREEMENT (this "Agreement"), dated as of 11-20-2019, between EMPOWER Broadband, Inc. ("Borrower"), a corporation organized and existing under the laws of the State of Virginia, and NATIONAL COOPERATIVE SERVICES CORPORATION ("NCSC"), a cooperative association organized and existing under the laws of the District of Columbia.

RECITALS

WHEREAS, the Borrower has applied to NCSC for a line of credit for the purposes set forth in Schedule 1 hereto, and NCSC is willing to extend such a line of credit to the Borrower on the terms and conditions stated herein.

NOW, THEREFORE, for and in consideration of the premises and the mutual covenants hereinafter contained, the parties hereto agree and bind themselves as follows:

ARTICLE I

DEFINITIONS

Section 1.01 For purposes of this Agreement, the following capitalized terms shall have the following meanings (such definitions to be equally applicable to the singular and the plural form thereof). Capitalized terms that are not defined herein shall have the meaning as set forth in the Security Instruments.

"Advance" shall mean each advance of funds by NCSC to the Borrower pursuant to the terms and conditions of this Agreement.

"Business Day" shall mean any day that both NCSC and the depository institution NCSC utilizes for funds transfers hereunder are open for business.

"Collateral" shall mean any and all "Collateral" as defined in any Security Instrument.

"Debt Service Coverage Ratio" or "DSC" for any fiscal year shall mean: (i) total net income of the Borrower, as determined in accordance with GAAP plus Depreciation and Amortization Expense, and interest on Long-Term Debt for such year, plus any cash equity contributions from Guarantor for such year, divided by (ii) the sum of all scheduled payments of principal and interest required to be made during such fiscal year on Long-Term Debt; provided, however, that in the event that any Long-Term Debt has been refinanced during such year the payments of principal and interest required to be made during such year on account of such Long-Term Debt shall be based (in lieu of actual payments required to be made on such refinanced Long-Term Debt) upon the larger of (a) an annualization of the payments required to be made with respect to the refinancing debt during the portion of such year such refinancing debt is outstanding or (b) the payment of principal and interest required to be made during the following year on account of such refinancing debt.

"Default Rate" shall mean a rate per annum equal to the interest rate in effect for an Advance plus two hundred (200) basis points.

"Depreciation and Amortization Expense" shall mean an amount constituting depreciation and amortization of the Borrower computed pursuant to GAAP.

"Distribution" shall mean, with respect to Borrower and its Subsidiaries, any dividend, purchase, redemption, retirement, defeasance or other acquisition for value of any equity interests now or hereafter outstanding, return of any capital to stockholders, partners or members or account debtors as such, any distribution of assets, equity interests, obligations or securities to stockholders, partners, members or account holders as such, or any other cash distribution or any general cancellation or abatement of charges for services furnished, or any equity distribution in kind.

"Effective Date" shall mean the date designated as such by NCSC on the signature page hereof.

"Environmental Laws" shall mean all federal, state and local laws, rules and regulations, now or hereafter in effect, and all judicial and administrative judgments, opinions and interpretations thereof, issued or promulgated by any Governmental Authority, relating in any way to the use, treatment, discharge, storage, management, handling, manufacture, generation, processing, recycling, distribution, transport, release of or exposure to any Hazardous Material, as such laws and other items recited above have been or may be amended from time to time.

"Equity" shall mean the aggregate of Borrower's equities and retained earnings computed pursuant to GAAP

"Equity Ratio" shall mean Equity divided by Total Assets.

"Event of Default" shall have the meaning as described in Article VI hereof.

"GAAP" shall mean generally accepted accounting principles in the United States of America as in effect from time to time.

"Governmental Authority" shall mean the government of the United States of America, any other nation or government, any state or other political subdivision thereof, whether state or local, and any agency, authority, instrumentality, regulatory body, court or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative powers or functions of or pertaining to government.

"Guarantor" shall have the meaning ascribed to it in Schedule 1 hereto.

"Guaranty" shall mean the guaranty entered into by the Guarantor for the benefit of NCSC pursuant to Section 4.01.C hereof, as such guaranty may be amended or modified from time to time.

"Hazardous Material" shall mean any (a) petroleum or petroleum products, radioactive materials, asbestos-containing materials, polychlorinated biphenyls, lead and radon gas and (b) any other chemicals, materials or substances designated, classified or regulated as hazardous or toxic or as a pollutant or contaminant under any Environmental Law.

"Intangible Assets" shall mean assets which provide future economic benefit but have no physical substance, i.e., goodwill, patents, copyrights, etc.

"Lien" shall mean any statutory or common law consensual or non-consensual mortgage, pledge, security interest, encumbrance, lien, right of set off, claim or charge of any kind, including, without limitation, any conditional sale or other title retention transaction, any lease transaction in the nature thereof and any secured transaction under the Uniform Commercial Code.

"Line of Credit" shall mean the line of credit extended by NCSC to Borrower, pursuant to this Agreement, in an aggregate principal amount outstanding at any time not to exceed the NCSC Commitment.

"Loan Documents" shall mean this Agreement, the Security Instruments and all other documents or instruments executed, delivered or executed and delivered by Borrower and evidencing, securing, governing or otherwise pertaining to the Line of Credit or the Obligations.

"Long-Term Debt" shall mean any amount constituting long-term debt of the Borrower computed pursuant to GAAP.

"Maturity Date" shall mean the date set forth in Schedule 1 hereto.

"NCSC Commitment" shall have the meaning ascribed to it in Schedule 1 hereto.

"NCSC Line of Credit Rate" shall mean the rate published by NCSC from time to time, by electronic or other means, for similarly classified lines of credit, but if not published, then the rate determined for such lines of credit by NCSC from time to time.

"Obligations" shall mean any and all liabilities, obligations or indebtedness owing by the Borrower to NCSC, 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.

"Organizational Documents" shall mean, with respect to a corporation, the articles or certificate of incorporation and bylaws and with respect to other Persons, the comparable organizational and governing documents.

"Permitted Encumbrances" shall have the meaning ascribed to it in the Security Instruments.

"Person" shall mean natural persons, sole proprietorships, cooperatives, corporations, limited liability companies, limited partnerships, general partnerships, limited liability partnerships, joint ventures, associations, companies, trusts or other organizations, irrespective of whether they are legal entities, and Governmental Authorities.

"Public Organic Record" shall have the meaning set forth in the Uniform Commercial Code of the jurisdiction of organization of the Borrower.

"Security Instrument" shall mean each agreement, instrument or document that creates or purports to create a Lien in favor of NCSC as more particularly described on Schedule 1 hereto.

"Subsidiary" as to any Person, shall mean a corporation, partnership, limited partnership, limited liability company or other entity of which shares of stock or other ownership interests having ordinary voting power (other than stock or such other ownership interests having such power only by reason of the happening of a contingency) to elect a majority of the board of directors or other managers of such entity are at the time owned, or the management of which is otherwise controlled, directly or indirectly through one or more intermediaries, or both, by such Person. Unless otherwise qualified, all references to a "Subsidiary" or to "Subsidiaries" in this Agreement shall refer to a Subsidiary or Subsidiaries of the Borrower.

"Tangible Net Worth" shall mean Borrower's Equity less Intangible Assets.

"Total Assets" shall mean an amount constituting the total assets of the Borrower computed pursuant to GAAP.

ARTICLE II

REPRESENTATIONS AND WARRANTIES

Section 2.01 The Borrower represents and warrants to NCSC that as of the date of this Agreement:

A. Good Standing. The Borrower is duly organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation or organization, is duly qualified to do business and is in good standing in those states in which it is required to be qualified to conduct its business.

B. Subsidiaries and Ownership. Schedule 1 hereto sets forth a complete and accurate list of the Subsidiaries of the Borrower showing the percentage of the Borrower's ownership of the outstanding stock, membership interests or partnership interests, as applicable, of each Subsidiary.

C. Authority; Validity. The Borrower has the power and authority to enter into this Agreement and the Security Instruments; to make the borrowing hereunder; to execute and deliver all documents and instruments required hereunder and to incur and perform the Obligations provided for herein and in the Security Instruments, all of which have been duly authorized by all necessary and proper action; and no consent or approval of any Person, including, as applicable and without limitation, stockholders, members and partners of the Borrower, which has not been obtained is required as a condition to the validity or enforceability hereof or thereof.

Each of this Agreement and the Security Instruments is, and when fully executed and delivered will be, legal, valid and binding upon the Borrower and enforceable against the Borrower in accordance with its terms, subject to applicable bankruptcy, insolvency, reorganization, moratorium or other laws affecting creditors' rights generally and subject to general principles of equity.

D. No Conflicting Agreements. The execution and delivery of the Loan Documents and performance by the Borrower of the obligations thereunder, and the transactions contemplated hereby or thereby, will not: (i) violate any provision of law, any order, rule or regulation of any court or other Governmental Authority, any award of any arbitrator, the articles of incorporation, by-laws, partnership agreement, articles of organization or operating agreement of the Borrower, as applicable, or any indenture, contract, agreement, mortgage, deed of trust or other instrument to which the Borrower is a party or by which it or any of its property is bound; or (ii) be in conflict with, result in a breach of or constitute (with due notice and/or lapse of time) a default under, any such award, indenture, contract, agreement, mortgage, deed of trust or other instrument, or result in the creation or imposition of any Lien (other than contemplated hereby) upon any of the property or assets of the Borrower.

The Borrower is not in default in any material respect under any agreement or instrument to which it is a party or by which it is bound and no event or condition exists which constitutes a default, or with the giving of notice or lapse of time, or both, would constitute a default under any such agreement or instrument.

E. Taxes. The Borrower, and each of its Subsidiaries, has filed or caused to be filed all federal, state and local tax returns which are required to be filed and has paid or caused to be paid all federal, state and local taxes, assessments, and Governmental Authority charges and levies thereon, including interest and penalties to the extent that such taxes, assessments, and Governmental Authority charges and levies have become due, except for such taxes, assessments, and Governmental Authority charges and levies which the Borrower or any Subsidiary is contesting in good faith by appropriate proceedings for which adequate reserves have been set aside.

F. Licenses and Permits. The Borrower has duly obtained and now holds all licenses, permits, certifications, approvals and the like necessary to own and operate its property and business that are required by Governmental Authorities and each remains valid and in full force and effect.

G. Litigation. There are no outstanding judgments, suits, claims, actions or proceedings pending or, to the knowledge of the Borrower, threatened against or affecting the Borrower, its Subsidiaries or any of their respective properties which, if adversely determined, either individually or collectively, would have a material adverse effect upon the business, operations, prospects, assets, liabilities or financial condition of the Borrower or its Subsidiaries. The Borrower and its Subsidiaries are not, to the Borrower's knowledge, in default or violation with respect to any judgment, order, writ, injunction, decree, rule or regulation of any Governmental Authority which would have a material adverse effect upon the business, operations, prospects, assets, liabilities or financial condition of the Borrower or its Subsidiaries.

H. Financial Statements. The balance sheet of the Borrower as at the date identified in Schedule 1 hereto, the statement of operations of the Borrower for the period ending on said date, and the interim financial statements of the Borrower, all heretofore furnished to NCSC, are complete and correct. Said balance sheet fairly presents the financial condition of the Borrower as at said date and said statement of operations fairly reflects its operations for the period ending on said date. The Borrower has no contingent obligations or extraordinary forward or long-term commitments except as specifically stated in said balance sheet or herein. There has been no material adverse change in the financial condition or operations of the Borrower from that set forth in said financial statements except changes

disclosed in writing to NCSC prior to the date hereof. The Borrower has heretofore furnished to NCSC true and complete copies of its financial reports for each of the fiscal years identified in Schedule 1 hereto.

I. Borrower's Legal Status. Schedule 1 hereto accurately sets forth: (i) the Borrower's name on its Public Organic Record, (ii) the Borrower's organizational type and jurisdiction of organization and (iii) the Borrower's place of business or, if more than one, its chief executive office as well as the Borrower's mailing address if different.

J. Required Approvals. No license, consent or approval of any Governmental Authority is required to enable the Borrower to enter into this Agreement and the Security Instruments, or to perform any of its Obligations provided for in such documents, except as disclosed in Schedule 1 hereto, all of which Borrower has obtained prior to the date hereof.

K. Compliance With Laws. The Borrower and each Subsidiary is in compliance, in all material respects, with all applicable requirements of law and all applicable rules and regulations of each Governmental Authority.

L. Disclosure. To the Borrower's knowledge, information and belief, neither this Agreement nor any document, certificate or financial statement furnished to NCSC by or on behalf of the Borrower in connection herewith (all such documents, certificates and financial statements, taken as a whole) contains any untrue statement of a material fact or omits to state any material fact necessary in order to make the statements contained herein and therein not misleading.

M. Environmental Matters. Except as to matters which individually or in the aggregate would not have a material adverse effect upon the business, operations, prospects, assets, liabilities or financial condition of the Borrower or its Subsidiaries, (i) the Borrower is in compliance with all Environmental Laws, (ii) the Borrower has obtained all permits, licenses and other approvals required under any Environmental Law and all such permits, licenses and approvals are in full force and effect, (iii) there have been no releases from any underground or aboveground storage tanks (or piping associated therewith) that are or were present at the Mortgaged Property, (iv) the Borrower has not received written notice of, or claim or liability related to, any violation of any Environmental Law (v) there is no pending investigation of the Borrower in regard to any Environmental Law and (vi) to the best of the Borrower's knowledge, there has not been any release, or contamination resulting from the presence, of Hazardous Materials by, or otherwise related to the actions of the Borrower, or on property owned, leased or operated by the Borrower.

ARTICLE III

LOAN

Section 3.01 Advances. NCSC agrees to advance funds to the Borrower pursuant to the terms and conditions hereof, provided, however, that the principal amount at any time outstanding under this Agreement shall not exceed the NCSC Commitment. The Borrower may borrow, repay and reborrow funds at any time or from time from the Effective Date up to, but not including, the Maturity Date, at which time all principal amounts outstanding, and accrued, but unpaid interest thereon, shall be due and payable in full.

Section 3.02 Payment and Interest Rate. The Line of Credit shall be payable and bear interest as follows:

A. 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 Maturity Date, if not sooner paid. Interest shall be due and payable in accordance with NCSC's regular billing cycles as may be in effect from time to time. As of the date hereof, interest shall be due and payable on the last day of each of March, June, September and December. NCSC shall provide reasonable prior written notice to the Borrower of any change to the billing cycle or due dates for the payment of interest. NCSC shall invoice the Borrower at least five days prior to the due date of any interest payment, provided, however, that NCSC's failure to timely send an invoice with respect to any interest payment shall not constitute a waiver by NCSC or be deemed to relieve the Borrower of its obligation to make such payment as provided for herein or to repay all amounts advanced hereunder in full with accrued interest as provided for herein. All amounts shall be payable at NCSC's main office at 20701 Cooperative Way, Dulles, VA 20166 or at such other location as designated by NCSC from time to time. The interest rate on all Advances will be equal to the NCSC Line of Credit Rate in effect from time to time. 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 NCSC, and shall remain in effect until any subsequent change in the interest rate occurs.

B. Application of Payments. Each payment shall be applied first to any fees, costs, expenses or charges other than interest or principal then due on the Borrower's indebtedness to NCSC, second to interest accrued and the balance to principal.

Section 3.03 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.

Section 3.04 Default Rate. If the Borrower defaults on its obligation to make a payment due hereunder by the applicable date payment is due, and such default continues for thirty (30) days thereafter, then beginning on the thirty-first (31st) day after the payment is due and for so long as such default continues, Advances shall bear interest at the Default Rate.

ARTICLE IV

CONDITIONS OF LENDING

Section 4.01 Conditions Precedent to Closing. The obligation of NCSC to make Advances hereunder shall not become effective until the date on which the following conditions precedent have been satisfied:

A. Legal Matters. All legal matters incident to the consummation of the transactions hereby contemplated shall be satisfactory to counsel for NCSC.

B. Representations and Warranties. The representations and warranties contained in Article II shall be true on the date hereof.

C. Closing Deliverables. NCSC shall have been furnished with the following, in form and substance satisfactory to NCSC:

(i) Borrower Documents. (a) the executed Loan Documents, (b) certified copies of all such organizational documents and proceedings of the Borrower authorizing the transactions hereby contemplated as NCSC shall require, (c) an opinion of counsel for the Borrower addressing such legal matters as NCSC shall reasonably require, and (d) all other such documents as NCSC may reasonably request.

(ii) Guarantor Documents. (a) the Guaranty executed by each Guarantor, (b) certified copies of all such organizational documents and proceedings of each Guarantor authorizing the transactions contemplated by the Guaranty as NCSC shall require, (c) true and correct copies of all certificates, authorizations, consents, permits and licenses from Governmental Authorities necessary for the execution or delivery of each Guaranty and performance by the Guarantor of the obligations thereunder and (d) an opinion of counsel for each Guarantor addressing such legal matters as NCSC shall reasonably require.

(iii) Government Approvals. True and correct copies of all certificates, authorizations, consents, permits and licenses from Governmental Authorities necessary for the execution or delivery of the Loan Documents, performance by the Borrower of the obligations thereunder and for Borrower to conduct its business.

(iv) Insurance. NCSC shall have received evidence of the Borrower having obtained the insurance identified in Section 5.01.K hereof.

D. UCC Filings. Uniform Commercial Code financing statements (and any continuation statements and other amendments thereto that NCSC shall require from time to time) shall have been duly filed, recorded or indexed in all jurisdictions necessary (and in any other jurisdiction that NCSC shall have reasonably requested) to provide NCSC a first priority, perfected security interest, subject to Permitted Encumbrances, in the Collateral which may be perfected by the filing of a financing statement, all in accordance with applicable law, and the Borrower shall have paid all applicable taxes, recording and filing fees and caused satisfactory evidence thereof to be furnished to NCSC.

E. RESERVED

F. Special Conditions of Closing. NCSC shall be fully satisfied that the Borrower has complied with all special conditions of closing identified in Schedule 1 hereto.

Section 4.02 Conditions to Advances. The obligation of NCSC to make each Advance hereunder is additionally subject to satisfaction of the following conditions:

A. Requisitions. Borrower will requisition each Advance by submitting its written requisition to NCSC in form and substance satisfactory to NCSC no later than 12:00 noon local time at NCSC's offices in Dulles, Virginia on the Business Day prior to the Business Day Borrower seeks to have funds advanced. Such request shall be in the form attached as Exhibit A hereto and shall be made only for the purposes set forth in Schedule 1 hereto.

NCSC may require the Borrower to submit such additional information as it may reasonably require prior to funding the Advance request.

B. Representations and Warranties; Default. The representations and warranties contained in Article II shall be true on the date of the making of each Advance hereunder with the same effect as though such representations and warranties had been made on such date; no Event of Default and no event which, with the lapse of time or the notice and lapse of time would become such an Event of Default, shall have occurred and be continuing or will have occurred after giving effect to each Advance on the books of the Borrower; there shall have occurred no material adverse change in the business or condition, financial or otherwise, of the Borrower or any Guarantor; and nothing shall have occurred which in the opinion of NCSC materially and adversely affects the Borrower's ability to perform its obligations hereunder or Guarantor's ability to perform its obligations under the Guaranty.

C. Special Conditions of Advances. NCSC shall be fully satisfied that the Borrower has complied with all special conditions to advance identified in Schedule 1 hereto.

ARTICLE V

COVENANTS

Section 5.01 Affirmative Covenants. The Borrower covenants and agrees with NCSC that until payment in full of the Line of Credit and performance of all obligations of the Borrower hereunder:

A. Financial Ratios. The Borrower agrees that it will operate and manage its business to achieve and maintain the financial ratios set forth in Schedule 1 hereof.

B. Use of Proceeds. The Borrower shall use the proceeds of this Line of Credit solely for the purposes identified on Schedule 1 hereto.

C. Eligibility. The Borrower will remain an eligible borrower of NCSC.

D. Notice. The Borrower shall promptly notify NCSC in writing of:

- (i) any material adverse change in the business, operations, prospects, assets, liabilities or financial condition of the Borrower or its Subsidiaries;
- (ii) the institution or threat of any litigation or administrative proceeding of any nature involving the Borrower, any Subsidiary or any Guarantor which could materially affect the business, operations, prospects, assets, liabilities or financial condition of the Borrower, any Subsidiary or any Guarantor; and

- (iii) the occurrence of an Event of Default hereunder, or any event that, with the giving of notice or lapse of time, or both, would constitute an Event of Default.

E. Default Notices. Upon receipt of any notices with respect to a default by the Borrower or any Subsidiary under the terms of any evidence of any indebtedness with parties other than NCSC or of any loan agreement, mortgage or other agreement relating thereto, the Borrower shall, and shall cause each Subsidiary to, deliver copies of such notice to NCSC.

F. Financial Books; Financial Reports; Right of Inspection. The Borrower will at all times keep, and safely preserve, proper books, records and accounts in which full and true entries will be made of all of the dealings, business and affairs of the Borrower, in accordance with GAAP. The Borrower will prepare and furnish NCSC within 30 days of the close of each fiscal quarter of the Borrower, financial reports on its condition and operations for the previous fiscal quarter. When requested by NCSC, the Borrower will prepare and furnish NCSC from time to time, not later than the last day of each month, financial reports on its condition and operations for the previous month. All of such reports shall be in such form and include such information as may be specified by NCSC, including without limitation a consolidated and consolidating balance sheet and the related consolidated and consolidating statements of income and cash flow for such quarter and for the period from the beginning of the then current fiscal year to date and for the corresponding budget period year to date. Borrower shall also provide such other reports describing the operations and financial condition as NCSC may request, such as operating statistics including but not limited to, customer or subscriber counts, penetration, additions, and deactivations for the current period and the corresponding period of the previous fiscal year. The Borrower will cause to be prepared and furnished to NCSC from time to time, within one hundred twenty (120) days of the end of each of its fiscal years, a full and complete consolidated and consolidating report of its financial condition and of its operations as of the end of such fiscal year in form and substance satisfactory to NCSC, audited and certified by independent certified public accountants nationally recognized or otherwise satisfactory to NCSC and accompanied by a report of such audit in form and substance satisfactory to NCSC. NCSC, through its representatives, shall at all times during reasonable business hours and upon prior notice have access to, and the right to inspect and make copies of, any or all books, records and accounts, and any or all invoices, contracts, leases, payrolls, canceled checks, statements and other documents and papers of every kind belonging to or in the possession of the Borrower or in any way pertaining to its property or business.

The Borrower shall furnish to NCSC, as soon as available, copies of all management reports provided to the Borrower or any Subsidiary by its independent public accountants.

G. Compliance With Laws. The Borrower and each Subsidiary shall remain in compliance, in all material respects, with all applicable requirements of law and applicable rules and regulations of each Governmental Authority.

H. Taxes. The Borrower shall pay, or cause to be paid all taxes, assessments or Governmental Authority charges lawfully levied or imposed on or against it and its properties prior to the time they become delinquent, except for any taxes, assessments or charges that are being contested in good faith and with respect to which adequate reserves as determined in good faith by the Borrower have been established and are being maintained.

I. Further Assurances. The Borrower shall execute any and all further documents, financing statements, agreements and instruments, and take all such further actions (including the filing and recording of financing statements, fixture filings, mortgages, deeds of trust and other documents), which may be required under any applicable law, or which NCSC may reasonably request, to effectuate the transactions contemplated by the Loan Documents or to grant, preserve, protect or perfect the Liens created or intended to be created thereby. The Borrower also agrees to provide to NCSC, from time to time upon request, evidence reasonably satisfactory to NCSC as to the perfection and priority of the Liens created or intended to be created by the Loan Documents.

J. Environmental Covenants. The Borrower shall:

- (i) Comply in all respects with all applicable Environmental Laws, and the Borrower shall have sole responsibility for any and all costs and expenses associated with such compliance;
- (ii) Conduct and complete, at its sole cost and expense, any investigation, study, sampling, monitoring and testing and undertake any cleanup, removal, remedial, corrective, mitigation, response or other action necessary to comply with applicable Environmental Laws; and
- (iii) Within ten (10) Business Days after receiving any written communication alleging any potential or actual violation of, or claim or liability related to, any Environmental Law, the Borrower shall provide NCSC with a copy thereof. With respect to any matter as to which it has received such notice, the Borrower shall immediately take any and all appropriate actions to remedy, cure, defend, or otherwise affirmatively respond to the matter in full compliance with all applicable Environmental Laws.

K. Insurance. In addition to the insurance required under the Security Instruments, the Borrower will maintain insurance with responsible and reputable insurance companies or associations in such amounts and covering such risks as is usually carried by companies engaged in similar businesses and owning similar properties similarly situated.

L. Maintenance of Existence; Licenses, Permits, etc. The Borrower will, and will cause each Subsidiary to, do or cause to be done all things necessary to preserve, renew or replace and keep in full force and effect its legal existence and rights, privileges, licenses, franchises and permits. The Borrower will qualify and remain qualified as a validly existing entity in good standing in each jurisdiction in which such qualification is necessary under applicable law.

M. Special Covenants. The Borrower agrees that it will comply with any special covenants identified in Schedule 1 hereto.

Section 5.02 Negative Covenants. The Borrower covenants and agrees with NCSC that until payment in full of the Line of Credit and performance of all obligations of the Borrower hereunder, the Borrower will not, directly or indirectly, without NCSC's prior written consent:

A. Limitation on Indebtedness. Create, incur, assume, become or be liable in any manner in respect of, any indebtedness, or cause or permit the Subsidiaries of the Borrower to

create, incur, assume, become or be liable in any manner in respect of, any indebtedness except: (i) the Obligations, (ii) accounts payable to trade creditors for goods or services incurred in the ordinary course of business, as presently conducted, and paid within the specified time, unless contested in good faith and by appropriate proceedings, (iii) indebtedness of the Borrower or any Subsidiary with respect to Permitted Encumbrances, and (iv) loans to the Borrower from the Guarantor.

B. Organizational Change. Change Borrower's type of organization, jurisdiction of organization or legal structure.

C. Notice of Change in Borrower Information. Change its (i) state of incorporation, (ii) legal name, or (iii) mailing address, unless the Borrower provides written notice to NCSC at least thirty (30) days prior to the effective date of any such change together with all documentation reflecting any such change as NCSC may reasonably require.

ARTICLE VI

EVENTS OF DEFAULT

Section 6.01 The following shall be "Events of Default" under this Agreement:

A. Representations and Warranties. Any representation or warranty made by the Borrower herein, or in any of the other Loan Documents, or in any certificate or financial statement furnished to NCSC hereunder or under any of the other Loan Documents shall prove to be false or misleading in any material respect.

B. Payment. The Borrower shall fail to pay (whether upon stated maturity, by acceleration, or otherwise) any principal, interest, premium (if any) or other amount payable under the Line of Credit and the Loan Documents within five (5) Business Days after the due date thereof.

C. Other Covenants.

(i) No Grace Period. Failure of the Borrower to observe or perform any covenant or agreement contained in Sections 5.01.A, 5.01.B, 5.01.C, 5.01.E, 5.01.F or 5.02 of this Agreement.

(ii) Thirty Day Grace Period. Failure of the Borrower to observe or perform any other covenant or agreement contained in this Agreement or any of the other Loan Documents, which shall remain unremedied for thirty (30) calendar days after written notice thereof shall have been given to the Borrower by NCSC.

D. Legal Existence, Permits and Licenses. The Borrower shall forfeit or otherwise be deprived of (i) its authority to conduct business in the jurisdiction in which it is organized or in any other jurisdiction where such authority is required in order for the Borrower to conduct its business in such jurisdiction or (ii) permits, easements, consents or licenses required to carry on any material portion of its business.

E. Other NCSC Obligations. The Borrower shall be in breach or default of any Obligation, which breach or default continues uncured beyond the expiration of any applicable grace period.

F. Other Obligations. The Borrower shall (i) fail to make any payment of any principal, premium or any other amount due or interest on any indebtedness with parties other than NCSC which shall remain unpaid beyond the expiration of any applicable grace period, or (ii) be in breach or default with respect to any other term of any evidence of any other indebtedness with parties other than NCSC or of any loan agreement, mortgage or other agreement relating thereto which breach or default continues uncured beyond the expiration of any applicable grace period, if the effect of such failure, default or breach is to cause the holder or holders of that indebtedness to cause that indebtedness to become or be declared due prior to its stated maturity (upon the giving or receiving of notice, lapse of time, both or otherwise).

G. Involuntary Bankruptcy. An involuntary case or other proceeding shall be commenced against the Borrower, Guarantor or any general partner seeking liquidation, reorganization or other relief with respect to it or its debts under bankruptcy, insolvency or other similar law now or hereafter in effect or seeking the appointment of a trustee, receiver, liquidator, custodian or other similar official of it or any substantial part of its property and such involuntary case or other proceeding shall continue without dismissal or stay for a period of sixty (60) consecutive days; or an order for relief shall be entered against the Borrower under the federal bankruptcy laws or applicable state law as now or hereafter in effect.

H. Insolvency. The Borrower, Guarantor or general partner, if any, shall commence a voluntary case or other proceeding seeking liquidation, reorganization or other relief with respect to itself or its debts under any bankruptcy, insolvency or other similar law now or hereafter in effect or seeking the appointment of a trustee, receiver, liquidator, custodian or other similar official of it or any substantial part of its property, or shall consent to any such relief or to the appointment of or taking possession by any such official in an involuntary case or proceeding commenced against it, or shall make a general assignment for the benefit of creditors, or shall admit in writing its inability to, or be generally unable to, pay its debts as they become due, or shall take any action to authorize any of the foregoing.

I. Dissolution or Liquidation. The dissolution, liquidation or other termination of the existence of the Borrower, Guarantor or general partner, if any.

J. Validity of Documents. Any material provision of this Agreement or any other Loan Document shall at any time cease to be valid and binding on the Borrower, or shall be declared to be null and void, or the validity or enforceability thereof shall be contested by the Borrower.

K. Material Adverse Change. Any material adverse change in the value of the Collateral or the financial condition or operating results of the Borrower or any Guarantor.

L. Monetary Judgment. The Borrower shall suffer any money judgment not covered by insurance, writ or warrant of attachment or similar process involving an amount in excess of \$100,000.00 and shall not discharge, vacate, bond or stay the same within a period of sixty (60) consecutive days.

M. Nonmonetary Judgment. One or more nonmonetary judgments or orders (including, without limitation, injunctions, writs or warrants of attachment, garnishment, execution, distraint, replevin or similar process) shall be rendered against the Borrower that, either individually or in the aggregate, could reasonably be expected to have a material adverse effect upon the business, operations, prospects, assets, liabilities or financial condition of the Borrower.

N. Cease Business. The Borrower shall cease to conduct all or any material part of its business.

O. Guarantor Default. Default by any Guarantor of its obligations under the Guaranty.

ARTICLE VII

REMEDIES

Section 7.01 If any Event of Default shall occur after the date of this Agreement and shall not have been remedied within the applicable grace period therefor, then in every such event (other than an event with respect to the Borrower described in Section 6.01.G, 6.01.H or 6.01.I) and at any time during the continuance of such event, NCSC may:

- (i) Cease making Advances hereunder;
- (ii) Declare all unpaid principal outstanding on the Line of Credit, all accrued and unpaid interest thereon, and all other Obligations to be immediately due and payable and the same shall thereupon become immediately due and payable without presentment, demand, protest or notice of any kind, all of which are hereby expressly waived;
- (iii) Exercise rights of setoff or recoupment and apply any and all amounts held, or hereafter held, by NCSC 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 or under the Line of Credit. The rights of NCSC under this section are in addition to any other rights and remedies (including other rights of setoff or recoupment) which NCSC may have. The Borrower waives all rights of setoff, deduction, recoupment or counterclaim;
- (iv) Pursue all rights and remedies available to NCSC that are contemplated by the Security Instruments in the manner, upon the conditions, and with the effect provided in the Security Instruments, including, but not limited to, a suit for specific performance, injunctive relief or damages;
- (v) Pursue any other rights and remedies available to NCSC at law or in equity.

If any Event of Default described in Section 6.01.G, 6.01.H or 6.01.I with respect to the Borrower shall occur after the date of this Agreement, then NCSC's commitment to make Advances hereunder shall automatically terminate and the unpaid principal outstanding hereunder, all accrued and unpaid interest thereon, and all other Obligations shall thereupon become immediately due and payable without presentment, demand, protest or notice of any kind, all of

which are hereby expressly waived. In addition, NCSC may pursue all rights and remedies available to NCSC that are contemplated by the Security Instruments and the other Loan Documents in the manner, upon the conditions, and with the effect provided in the Security Instruments and the other Loan Documents, including, but not limited to, a suit for specific performance, injunctive relief or damages and any other rights and remedies available to NCSC at law or in equity.

Nothing herein shall limit the right of NCSC to pursue all rights and remedies available to a creditor following the occurrence of an Event of Default. Each right, power and remedy of NCSC shall be cumulative and concurrent, and recourse to one or more rights or remedies shall not constitute a waiver of any other right, power or remedy.

ARTICLE VIII

MISCELLANEOUS

Section 8.01 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 facsimile) 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. All such communications shall be deemed to have been duly given (i) when personally delivered including, without limitation, by overnight mail or courier service, (ii) in the case of notice by United States mail, certified or registered, postage prepaid, return receipt requested, upon receipt thereof, or (iii) in the case of notice by facsimile, upon transmission thereof, provided such transmission is promptly confirmed by either of the methods set forth in clauses (i) or (ii) above in each case given or addressed as provided for herein. The Address for Notices of each of the respective parties is as follows:

The Borrower:

The address set forth in
Schedule 1 hereto

National Cooperative Services Corporation:
20701 Cooperative Way
Dulles, Virginia 20166
Attention: General Counsel
Fax # 866-230-5635

Section 8.02 Expenses. The Borrower shall reimburse NCSC for any reasonable costs and out-of-pocket expenses paid or incurred by NCSC (including, without limitation, reasonable fees and expenses of outside attorneys, paralegals and consultants) for all actions NCSC takes, (a) to enforce the payment of any Obligation, to effect collection of any Collateral, or in preparation for such enforcement or collection, (b) to institute, maintain, preserve, enforce and foreclose on NCSC's security interest in or Lien on any of the Collateral, whether through judicial proceedings or otherwise, (c) to restructure any of the Obligations, (d) to review, approve or grant any consents or waivers hereunder, (e) to prepare, negotiate, execute, deliver, review, amend or modify this Agreement, and (f) to prepare, negotiate, execute, deliver, review,

amend or modify any other agreements, documents and instruments deemed necessary or appropriate by NCSC in connection with any of the foregoing.

The amount of all such expenses identified in this Section 8.02 shall be secured by the Security Instruments and shall be payable upon demand, and if not paid, shall accrue interest at the then prevailing NCSC Line of Credit Rate plus two hundred basis points.

Section 8.03 Late Payments. If payment of any principal and/or interest due under the terms of the Line of Credit is not received at NCSC's office in Dulles, Virginia or such other place as NCSC may designate to the Borrower, within five (5) Business Days after the due date thereof, the Borrower will pay to NCSC, in addition to all other amounts due under the terms of the Loan Documents, a late payment charge equal to five percent (5%) of the delinquent amount.

Section 8.04 Non-Business Day Payments. If any payment to be made by the Borrower hereunder shall become due on a day which is not a Business Day, such payment shall be made on the next succeeding Business Day and such extension of time shall be included in computing any interest in respect of such payment.

Section 8.05 Filing Fees. To the extent permitted by law, the Borrower agrees to pay all expenses of NCSC (including the reasonable fees and expenses of its counsel) in connection with the filing, registration, recordation or perfection of any security interest or financing statements and instruments as may be required by NCSC in connection with this Agreement, including, without limitation, all documentary stamps, recordation and transfer taxes and other costs and taxes incident to execution, filing, registration, recordation or perfection of any document or instrument in connection herewith. The Borrower agrees to save harmless and indemnify NCSC from and against any liability resulting from the failure to pay any required documentary stamps, recordation and transfer taxes, recording costs, or any other expenses incurred by NCSC in connection with this Agreement. The provisions of this subsection shall survive the execution and delivery of this Agreement and the payment of all other amounts due under the Loan Documents.

Section 8.06 NCSC Accounts. Borrower agrees that the records of, and all computations by, NCSC (in whatever media they are recorded or maintained) as to the amount of principal, interest and fees due on the Line of Credit shall be conclusive in the absence of manifest error

Section 8.07 Waiver; Modification. No failure on the part of NCSC to exercise, and no delay in exercising, any right or power hereunder or under the other Loan Documents shall operate as a waiver thereof, nor shall any single or partial exercise by NCSC of any right hereunder, or any abandonment or discontinuance of steps to enforce such right or power, preclude any other or further exercise thereof or the exercise of any other right or power. No modification or waiver of any provision of this Agreement or the other Loan Documents and no consent to any departure by the Borrower therefrom shall in any event be effective unless the same shall be in writing by the party granting such modification, waiver or consent, and then such modification, waiver or consent shall be effective only in the specific instance and for the purpose for which given.

SECTION 8.08 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) THE BORROWER HEREBY SUBMITS TO THE NON-EXCLUSIVE 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. THE BORROWER IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY OBJECTIONS THAT IT MAY NOW OR HEREAFTER HAVE TO THE ESTABLISHING OF THE VENUE OF ANY SUCH PROCEEDINGS BROUGHT IN SUCH A COURT AND ANY CLAIM THAT ANY SUCH PROCEEDING HAS BEEN BROUGHT IN AN INCONVENIENT FORUM.

(C) THE BORROWER AND NCSC EACH 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.

SECTION 8.09 VOLUNTARY WAIVERS. THE BORROWER ACKNOWLEDGES THAT IT HAS BEEN ADVISED BY ITS COUNSEL WITH RESPECT TO THIS AGREEMENT AND THE TRANSACTIONS CONTEMPLATED HEREBY, AND THE BORROWER ACKNOWLEDGES AND AGREES THAT (A) EACH OF THE WAIVERS SET FORTH HEREIN, WERE KNOWINGLY AND VOLUNTARILY MADE; (B) THE OBLIGATIONS OF NCSC HEREUNDER, INCLUDING THE OBLIGATION TO MAKE ADVANCES AND LEND FUNDS TO THE BORROWER IN ACCORDANCE HERewith, SHALL BE STRICTLY CONSTRUED AND SHALL BE EXPRESSLY SUBJECT TO THE BORROWER'S COMPLIANCE IN ALL RESPECTS WITH THE TERMS AND CONDITIONS HEREIN SET FORTH; AND (C) NO REPRESENTATIVE OF NCSC HAS WAIVED OR MODIFIED ANY OF THE PROVISIONS OF THIS AGREEMENT AS OF THE DATE HEREOF AND NO SUCH WAIVER OR MODIFICATION FOLLOWING THE DATE HEREOF SHALL BE EFFECTIVE UNLESS MADE IN ACCORDANCE WITH SECTION 8.07 HEREOF.

SECTION 8.10 INDEMNIFICATION. THE BORROWER HEREBY INDEMNIFIES AND AGREES TO HOLD HARMLESS, AND DEFEND NCSC AND ITS MEMBERS, DIRECTORS, OFFICERS, EMPLOYEES, AGENTS, ATTORNEYS AND REPRESENTATIVES (EACH AN "INDEMNITEE") FOR, FROM, AND AGAINST ALL CLAIMS, DAMAGES, LOSSES, LIABILITIES, COSTS, AND EXPENSES (INCLUDING, WITHOUT LIMITATION, COSTS AND EXPENSES OF LITIGATION AND REASONABLE ATTORNEYS' FEES) ARISING FROM ANY CLAIM OR DEMAND IN RESPECT OF THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS, THE COLLATERAL, OR THE TRANSACTIONS DESCRIBED IN THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS AND ARISING AT ANY TIME, WHETHER BEFORE OR AFTER PAYMENT AND PERFORMANCE OF ALL OBLIGATIONS UNDER THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS IN FULL, EXCEPTING ANY SUCH MATTERS ARISING SOLELY FROM THE GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF NCSC OR ANY INDEMNITEE NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED IN SECTION 8.13 HEREOF. THE OBLIGATIONS IMPOSED UPON THE BORROWER BY THIS SECTION SHALL SURVIVE THE REPAYMENT OF THE LINE OF

CREDIT, THE TERMINATION OF THIS AGREEMENT AND THE TERMINATION OR RELEASE OF THE LIEN OF ANY SECURITY INSTRUMENT.

SECTION 8.11 ENVIRONMENTAL INDEMNIFICATION. THE BORROWER HEREBY AGREES TO ASSUME, AND DOES HEREBY ASSUME, LIABILITY FOR, AND HEREBY AGREES TO INDEMNIFY, AND DOES HEREBY INDEMNIFY, AND HEREBY AGREES TO PROTECT, DEFEND, SAVE AND KEEP HARMLESS, NCSC AND ALL INDEMNITEES FROM AND AGAINST ANY AND ALL LIABILITIES, OBLIGATIONS, LOSSES, DAMAGES, PENALTIES, SETTLEMENTS, CLAIMS, ACTIONS, SUITS OR PROCEEDINGS OF ANY KIND AND NATURE, COSTS, EXPENSES (INCLUDING REASONABLE ATTORNEYS' AND CONSULTANTS' FEES AND DISBURSEMENTS) AND DISBURSEMENTS OF ANY KIND AND NATURE WHATSOEVER WHICH MAY BE IMPOSED ON, INCURRED BY OR ASSERTED AGAINST NCSC OR ANY INDEMNITEE IN ANY WAY RELATING TO OR ARISING OUT OF (I) THE PRESENCE, USE, GENERATION, TREATMENT, STORAGE, RECYCLING, MANAGEMENT OR RELEASE OF ANY HAZARDOUS MATERIAL FROM, AT, IN, ON OR UNDER, OR THE TRANSPORT TO OR FROM, ANY PROPERTY OWNED, LEASED OR OPERATED BY THE BORROWER, (II) THE VIOLATION OF OR NONCOMPLIANCE WITH ANY ENVIRONMENTAL LAW, OR (III) ANY LOSS OF OR DAMAGE TO ANY PROPERTY, NATURAL RESOURCES OR THE ENVIRONMENT, OR DEATH OF OR INJURY TO ANY PERSON, RESULTING FROM OR RELATING IN ANY WAY TO ANY HAZARDOUS MATERIAL THAT IS OR WAS PRESENT, USED, GENERATED, TREATED, STORED, RECYCLED, MANAGED, TRANSPORTED OR RELEASED BY OR ON BEHALF OF THE BORROWER OR AT, ON, IN, UNDER, TO OR FROM ANY PROPERTY OWNED, LEASED OR OPERATED BY THE BORROWER. THE OBLIGATIONS IMPOSED UPON THE BORROWER BY THIS SECTION SHALL SURVIVE THE REPAYMENT OF THE LINE OF CREDIT, THE TERMINATION OF THIS AGREEMENT AND THE TERMINATION OR RELEASE OF THE LIEN OF ANY SECURITY INSTRUMENT.

Section 8.12 Complete Agreement. This Agreement, together with the schedules and exhibits to this Agreement and the other Loan Documents, and the other agreements and matters referred to herein or by their terms referring hereto, is intended by the parties as a final expression of their agreement and is intended as a complete statement of the terms and conditions of their agreement. In the event of any conflict in the terms and provisions of this Agreement and any other Loan Documents, the terms and provisions of this Agreement shall control.

Section 8.13 Survival; Successors and Assigns. All covenants, agreements, representations and warranties of the Borrower which are contained in this Agreement shall survive the execution and delivery to NCSC of the Loan Documents and the making of Advances hereunder and shall continue in full force and effect until all of the obligations under the Loan Documents have been paid in full. All covenants, agreements, representations and warranties of the Borrower which are contained in this Agreement shall inure to the benefit of the successors and assigns of NCSC. The Borrower shall not have the right to assign its rights or obligations under this Agreement without the prior written consent of NCSC.

Section 8.14 Use of Terms. The use of the singular herein shall also refer to the plural, and vice versa.

Section 8.15 Headings. The headings and sub-headings contained in this Agreement are intended to be used for convenience only and do not constitute part of this Agreement.

Section 8.16 Severability. If any term, provision or condition, or any part thereof, of this Agreement or the other Loan Documents shall for any reason be found or held invalid or unenforceable by any court of competent jurisdiction or other Governmental Authority, 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 and the other Loan Documents shall survive and be construed as if such invalid or unenforceable term, provision or condition had not been contained therein.

Section 8.17 Binding Effect. This Agreement shall become effective when it shall have been executed by both the Borrower and NCSC and thereafter shall be binding upon and inure to the benefit of the Borrower and NCSC and their respective successors and assigns, except that the Borrower shall not have the right to assign its rights hereunder or any interest herein without the prior written consent of NCSC.

Section 8.18 Counterparts. This Agreement may be executed in one or more counterparts, each of which will be deemed an original and all of which together will constitute one and the same document. Signature pages may be detached from the counterparts and attached to a single copy of this Agreement to physically form one document.

Section 8.19 Security. This Line of Credit and the obligations of the Borrower hereunder are secured under the Security Instruments.

Section 8.20 Schedule 1. Schedule 1 attached hereto is an integral part of this Agreement.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed as of the day and year first above written.

EMPOWER Broadband, Inc.

(SEAL)

By: [Signature]
Title: Chairman

Attest: [Signature]
Secretary

NATIONAL COOPERATIVE SERVICES CORPORATION

(SEAL)

By: Elaine MacDonald Elaine MacDonald
Assistant Secretary-Treasurer

Attest: [Signature] Jennifer Mink
Assistant Secretary-Treasurer

Loan Number: VA401-R-5101

Effective Date: December 9, 2019

SCHEDULE 1

1. The purpose of the loan is to provide funds for the Borrower's general corporate use, consistent with the Borrower's articles of incorporation, bylaws and applicable federal, state and local laws and regulations.
2. The aggregate NCSC Commitment shall mean \$1,000,000.00.
3. Maturity Date shall mean the date five (5) years from the Effective Date.
4. Guarantor shall mean: Mecklenburg Electric Cooperative
5. Security Instrument shall mean the Security Agreement, dated as of even date herewith, between the Borrower and NCSC, as it may be supplemented, amended, consolidated or restated from time to time.
6. The Subsidiaries of the Borrower referred to in Section 2.01.B are:

<u>Name of Subsidiary</u>	<u>% of Borrower's ownership</u>
---------------------------	----------------------------------

N/A

7. The date of the Borrower's balance sheet referred to in Section 2.01.H is December 31, 2018.
8. The fiscal years referred to in Section 2.01.H are 2017 and 2018.
9. The Borrower's exact legal name is: EMPOWER Broadband, Inc.
10. The Borrower's organizational type is: corporation
11. The Borrower is organized under the laws of the state of: Virginia
12. The place of business or, if more than one, the chief executive office of the Borrower referred to in Section 2.01.I is 11633 Highway #92, Chase City, VA 23924.
13. The Governmental Authority referred to in Section 2.01.J is: Virginia State Corporation Commission
14. The special conditions of closing referred to in Section 4.01.F are as follows: None
15. The special conditions of advance referred to in Section 4.02.C are as follows: None
16. The financial ratios referred to in Section 5.01.A are:

An annual DSC of not less than (a) 1.00 as of December 31, 2020, (b) 1.10 as of December 31, 2021, and (c) 1.25 as of December 31, 2022 and as of each December 31 thereafter, each measured based on Borrower's fiscal year-end results as reflected in its audited financial statements.

17. The special covenants referred to in Section 5.01.M are as follows:
- (a) Borrower shall provide NCSC with an annual budget, in form and substance satisfactory to NCSC, within thirty (30) days of the beginning of each fiscal year.
 - (b) Borrower shall not make, declare or pay, or permit any of its Subsidiaries to make, declare or pay, any Distribution except under the following conditions:
 - (i) The Borrower is in compliance with all covenants set forth in Article V hereof; and
 - (ii) After giving effect to the Distribution, the Equity Ratio will be not less than twenty percent (20%).

18. The address for notices to the Borrower referred to in Section 8.01 is:

If by personal delivery (including overnight mail or courier service):

EMPOWER Broadband, Inc.
11633 Highway #92
Chase City, VA 23924
Attention: General Manager

If by United States mail:

EMPOWER Broadband, Inc.
PO Box 2451
Chase City, VA 23924
Attention: General Manager

If by facsimile:

Fax: (434) 372-6101

EXHIBIT A



LOAN ADVANCE FORM

Borrower Name	Borrower ID #	Facility #	Advance Date	Advance Amount

Loan Advance Purpose

Interest Rate Selection
<i>Variable Rate (NCSC Associate)</i>

Banking Information		Correspondent Bank Information	
Bank Name:		Routing Bank Name	
City, State:		Routing Bank City, State	
Bank ABA #		Routing Bank ABA #	
Bank Account #			

CERTIFICATION

Acting on behalf of the Borrower, I hereby certify that as of the date below: (1) I am duly authorized to make this certification and to request funds on the terms specified herein; (2) the Borrower has met all of the conditions contained in the loan agreement governing the terms of this Advance that the Borrower is required to meet prior to an Advance of funds; (3) all of the representations and warranties contained in said loan agreement are true; (4) no Event of Default, as defined in said loan agreement, has occurred and is continuing; (5) I know of no other event that has occurred which, with the lapse of time and/or notification to NCSC of such event, or after giving effect to this Advance, would become an Event of Default; and (6) the funds requested herein will be used only for the purposes specified in said loan agreement.

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,

A handwritten signature in cursive script that reads 'David Olah'.

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

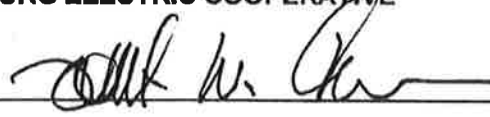
23. Additional Terms and Conditions.

- (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: _____

David W. Olah
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 12 - Derivation of Cost

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
Underground - Buried Labor Sub-total	\$ 25,920,632	\$ 17,385,224	\$ 8,535,408	MEC-EMPOWER Construction Costs 2022-2023	12/18/2023
Splicing Labor Sub-total	\$ 3,628,750	\$ 2,540,125	\$ 1,088,625	MEC-EMPOWER Construction Costs 2022-2023	12/18/2023
Patch Pannels and Cabinets Labor	\$ 31,044	\$ 21,731	\$ 9,313	MEC-EMPOWER Construction Costs 2022-2023	12/18/2023
Fiber Material Sub-total	\$ 2,868,274	\$ 2,007,792	\$ 860,482	MEC-EMPOWER Construction Costs 2022-2023	12/18/2023
Underground Material Sub-total	\$ 7,027,095	\$ 4,918,966	\$ 2,108,128	MEC-EMPOWER Construction Costs 2022-2023	12/18/2023
Closures Material Sub-total	\$ 2,047,826	\$ 1,433,478	\$ 614,348	MEC-EMPOWER Construction Costs 2022-2023	12/18/2023
Patch Panels and Cabinets Material Sub-total	\$ 349,981	\$ 244,986	\$ 104,994	MEC-EMPOWER Construction Costs 2022-2023	12/18/2023
Drop Labor and Material	\$ 15,456,500		\$ 15,456,500	MEC-EMPOWER Construction Costs 2022-2023	12/18/2023
Grant Administration	\$ 200,000	\$ 200,000	\$ -	SPDC	12/18/2023
	\$ -	\$ -	\$ -		



HEADQUARTERS

P. O. Box 325
Chase City, VA 23924
Phone: 434-372-6244

BRACEY DISTRICT

P. O. Box 129
Bracey, VA 23919
Phone: 434-636-2274

December 18, 2024

Tamarah Holmes, Ph.D.
Director, Office of Broadband
Virginia Department of Housing and Community Development
600 East Main Street, Suite 300
Richmond, Virginia 23219

RE: Cost Estimates for VATI FY 2024 Application for EMPOWER Broadband

Dear Dr. Holmes:

To develop the network design and associated cost estimates contained in the application to continue pursuit of universal coverage to Brunswick, Greensville, Halifax, Mecklenburg, and the southern portion of Charlotte County, Empower Broadband has based this request on extending the existing fiber network.

The cost estimates contained in the application are derived using Magellan - Entrust Solutions Group Cost estimate model. Entrust is a multi-disciplined organization offering professional engineering, surveying, mapping, environmental and right-of-way services to the telecommunications, electric power transmission and distribution, gas pipeline, fiber optics, and related industries.

Utilizing this comprehensive model, EMPOWER is able to calculate detailed cost estimates taking into account multiple expenses derived from numerous successful projects completed by EMPOWER and its parent organization Mecklenburg Electric Cooperative.

Sincerely,

A handwritten signature in black ink, appearing to read "David Lipscomb".

David Lipscomb
VP Member & Energy Services

Location	HHP	Miles	Estimated Cost
Halifax24	4093	116	\$ 8,257,196.00
HalifaxCAF	1304	53	\$ 3,500,251.37
HalifaxDOM	0	14	\$ 811,455.95
Mecklenburg24	1552	66	\$ 4,324,109.10
MecklenburgCAF	2640	87	\$ 5,987,628.89
MecklenburgDOM	0	0	\$ -
Brunswick24	515	42	\$ 2,526,370.80
BrunswickCAF	1943	215	\$ 12,558,103.16
BrunswickDOM	0	19	\$ 1,085,437.52
Charlotte24	32	0	\$ -
CharlotteCAF	661	0	\$ -
CharlotteDOM	0	0	\$ -
Greenville24	351	49	\$ 2,823,047.44
GreenvilleCAF	0	0	\$ -
GreenvilleDOM	0	0	\$ -

Location	HHP	Drops	Miles	OSP Estimate	p Estimate (\$1900/di	Total
Halifax24	4093	2836	116	\$ 8,257,196.00	\$ 5,388,400.00	\$ 13,645,596.00
HalifaxCAF	1304	1178	53	\$ 3,500,251.37	\$ 2,238,200.00	\$ 5,738,451.37
HalifaxDOM	0	0	14	\$ 811,455.95	\$ -	\$ 811,455.95
Mecklenburg24	1552	1131	66	\$ 4,324,109.10	\$ 2,148,900.00	\$ 6,473,009.10
MecklenburgCAF	2640	1714	87	\$ 5,987,628.89	\$ 3,256,600.00	\$ 9,244,228.89
MecklenburgDOM	0	0	0	\$ -	\$ -	\$ -
Brunswick24	515	274	42	\$ 2,526,370.80	\$ 520,600.00	\$ 3,046,970.80
BrunswickCAF	1943	145	215	\$ 12,558,103.16	\$ 275,500.00	\$ 12,833,603.16
BrunswickDOM	0	0	19	\$ 1,085,437.52	\$ -	\$ 1,085,437.52
Charlotte24	32	28	0	\$ -	\$ 53,200.00	\$ 53,200.00
CharlotteCAF	661	661	0	\$ -	\$ 1,255,900.00	\$ 1,255,900.00
CharlotteDOM	0	0	0	\$ -	\$ -	\$ -
Greenville24	351	168	49	\$ 2,823,047.44	\$ 319,200.00	\$ 3,142,247.44
GreenvilleCAF	0	0	0	\$ -	\$ -	\$ -
GreenvilleDOM	0	0	0	\$ -	\$ -	\$ -

13091

Total Construction Costs	\$ 57,330,100.23
Admin Costs	\$ 200,000.00
Total	\$ 57,530,100.23

PRICE REGION

NorthEast

DESIGN RATE PER FOOT **\$1.30**
CONTINGENCY % **20%**

SET THESE FIELDS BEFORE RUNNING BUILD SUMMARY

0

42

42

OVERALL TOTAL		Backbone							Distribution							Overall						
DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp	Pgs/Cost	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp	Pgs/Cost	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp	Pgs/Cost	
Footage	0.00	0.00	0.00	\$ 1.30	\$ -	-	-	475,611.00	412,332.00	63,279.00	\$ 1.30	\$ 618,299	719	719	475,611.00	412,332.00	63,279.00	\$ 1.30	618,299.00	719	719	
Mileage	0.00	0.00	0.00			\$ -	-	90.07	78.09	11.98			\$ 121,650	121,650	90.07	78.09	11.98				\$ 121,650	
PREMISES	-							1,344							1,344							
Residential	-							1,344							1,344							
Business	-							-						-								
Anchors	-							-						-								
UNDERGROUND - BURIED LABOR TOTAL	\$ 0.00							\$ 3,203,056.52							\$ 3,203,056.52							
AERIAL -STRAND/LASH LABOR TOTAL	\$ 0.00							\$ 13,190.00							\$ 13,190.00							
AERIAL - ADSS LABOR TOTAL	\$ 0.00							\$ 282,480.00							\$ 282,480.00							
WIRELESS LABOR TOTAL	\$ 0.00							\$ 0.00							\$ 0.00							
SPLICING LABOR TOTAL	\$ 0.00							\$ 210,224.00							\$ 210,224.00							
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 0.00							\$ 2,730.00							\$ 2,730.00							
GENERAL LABOR TOTAL	\$ 0.00							\$ 0.00							\$ 0.00							
LABOR TOTAL	\$ 0.00							\$ 3,711,680.52							\$ 3,711,680.52							
FIBER MATERIAL TOTAL	\$ 0.00							\$ 428,543.08							\$ 428,543.08							
UNDERGROUND MATERIAL TOTAL	\$ 0.00							\$ 699,419.25							\$ 699,419.25							
CLOSURES MATERIAL TOTAL	\$ 0.00							\$ 278,788.78							\$ 278,788.78							
MST MATERIAL TOTAL	\$ 0.00							\$ 12,114.00							\$ 12,114.00							
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 0.00							\$ 2,394.00							\$ 2,394.00							
AERIAL MATERIAL TOTAL	\$ 0.00							\$ 0.00							\$ 0.00							
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00							\$ 0.00							\$ 0.00							
AERIAL - ADSS MATERIAL TOTAL	\$ 0.00							\$ 26,301.12							\$ 26,301.12							
WIRELESS MATERIAL TOTAL	\$ 0.00							\$ 0.00							\$ 0.00							
MATERIAL TOTAL	\$ 0.00	Cost Per Foot	Cost Per Mile	w/ Design/Stamp				\$ 1,447,560.23	Cost Per Foot	Cost Per Mile	w/ Design/Stamp			\$ 1,447,560.23	Cost Per Foot	Cost Per Mile	w/ Design/Stamp					
TOTAL BID	\$ 0.00	\$0.00	\$0.00	\$0.00	\$0.00			\$ 5,159,240.75	\$10.85	\$57,280.35	\$5,899,189.75			\$5,159,240.75	\$10.85	\$57,280.35	\$5,899,189.75					
WITH 20% CONTINGENCY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00			\$6,191,088.90	\$13.02	\$68,736.42	\$6,931,037.90			\$6,191,088.90	\$13.02	\$68,736.42	\$6,931,037.90					

DIST-CHASc-M07-01

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp	Pgs/Cost
Footage	6,167.00	4,805.00	1,362.00	\$ 1.30	\$ 8,017		10
Mileage	1.17	0.91	0.26				\$1,800
PREMISES	32						
Residential	32						
Business	0						
Anchor	0						
UNDERGROUND - BURIED LABOR TOTAL	\$ 42,237.60						
AERIAL -STRAND/LASH LABOR TOTAL	\$ 262.50						
AERIAL - ADSS LABOR TOTAL	\$ 6,193.75						
WIRELESS LABOR TOTAL	\$ 0.00						
SPLICING LABOR TOTAL	\$ 4,197.00						
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00						
GENERAL LABOR TOTAL	\$ 0.00						
LABOR TOTAL	\$ 52,955.85						
FIBER MATERIAL TOTAL	\$ 6,825.12						
UNDERGROUND MATERIAL TOTAL	\$ 13,134.00						
CLOSURES MATERIAL TOTAL	\$ 5,326.30						
MST MATERIAL TOTAL	\$ 396.00						

PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00				
AERIAL MATERIAL TOTAL	\$ 0.00				
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00				
AERIAL - ADSS MATERIAL TOTAL	\$ 693.00				
WIRELESS MATERIAL TOTAL	\$ 0.00				
MATERIAL TOTAL	\$ 26,431.42	Cost Per Foot	Cost Per Mile	w/Design/Stamp	
TOTAL BID	\$ 79,387.27	\$ 12.87	\$ 67,852.37	\$ 89,204.27	
WITH 20% CONTINGENCY	\$ 95,264.72	\$ 15.45	\$ 81,422.84	\$ 105,081.72	

DIST-CHASF-01

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	2,066.00	2,066.00	0.00	\$ 1.30	\$ 2,686	4
Mileage	0.39	0.39	0.00			\$720

PREMISES

	32					
Residential	32					
Business	0					
Anchor	0					

UNDERGROUND - BURIED LABOR TOTAL	\$ 20,923.50					
AERIAL -STRAND/LASH LABOR TOTAL	\$ 190.00					
AERIAL - ADSS LABOR TOTAL	\$ 0.00					
WIRELESS LABOR TOTAL	\$ 0.00					
SPLICING LABOR TOTAL	\$ 4,197.00					
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00					
GENERAL LABOR TOTAL	\$ 0.00					
LABOR TOTAL	\$ 25,375.50					
FIBER MATERIAL TOTAL	\$ 1,136.12					
UNDERGROUND MATERIAL TOTAL	\$ 9,373.50					
CLOSURES MATERIAL TOTAL	\$ 5,326.30					
MST MATERIAL TOTAL	\$ 0.00					
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00					
AERIAL MATERIAL TOTAL	\$ 0.00					
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00					
AERIAL - ADSS MATERIAL TOTAL	\$ 0.00					
WIRELESS MATERIAL TOTAL	\$ 0.00					
MATERIAL TOTAL	\$ 15,892.92	Cost Per Foot	Cost Per Mile	w/Design/Stamp		
TOTAL BID	\$ 41,268.42	\$ 19.98	\$ 105,816.46	\$ 44,674.42		
WITH 20% CONTINGENCY	\$ 49,522.10	\$ 23.97	\$ 126,979.74	\$ 52,928.10		

DIST-CHASF-02

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	11,972.00	4,454.00	7,518.00	\$ 1.30	\$ 15,564	18
Mileage	2.27	0.84	1.42			\$3,080

PREMISES

	32					
Residential	32					
Business	0					
Anchor	0					

UNDERGROUND - BURIED LABOR TOTAL	\$ 48,724.70					
AERIAL -STRAND/LASH LABOR TOTAL	\$ 0.00					
AERIAL - ADSS LABOR TOTAL	\$ 32,593.25					
WIRELESS LABOR TOTAL	\$ 0.00					
SPLICING LABOR TOTAL	\$ 5,072.00					
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00					
GENERAL LABOR TOTAL	\$ 0.00					
LABOR TOTAL	\$ 86,454.95					
FIBER MATERIAL TOTAL	\$ 29,068.52					
UNDERGROUND MATERIAL TOTAL	\$ 15,962.25					
CLOSURES MATERIAL TOTAL	\$ 7,061.56					

MST MATERIAL TOTAL	\$ 0.00			
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00			
AERIAL MATERIAL TOTAL	\$ 0.00			
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00			
AERIAL - ADSS MATERIAL TOTAL	\$ 2,283.80			
WIRELESS MATERIAL TOTAL	\$ 0.00			
MATERIAL TOTAL	\$ 54,433.13	Cost Per Foot	Cost Per Mile	w/Design/Stamp
TOTAL BID	\$ 140,888.08	\$ 11.77	\$ 62,065.23	\$ 159,532.08
WITH 20% CONTINGENCY	\$ 169,065.70	\$ 14.12	\$ 74,478.28	\$ 187,709.70

DIST-CHASF-M04-02

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	15,596.00	15,596.00	0.00	\$ 1.30	\$ 20,275	23
Mileage	2.95	2.95	0.00			\$3,850

PREMISES	32
Residential	32
Business	0
Anchor	0

UNDERGROUND - BURIED LABOR TOTAL	\$ 116,127.10
AERIAL -STRAND/LASH LABOR TOTAL	\$ 0.00
AERIAL - ADSS LABOR TOTAL	\$ 0.00
WIRELESS LABOR TOTAL	\$ 0.00
SPLICING LABOR TOTAL	\$ 5,072.00
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00
GENERAL LABOR TOTAL	\$ 0.00
LABOR TOTAL	\$ 121,264.10

FIBER MATERIAL TOTAL	\$ 7,413.98
UNDERGROUND MATERIAL TOTAL	\$ 16,203.75
CLOSURES MATERIAL TOTAL	\$ 6,481.28
MST MATERIAL TOTAL	\$ 0.00
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00
AERIAL MATERIAL TOTAL	\$ 0.00
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00
AERIAL - ADSS MATERIAL TOTAL	\$ 0.00
WIRELESS MATERIAL TOTAL	\$ 0.00

MATERIAL TOTAL	\$ 30,156.01	Cost Per Foot	Cost Per Mile	w/Design/Stamp
TOTAL BID	\$ 151,420.11	\$ 9.71	\$ 51,328.85	\$ 175,545.11
WITH 20% CONTINGENCY	\$ 181,704.13	\$ 11.65	\$ 61,594.62	\$ 205,829.13

DIST-CHASF-M04-03

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	2,797.00	2,797.00	0.00	\$ 1.30	\$ 3,636	5
Mileage	0.53	0.53	0.00			\$900

PREMISES	32
Residential	32
Business	0
Anchor	0

UNDERGROUND - BURIED LABOR TOTAL	\$ 35,769.60
AERIAL -STRAND/LASH LABOR TOTAL	\$ 0.00
AERIAL - ADSS LABOR TOTAL	\$ 0.00
WIRELESS LABOR TOTAL	\$ 0.00
SPLICING LABOR TOTAL	\$ 3,322.00
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00
GENERAL LABOR TOTAL	\$ 0.00
LABOR TOTAL	\$ 39,156.60

FIBER MATERIAL TOTAL	\$ 1,543.76
UNDERGROUND MATERIAL TOTAL	\$ 10,161.75

CLOSURES MATERIAL TOTAL	\$ 2,430.48			
MST MATERIAL TOTAL	\$ 0.00			
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00			
AERIAL MATERIAL TOTAL	\$ 0.00			
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00			
AERIAL - ADSS MATERIAL TOTAL	\$ 0.00			
WIRELESS MATERIAL TOTAL	\$ 0.00			
MATERIAL TOTAL	\$ 14,192.99	Cost Per Foot	Cost Per Mile	w/Design/Stamp
TOTAL BID	\$ 53,349.59	\$ 19.07	\$ 100,659.60	\$ 57,885.59
WITH 20% CONTINGENCY	\$ 64,019.51	\$ 22.89	\$ 120,791.53	\$ 68,555.51

DIST-CHASf-M04-04

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	7,260.00	7,260.00	0.00		\$ 1.30	\$ 9,438
Mileage	1.38	1.38	0.00			\$1,960

PREMISES	32
Residential	32
Business	0
Anchor	0

UNDERGROUND - BURIED LABOR TOTAL	\$ 55,985.70
AERIAL -STRAND/LASH LABOR TOTAL	\$ 0.00
AERIAL - ADSS LABOR TOTAL	\$ 0.00
WIRELESS LABOR TOTAL	\$ 0.00
SPLICING LABOR TOTAL	\$ 4,722.00
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00
GENERAL LABOR TOTAL	\$ 0.00

LABOR TOTAL \$ 60,772.70

FIBER MATERIAL TOTAL	\$ 3,829.68
UNDERGROUND MATERIAL TOTAL	\$ 13,829.25
CLOSURES MATERIAL TOTAL	\$ 5,671.12
MST MATERIAL TOTAL	\$ 0.00
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00
AERIAL MATERIAL TOTAL	\$ 0.00
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00
AERIAL - ADSS MATERIAL TOTAL	\$ 0.00
WIRELESS MATERIAL TOTAL	\$ 0.00

MATERIAL TOTAL	\$ 23,387.05	Cost Per Foot	Cost Per Mile	w/Design/Stamp
TOTAL BID	\$ 84,159.75	\$ 11.59	\$ 60,985.33	\$ 95,557.75
WITH 20% CONTINGENCY	\$ 100,991.70	\$ 13.91	\$ 73,182.39	\$ 112,389.70

DIST-CHASf-M06-01

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	2,789.00	2,789.00	0.00		\$ 1.30	\$ 3,626
Mileage	0.53	0.53	0.00			\$900

PREMISES	32
Residential	32
Business	0
Anchor	0

UNDERGROUND - BURIED LABOR TOTAL	\$ 35,778.20
AERIAL -STRAND/LASH LABOR TOTAL	\$ 0.00
AERIAL - ADSS LABOR TOTAL	\$ 0.00
WIRELESS LABOR TOTAL	\$ 0.00
SPLICING LABOR TOTAL	\$ 5,247.00
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00
GENERAL LABOR TOTAL	\$ 0.00

LABOR TOTAL \$ 41,090.20

FIBER MATERIAL TOTAL	\$ 1,248.20
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UNDERGROUND MATERIAL TOTAL	\$ 17,619.00			
CLOSURES MATERIAL TOTAL	\$ 7,756.78			
MST MATERIAL TOTAL	\$ 0.00			
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00			
AERIAL MATERIAL TOTAL	\$ 0.00			
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00			
AERIAL - ADSS MATERIAL TOTAL	\$ 0.00			
WIRELESS MATERIAL TOTAL	\$ 0.00			
MATERIAL TOTAL	\$ 26,680.98	Cost Per Foot	Cost Per Mile	w/Design/Stamp
TOTAL BID	\$ 67,771.18	\$ 24.30	\$ 127,870.15	\$ 72,297.18
WITH 20% CONTINGENCY	\$ 81,325.42	\$ 29.16	\$ 153,444.19	\$ 85,851.42

DIST-CHASj-M01-01

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	11,212.00		0.00	11,212.00	\$ 1.30	\$ 14,576 17
Mileage	2.12		0.00	2.12		\$2,920

PREMISES	32
Residential	32
Business	0
Anchor	0

UNDERGROUND - BURIED LABOR TOTAL	\$ 960.00			
AERIAL -STRAND/LASH LABOR TOTAL	\$ 3,237.50			
AERIAL - ADSS LABOR TOTAL	\$ 50,368.75			
WIRELESS LABOR TOTAL	\$ 0.00			
SPLICING LABOR TOTAL	\$ 4,897.00			
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00			
GENERAL LABOR TOTAL	\$ 0.00			
LABOR TOTAL	\$ 59,528.25			
FIBER MATERIAL TOTAL	\$ 29,860.98			
UNDERGROUND MATERIAL TOTAL	\$ 0.00			
CLOSURES MATERIAL TOTAL	\$ 6,076.20			
MST MATERIAL TOTAL	\$ 4,081.50			
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00			
AERIAL MATERIAL TOTAL	\$ 0.00			
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00			
AERIAL - ADSS MATERIAL TOTAL	\$ 5,063.80			
WIRELESS MATERIAL TOTAL	\$ 0.00			
MATERIAL TOTAL	\$ 45,139.48	Cost Per Foot	Cost Per Mile	w/Design/Stamp
TOTAL BID	\$ 104,667.73	\$ 9.34	\$ 49,371.57	\$ 122,163.73
WITH 20% CONTINGENCY	\$ 125,601.28	\$ 11.20	\$ 59,245.89	\$ 143,097.28

DIST-CHASf-M01-01

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	8,266.00	6,145.00	2,121.00		\$ 1.30	\$ 10,746 13
Mileage	1.57		1.16	0.40		\$2,280

PREMISES	32
Residential	32
Business	0
Anchor	0

UNDERGROUND - BURIED LABOR TOTAL	\$ 74,337.40			
AERIAL -STRAND/LASH LABOR TOTAL	\$ 452.50			
AERIAL - ADSS LABOR TOTAL	\$ 9,521.25			
WIRELESS LABOR TOTAL	\$ 0.00			
SPLICING LABOR TOTAL	\$ 4,897.00			
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00			
GENERAL LABOR TOTAL	\$ 0.00			
LABOR TOTAL	\$ 89,273.15			

FIBER MATERIAL TOTAL	\$ 6,154.71			
UNDERGROUND MATERIAL TOTAL	\$ 18,014.25			
CLOSURES MATERIAL TOTAL	\$ 6,076.20			
MST MATERIAL TOTAL	\$ 220.50			
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00			
AERIAL MATERIAL TOTAL	\$ 0.00			
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00			
AERIAL - ADSS MATERIAL TOTAL	\$ 923.00			
WIRELESS MATERIAL TOTAL	\$ 0.00			
MATERIAL TOTAL	\$ 31,445.66	Cost Per Foot	Cost Per Mile	w/Design/Stamp
TOTAL BID	\$ 120,718.81	\$ 14.60	\$ 76,890.96	\$ 133,744.81
WITH 20% CONTINGENCY	\$ 144,862.57	\$ 17.53	\$ 92,269.15	\$ 157,888.57

DIST-CHASf-M01-04

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	3,699.00	3,699.00	0.00		\$ 1.30	\$ 4,809
Mileage	0.70	0.70	0.00			\$1,080

PREMISES	32
Residential	32
Business	0
Anchor	0

UNDERGROUND - BURIED LABOR TOTAL	\$ 35,855.90
AERIAL -STRAND/LASH LABOR TOTAL	\$ 0.00
AERIAL - ADSS LABOR TOTAL	\$ 0.00
WIRELESS LABOR TOTAL	\$ 0.00
SPLICING LABOR TOTAL	\$ 4,197.00
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00
GENERAL LABOR TOTAL	\$ 0.00
LABOR TOTAL	\$ 40,117.90

FIBER MATERIAL TOTAL	\$ 2,041.94			
UNDERGROUND MATERIAL TOTAL	\$ 10,302.00			
CLOSURES MATERIAL TOTAL	\$ 4,455.88			
MST MATERIAL TOTAL	\$ 0.00			
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00			
AERIAL MATERIAL TOTAL	\$ 0.00			
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00			
AERIAL - ADSS MATERIAL TOTAL	\$ 0.00			
WIRELESS MATERIAL TOTAL	\$ 0.00			
MATERIAL TOTAL	\$ 16,856.82	Cost Per Foot	Cost Per Mile	w/Design/Stamp
TOTAL BID	\$ 56,974.72	\$ 15.40	\$ 81,392.46	\$ 62,863.72
WITH 20% CONTINGENCY	\$ 68,369.66	\$ 18.48	\$ 97,670.94	\$ 74,258.66

DIST-CHASf-M02-01

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	12,560.00	12,560.00	0.00		\$ 1.30	\$ 16,328
Mileage	2.38	2.38	0.00			\$3,240

PREMISES	32
Residential	32
Business	0
Anchor	0

UNDERGROUND - BURIED LABOR TOTAL	\$ 93,049.70
AERIAL -STRAND/LASH LABOR TOTAL	\$ 0.00
AERIAL - ADSS LABOR TOTAL	\$ 0.00
WIRELESS LABOR TOTAL	\$ 0.00
SPLICING LABOR TOTAL	\$ 6,122.00
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00
GENERAL LABOR TOTAL	\$ 0.00

	LABOR TOTAL	\$ 99,236.70			
FIBER MATERIAL TOTAL		\$ 6,933.12			
UNDERGROUND MATERIAL TOTAL		\$ 21,202.50			
CLOSURES MATERIAL TOTAL		\$ 8,911.76			
MST MATERIAL TOTAL		\$ 0.00			
PATCH PANELS AND CABINETS MATERIAL TOTAL		\$ 57.00			
AERIAL MATERIAL TOTAL		\$ 0.00			
AERIAL - STRAND/LASH MATERIAL TOTAL		\$ 0.00			
AERIAL - ADSS MATERIAL TOTAL		\$ 0.00			
WIRELESS MATERIAL TOTAL		\$ 0.00			
	MATERIAL TOTAL	\$ 37,104.38	Cost Per Foot	Cost Per Mile	w/Design/Stamp
	TOTAL BID	\$ 136,341.08	\$ 10.86	\$ 57,286.17	\$ 155,909.08
	WITH 20% CONTINGENCY	\$ 163,609.30	\$ 13.03	\$ 68,743.40	\$ 183,177.30

DIST-CHASE-02

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	6,254.00	6,254.00	0.00	\$ 1.30	\$ 8,130	10
Mileage	1.18	1.18	0.00			\$1,800

PREMISES	32
Residential	32
Business	0
Anchor	0

UNDERGROUND - BURIED LABOR TOTAL	\$ 69,144.60				
AERIAL -STRAND/LASH LABOR TOTAL	\$ 0.00				
AERIAL - ADSS LABOR TOTAL	\$ 0.00				
WIRELESS LABOR TOTAL	\$ 0.00				
SPLICING LABOR TOTAL	\$ 5,597.00				
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00				
GENERAL LABOR TOTAL	\$ 0.00				
	LABOR TOTAL	\$ 74,806.60			
FIBER MATERIAL TOTAL	\$ 6,679.64				
UNDERGROUND MATERIAL TOTAL	\$ 24,599.25				
CLOSURES MATERIAL TOTAL	\$ 8,276.80				
MST MATERIAL TOTAL	\$ 0.00				
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00				
AERIAL MATERIAL TOTAL	\$ 0.00				
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00				
AERIAL - ADSS MATERIAL TOTAL	\$ 0.00				
WIRELESS MATERIAL TOTAL	\$ 0.00				
	MATERIAL TOTAL	\$ 39,612.69	Cost Per Foot	Cost Per Mile	w/Design/Stamp
	TOTAL BID	\$ 114,419.29	\$ 18.30	\$ 96,965.50	\$ 124,349.29
	WITH 20% CONTINGENCY	\$ 137,303.15	\$ 21.95	\$ 116,358.60	\$ 147,233.15

DIST-CHASf-05

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	2,576.00	2,576.00	0.00	\$ 1.30	\$ 3,349	4
Mileage	0.49	0.49	0.00			\$720

PREMISES	32
Residential	32
Business	0
Anchor	0

UNDERGROUND - BURIED LABOR TOTAL	\$ 22,092.20				
AERIAL -STRAND/LASH LABOR TOTAL	\$ 0.00				
AERIAL - ADSS LABOR TOTAL	\$ 0.00				
WIRELESS LABOR TOTAL	\$ 0.00				
SPLICING LABOR TOTAL	\$ 3,672.00				
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00				

GENERAL LABOR TOTAL		\$ 0.00			
	LABOR TOTAL	\$ 25,829.20			
FIBER MATERIAL TOTAL		\$ 3,448.40			
UNDERGROUND MATERIAL TOTAL		\$ 5,703.75			
CLOSURES MATERIAL TOTAL		\$ 3,820.92			
MST MATERIAL TOTAL		\$ 0.00			
PATCH PANELS AND CABINETS MATERIAL TOTAL		\$ 57.00			
AERIAL MATERIAL TOTAL		\$ 0.00			
AERIAL - STRAND/LASH MATERIAL TOTAL		\$ 0.00			
AERIAL - ADSS MATERIAL TOTAL		\$ 0.00			
WIRELESS MATERIAL TOTAL		\$ 0.00			
	MATERIAL TOTAL	\$ 13,030.07	Cost Per Foot	Cost Per Mile	w/Design/Stamp
	TOTAL BID	\$ 38,859.27	\$ 15.09	\$ 79,304.63	\$ 42,928.27
	WITH 20% CONTINGENCY	\$ 46,631.12	\$ 18.10	\$ 95,165.55	\$ 50,700.12

DIST-CHASf-09

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	12,806.00	12,806.00	0.00		\$ 1.30	\$ 16,648
Mileage	2.43	2.43	0.00			19
						\$3,240
PREMISES	32					
Residential	32					
Business	0					
Anchor	0					

UNDERGROUND - BURIED LABOR TOTAL	\$ 100,651.40				
AERIAL -STRAND/LASH LABOR TOTAL	\$ 0.00				
AERIAL - ADSS LABOR TOTAL	\$ 0.00				
WIRELESS LABOR TOTAL	\$ 0.00				
SPLICING LABOR TOTAL	\$ 5,422.00				
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00				
GENERAL LABOR TOTAL	\$ 0.00				
	LABOR TOTAL	\$ 106,138.40			
FIBER MATERIAL TOTAL	\$ 9,062.81				
UNDERGROUND MATERIAL TOTAL	\$ 17,973.75				
CLOSURES MATERIAL TOTAL	\$ 7,871.72				
MST MATERIAL TOTAL	\$ 0.00				
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00				
AERIAL MATERIAL TOTAL	\$ 0.00				
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00				
AERIAL - ADSS MATERIAL TOTAL	\$ 0.00				
WIRELESS MATERIAL TOTAL	\$ 0.00				
	MATERIAL TOTAL	\$ 34,965.28	Cost Per Foot	Cost Per Mile	w/Design/Stamp
	TOTAL BID	\$ 141,103.68	\$ 11.02	\$ 58,067.36	\$ 160,991.68
	WITH 20% CONTINGENCY	\$ 169,324.42	\$ 13.22	\$ 69,680.83	\$ 189,212.42

DIST-CHASf-M01-05

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	7,893.00	7,893.00	0.00		\$ 1.30	\$ 10,261
Mileage	1.49	1.49	0.00			12
						\$2,120
PREMISES	32					
Residential	32					
Business	0					
Anchor	0					

UNDERGROUND - BURIED LABOR TOTAL	\$ 55,591.20
AERIAL -STRAND/LASH LABOR TOTAL	\$ 0.00
AERIAL - ADSS LABOR TOTAL	\$ 0.00
WIRELESS LABOR TOTAL	\$ 0.00
SPLICING LABOR TOTAL	\$ 3,672.00

PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00			
GENERAL LABOR TOTAL	\$ 0.00			
LABOR TOTAL	\$ 59,328.20			
FIBER MATERIAL TOTAL	\$ 4,357.12			
UNDERGROUND MATERIAL TOTAL	\$ 6,863.25			
CLOSURES MATERIAL TOTAL	\$ 3,240.64			
MST MATERIAL TOTAL	\$ 0.00			
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00			
AERIAL MATERIAL TOTAL	\$ 0.00			
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00			
AERIAL - ADSS MATERIAL TOTAL	\$ 0.00			
WIRELESS MATERIAL TOTAL	\$ 0.00			
MATERIAL TOTAL	\$ 14,518.01	Cost Per Foot	Cost Per Mile	w/Design/Stamp
TOTAL BID	\$ 73,846.21	\$ 9.36	\$ 49,561.21	\$ 86,227.21
WITH 20% CONTINGENCY	\$ 88,615.45	\$ 11.23	\$ 59,473.46	\$ 100,996.45

DIST-CHASf-M02-02

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	12,490.00	12,490.00	0.00	0.00	\$ 1.30	\$ 16,237
Mileage	2.37	2.37	0.00	0.00		\$3,240
PREMISES	32					
Residential	32					
Business	0					
Anchor	0					

UNDERGROUND - BURIED LABOR TOTAL	\$ 90,375.90			
AERIAL -STRAND/LASH LABOR TOTAL	\$ 0.00			
AERIAL - ADSS LABOR TOTAL	\$ 0.00			
WIRELESS LABOR TOTAL	\$ 0.00			
SPLICING LABOR TOTAL	\$ 5,072.00			
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00			
GENERAL LABOR TOTAL	\$ 0.00			
LABOR TOTAL	\$ 95,512.90			
FIBER MATERIAL TOTAL	\$ 5,280.16			
UNDERGROUND MATERIAL TOTAL	\$ 17,306.25			
CLOSURES MATERIAL TOTAL	\$ 6,481.28			
MST MATERIAL TOTAL	\$ 0.00			
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00			
AERIAL MATERIAL TOTAL	\$ 0.00			
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00			
AERIAL - ADSS MATERIAL TOTAL	\$ 0.00			
WIRELESS MATERIAL TOTAL	\$ 0.00			
MATERIAL TOTAL	\$ 29,124.69	Cost Per Foot	Cost Per Mile	w/Design/Stamp
TOTAL BID	\$ 124,637.59	\$ 9.98	\$ 52,589.70	\$ 144,114.59
WITH 20% CONTINGENCY	\$ 149,565.11	\$ 11.97	\$ 63,107.64	\$ 169,042.11

DIST-CHASg-M04-02

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	11,702.00	11,387.00	315.00	0.00	\$ 1.30	\$ 15,213
Mileage	2.22	2.16	0.06	0.00		\$3,080
PREMISES	32					
Residential	32					
Business	0					
Anchor	0					

UNDERGROUND - BURIED LABOR TOTAL	\$ 82,853.00
AERIAL -STRAND/LASH LABOR TOTAL	\$ 350.00
AERIAL - ADSS LABOR TOTAL	\$ 1,803.50
WIRELESS LABOR TOTAL	\$ 0.00

SPLICING LABOR TOTAL	\$ 5,247.00			
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00			
GENERAL LABOR TOTAL	\$ 0.00			
LABOR TOTAL	\$ 90,318.50			
FIBER MATERIAL TOTAL	\$ 6,502.44			
UNDERGROUND MATERIAL TOTAL	\$ 17,440.50			
CLOSURES MATERIAL TOTAL	\$ 6,886.36			
MST MATERIAL TOTAL	\$ 252.00			
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00			
AERIAL MATERIAL TOTAL	\$ 0.00			
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00			
AERIAL - ADSS MATERIAL TOTAL	\$ 484.60			
WIRELESS MATERIAL TOTAL	\$ 0.00			
MATERIAL TOTAL	\$ 31,622.90	Cost Per Foot	Cost Per Mile	w/Design/Stamp
TOTAL BID	\$ 121,941.40	\$ 10.42	\$ 54,928.56	\$ 140,234.40
WITH 20% CONTINGENCY	\$ 146,329.68	\$ 12.50	\$ 65,914.27	\$ 164,622.68

DIST-CHASp-01

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	25,809.00		0.00	25,809.00	\$ 1.30	\$ 33,552 38
Mileage	4.89		0.00	4.89		\$6,100
PREMISES	32					
Residential	32					
Business	0					
Anchor	0					

UNDERGROUND - BURIED LABOR TOTAL	\$ 540.00			
AERIAL -STRAND/LASH LABOR TOTAL	\$ 1,575.00			
AERIAL - ADSS LABOR TOTAL	\$ 112,504.00			
WIRELESS LABOR TOTAL	\$ 0.00			
SPLICING LABOR TOTAL	\$ 3,497.00			
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00			
GENERAL LABOR TOTAL	\$ 0.00			
LABOR TOTAL	\$ 118,181.00			
FIBER MATERIAL TOTAL	\$ 64,229.04			
UNDERGROUND MATERIAL TOTAL	\$ 0.00			
CLOSURES MATERIAL TOTAL	\$ 2,835.56			
MST MATERIAL TOTAL	\$ 1,962.00			
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00			
AERIAL MATERIAL TOTAL	\$ 0.00			
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00			
AERIAL - ADSS MATERIAL TOTAL	\$ 8,410.20			
WIRELESS MATERIAL TOTAL	\$ 0.00			
MATERIAL TOTAL	\$ 77,493.80	Cost Per Foot	Cost Per Mile	w/Design/Stamp
TOTAL BID	\$ 195,674.80	\$ 7.58	\$ 40,015.30	\$ 235,326.80
WITH 20% CONTINGENCY	\$ 234,809.76	\$ 9.10	\$ 48,018.36	\$ 274,461.76

DIST-CHASf-M01-02

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	2,714.00	2,714.00	0.00		\$ 1.30	\$ 3,528 4
Mileage	0.51	0.51	0.00			\$720
PREMISES	32					
Residential	32					
Business	0					
Anchor	0					

UNDERGROUND - BURIED LABOR TOTAL	\$ 35,906.20
AERIAL -STRAND/LASH LABOR TOTAL	\$ 0.00
AERIAL - ADSS LABOR TOTAL	\$ 0.00

WIRELESS LABOR TOTAL	\$ 0.00			
SPLICING LABOR TOTAL	\$ 4,547.00			
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00			
GENERAL LABOR TOTAL	\$ 0.00			
LABOR TOTAL	\$ 40,518.20			
FIBER MATERIAL TOTAL	\$ 1,477.16			
UNDERGROUND MATERIAL TOTAL	\$ 16,841.25			
CLOSURES MATERIAL TOTAL	\$ 5,266.04			
MST MATERIAL TOTAL	\$ 0.00			
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00			
AERIAL MATERIAL TOTAL	\$ 0.00			
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00			
AERIAL - ADSS MATERIAL TOTAL	\$ 0.00			
WIRELESS MATERIAL TOTAL	\$ 0.00			
MATERIAL TOTAL	\$ 23,641.45	Cost Per Foot	Cost Per Mile	w/Design/Stamp
TOTAL BID	\$ 64,159.65	\$ 23.64	\$ 125,803.24	\$ 68,407.65
WITH 20% CONTINGENCY	\$ 76,991.58	\$ 28.37	\$ 150,963.88	\$ 81,239.58

DIST-CHASg-M03-01

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	17,222.00	16,573.00	649.00		\$ 1.30	\$ 22,389 26
Mileage	3.26	3.14	0.12			\$4,300

PREMISES	32
Residential	32
Business	0
Anchor	0

UNDERGROUND - BURIED LABOR TOTAL	\$ 132,387.80			
AERIAL -STRAND/LASH LABOR TOTAL	\$ 612.50			
AERIAL - ADSS LABOR TOTAL	\$ 3,291.75			
WIRELESS LABOR TOTAL	\$ 0.00			
SPLICING LABOR TOTAL	\$ 6,822.00			
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00			
GENERAL LABOR TOTAL	\$ 0.00			
LABOR TOTAL	\$ 143,179.05			
FIBER MATERIAL TOTAL	\$ 8,375.32			
UNDERGROUND MATERIAL TOTAL	\$ 38,627.25			
CLOSURES MATERIAL TOTAL	\$ 11,982.78			
MST MATERIAL TOTAL	\$ 648.00			
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00			
AERIAL MATERIAL TOTAL	\$ 0.00			
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00			
AERIAL - ADSS MATERIAL TOTAL	\$ 614.00			
WIRELESS MATERIAL TOTAL	\$ 0.00			
MATERIAL TOTAL	\$ 60,304.35	Cost Per Foot	Cost Per Mile	w/Design/Stamp
TOTAL BID	\$ 203,483.40	\$ 11.82	\$ 62,418.22	\$ 230,172.40
WITH 20% CONTINGENCY	\$ 244,180.08	\$ 14.18	\$ 74,901.87	\$ 270,869.08

DIST-CHASF-M01-03

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	7,873.00	7,873.00	0.00		\$ 1.30	\$ 10,235 12
Mileage	1.49	1.49	0.00			\$2,120

PREMISES	32
Residential	32
Business	0
Anchor	0

UNDERGROUND - BURIED LABOR TOTAL	\$ 56,908.30
AERIAL -STRAND/LASH LABOR TOTAL	\$ 1,710.00

AERIAL - ADSS LABOR TOTAL	\$ 910.00			
WIRELESS LABOR TOTAL	\$ 0.00			
SPLICING LABOR TOTAL	\$ 5,072.00			
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00			
GENERAL LABOR TOTAL	\$ 0.00			
	LABOR TOTAL	\$ 64,665.30		
FIBER MATERIAL TOTAL	\$ 4,346.08			
UNDERGROUND MATERIAL TOTAL	\$ 13,095.00			
CLOSURES MATERIAL TOTAL	\$ 6,481.28			
MST MATERIAL TOTAL	\$ 0.00			
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00			
AERIAL MATERIAL TOTAL	\$ 0.00			
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00			
AERIAL - ADSS MATERIAL TOTAL	\$ 636.72			
WIRELESS MATERIAL TOTAL	\$ 0.00			
	MATERIAL TOTAL	\$ 24,616.08	Cost Per Foot	Cost Per Mile w/Design/Stamp
	TOTAL BID	\$ 89,281.38	\$ 11.34	\$ 59,920.39 \$ 101,636.38
	WITH 20% CONTINGENCY	\$ 107,137.66	\$ 13.61	\$ 71,904.47 \$ 119,492.66

DIST-CHASf-07

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	24,496.00	24,496.00	0.00	0.00	\$ 1.30 \$ 31,845	36
Mileage	4.64	4.64	0.00	0.00		\$5,800
PREMISES	32					
Residential	32					
Business	0					
Anchor	0					

UNDERGROUND - BURIED LABOR TOTAL	\$ 173,818.10			
AERIAL -STRAND/LASH LABOR TOTAL	\$ 0.00			
AERIAL - ADSS LABOR TOTAL	\$ 0.00			
WIRELESS LABOR TOTAL	\$ 0.00			
SPLICING LABOR TOTAL	\$ 6,822.00			
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00			
GENERAL LABOR TOTAL	\$ 0.00			
	LABOR TOTAL	\$ 180,705.10		
FIBER MATERIAL TOTAL	\$ 25,710.68			
UNDERGROUND MATERIAL TOTAL	\$ 25,947.00			
CLOSURES MATERIAL TOTAL	\$ 10,532.08			
MST MATERIAL TOTAL	\$ 0.00			
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00			
AERIAL MATERIAL TOTAL	\$ 0.00			
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00			
AERIAL - ADSS MATERIAL TOTAL	\$ 0.00			
WIRELESS MATERIAL TOTAL	\$ 0.00			
	MATERIAL TOTAL	\$ 62,246.76	Cost Per Foot	Cost Per Mile w/Design/Stamp
	TOTAL BID	\$ 242,951.86	\$ 9.92	\$ 52,360.31 \$ 280,596.86
	WITH 20% CONTINGENCY	\$ 291,542.23	\$ 11.90	\$ 62,832.38 \$ 329,187.23

DIST-CHASf-M03-01

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	9,406.00	9,406.00	0.00	0.00	\$ 1.30 \$ 12,228	14
Mileage	1.78	1.78	0.00	0.00		\$2,440
PREMISES	32					
Residential	32					
Business	0					
Anchor	0					

UNDERGROUND - BURIED LABOR TOTAL \$ 67,612.70

AERIAL -STRAND/LASH LABOR TOTAL	\$ 0.00			
AERIAL - ADSS LABOR TOTAL	\$ 0.00			
WIRELESS LABOR TOTAL	\$ 0.00			
SPLICING LABOR TOTAL	\$ 4,547.00			
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00			
GENERAL LABOR TOTAL	\$ 0.00			
	LABOR TOTAL	\$ 72,224.70		
FIBER MATERIAL TOTAL	\$ 5,192.02			
UNDERGROUND MATERIAL TOTAL	\$ 14,100.75			
CLOSURES MATERIAL TOTAL	\$ 5,266.04			
MST MATERIAL TOTAL	\$ 0.00			
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00			
AERIAL MATERIAL TOTAL	\$ 0.00			
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00			
AERIAL - ADSS MATERIAL TOTAL	\$ 0.00			
WIRELESS MATERIAL TOTAL	\$ 0.00			
	MATERIAL TOTAL	\$ 24,615.81	Cost Per Foot	Cost Per Mile w/Design/Stamp
	TOTAL BID	\$ 96,840.51	\$ 10.30	\$ 54,404.78 \$ 111,508.51
	WITH 20% CONTINGENCY	\$ 116,208.61	\$ 12.35	\$ 65,285.74 \$ 130,876.61

DIST-CHASg-M04-01

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	21,825.00	21,453.00	372.00		\$ 1.30	\$ 28,373 32
Mileage	4.13	4.06	0.07			\$5,200

PREMISES	32
Residential	32
Business	0
Anchor	0

UNDERGROUND - BURIED LABOR TOTAL	\$ 167,366.40			
AERIAL -STRAND/LASH LABOR TOTAL	\$ 0.00			
AERIAL - ADSS LABOR TOTAL	\$ 1,637.75			
WIRELESS LABOR TOTAL	\$ 0.00			
SPLICING LABOR TOTAL	\$ 6,297.00			
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00			
GENERAL LABOR TOTAL	\$ 0.00			
	LABOR TOTAL	\$ 175,366.15		
FIBER MATERIAL TOTAL	\$ 12,301.60			
UNDERGROUND MATERIAL TOTAL	\$ 29,069.25			
CLOSURES MATERIAL TOTAL	\$ 10,477.40			
MST MATERIAL TOTAL	\$ 0.00			
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00			
AERIAL MATERIAL TOTAL	\$ 0.00			
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00			
AERIAL - ADSS MATERIAL TOTAL	\$ 127.00			
WIRELESS MATERIAL TOTAL	\$ 0.00			
	MATERIAL TOTAL	\$ 52,032.25	Cost Per Foot	Cost Per Mile w/Design/Stamp
	TOTAL BID	\$ 227,398.40	\$ 10.42	\$ 55,060.15 \$ 260,971.40
	WITH 20% CONTINGENCY	\$ 272,878.08	\$ 12.50	\$ 66,072.17 \$ 306,451.08

DIST-CHASc-M05-01

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	14,991.00	13,106.00	1,885.00		\$ 1.30	\$ 19,488 22
Mileage	2.84	2.48	0.36			\$3,700

PREMISES	32
Residential	32
Business	0
Anchor	0

UNDERGROUND - BURIED LABOR TOTAL	\$ 102,806.30			
AERIAL -STRAND/LASH LABOR TOTAL	\$ 700.00			
AERIAL - ADSS LABOR TOTAL	\$ 8,544.75			
WIRELESS LABOR TOTAL	\$ 0.00			
SPLICING LABOR TOTAL	\$ 6,122.00			
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00			
GENERAL LABOR TOTAL	\$ 0.00			
	LABOR TOTAL	\$ 118,238.05		
FIBER MATERIAL TOTAL	\$ 10,148.00			
UNDERGROUND MATERIAL TOTAL	\$ 24,433.50			
CLOSURES MATERIAL TOTAL	\$ 10,362.46			
MST MATERIAL TOTAL	\$ 742.50			
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00			
AERIAL MATERIAL TOTAL	\$ 0.00			
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00			
AERIAL - ADSS MATERIAL TOTAL	\$ 897.90			
WIRELESS MATERIAL TOTAL	\$ 0.00			
	MATERIAL TOTAL	\$ 46,641.36	Cost Per Foot	Cost Per Mile w/Design/Stamp
	TOTAL BID	\$ 164,879.41	\$ 11.00	\$ 58,056.13 \$ 188,067.41
	WITH 20% CONTINGENCY	\$ 197,855.29	\$ 13.20	\$ 69,667.36 \$ 221,043.29

DIST-CHASf-08

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	17,316.00	17,316.00	0.00		\$ 1.30	\$ 22,511 26
Mileage	3.28	3.28	0.00			\$4,300
PREMISES	32					
Residential	32					
Business	0					
Anchor	0					

UNDERGROUND - BURIED LABOR TOTAL	\$ 124,696.00			
AERIAL -STRAND/LASH LABOR TOTAL	\$ 0.00			
AERIAL - ADSS LABOR TOTAL	\$ 0.00			
WIRELESS LABOR TOTAL	\$ 0.00			
SPLICING LABOR TOTAL	\$ 5,422.00			
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00			
GENERAL LABOR TOTAL	\$ 0.00			
	LABOR TOTAL	\$ 130,183.00		
FIBER MATERIAL TOTAL	\$ 19,937.77			
UNDERGROUND MATERIAL TOTAL	\$ 19,367.25			
CLOSURES MATERIAL TOTAL	\$ 7,291.44			
MST MATERIAL TOTAL	\$ 0.00			
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00			
AERIAL MATERIAL TOTAL	\$ 0.00			
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00			
AERIAL - ADSS MATERIAL TOTAL	\$ 0.00			
WIRELESS MATERIAL TOTAL	\$ 0.00			
	MATERIAL TOTAL	\$ 46,653.46	Cost Per Foot	Cost Per Mile w/Design/Stamp
	TOTAL BID	\$ 176,836.46	\$ 10.21	\$ 53,913.55 \$ 203,647.46
	WITH 20% CONTINGENCY	\$ 212,203.75	\$ 12.25	\$ 64,696.27 \$ 239,014.75

DIST-CHASg-M01-01

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	23,785.00	22,247.00	1,538.00		\$ 1.30	\$ 30,921 35
Mileage	4.50	4.21	0.29			\$5,650
PREMISES	32					
Residential	32					
Business	0					
Anchor	0					

UNDERGROUND - BURIED LABOR TOTAL	\$ 163,423.20			
AERIAL -STRAND/LASH LABOR TOTAL	\$ 437.50			
AERIAL - ADSS LABOR TOTAL	\$ 7,067.75			
WIRELESS LABOR TOTAL	\$ 0.00			
SPLICING LABOR TOTAL	\$ 6,997.00			
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00			
GENERAL LABOR TOTAL	\$ 0.00			
LABOR TOTAL	\$ 177,990.45			
FIBER MATERIAL TOTAL	\$ 14,749.74			
UNDERGROUND MATERIAL TOTAL	\$ 33,885.75			
CLOSURES MATERIAL TOTAL	\$ 11,807.58			
MST MATERIAL TOTAL	\$ 522.00			
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00			
AERIAL MATERIAL TOTAL	\$ 0.00			
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00			
AERIAL - ADSS MATERIAL TOTAL	\$ 808.00			
WIRELESS MATERIAL TOTAL	\$ 0.00			
MATERIAL TOTAL	\$ 61,830.07	Cost Per Foot	Cost Per Mile	w/Design/Stamp
TOTAL BID	\$ 239,820.52	\$ 10.08	\$ 53,293.45	\$ 276,391.52
WITH 20% CONTINGENCY	\$ 287,784.62	\$ 12.10	\$ 63,952.14	\$ 324,355.62

DIST-CHASe-03

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	21,894.00	21,894.00	0.00	\$ 1.30	\$ 28,462	33
Mileage	4.15	4.15	0.00			\$5,350
PREMISES	32					
Residential	32					
Business	0					
Anchor	0					

UNDERGROUND - BURIED LABOR TOTAL	\$ 150,795.80			
AERIAL -STRAND/LASH LABOR TOTAL	\$ 0.00			
AERIAL - ADSS LABOR TOTAL	\$ 0.00			
WIRELESS LABOR TOTAL	\$ 0.00			
SPLICING LABOR TOTAL	\$ 5,247.00			
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00			
GENERAL LABOR TOTAL	\$ 0.00			
LABOR TOTAL	\$ 156,107.80			
FIBER MATERIAL TOTAL	\$ 21,864.23			
UNDERGROUND MATERIAL TOTAL	\$ 19,101.00			
CLOSURES MATERIAL TOTAL	\$ 6,886.36			
MST MATERIAL TOTAL	\$ 0.00			
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00			
AERIAL MATERIAL TOTAL	\$ 0.00			
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00			
AERIAL - ADSS MATERIAL TOTAL	\$ 0.00			
WIRELESS MATERIAL TOTAL	\$ 0.00			
MATERIAL TOTAL	\$ 47,908.59	Cost Per Foot	Cost Per Mile	w/Design/Stamp
TOTAL BID	\$ 204,016.39	\$ 9.32	\$ 49,160.58	\$ 237,828.39
WITH 20% CONTINGENCY	\$ 244,819.67	\$ 11.18	\$ 58,992.69	\$ 278,631.67

DIST-CHASf-M01-06

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	16,080.00	15,283.00	797.00	\$ 1.30	\$ 20,904	24
Mileage	3.05	2.89	0.15			\$4,000
PREMISES	32					
Residential	32					
Business	0					

Anchor	0			
UNDERGROUND - BURIED LABOR TOTAL	\$ 105,699.60			
AERIAL -STRAND/LASH LABOR TOTAL	\$ 1,737.50			
AERIAL - ADSS LABOR TOTAL	\$ 4,650.25			
WIRELESS LABOR TOTAL	\$ 0.00			
SPLICING LABOR TOTAL	\$ 4,722.00			
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00			
GENERAL LABOR TOTAL	\$ 0.00			
LABOR TOTAL	\$ 116,874.35			
FIBER MATERIAL TOTAL	\$ 7,884.89			
UNDERGROUND MATERIAL TOTAL	\$ 13,981.50			
CLOSURES MATERIAL TOTAL	\$ 5,671.12			
MST MATERIAL TOTAL	\$ 661.50			
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00			
AERIAL MATERIAL TOTAL	\$ 0.00			
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00			
AERIAL - ADSS MATERIAL TOTAL	\$ 1,184.00			
WIRELESS MATERIAL TOTAL	\$ 0.00			
MATERIAL TOTAL	\$ 29,440.01	Cost Per Foot	Cost Per Mile	w/Design/Stamp
TOTAL BID	\$ 146,314.36	\$ 9.10	\$ 47,971.92	\$ 171,218.36
WITH 20% CONTINGENCY	\$ 175,577.23	\$ 10.92	\$ 57,566.30	\$ 200,481.23

DIST-CHASF-M05-01

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	11,262.00	11,262.00	0.00		\$ 1.30	\$ 14,641
Mileage	2.13	2.13	0.00			17
						\$2,920
PREMISES	32					
Residential	32					
Business	0					
Anchor	0					

UNDERGROUND - BURIED LABOR TOTAL	\$ 82,470.50			
AERIAL -STRAND/LASH LABOR TOTAL	\$ 0.00			
AERIAL - ADSS LABOR TOTAL	\$ 0.00			
WIRELESS LABOR TOTAL	\$ 0.00			
SPLICING LABOR TOTAL	\$ 5,597.00			
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00			
GENERAL LABOR TOTAL	\$ 0.00			
LABOR TOTAL	\$ 88,132.50			
FIBER MATERIAL TOTAL	\$ 5,216.10			
UNDERGROUND MATERIAL TOTAL	\$ 19,867.50			
CLOSURES MATERIAL TOTAL	\$ 7,696.52			
MST MATERIAL TOTAL	\$ 0.00			
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00			
AERIAL MATERIAL TOTAL	\$ 0.00			
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00			
AERIAL - ADSS MATERIAL TOTAL	\$ 0.00			
WIRELESS MATERIAL TOTAL	\$ 0.00			
MATERIAL TOTAL	\$ 32,837.12	Cost Per Foot	Cost Per Mile	w/Design/Stamp
TOTAL BID	\$ 120,969.62	\$ 10.74	\$ 56,793.25	\$ 138,530.62
WITH 20% CONTINGENCY	\$ 145,163.54	\$ 12.89	\$ 68,151.90	\$ 162,724.54

DIST-CHASF-M04-01

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	13,047.00	13,047.00	0.00		\$ 1.30	\$ 16,961
Mileage	2.47	2.47	0.00			20
						\$3,400
PREMISES	32					
Residential	32					

Business 0
Anchor 0

UNDERGROUND - BURIED LABOR TOTAL \$ 98,655.70
AERIAL -STRAND/LASH LABOR TOTAL \$ 0.00
AERIAL - ADSS LABOR TOTAL \$ 0.00
WIRELESS LABOR TOTAL \$ 0.00
SPLICING LABOR TOTAL \$ 5,422.00
PATCH PANELS AND CABINETS LABOR TOTAL \$ 65.00
GENERAL LABOR TOTAL \$ 0.00

LABOR TOTAL \$ 104,142.70

FIBER MATERIAL TOTAL \$ 6,432.00
UNDERGROUND MATERIAL TOTAL \$ 20,293.50
CLOSURES MATERIAL TOTAL \$ 7,291.44
MST MATERIAL TOTAL \$ 0.00
PATCH PANELS AND CABINETS MATERIAL TOTAL \$ 57.00
AERIAL MATERIAL TOTAL \$ 0.00
AERIAL - STRAND/LASH MATERIAL TOTAL \$ 0.00
AERIAL - ADSS MATERIAL TOTAL \$ 0.00
WIRELESS MATERIAL TOTAL \$ 0.00

MATERIAL TOTAL \$ 34,073.94 Cost Per Foot Cost Per Mile w/Design/Stamp

TOTAL BID \$ 138,216.64 \$ 10.59 \$ 55,958.15 \$ 158,577.64

WITH 20% CONTINGENCY \$ 165,859.97 \$ 12.71 \$ 67,149.79 \$ 186,220.97

DIST-CHASf-06

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	13,415.00	13,415.00	0.00	\$ 1.30	\$ 17,440	20
Mileage	2.54	2.54	0.00			\$3,400

PREMISES 32
Residential 32
Business 0
Anchor 0

UNDERGROUND - BURIED LABOR TOTAL \$ 104,727.40
AERIAL -STRAND/LASH LABOR TOTAL \$ 0.00
AERIAL - ADSS LABOR TOTAL \$ 0.00
WIRELESS LABOR TOTAL \$ 0.00
SPLICING LABOR TOTAL \$ 5,947.00
PATCH PANELS AND CABINETS LABOR TOTAL \$ 65.00
GENERAL LABOR TOTAL \$ 0.00

LABOR TOTAL \$ 110,739.40

FIBER MATERIAL TOTAL \$ 16,997.62
UNDERGROUND MATERIAL TOTAL \$ 25,095.75
CLOSURES MATERIAL TOTAL \$ 8,506.68
MST MATERIAL TOTAL \$ 0.00
PATCH PANELS AND CABINETS MATERIAL TOTAL \$ 57.00
AERIAL MATERIAL TOTAL \$ 0.00
AERIAL - STRAND/LASH MATERIAL TOTAL \$ 0.00
AERIAL - ADSS MATERIAL TOTAL \$ 0.00
WIRELESS MATERIAL TOTAL \$ 0.00

MATERIAL TOTAL \$ 50,657.05 Cost Per Foot Cost Per Mile w/Design/Stamp

TOTAL BID \$ 161,396.45 \$ 12.03 \$ 63,541.91 \$ 182,236.45

WITH 20% CONTINGENCY \$ 193,675.74 \$ 14.44 \$ 76,250.29 \$ 214,515.74

DIST-CHASe-01

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	9,418.00	3,574.00	5,844.00	\$ 1.30	\$ 12,243	14
Mileage	1.78	0.68	1.11			\$2,440

PREMISES 32

Residential	32
Business	0
Anchor	0

UNDERGROUND - BURIED LABOR TOTAL	\$ 26,742.50
AERIAL -STRAND/LASH LABOR TOTAL	\$ 1,050.00
AERIAL - ADSS LABOR TOTAL	\$ 25,974.00
WIRELESS LABOR TOTAL	\$ 0.00
SPLICING LABOR TOTAL	\$ 3,672.00
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00
GENERAL LABOR TOTAL	\$ 0.00

LABOR TOTAL \$ 57,503.50

FIBER MATERIAL TOTAL	\$ 21,019.07
UNDERGROUND MATERIAL TOTAL	\$ 5,441.25
CLOSURES MATERIAL TOTAL	\$ 3,240.64
MST MATERIAL TOTAL	\$ 1,584.00
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00
AERIAL MATERIAL TOTAL	\$ 0.00
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00
AERIAL - ADSS MATERIAL TOTAL	\$ 2,399.80
WIRELESS MATERIAL TOTAL	\$ 0.00

MATERIAL TOTAL	\$ 33,741.76	Cost Per Foot	Cost Per Mile	w/Design/Stamp
TOTAL BID	\$ 91,245.26	\$ 9.69	\$ 51,261.38	\$ 105,928.26
WITH 20% CONTINGENCY	\$ 109,494.31	\$ 11.63	\$ 61,513.66	\$ 124,177.31

DIST-CHASF-M01-08

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	5,960.00	5,960.00	0.00	\$ 1.30	\$ 7,748	9
Mileage	1.13	1.13	0.00			\$1,620

PREMISES	32
Residential	32
Business	0
Anchor	0

UNDERGROUND - BURIED LABOR TOTAL	\$ 49,025.20
AERIAL -STRAND/LASH LABOR TOTAL	\$ 0.00
AERIAL - ADSS LABOR TOTAL	\$ 0.00
WIRELESS LABOR TOTAL	\$ 0.00
SPLICING LABOR TOTAL	\$ 5,247.00
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00
GENERAL LABOR TOTAL	\$ 0.00

LABOR TOTAL \$ 54,337.20

FIBER MATERIAL TOTAL	\$ 2,074.02
UNDERGROUND MATERIAL TOTAL	\$ 16,737.00
CLOSURES MATERIAL TOTAL	\$ 7,756.78
MST MATERIAL TOTAL	\$ 0.00
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00
AERIAL MATERIAL TOTAL	\$ 0.00
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00
AERIAL - ADSS MATERIAL TOTAL	\$ 0.00
WIRELESS MATERIAL TOTAL	\$ 0.00

MATERIAL TOTAL	\$ 26,624.80	Cost Per Foot	Cost Per Mile	w/Design/Stamp
TOTAL BID	\$ 80,962.00	\$ 13.58	\$ 71,647.79	\$ 90,330.00
WITH 20% CONTINGENCY	\$ 97,154.40	\$ 16.30	\$ 85,977.35	\$ 106,522.40

DIST-CHASF-M01-07

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	9,723.00	9,723.00	0.00	\$ 1.30	\$ 12,640	15
Mileage	1.84	1.84	0.00			\$2,600

PREMISES	32
Residential	32
Business	0
Anchor	0

UNDERGROUND - BURIED LABOR TOTAL	\$ 69,903.80
AERIAL -STRAND/LASH LABOR TOTAL	\$ 0.00
AERIAL - ADSS LABOR TOTAL	\$ 0.00
WIRELESS LABOR TOTAL	\$ 0.00
SPLICING LABOR TOTAL	\$ 4,897.00
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00
GENERAL LABOR TOTAL	\$ 0.00

LABOR TOTAL \$ 74,865.80

FIBER MATERIAL TOTAL	\$ 4,791.28
UNDERGROUND MATERIAL TOTAL	\$ 12,348.00
CLOSURES MATERIAL TOTAL	\$ 6,656.48
MST MATERIAL TOTAL	\$ 0.00
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00
AERIAL MATERIAL TOTAL	\$ 0.00
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00
AERIAL - ADSS MATERIAL TOTAL	\$ 0.00
WIRELESS MATERIAL TOTAL	\$ 0.00

MATERIAL TOTAL	\$ 23,852.76	Cost Per Foot	Cost Per Mile	w/Design/Stamp
TOTAL BID	\$ 98,718.56	\$ 10.15	\$ 53,651.39	\$ 113,958.56
WITH 20% CONTINGENCY	\$ 118,462.27	\$ 12.18	\$ 64,381.67	\$ 133,702.27

DIST-CHASf-M04-05

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	10,369.00	10,369.00		0.00	\$ 1.30	\$ 13,480
Mileage	1.96	1.96		0.00		\$2,760

PREMISES	32
Residential	32
Business	0
Anchor	0

UNDERGROUND - BURIED LABOR TOTAL	\$ 76,635.30
AERIAL -STRAND/LASH LABOR TOTAL	\$ 0.00
AERIAL - ADSS LABOR TOTAL	\$ 0.00
WIRELESS LABOR TOTAL	\$ 0.00
SPLICING LABOR TOTAL	\$ 5,247.00
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00
GENERAL LABOR TOTAL	\$ 0.00

LABOR TOTAL \$ 81,947.30

FIBER MATERIAL TOTAL	\$ 5,623.16
UNDERGROUND MATERIAL TOTAL	\$ 17,846.25
CLOSURES MATERIAL TOTAL	\$ 6,886.36
MST MATERIAL TOTAL	\$ 0.00
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00
AERIAL MATERIAL TOTAL	\$ 0.00
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00
AERIAL - ADSS MATERIAL TOTAL	\$ 0.00
WIRELESS MATERIAL TOTAL	\$ 0.00

MATERIAL TOTAL	\$ 30,412.77	Cost Per Foot	Cost Per Mile	w/Design/Stamp
TOTAL BID	\$ 112,360.07	\$ 10.84	\$ 57,326.57	\$ 128,600.07
WITH 20% CONTINGENCY	\$ 134,832.08	\$ 13.00	\$ 68,791.88	\$ 151,072.08

DIST-CHASc-M06-01

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	9,050.00	7,449.00	1,601.00		\$ 1.30	\$ 11,765
Mileage	1.71	1.41	0.30			\$2,440

PREMISES	32
Residential	32
Business	0
Anchor	0

UNDERGROUND - BURIED LABOR TOTAL	\$ 54,988.90
AERIAL -STRAND/LASH LABOR TOTAL	\$ 437.50
AERIAL - ADSS LABOR TOTAL	\$ 7,311.50
WIRELESS LABOR TOTAL	\$ 0.00
SPLICING LABOR TOTAL	\$ 4,197.00
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00
GENERAL LABOR TOTAL	\$ 0.00

LABOR TOTAL \$ 66,999.90

FIBER MATERIAL TOTAL	\$ 8,316.62
UNDERGROUND MATERIAL TOTAL	\$ 12,241.50
CLOSURES MATERIAL TOTAL	\$ 5,036.16
MST MATERIAL TOTAL	\$ 522.00
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00
AERIAL MATERIAL TOTAL	\$ 0.00
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00
AERIAL - ADSS MATERIAL TOTAL	\$ 812.80
WIRELESS MATERIAL TOTAL	\$ 0.00

MATERIAL TOTAL \$ 26,986.08 Cost Per Foot Cost Per Mile w/Design/Stamp

TOTAL BID \$ 93,985.98 \$ 10.39 \$ 54,962.56 \$ 108,190.98

WITH 20% CONTINGENCY \$ 112,783.18 \$ 12.46 \$ 65,955.08 \$ 126,988.18

DIST-CHASE-M02-01

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	3,911.00	3,911.00	0.00		\$ 1.30	\$ 5,084 6
Mileage	0.74	0.74	0.00			\$1,080

PREMISES	32
Residential	32
Business	0
Anchor	0

UNDERGROUND - BURIED LABOR TOTAL	\$ 30,967.80
AERIAL -STRAND/LASH LABOR TOTAL	\$ 0.00
AERIAL - ADSS LABOR TOTAL	\$ 0.00
WIRELESS LABOR TOTAL	\$ 0.00
SPLICING LABOR TOTAL	\$ 3,672.00
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00
GENERAL LABOR TOTAL	\$ 0.00

LABOR TOTAL \$ 34,704.80

FIBER MATERIAL TOTAL	\$ 2,158.78
UNDERGROUND MATERIAL TOTAL	\$ 9,630.75
CLOSURES MATERIAL TOTAL	\$ 3,240.64
MST MATERIAL TOTAL	\$ 0.00
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00
AERIAL MATERIAL TOTAL	\$ 0.00
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00
AERIAL - ADSS MATERIAL TOTAL	\$ 0.00
WIRELESS MATERIAL TOTAL	\$ 0.00

MATERIAL TOTAL \$ 15,087.17 Cost Per Foot Cost Per Mile w/Design/Stamp

TOTAL BID \$ 49,791.97 \$ 12.73 \$ 67,286.45 \$ 55,955.97

WITH 20% CONTINGENCY \$ 59,750.36 \$ 15.28 \$ 80,743.73 \$ 65,914.36

DIST-CHASg-M02-01

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	19,974.00	17,718.00	2,256.00		\$ 1.30	\$ 25,966 30

Mileage	3.78	3.36	0.43	\$4,900
PREMISES	32			
Residential	32			
Business	0			
Anchor	0			

UNDERGROUND - BURIED LABOR TOTAL	\$ 130,749.70
AERIAL -STRAND/LASH LABOR TOTAL	\$ 437.50
AERIAL - ADSS LABOR TOTAL	\$ 10,107.75
WIRELESS LABOR TOTAL	\$ 0.00
SPLICING LABOR TOTAL	\$ 6,122.00
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00
GENERAL LABOR TOTAL	\$ 0.00
LABOR TOTAL	\$ 147,481.95

FIBER MATERIAL TOTAL	\$ 13,110.76
UNDERGROUND MATERIAL TOTAL	\$ 22,081.50
CLOSURES MATERIAL TOTAL	\$ 10,072.32
MST MATERIAL TOTAL	\$ 522.00
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00
AERIAL MATERIAL TOTAL	\$ 0.00
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00
AERIAL - ADSS MATERIAL TOTAL	\$ 962.50
WIRELESS MATERIAL TOTAL	\$ 0.00

MATERIAL TOTAL	\$ 46,806.08	Cost Per Foot	Cost Per Mile	w/Design/Stamp
TOTAL BID	\$ 194,288.03	\$ 9.73	\$ 51,398.95	\$ 225,154.03
WITH 20% CONTINGENCY	\$ 233,145.64	\$ 11.67	\$ 61,678.74	\$ 264,011.64

DIST-CHASE-M01-01

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	13,453.00	13,453.00	0.00	\$ 1.30	\$ 17,489	20
Mileage	2.55	2.55	0.00			\$3,400

PREMISES	32
Residential	32
Business	0
Anchor	0

UNDERGROUND - BURIED LABOR TOTAL	\$ 100,664.12
AERIAL -STRAND/LASH LABOR TOTAL	\$ 0.00
AERIAL - ADSS LABOR TOTAL	\$ 0.00
WIRELESS LABOR TOTAL	\$ 0.00
SPLICING LABOR TOTAL	\$ 4,897.00
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00
GENERAL LABOR TOTAL	\$ 0.00
LABOR TOTAL	\$ 105,626.12

FIBER MATERIAL TOTAL	\$ 7,426.24
UNDERGROUND MATERIAL TOTAL	\$ 21,860.25
CLOSURES MATERIAL TOTAL	\$ 6,076.20
MST MATERIAL TOTAL	\$ 0.00
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00
AERIAL MATERIAL TOTAL	\$ 0.00
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00
AERIAL - ADSS MATERIAL TOTAL	\$ 0.00
WIRELESS MATERIAL TOTAL	\$ 0.00

MATERIAL TOTAL	\$ 35,419.69	Cost Per Foot	Cost Per Mile	w/Design/Stamp
TOTAL BID	\$ 141,045.81	\$ 10.48	\$ 55,312.08	\$ 161,934.81
WITH 20% CONTINGENCY	\$ 169,254.97	\$ 12.58	\$ 66,374.50	\$ 190,143.97

DIST-CHASE-M03-02

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
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Footage	6,900.00	6,900.00	0.00	\$ 1.30	\$ 8,970	11
Mileage	1.31	1.31	0.00			\$1,960

PREMISES	32
Residential	32
Business	0
Anchor	0

UNDERGROUND - BURIED LABOR TOTAL	\$ 52,506.90
AERIAL -STRAND/LASH LABOR TOTAL	\$ 0.00
AERIAL - ADSS LABOR TOTAL	\$ 0.00
WIRELESS LABOR TOTAL	\$ 0.00
SPLICING LABOR TOTAL	\$ 3,672.00
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00
GENERAL LABOR TOTAL	\$ 0.00

LABOR TOTAL \$ 56,243.90

FIBER MATERIAL TOTAL	\$ 3,808.34
UNDERGROUND MATERIAL TOTAL	\$ 11,742.75
CLOSURES MATERIAL TOTAL	\$ 3,240.64
MST MATERIAL TOTAL	\$ 0.00
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00
AERIAL MATERIAL TOTAL	\$ 0.00
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00
AERIAL - ADSS MATERIAL TOTAL	\$ 0.00
WIRELESS MATERIAL TOTAL	\$ 0.00

MATERIAL TOTAL	\$ 18,848.73	Cost Per Foot	Cost Per Mile	w/Design/Stamp
TOTAL BID	\$ 75,092.63	\$ 10.88	\$ 57,322.62	\$ 86,022.63
WITH 20% CONTINGENCY	\$ 90,111.16	\$ 13.06	\$ 68,787.15	\$ 101,041.16

DIST-CHASE-M03-01

DESIGN	Total	Buried	Aerial	Rate/Ft	Total Design	PE Stamp Pgs/Cost
Footage	7,613.00	7,613.00	0.00	\$ 1.30	\$ 9,897	12
Mileage	1.44	1.44	0.00			\$2,120

PREMISES	32
Residential	32
Business	0
Anchor	0

UNDERGROUND - BURIED LABOR TOTAL	\$ 62,600.60
AERIAL -STRAND/LASH LABOR TOTAL	\$ 0.00
AERIAL - ADSS LABOR TOTAL	\$ 0.00
WIRELESS LABOR TOTAL	\$ 0.00
SPLICING LABOR TOTAL	\$ 4,897.00
PATCH PANELS AND CABINETS LABOR TOTAL	\$ 65.00
GENERAL LABOR TOTAL	\$ 0.00

LABOR TOTAL \$ 67,562.60

FIBER MATERIAL TOTAL	\$ 3,965.86
UNDERGROUND MATERIAL TOTAL	\$ 20,094.75
CLOSURES MATERIAL TOTAL	\$ 6,076.20
MST MATERIAL TOTAL	\$ 0.00
PATCH PANELS AND CABINETS MATERIAL TOTAL	\$ 57.00
AERIAL MATERIAL TOTAL	\$ 0.00
AERIAL - STRAND/LASH MATERIAL TOTAL	\$ 0.00
AERIAL - ADSS MATERIAL TOTAL	\$ 0.00
WIRELESS MATERIAL TOTAL	\$ 0.00

MATERIAL TOTAL	\$ 30,193.81	Cost Per Foot	Cost Per Mile	w/Design/Stamp
TOTAL BID	\$ 97,756.41	\$ 12.84	\$ 67,886.40	\$ 109,773.41
WITH 20% CONTINGENCY	\$ 117,307.69	\$ 15.41	\$ 81,463.67	\$ 129,324.69

MEC - FIBER CONSTRUCTION PROJECT - BOM (DIST-ORIGINAL)

Contractor:	
Contact Name/Position:	
Email:	
Phone:	

is with listed quantities are included in the current design, but MEC requests costs for all the items should the item be needed due to design alterations. All proposed unit costs must be guaranteed for the term of the project unless expressly agreed upon by MEC.

BB, Lateral, PON (This is for HLD estimates, this does not matter for LLD):	PON	Mileage	22,000	Total Passings
Total Design with underground overbuild % (F12) Footage/Miles:	11,035,200	2,090.00	22,000	Residential
Buried:	7,724,640	1,463.00	-	Business
Aerial:	3,310,560	627.00	-	Anchor
Region for unit pricing	NorthEast	Actual Buried	0%	Underground overbuild percentage (If using centerline for PON assume 75%)
Use MST's? (Only changes PON estimates)	No MST	7,724,640	0%	Rock Percentage
Labor Rate Adjustment (Use this if you want to add additional costs to wage i.e. prevailing wage ~30%)	0%	1,463.00	ADSS	Aerial (Strand and Lash or ADSS)

UNIT PRICING

PRICING. All work includes traffic control plans, setup, maintenance and breakdown, compacted backfill, stormwater and erosion control setup, maintenance and breakdown, safety compliance and soft surface restoration. All cells shown in green shall be completed by the Contractor. All other cells are protected in this form.

Description	Estimated Quantity	Unit	Unit Price	Total	Notes
UNDERGROUND - BURIED					
BFO12 - (12ct flat drop), can be used overhead or underground. (LABOR)	1,699,421	LF	\$ 3.42	\$ 5,812,019.82	Get updated pricing from Clayton first
BFO24LT - 24CT LIGHT ARMOR UG FIBER CABLE (LABOR)	-	LF	\$ 3.42	\$ -	Get updated pricing from Clayton first
EFBC.24UG - 24CT LIGHT ARMOR UG FIBER CABLE (LABOR)	-	LF	\$ 3.42	\$ -	Get updated pricing from Clayton first
BFO36LT - BURIED 36 FIBER OPTIC CABLE (LABOR)	-	LF	\$ 3.42	\$ -	Get updated pricing from Clayton first
EFBC.48UG - 48CT LIGHT ARMOR UG FIBER CABLE (LABOR)	-	LF	\$ 3.42	\$ -	Get updated pricing from Clayton first
BFO48LT - BURIED 48CT FIBER OPTIC CABLE (LABOR)	5,268,205	LF	\$ 3.42	\$ 18,017,261.10	Get updated pricing from Clayton first
BFO72LT - BURIED 72 FIBER OPTIC CABLE (LABOR)	-	LF	\$ 3.42	\$ -	Get updated pricing from Clayton first
BFO96LT - BURIED 96CT FIBER OPTIC CABLE (LABOR)	-	LF	\$ 3.42	\$ -	Get updated pricing from Clayton first
BFO144LT - BURIED 144 FIBER OPTIC CABLE (LABOR)	1,529,479	LF	\$ 3.42	\$ 5,230,818.18	Get updated pricing from Clayton first
FBC.192DJ - ADSS DOUBLE JACKET 192CT (LABOR)	-	LF	\$ 3.42	\$ -	Get updated pricing from Clayton first
BFO288R - BUIED 288 FIBER OPTIC CABLE (LABOR)	-	LF	\$ 3.42	\$ -	Get updated pricing from Clayton first
BM53 - (marker post) (LABOR)	-	EA	\$ 25.00	\$ -	Get updated pricing from Clayton first
BM53-T - ORANGE FIBER TEST POST (LABOR)	11,036	EA	\$ 50.00	\$ 551,800.00	Get updated pricing from Clayton first
BM71 - ROCK EXCAVATING UNIT (LABOR)	-	LF	\$ 75.00	\$ -	Get updated pricing from Clayton first
BM72 - ASPHALT UNIT (LABOR)	77,247	SqrFt	\$ 40.50	\$ 3,128,503.50	Get updated pricing from Clayton first
BM73 - CONCRETE UNIT (LABOR)	77,247	SqrFt	\$ 52.20	\$ 4,032,293.40	Get updated pricing from Clayton first
EFB6.9 - FIBER CABLE RISER (LABOR)	1,375	EA	\$ 120.00	\$ 165,000.00	Add 5% for variance
BM80 - 1" RISER GUARD (LABOR)	3,300	EA	\$ 60.00	\$ 198,000.00	Add 5% for variance
BM81 - 2" RISER GUARD (LABOR)	-	EA	\$ 60.00	\$ -	Add 5% for variance
BM82 - 3" RISER GUARD (LABOR)	-	EA	\$ 60.00	\$ -	Add 5% for variance
EFB.DROPVAULT - 12"x12" vault (LABOR)	3,090	EA	\$ 125.00	\$ 386,250.00	Add 5% for variance
EFB.VAULT - 24x36 FIBER VAULT FOR UG CABLE HOME (LABOR)	11,036	EA	\$ 300.00	\$ 3,310,800.00	Add 5% for variance
FB.1RC - 1" ROLL CONDUIT FOR FIBER (LABOR)	-	LF	\$ 10.50	\$ -	Add 5% for variance
EFB.1RC - 1.50" ROLL CONDUIT FOR FIBER (LABOR)	617,972	LF	\$ 11.50	\$ 7,106,678.00	Add 5% for variance
BM60(1.5)-S - 1.5" Steel Conduit (LABOR)	1,932	LF	\$ 9.25	\$ 17,871.00	Add 5% for variance
BDO210 - FIBER SPLICE PEDESTAL (LABOR)	-	EA	\$ 210.00	\$ -	Dependent on build
EFB.SP - FIBER SPLICE PEDESTAL (LABOR)	-	EA	\$ 85.00	\$ -	Dependent on build (Some RR, DOT, and water crossings need steel casings)
EFB.24UGLOOP - FIBER LOOP 24CT LIGHT ARMOR UG (LABOR)	-	EA	\$ 360.00	\$ -	This would be for RR, DOT, Waterway or other crossing. Estimate is 0.025% of Buried total.
	-		\$ -	\$ -	This would be for RR, DOT, Waterway or other crossing. Estimate is 0.025% of Buried total.
	-		\$ -	\$ -	This would be for RR, DOT, Waterway or other crossing. Estimate is 0.025% of Buried total.
	-		\$ -	\$ -	This would be for RR, DOT, Waterway or other crossing. Estimate is 0.025% of Buried total.
	-		\$ -	\$ -	Dependent on build
	-		\$ -	\$ -	Should match length of empty conduits (BB and PON twice as much as URD footage)
	-		\$ -	\$ -	Get updated pricing from Clayton first
	-		\$ -	\$ -	Dependent on build, Question for customer in data collection
	-		\$ -	\$ -	should equal underground footage
	-		\$ -	\$ -	Get qtys from design, if not specified assume 1 ever 2,000ft
	-		\$ -	\$ -	Get qtys from design, can estimate 75% of handholes
	-		\$ -	\$ -	Get qtys from design, can estimate 25% of handholes
	-		\$ -	\$ -	Dependent on build, Question for customer in data collection
	-		\$ -	\$ -	Dependent on build, Question for customer in data collection
	-		\$ -	\$ -	Dependent on build, Question for customer in data collection
	-		\$ -	\$ -	Dependent on build, Question for customer in data collection
	-		\$ -	\$ -	Dependent on build, Question for customer in data collection
	-		\$ -	\$ -	Add 5% for variance
	-		\$ -	\$ -	*Get updated pricing from Clayton first* underground footage & 100' slack from Ring Cuts and 55' for Butt splices (Estimated as URD footage + 75' per HH)
	-		\$ -	\$ -	Get qtys from design

SEBO-1 - (2ct flat drop), can be used overhead or underground. (LABOR)	-	LF	\$ 2.25	\$ -	Ft of fiber that needs to be pulled into a building. Qtys from design
SEBO-1P - (precut fiber Empower) (LABOR)	-	LF	\$ -	\$ -	Used if any Electrical conduit needs to be installed
BM83 - SERVICE RISER GUARD (LABOR)	-	EA	\$ 5.00	\$ -	If any buildings need to be drilled to for fiber/conduit entrance
EFB.2.1 - (screw in knob attachment on the house for overhead fiber) (LABOR)	-	EA	\$ -	\$ -	If any building entracnes needed
EFB.JHOOK - (hook attachment for 2 & 12ct flat drop) (LABOR)	-	EA	\$ -	\$ -	If any generic enclosures are needed to be installed
EFB3.2 - (mast pipe attachment for overhead fiber at the house) (LABOR)	-	EA	\$ -	\$ -	
EFBDE.2.12 - (single deadender for 2 & 12ct flat drop) (LABOR)	-	EA	\$ -	\$ -	
EFBDE.2.12 - (double deadender for 2 & 12ct flat drop) (LABOR)	-	EA	\$ -	\$ -	
EFBSH.2.12 - ADSS LITE SUPPORT CLAMP 2 & 12CT DROP (LABOR)	-	EA	\$ -	\$ -	
EFB.LTDROPLOOP - 2CT DROP FIBER CABLE LOOP 150 FT (LABOR)	-	EA	\$ -	\$ -	
EFB.DROPLOOP - FIBER DROP 2CT 50FT. LOOP (LABOR)	-	EA	\$ -	\$ -	
EFB.DROP12LOOP - FIBER DROP 12 50FT. LOOP (LABOR)	-	EA	\$ -	\$ -	
EFB.12.24.48DC - (down lead cushion for 12,24,48ct fiber to go around stepdown or regulatorplatforms) (LABOR)	-	EA	\$ -	\$ -	
EFB.144DC - (down lead cushion to go around stepdown or regulator platforms for single jacket 144) (LABOR)	-	EA	\$ -	\$ -	
EFB.144DJDC - (down lead cushion to go around stepdown or regulator platforms for double jacket 144) (LABOR)	-	EA	\$ -	\$ -	
GENERAL LABOR TOTAL				\$ -	

LABOR TOTAL				\$ 68,076,120.07	
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MATERIAL PRICING. All material costs shall include shipping, handling and storage.

Description	Estimated Quantity	Unit	Unit Price	Total	Notes
FIBER					
BFO12 - (12ct flat drop), can be used overhead or underground. (MATERIAL)	1,699,421	FT	\$ 0.30	\$ 509,826.30	Get qtys from design
BFO24LT - 24CT LIGHT ARMOR UG FIBER CABLE (MATERIAL)	-	FT	\$ -	\$ -	Get qtys from design
EFBC.24UG - 24CT LIGHT ARMOR UG FIBER CABLE (MATERIAL)	-	FT	\$ -	\$ -	Get qtys from design
BFO36LT - BURIED 36 FIBER OPTIC CABLE (MATERIAL)	-	FT	\$ -	\$ -	Get qtys from design
BFO48LT - BURIED 48CT FIBER OPTIC CABLE (MATERIAL)	5,268,205	FT	\$ 0.53	\$ 2,792,148.65	Get qtys from design
EFBC.48UG - 48CT LIGHT ARMOR UG FIBER CABLE (MATERIAL)	-	FT	\$ 0.46	\$ -	Get qtys from design
BFO72LT - BURIED 72 FIBER OPTIC CABLE (MATERIAL)	-	FT	\$ -	\$ -	Get qtys from design
BFO96LT - BURIED 96CT FIBER OPTIC CABLE (MATERIAL)	-	FT	\$ 0.81	\$ -	Get qtys from design
BFO144LT - BURIED 144 FIBER OPTIC CABLE (MATERIAL)	1,529,479	FT	\$ 1.30	\$ 1,988,322.70	Get qtys from design
BFO288R - BUIED 288 FIBER OPTIC CABLE (MATERIAL)	-	FT	\$ -	\$ -	Get qtys from design
EFBC.12DJ - ADSS DOUBLE JACKET 12CT (MATERIAL)	993,168	FT	\$ 1.45	\$ 1,440,093.60	Get qtys from design
EFBC.24DJ - 24CT DOUBLE JACKET FIBER CABLE (MATERIAL)	-	FT	\$ -	\$ -	
EFBC.48DJ - ADSS DOUBLE JACKET 48CT (MATERIAL)	397,268	FT	\$ 1.69	\$ 671,382.92	
EFBC.144 - ADSS SINGLE JACKET 144CT (MATERIAL)	-	FT	\$ -	\$ -	
EFBC.144DJ - ADSS DOUBLE JACKET 144CT (MATERIAL)	2,582,237	FT	\$ 3.04	\$ 7,850,000.48	
FBC.192DJ - ADSS DOUBLE JACKET 192CT (MATERIAL)	-	FT	\$ -	\$ -	
SEBO-1 - (2ct flat drop), can be used overhead or underground. (MATERIAL)	-	FT	\$ 0.15	\$ -	
SEBO-1P - (precut fiber Empower) (MATERIAL)	-	FT	\$ -	\$ -	
	-		\$ -	\$ -	
	-		\$ -	\$ -	
FIBER MATERIAL TOTAL				\$ 15,251,774.65	

UNDERGROUND					
EFB.1RC - 1.50" ROLL CONDUIT FOR FIBER (MATERIAL)	617,972	FT	\$ 1.07	\$ 661,230.04	Get qtys from design
BM60(1.5)-S - 1.5" Steel Conduit (MATERIAL)	1,932	FT	\$ 7.90	\$ 15,262.80	Get qtys from design
FB.1RC - 1" ROLL CONDUIT FOR FIBER (MATERIAL)	-	FT	\$ -	\$ -	Get qtys from design
BM53 - (marker post) (MATERIAL)	-	EA	\$ 50.24	\$ -	Get qtys from design
BM53-T - ORANGE FIBER TEST POST (MATERIAL)	11,036	EA	\$ 89.11	\$ 983,417.96	Get qtys from design
BM71 - ROCK EXCAVATING UNIT (MATERIAL)	-	FT	\$ -	\$ -	Get qtys from design
BM72 - ASPHALT UNIT (MATERIAL)	77,247	SqrtFT	\$ 3.60	\$ 278,089.20	Get qtys from design
BM73 - CONCRETE UNIT (MATERIAL)	77,247	SqrtFT	\$ 3.57	\$ 275,771.79	Get qtys from design
BM80 - 1" RISER GUARD (MATERIAL)	3,300	EA	\$ 9.82	\$ 32,406.00	Get qtys from design, if not specified assume 1 ever 2,000ft
BM81 - 2" RISER GUARD (MATERIAL)	-	EA	\$ -	\$ -	Get qtys from design
BM82 - 3" RISER GUARD (MATERIAL)	-	EA	\$ -	\$ -	Get qtys from design
EFB.DROPVAULT - (12"x12" vault) (MATERIAL)	3,090	EA	\$ 184.00	\$ 568,560.00	Get qtys from design
EFB.VAULT - 24x36 FIBER VAULT FOR UG CABLE HOME (MATERIAL)	11,036	EA	\$ 918.18	\$ 10,133,034.48	Get qtys from design
EFB6.9 - FIBER CABLE RISER (MATERIAL)	1,375	EA	\$ 21.48	\$ 29,535.00	Get qtys from design
BDO210 - FIBER SPLICE PEDESTAL (MATERIAL)	-	EA	\$ 311.32	\$ -	Get qtys from design
EFB.SP - FIBER SPLICE PEDESTAL (MATERIAL)	-	EA	\$ 311.32	\$ -	Get qtys from design
EFB.24UGLOOP - FIBER LOOP 24CT LIGHT ARMOR UG (MATERIAL)	-	EA	\$ -	\$ -	Get qtys from design
	-		\$ -	\$ -	Estimate based on the number of vaults
	-		\$ -	\$ -	Estimate based on the number of vaults
	-		\$ -	\$ -	Get qtys from design, can estimate 75% of handholes
	-		\$ -	\$ -	Get qtys from design, can estimate 25% of handholes
	-		\$ -	\$ -	Dependent on build, Question for customer in data collection

EFBDE.144 - DEADEND FIBER 144 (MATERIAL)	-	EA	\$ 47.88	\$ -	
EFPDDE.144 - DOUBLE DEADEND FIBER 144 (MATERIAL)	-	EA	\$ 47.88	\$ -	
EFB.DAMPER - STABILIZING DAMPER FOR 12,24,48CT FIBER (MATERIAL)	4,730	EA	\$ 10.33	\$ 48,860.90	
EFB.144DAMPER - STABILIZING DAMPER FOR 144CT FIBER (MATERIAL)	6,622	EA	\$ 12.08	\$ 79,993.76	
AERIAL - ADSS MATERIAL TOTAL				\$ 1,206,320.26	

WIRELESS					
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WIRELESS MATERIAL TOTAL				\$ -	

	MATERIAL TOTAL			\$ 33,574,772.62	
	TOTAL BID			\$ 101,650,892.69	

HOURLY LABOR RATES - Will only be utilized for work items not specifically listed in the scope and will only be billable on a pre-approved agreement with the Client

Contractor shall insert a full schedule of labor rates in the line items below in the event of out of scope or hourly rate work is needed.					
Description		Unit	Regular Rate	OT/Holiday Rate	Notes
Licensed Arborist		HR	\$ 50.00	\$ 90.00	
Licensed Surveyor		HR	\$ 250.00	\$ 350.00	
OSP Director		HR	\$ 78.00	\$ 130.00	
OSP Engineer		HR	\$ 78.00	\$ 130.00	
OSP Project Manager		HR	\$ 78.00	\$ 130.00	
OSP Inspector		HR	\$ 58.00	\$ 100.00	
OSP Permit Coordinator		HR	\$ 58.00	\$ 100.00	
OSP Materials Manager		HR	\$ 58.00	\$ 100.00	
Fiber Splicer & Tester		HR	\$ 75.00	\$ 112.00	
Construction Foreman		HR	\$ 58.00	\$ 100.00	
Machine Operators		HR	\$ 75.00	\$ 112.00	
General Construction Laborer		HR	\$ 50.00	\$ 75.00	
Traffic Control Plan by Certified Firm		PG	\$ 150.00	\$ 200.00	
Locate Paint Removal		HR	\$ 45.00	\$ 65.00	
Traffic Control as required when out of scope items requested		HR	\$ -	\$ -	
Railroad Flaggers - extra cost for crossing railroads have to hire railroad employee flaggers		HR	\$ -	\$ -	
		HR	\$ -	\$ -	
		HR	\$ -	\$ -	
		HR	\$ -	\$ -	
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		HR	\$ -	\$ -	
		HR	\$ -	\$ -	

EQUIPMENT RATES Contractor shall insert a full schedule of equipment use rates in the line items below.

Description		Unit	Regular Rate		Notes
Drill Truck equip with trailer and drill		HR	\$ 175.00		
Crew truck with vac		HR	\$ 150.00		
Large vac		HR	\$ 125.00		
Reel trailer		HR	\$ 50.00		
Crew Truck with Mini Ex		HR	\$ 150.00		

3 Vendor to use (1 = Template, 2 = NOD, 3 = Other)

4" J-Hook \$ 70.00

UNDERGROUND - BURIED

- BFO12 - (12ct flat drop), can be used overhead or underground. (LABOR)
BFO24LT - 24CT LIGHT ARMOR UG FIBER CABLE (LABOR)
EFBC.24UG - 24CT LIGHT ARMOR UG FIBER CABLE (LABOR)
BFO36LT - BURIED 36 FIBER OPTIC CABLE (LABOR)
EFBC.48UG - 48CT LIGHT ARMOR UG FIBER CABLE (LABOR)
BFO48LT - BURIED 48CT FIBER OPTIC CABLE (LABOR)
BFO72LT - BURIED 72 FIBER OPTIC CABLE (LABOR)
BFO96LT - BURIED 96CT FIBER OPTIC CABLE (LABOR)
BFO144LT - BURIED 144 FIBER OPTIC CABLE (LABOR)
FBC.192DJ - ADSS DOUBLE JACKET 192CT (LABOR)
BFO288R - BURIED 288 FIBER OPTIC CABLE (LABOR)
BM53 - (marker post) (LABOR)
BM53-T - ORANGE FIBER TEST POST (LABOR)
BM71 - ROCK EXCAVATING UNIT (LABOR)
BM72 - ASPHALT UNIT (LABOR)
BM73 - CONCRETE UNIT (LABOR)
EFB6.9 - FIBER CABLE RISER (LABOR)
BM80 - 1" RISER GUARD (LABOR)
BM81 - 2" RISER GUARD (LABOR)
BM82 - 3" RISER GUARD (LABOR)
EFB.DROPVault - 12"x12" vault (LABOR)
EFB.Vault - 24x36 FIBER VAULT FOR UG CABLE HOME (LABOR)
FB.1RC - 1" ROLL CONDUIT FOR FIBER (LABOR)
EFB.1RC - 1.50" ROLL CONDUIT FOR FIBER (LABOR)
BM60(1.5)-S - 1.5" Steel Conduit (LABOR)
BDO210 - FIBER SPLICE PEDESTAL (LABOR)
EFB.SP - FIBER SPLICE PEDESTAL (LABOR)
EFB.24UGLOOP - FIBER LOOP 24CT LIGHT ARMOR UG (LABOR)

Table with columns: Price Used, Template, NOD, Other, 9/28/2023, Manufacturer, Manufacturer Item #. Lists various underground buried materials and their associated costs.

AERIAL -STRAND/LASH

- E2.12X - 10" screw anchor (LABOR)
EF2.12X - ANCHOR POWER INSTALL 10" HELIX (LABOR)
EFBA1.8 - ANCHOR BUST 8 000LB (LABOR)
EFBG1.01 - SINGLE OVERHEAD GUY (LABOR)
EFBG1.1X - SINGLE DOWN GUY (LABOR)
EFB.12DJLOOP100 - FIBER LOOP 100FT 12CT (LABOR)
EFB.12DJLOOP - FIBER LOOP 150FT 12CT (LABOR)
EFB.24DJLOOP - FIBER 24CT LOOP 150FT (LABOR)
EFB.48DJLOOP - FIBER 48 150FT LOOP (LABOR)
EFB.144DJLOOP - FIBER 144 150FT LOOP (LABOR)
EFB.144DJLOOP - FIBER 144DJ 150FT LOOP (LABOR)
FB.192DJLOOP - 150' FIBER 192CT LOOP (LABOR)
EFB.DAMPER - STABILIZING DAMPER FOR 12,24,48CT FIBER (LABOR)
EFB.144DAMPER - STABILIZING DAMPER FOR 144CT FIBER (LABOR)
EFB.144DESTOFF - 144 DEADEND STANDOFF FOR SWITCH OR POT C (LABOR)
EFB.144STOFF - 144 STANDOFF FOR SWITCH OR POT CLEARANC (LABOR)
EFBC.144 - ADSS SINGLE JACKET 144CT (LABOR)
EFBDDE.144 - DOUBLE DEADEND FIBER 144 (LABOR)
EFBDE.144 - DEADEND FIBER 144 (LABOR)
EFBDH.144 - ADSS DOUBLE HANGER 144 0-15 DEGREES (LABOR)
EBFSH.144 - straight hanger single jacket 144ct (LABOR)
EFBSH.144 - ADSS SINGLE HANGER 144 0-15 DEGREES (LABOR)

Table with columns: Price Used, Template, NOD, Other, 9/28/2023, Manufacturer, Manufacturer Item #. Lists various aerial strand and lashing materials and their associated costs.

AERIAL - ADSS

- EFBC.12DJ - ADSS DOUBLE JACKET 12CT (LABOR)
EFBC.24DJ - 24CT DOUBLE JACKET FIBER CABLE (LABOR)
EFBC.48DJ - ADSS DOUBLE JACKET 48CT (LABOR)
EFBC.144DJ - ADSS DOUBLE JACKET 144CT (LABOR)
EFBDDE.12.24.48 - DOUBLE DEADEND FIBER 12 24 48 CT FIBERS (LABOR)
EFBDDE.144DJ - DOUBLE DEADEND FIBER 144DJ (LABOR)
EFBDE.12.24.48 - DEADEND FIBER 12 24 48 CT FIBER (LABOR)
EFBDE.144DJ - DEADEND FIBER 144DJ (LABOR)
EFBSH.12.24.48 - ADSS SINGLE HANGER 12 24 48 0-15 DEGREES (LABOR)
EFBSH.144DJ - ADSS SINGLE HANGER 144DJ 0-15 DEGREES (LABOR)
FBDDE.12.2 - DOUBLE DEADEND FIBER 12 (LABOR)
FBDDE.48.12 - DOUBLE DEADEND FIBER 48 (LABOR)
FBDE.12.2 - DEADEND FIBER 12 (LABOR)
FBDE.48.12 - DEADEND FIBER 48 (LABOR)
FBSH.48.12 - ADSS SINGLE HANGER 48 0-15 DEGREES (LABOR)

Table with columns: Price Used, Template, NOD, Other, 9/28/2023, Manufacturer, Manufacturer Item #. Lists various aerial ADSS materials and their associated costs.

SPLICING

- EFB.OWM - (nid or wall mount) (LABOR)
EFSC.ACAN - FIBER SPLICE CAN (A CAN) (LABOR)
EFSC.CCAN - FIBER SPLICE CAN (C CAN) (LABOR)
HO1-Splice - Splicing, Fusion, Single Fiber (LABOR)
TEST-OTDR-UNI - Testing, OTDR, Uni-Directional, Power Meter Testing (LABOR)
TEST-ODR-BI - Testing, OTDR, Bi-Directional, Power Meter Testing (LABOR)
EFSC.TRAY(24) - A Closure Tray (LABOR)
EFSC.TRAY(36) - C Closure Tray (36) (LABOR)
EFSC.TRAY(24) - C Closure Tray (24) (LABOR)

Table with columns: Price Used, Template, NOD, Other, 9/28/2023, Manufacturer, Manufacturer Item #. Lists various splicing materials and their associated costs.

PATCH PANELS AND CABINETS

- FDC - 288 FDH Cabinet (LABOR)
EFB.1X32SPLITTER - 1X32 SYMMETRICAL FIBER SPLITTER (LABOR)
EFB.1X4SPLITTER - 1X4 SPLITTER FIELD INSTALLABLE (LABOR)
EFB.1X8SPLITTER - 1X8 SPLITTER FIELD INSTALLABLE (LABOR)

Table with columns: Price Used, Template, NOD, Other, 9/28/2023, Manufacturer, Manufacturer Item #. Lists various patch panels and cabinets and their associated costs.

Letters of Support

Southside Regional Fiber Broadband Phase 3 Project

Senator Frank Ru , 15th Senatorial District

Delegate Thomas C. “Tommy” Wright, Jr., 61st District Virginia House of Delegates

Delegate H. Otto Wachsmann, Jr., 75th District Virginia House of Delegates

E. Jay Ellington, Crater Planning District Commission

Leslie Weddington, Brunswick County Administrator

Dan Witt, Charlotte County Administrator

Dr. Charlette Woolridge, Greenville County Administrator

Scott Simpson, Halifax County Administrator

H. Wayne Carter, III, Mecklenburg County Administrator

David Walker, Dominion Energy

Tad Deriso, Mid-Atlantic Broadband

Alfreda Jarrett Reynolds, Brunswick County Economic Development

Gloria Menyweather-Woods, Brunswick County Industrial Development Authority

Robbie, W. Mason, Charlotte County Public Schools

Natalie B. Slate, Greenville County Economic Development

Linwood, E. Pope, Greenville County Planning

Mitzi T. McCormick, Halifax County Chamber of Commerce

Kristy Johnson, Halifax County Industrial Development Authority

Dr. Amy Huskin, Halifax County Public Schools

Angie D. Kellett, Mecklenburg County Economic Development

Dr. Quentin R. Johnson, Southside Virginia Community College

A. Todd Howell, VCU Health-Community Memorial Hospital

Terra Bailey Napier, Virginia Career Works

SENATE OF VIRGINIA

FRANK M. RUFF, JR.
15th SENATORIAL DISTRICT
ALL OF CHARLOTTE, LUNENBURG, MECKLENBURG,
AND NOTTOWAY COUNTIES; PART OF BRUNSWICK,
CAMPBELL, DINWIDDIE, HALIFAX, PITTSYLVANIA,
AND PRINCE GEORGE COUNTIES;
AND PART OF THE CITY OF DANVILLE
POST OFFICE BOX 332
CLARKSVILLE, VIRGINIA 23027



COMMITTEE ASSIGNMENTS:
AGRICULTURE, CONSERVATION AND
NATURAL RESOURCES
FINANCE AND APPROPRIATIONS
GENERAL LAWS AND TECHNOLOGY
PRIVILEGES AND ELECTIONS

December 1, 2023

Dr. Tamarah Holmes
Director, Office of Broadband
Department of Housing and Community Development VATI Program
600 East Main Street, Suite 300
Richmond, VA 23219

Dear Dr. Tamarah Holmes,

I write this letter in support of the Southside Planning District Commission's, in collaboration with EMPOWER Broadband, application for the FY24 VATI Grant to help secure funding to ensure all households and businesses in Brunswick, Charlotte, Mecklenburg, Halifax, and Greensville counties have access to broadband services with speeds at or above 100/20 Mbps. While many parts of these counties continue to struggle with little or marginal broadband service, this additional funding can close the gap in the Southern Virginia region and make universal fiber broadband coverage a reality.

I greatly appreciate your consideration of their application for the FY24 VATI Grant. Broadband services are necessary for the future economic stability of our community.

Thank you in advance,

Sincerely,

A handwritten signature in dark ink, appearing to read "Frank M. Ruff, Jr.", written in a cursive style.

District 15
Senate of Virginia



COMMONWEALTH OF VIRGINIA
HOUSE OF DELEGATES
RICHMOND

THOMAS C. "TOMMY" WRIGHT, JR.
POST OFFICE BOX 1323
VICTORIA, VIRGINIA 23974
SIXTY-FIRST DISTRICT

COMMITTEE ASSIGNMENTS:
GENERAL LAWS (VICE-CHAIR)
AGRICULTURE, CHESAPEAKE AND
NATURAL RESOURCES

12/11/2023

Dr. Tamarah Holmes
Director, Office of Broadband
Department of Housing and Community Development VATI Program
600 East Main Street, Suite 300
Richmond, VA 23219

Dear Dr. Holmes,

I write this letter in full support of the Southside Planning District Commission's application for a VATI grant to help secure funding to build fiber-to-the-home within the Southside Virginia Region that struggle to receive broadband of 100/20 Mbps and that, to date, remain unserved and underserved. The application is being made in partnership with Mecklenburg, Brunswick, Charlotte, Halifax Counties, and Empower Broadband, Inc. Although great strides have been made to provide broadband availability, this effort will help to fill service gaps to provide universal fiber broadband coverage to Southside Virginia. This impacts many areas including limitations on educational opportunities, economic development, tourism, availability of medical resources, as well as personal growth.

I greatly appreciate your serious consideration in approving this VATI application in the 2024 grant round. Not only will this help with sustaining the future of advanced broadband services in their service footprint, but also promoting the future economic stability of our community.

Sincerely,

A handwritten signature in black ink, appearing to read "Thomas C. Wright, Jr.", written in a cursive style.

Delegate Thomas C. "Tommy" Wright, Jr.



COMMONWEALTH OF VIRGINIA
HOUSE OF DELEGATES
RICHMOND

H. OTTO WACHSMANN, JR.
POST OFFICE BOX 268
STONY CREEK, VIRGINIA 23882

SEVENTY-FIFTH DISTRICT

COMMITTEE ASSIGNMENTS:
PRIVILEGES AND ELECTIONS
COUNTIES, CITIES AND TOWNS
HEALTH, WELFARE AND INSTITUTIONS

December 13, 2023

Dr. Tamarah Holmes
Director, Office of Broadband
Department of Housing and Community Development VATI Program
600 East Main Street, Suite 300
Richmond, VA 23219

Dear Dr. Holmes,

I write in strong support of expanding high speed internet services into Southside Virginia by recommending the approval of the Southside Planning District Commission and Empower Broadband's application to the Virginia Department of Housing & Community Development's (DHCD) Virginia Telecommunications Initiative (VATI) grant program. Once approved, Empower Broadband, Inc. will extend its existing fiber network to deliver high speed broadband to 2,700 unserved and underserved residences and businesses in Brunswick and Greenville Counties in partnership with the Counties of Charlotte, Halifax, and Mecklenburg.

Brunswick and Greenville County are rural counties with low population densities along the North Carolina border, and currently have very limited broadband coverage via cable service. Both countries are economically depressed areas which need broadband services to expand its business options, educate its students and bring services that those in other areas of the state now known as a necessity.

I support the Southside Planning District Commission's application fully in order to allow Brunswick and Greenville Counties to join the rest of the counties in the 75th House District so they will have a plan toward high-speed Internet.

I encourage the adoption of the proposed application and provide every appropriate consideration as. If I might be of additional service, please do not hesitate to contact me directly.

Respectfully,

A handwritten signature in black ink, appearing to read "H. Otto Wachsmann, Jr.", with a long horizontal line extending to the right.

H. Otto Wachsmann, Jr.
75th District, Virginia House of Delegates

CRATER PLANNING DISTRICT COMMISSION

Monument Professional Building • 1964 Wakefield Street • Post Office Box 1808 • Petersburg, VA 23805
Phone: (804) 861-1666 • Fax: (804) 732-8972 • info@craterpdc.org • craterpdc.org

December 1, 2023

Dr. Tamarah Holmes
Director, Office of Broadband
Virginia Department of Housing and Community Development
VATI Program
600 East Main Street, Suite 300
Richmond, Virginia 23219

RE: Letter of Support

Dear Dr. Holmes:

I write to you on behalf of the Crater Planning District Commission in support of the Southside Planning District Commission's VATI application for broadband implementation. We strongly support this project and focus on infrastructure development for universal fiber broadband coverage.

Our mission is to strengthen the quality of life throughout the Crater District by serving as a regional forum of member local governments to address issues of regional significance, providing technical assistance to localities, and promoting and enhancing the collective consensus on the economic, transportation, social, environmental and demographic interests of the region. This project closely aligns with our mission, by increasing community enhancement and development throughout Greenville County.

Ten small localities in southern Virginia comprise the Crater Economic Development District, home to 186,938 people according to the 2020 US Census. Population growth is stagnant with an increase shy of 7,000 since 2010. A lack of investment in modernization of infrastructure and services like broadband internet accompanies this last of growth.

Investment in broadband infrastructure is both an objective of Goal 4 and a performance measure under Goal 5 of the Comprehensive Economic Development Strategy of the Crater Economic Development District. These goals are to (4) encourage and facilitate the provision of well planned, state-of-the-art public infrastructure that will attract higher-wage employers and to (5) enhance the innovation/information technology ecosystem.

In conclusion, I fully support the efforts of Greenville County to seek federal FY 24 VATI funding through the Virginia Telecommunication Initiative. We are committed to supporting the proposed project and look forward to continuing our collaborative efforts to enhance the Region.

Sincerely,



E. Jay Ellington
Executive Director
Crater Planning District Commission



County of Charlotte Board of Supervisors

Post Office Box 608
250 LeGrande Avenue, Suite A
Charlotte Court House, VA 23923-0608

Daniel N. Witt
County Administrator
www.charlottecountyva.gov

Phone 434-542-5117
Fax 434-542-5248

November 30, 2023

Dr. Tamarah Holmes
Director, Office of Broadband
Virginia Department of Housing and Community Development
VATI Program
600 East Main Street, Suite 300
Richmond, Virginia 23219

RE: Letter of Support

Dear Dr. Holmes:

Charlotte County is participating in a regional VATI application this year in collaboration with the Southside Planning District Commission and EMPOWER Broadband. This project will provide reliable broadband infrastructure to our Region and is essential to our communities. The Southside Planning District Commission will be the applicant for this FY 24 VATI application.

Please be advised that Charlotte County will provide up to \$5,957 in matching funds for the application.

Thank you for your consideration and please let me know if you require additional documentation or have questions regarding our county's participation.

Sincerely,

Daniel Witt

County Administrator

Dr. Charlette T. Woolridge
County Administrator

Gary. L. Cifers
Assistant County Administrator

Russell Slayton
County Attorney



Belinda Astrop
Chair
Election District 1

James Brown
Vice-Chair
Election District 2

William Cain
Election District 3

Tony Conwell
Election District 4

December 18, 2023

Dr. Tamarah Holmes, Director, Office of Broadband
Virginia Department of Housing and Community Development
VATI Program
600 East Main Street, Suite 300
Richmond, Virginia 23219

RE: Letter of Support

Dear Dr. Holmes:

On behalf of the County of Greenville, I write this letter in full support of the County's regional VATI application in collaboration with the Southside Planning District Commission and EMPOWER Broadband. This project will provide reliable broadband infrastructure to our region and is essential to promote future economic growth, development and stability for families and businesses. The Southside Planning District Commission will be the applicant for this FY 24 VATI application.

Please be advised that Greenville County will provide up to \$41,894 in matching funds for the application.

Thank you for your consideration and please let me know if you require additional documentation or have questions regarding our County's participation.

Sincerely,



Dr. Charlette Woolridge
County Administrator



SCOTT R. SIMPSON, P.E., MPA
County Administrator
srs@co.halifax.va.us

HALIFAX COUNTY BOARD OF SUPERVISORS

1050 Mary Bethune Street
P. O. Box 699
Halifax, VA 24558-0699
(434) 476-3300
Fax: (434) 476-3384
www.halifaxcountvva.gov

CALVIN "RICKY" SHORT - ED#1
CHAIRMAN
GARLAND B. RICKETTS - ED#7
VICE CHAIRMAN

LARRY D. ROLLER - ED#2
H. W. H. PANNELL - ED#3
RONNIE DUFFEY - ED#4
DEAN THROCKMORTON - ED#5
STANLEY BRANDON - ED#6
W. BRYANT CLAIBORNE - ED#8

December 06, 2023

Dr. Tamarah Holmes
Director, Office of Broadband
Virginia Department of Housing & Community Development
VATI Program
600 East Main Street, Suite 300
Richmond, Virginia 23219

RE: Project Application Support FY2024 VATI
Match Commitment

Dear Dr. Holmes:

Halifax County is participating in a regional VATI application this year in collaboration with the Southside Planning District Commission and EMPOWER Broadband. This project will provide reliable broadband infrastructure to our Region and is essential to the survival of our communities. The Southside Planning District Commission will be the applicant for this FY2024 VATI application. Broadband services with adequate speeds and ISP follow through is vital to our region and specifically Halifax County

Please be advised that Halifax County will provide up to \$1,747,171 in matching funds for the application. With up to \$942,532 being committed to previously funded CAF-II areas in the application where construction has not begun and up to \$804,639 being committed to areas in the application determined to be unserved or underserved by Broadband Equity, Access, and Deployment (BEAD).

Thank you for your consideration and please let me know if you require additional documentation or have questions regarding our County's participation.

Sincerely,

Scott R. Simpson, PE, MPA
County Administrator



H. Wayne Carter III
County Administrator
Emergency Services Director

Mecklenburg County Board of Supervisors

Post Office Box 307 • Boydton, Virginia 23917

BOARD OF SUPERVISORS

Glenn Barbour
Chairman
Jim Jennings
Vice-Chairman
Brenda Blackwell
David Brankley
Andy Hargrove
Charles Jones
Claudia H. Lundy
Tom Tanner
Sterling Wilkinson

December 13, 2023

Dr. Tamarah Holmes
Director, Office of Broadband
Virginia Department of Housing and Community Development
VATI Program
600 East Main Street, Suite 300
Richmond, Virginia 23219

RE: Letter of Support

Dear Dr. Holmes:

Mecklenburg County is participating in a regional VATI application this year in collaboration with the Southside Planning District Commission and EMPOWER Broadband. This project will provide reliable broadband infrastructure to our Region and is essential to our communities. The Southside Planning District Commission will be the applicant for this FY 24 VATI application.

Please be advised that Mecklenburg County will provide up to \$2,179,697 in matching funds for the application. With up to \$1,875,675 being committed to previously funded CAF-II areas in the application where construction has not begun and up to \$304,022 being committed to areas in the application determined to be unserved or underserved by Broadband Equity, Access, and Deployment (BEAD).

Thank you for your consideration and please let me know if you require additional documentation or have questions regarding our county's participation.

Sincerely,

H. Wayne Carter, III
County Administrator



December 13, 2023

Tamarah Holmes, Ph.D
Director, Office of Broadband
Virginia Department of Housing and Community Development
600 East Main Street, Suite 300
Richmond, Virginia 23219

RE: 2024 VATI Application from Empower

Dear Ms. Holmes:

Dominion Energy Virginia ("Dominion") is pleased to have been a party to several Memoranda of Understanding with Empower, the City of Emporia, and the counties of Mecklenburg, Greensville, Halifax, and Brunswick (each, a "Participating County").

Dominion, Empower, and our electric cooperative partners have developed a unique approach for achieving universal broadband access with individual Counties, and through broader, regional approaches. Dominion's participation in each of these projects will be pursuant to, and in a manner consistent with the provisions of, Virginia Code § 56-585.1:9 (the "Utility Leverage Statute").

This letter confirms Dominion's support for the applications to the 2024 Virginia Telecommunication Initiative to be submitted by Empower and our Participating County partners named above. Dominion's specific investments that will support each proposed project will be set forth in petitions under the Utility Leverage Statute that will be submitted to the State Corporation Commission ("SCC"). Dominion's participation in each project, and its specific level of related investment, will be subject to the approval of the SCC and the terms set forth in the SCC's Final Order related to each project.

Sincerely,

David F Walker

David F. Walker
Director, DEV Strategic Customer Programs



Mid-Atlantic Broadband Communities Corporation

December 12, 2023

Dr. Tamarah Holmes
Director, Office of Broadband
Virginia Department of Housing and Community Development
VATI Program
600 East Main Street, Suite 300
Richmond, Virginia 23219

Dear Dr. Holmes:

The Mid-Atlantic Broadband Communities Corporation (MBC) is pleased to offer this letter of support to Southside Planning District Commission and EMPOWER Broadband's application for VATI funding in the 2024 grant round.

MBC was formed in 2004, in part because of the strong support of the electric cooperatives in Virginia, who recognized the need to have an open-access fiber optic network that could serve as an economic development catalyst and help improve middle mile access throughout rural southern Virginia. In the last few years as the electric cooperatives took another leadership position and started to build new business ventures to supply critical last mile broadband connections, Mecklenburg Electric (MEC) and their Empower subsidiary were first in line to partner with MBC once again to utilize the middle mile network to enable their last mile network plans and extend their critical services to more of our rural residents.

MBC and MEC/Empower have worked hand in hand over the last few years to leverage the middle mile fiber network made possible by investments from the Commonwealth of Virginia and MBC is delighted to be able to support the MEC/Empower VATI application.

MBC is proud to support MEC/Empower broadband project that will provide universal coverage in the region, and we appreciate all of your support to make this project a reality for the citizens of southern Virginia.

Sincerely,

A handwritten signature in black ink, appearing to read "Tad Deriso", is written over a light blue horizontal line.

Tad Deriso
President & CEO



County of Brunswick

OFFICE OF THE ECONOMIC DEVELOPMENT DIRECTOR

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

December 12, 2023

Dr. Tamarah Holmes
Director, Office of Broadband
Virginia Department of Housing and Community Development
VATI Program
600 East Main Street, Suite 300
Richmond, Virginia 23219

Dr. Holmes:

The County of Brunswick is writing to express our support for the Southside Planning District Commission's Universal Broadband Coverage Initiative to provide broadband access across the Region. Reliable broadband infrastructure is essential to the survival of our communities. It expands educational and employment opportunities, enhances healthcare, and greatly improves the quality of life for our residents. This letter serves as an official notice that the County of Brunswick wholeheartedly supports this effort.

Brunswick County having access to Universal Broadband Coverage will help with the attraction of several major projects and also help propel our Board of Supervisor's Vision 2035 which specifically outlines our innovative strategies to make Brunswick County a premier location of choice for economic growth and development. Universal Broadband Coverage can play an integral role in the revitalization of Brunswick County.

Disconnected communities struggle to retain existing businesses due to slow, sporadic, or limited broadband services. Broadband is a necessity in the twenty-first century economy and it is beyond time to make internet access available to all citizens in rural Southside Virginia.

We are excited about the Southside Planning District Commission's Universal Broadband Coverage and what it would mean to the citizens of Brunswick County. If you have questions, or need additional information, feel free to contact me at 434-848-3107 or via email at areynolds@brunswickco.com.

Sincerely,

Alfreda Jarrett Reynolds

Director of Economic Development



November 30, 2023

Dr. Tamarah Holmes
Director, Office of Broadband
Virginia Department of Housing and Community Development
VATI Program
600 East Main Street, Suite 300
Richmond, Virginia 23219

Dear Dr. Holmes:

The Industrial Development Authority of Brunswick County is writing to express our support for the Southside Planning District Commission's Universal Broadband Coverage Initiative to provide broadband access across the Region. Reliable broadband Infrastructure is essential to the survival and growth of our communities. It expands educational and employment opportunities, enhances healthcare, and greatly improves the quality of life for our residents. We strongly need universal Broadband Coverage for all of our citizens. We whole-heartedly support any effort that will bring broadband service to Brunswick County.

Sincerely,



Gloria Menyweather-Woods
Chairperson, Brunswick County Industrial Development Authority

ENNIS JONES
County Seat
TERESA DUNAWAY
Red Oak / Wylliesburg
GLORIA TALBOTT
Drakes Branch
R. B. "JAY" GEORGE
Keysville

Charlotte County Public Schools

ROBBIE MASON, SUPERINTENDENT
P.O. BOX 790 • 250 LEGRANDE AVENUE
CHARLOTTE COURT HOUSE, VIRGINIA 23923
434/542-5151 FAX 434/542-4261

R. "SCOTTY" HAMLETT
Cullen / Red House
ELISE GREEN
Aspen / Phenix
JON BERKLEY
Bacon / Saxe
DANA L. RAMSEY
Clerk of Board

December 13, 2023

Dr. Tamarah Holmes
Director, Office of Broadband
Virginia Department of Housing and Community Development
VATI Program
600 East Main Street, Suite 300
Richmond, Virginia 23219

RE: Letter of Support

Dear Dr. Holmes:

We are writing to express our support for the Southside Planning District Commission's VATI application for expanding broadband access in the county. Broadband access can greatly improve citizens' access to education, healthcare, employment opportunities, and public services, thereby improving citizens' quality of life and their ability to compete and prosper. While Charlotte County's topography and low population density make universal broadband access a challenge, it does not diminish our citizens' need for that access.

As Superintendent for Charlotte County Public Schools, I have seen first-hand how our students have been impacted by not having broadband access in our area. Reliable broadband is necessary to achieve equity for the students within our county as well as equity between our county's students and students from other divisions. Lack of broadband access diminishes our students' ability to access information, apply to colleges, seek financial aid, and enroll in virtual courses such as Physics and Calculus. Students need reliable internet to be successful in such courses that we are not able to staff in a traditional in-person manner. We are far behind other localities in our ability to offer our students broadband internet options at home. It is my belief that our students should not be penalized for where they live and should be afforded the same opportunities as students in other areas that have access to reliable broadband.

We recognize the importance of providing broadband access to citizens in Charlotte County. The proposed broadband expansion will increase educational opportunities and economic growth locally and regionally. The proposed project utilizing a VATI Grant can help our citizens, our businesses, and our community grow and prosper. Please consider their application and know we will stand in support of their efforts.

Sincerely,

A handwritten signature in black ink, appearing to read "Robbie W. Mason". The signature is fluid and cursive, with a long horizontal line extending to the right from the end of the name.

Robbie W. Mason
Superintendent
Charlotte County Public Schools



December 12, 2023

Dr. Tamarah Holmes
Director, Office of Broadband
Virginia Department of Housing and Community Development
VATI Program
600 East Main Street, Suite 300
Richmond, Virginia 23219

Dear Dr. Holmes,

Greenville County, is fully supportive of SPDC's VATI grant application to expand Broadband capabilities to vital communities in the region. At this time, the rural areas of Virginia have a limited access to broadband. It is essential to have access for residents, workforce training, small businesses and industrial development. The lack of broadband access creates vulnerability in our efforts to attract new investment into the state.

Greenville County has been a strong proponent of broadband expansion. Working with neighboring localities and Empower Inc., the development of broadband capabilities to this region will enhance Virginia and all economic development efforts, leveraging a strong partnership to recruit top companies to the region.

Investment in broadband infrastructure is both an objective of Goal 4 and a performance measure under Goal 5 of the Comprehensive Economic Development Strategy of the Crater Economic Development District, of which Greenville County is a member. These goals are to (4) encourage and facilitate the provision of well planned, state-of-the-art public infrastructure that will attract higher- wage employers and to (5) enhance the innovation/information technology ecosystem.

Should you have any questions about our support, please don't hesitate to contact me.

Sincerely,

Natalie B. Slate

Natalie B. Slate, Director of Economic Development
Greenville County

Dr. Charlette T. Woolridge
County Administrator

Gary. L. Cifers
Assistant County Administrator

Russell Slayton
County Attorney



Belinda Astrop
Chair
Election District 1

James Brown
Vice-Chair
Election District 2

William Cain
Election District 3

Tony Conwell
Election District 4

December 13, 2023

Dr. Tamarah Holmes
Director, Office of Broadband
Virginia Department of Housing & Community Development VATI Program
600 East Main Street, Suite 300
Richmond, VA 23219

Dear Dr. Holmes:

I write this letter in full support of EMPOWER'S Broadband application for a FY2024 DHCD Virginia Telecommunication Initiative (VATI) broadband grant to secure funding to build a fiber network for all unserved and underserved areas within Greenville County. The residents and businesses in portions of our locality struggle to receive broadband speeds of 100/20 Mbps.

I am confident their aggressive strategy will provide highspeed broadband to the Greenville County area and across Southside Virginia. We are also aware that EMPOWER's solution will immediately provide 100Megabits per second speeds as recommended by the Treasury Department in its most recent guidance on broadband. Accordingly, we enthusiastically support Mecklenburg Electric Cooperative and EMPOWER'S Broadband long-term fiber solution.

EMPOWER's VATI application is an effort made by Greenville County where broadband capability is severely limited. Like you, we regularly hear of the impacts and limitations on educational opportunities, economic development, tourism, medical resources, as well as personal growth. Together, we must create lasting solutions to shatter the overwhelming digital divide experienced in this region of the Commonwealth.

In closing, I greatly appreciate your serious consideration in approving EMPOWER's grant application. Not only will the award of this funding sustain the future of advanced broadband services in the County's footprint, it will also promote future economic stability for our families and businesses.

Sincerely,

A handwritten signature in black ink, appearing to read "Linwood E. Pope, Jr.", written in a cursive style.

Linwood E. Pope, Jr.
Director of Planning



1100 Confroy Drive
Suite 1
South Boston, VA 24592

**BRIGHTER
BOLDER
BUSINESS**

December 4, 2024

Dr. Tamarah Holmes
Director, Office of Broadband
Virginia Department of Housing and Community Development
VATI Program
600 East Main Street, Suite 300
Richmond, Virginia 23219

Dear Dr. Holmes,

The Halifax County Industrial Development Authority is in full support of the Southside Planning District Commission's application to the 2024 VATI funding round in pursuit of universal fiber broadband coverage in Southside Virginia.

The Mission of the Industrial Development Authority of Halifax County, Virginia is to increase employment and improve economic growth by retaining and expanding our current businesses and attracting new businesses. Reliable fiber broadband connectivity is essential to recruit new businesses and workforce to Halifax County. While large strides have been made, with significant assistance from past VATI rounds, the ability to target specific unserved and underserved address points as identified by the Broadband Equity Access and Deployment Program, provides Halifax County the opportunity to fill gaps in broadband access.

Broadband access is critical to the quality of life in Halifax County. The proposal for universal coverage across the County will benefit educational opportunities, access to health care, and economic growth. I thank you for your consideration of this application.

Sincerely,

A handwritten signature in black ink, appearing to read "V. Kristy Johnson", is written over a light blue horizontal line.

Kristy Johnson
Executive Director





HALIFAX
COUNTY
PUBLIC SCHOOLS

1030 Mary Bethune Street, Suite 100
P. O. Box 1849
Halifax, Virginia 24558

(434) 476-2171
Fax (434) 476-1858
www.halifax.k12.va.us

Dr. Amy D. Huskin
Superintendent of Schools

(434) 476-3120
Fax (434) 476-3121
ahuskin@halifax.k12.va.us

November 30, 2023

Dr. Tamarah Holmes
Director, Office of Broadband
Virginia Department of Housing and Community Development
VATI Program
600 East Main Street, Suite 300
Richmond, Virginia 23219

RE: Letter of Support

Dear Dr. Holmes:

Halifax County Public Schools is writing to express its support for the Southside Planning District Commission's Universal Broadband Coverage Initiative to provide broadband access across the Region. Reliable broadband infrastructure is essential to the survival of our communities. It expands educational and employment opportunities, enhances healthcare and greatly improves the quality of life for our residents.

Our region is faced with real challenges of having our students and their families obtain affordable access to broadband internet services. Our instructional methods and technology continue to progress to more and more on-line learning and resources, and without broadband access, many of our students and their families will continue to fall behind the digital divide.

Sincerely,

Dr. Amy Huskin
Superintendent of Schools

December 5, 2023

Dr. Tamarah Holmes
Director, Office of Broadband
Virginia Department of Housing and Community Development
VATI Program
600 East Main Street, Suite 300
Richmond, Virginia 23219

Dr. Holmes:

The Mecklenburg County Office of Economic Development is writing to express our support for the Southside Planning District Commission's Universal Broadband Coverage Initiative to provide broadband access across the Region. Reliable broadband infrastructure is essential to the survival of our communities and our growth. It is essential for attracting new industries, as well as people to work in those new industries. It expands educational and employment opportunities, enhances healthcare, and greatly improves the quality of life for our residents. We strongly support the efforts of the Southside Planning District Commission and ask that you do as well.

Sincerely,



Angie D. Kellett
Director of Economic Development
Mecklenburg County, VA



SOUTHSIDE VIRGINIA COMMUNITY COLLEGE

November 30, 2023

Dr. Tamarah Holmes
Director, Office of Broadband
Virginia Department of Housing and Community Development
VATI Program
600 East Main Street, Suite 300
Richmond, Virginia 23219

Dear Dr. Holmes:

Southside Virginia Community College (SVCC) is writing to express our support for the Southside Planning District Commission's Universal Broadband Coverage Initiative to provide broadband access across the Region. Reliable broadband infrastructure is essential to the survival of our communities. It expands educational and employment opportunities, enhances healthcare, and greatly improves the quality of life for our residents.

SVCC serves over 3,000 students in a 4,200 square mile service area covering 10 counties. The availability of broadband access to our students is crucial for their success. In a geographic area that already deals with many barriers, this project will be a real boost.

Thank you for your consideration of this important project.

Sincerely,

Quentin R. Johnson, Ph.D.
President

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
Southern Virginia Higher Education Center .. 820 Bruce Street, South Boston, VA 24592 434-572-5451
Estes Community Center 316 N. Main Street, Chase City, VA 23924 434-372-0194

Lake Country Advanced Knowledge Center ... 118 E. Danville Road, South Hill, VA 23970 434-955-2252
Occupational Technical Center Pickett Park, 1041 W. 10th Street, Blackstone, VA 23824 . . 434-292-3101
Cumberland County Community Center 1874 Anderson Highway, Cumberland, VA 23040 804-492-9275



VCU Health

Community Memorial Hospital

Community Memorial Hospital

1755 North Mecklenburg Avenue
South Hill, Virginia 23970

O 434.447.3151

F 434.584.5455

December 12, 2023

Dr. Tamarah Holmes
Director, Office of Broadband
Virginia Department of Housing and Community Development
VATI Program
600 East Main Street, Suite 300
Richmond, Virginia 23219

Dear Dr. Holmes:

VCU Health-Community Memorial Hospital is writing to express our backing of the Southside Planning District Commission's Universal Broadband Coverage Initiative to provide broadband access across the Region. Dependable, consistent broadband infrastructure is essential to the survival of our communities.

An expansion would provide educational and employment opportunities, enhance healthcare, and would greatly advance the quality of life for our residents. Because of the pandemic and trying to maintain public safety, we have worked to try and provide virtual care to our residents, but many residents do not have reliable internet coverage to make this a reality for many in our community. This coverage would be critical to help Southside Virginia have a healthier community, as it is one of the least healthy regions in the Commonwealth.

Additionally, as we try to recruit trained medical professionals to the area, internet coverage is critical to recruit and retain these professionals to live and work in this underserved area. It is critical that rural underserved areas have this access to make it a better option for residing in this area.

I support this application and would welcome broadband expansion to this region.

Sincerely,

A. Todd Howell, FACHE
Vice President for Professional Services



SOUTH CENTRAL REGION

285-C George Washington Highway
P.O. Box 580
Charlotte Court House, Virginia 23923
Phone: (434) 542-5871

November 30, 2023

Dr. Tamarah Holmes
Director, Office of Broadband
Virginia Department of Housing and Community Development
VATI Program
600 East Main Street, Suite 300
Richmond, Virginia 23219

Dear Dr. Holmes:

The South Central Workforce Development Board is writing to express our support for the Southside Planning District Commission's Universal Broadband Coverage Initiative to provide broadband access across the Region. Reliable broadband infrastructure is essential to the survival of our communities. It expands educational and employment opportunities, enhances healthcare, and greatly improves the quality of life for our residents.

Sincerely,

A handwritten signature in black ink that reads "Terra Bailey Napier". The signature is fluid and cursive.

Terra Bailey Napier
Executive Director, South Central Workforce Development Board

Success

Thank you. Your data has been submitted for review.

Broadband Data Collection System

Help | Kim W

Submissions Dashboard / Submission Overview

The filing deadline for June 30, 2023 data is extended to September 15, 2023. Filers should use updated release 3.2 Fabric files to report their fixed availability data.

Submission Overview

SUBMISSION CERTIFIED

ERIN: 0027843333 | Service Provider | EMPOWER Broadband, Inc.

Data as of June 30, 2023

Biannual Filing Window

DATA AS-OF DATE	WINDOW OPEN
Jun 30, 2023	Jul 3, 2023

TODAY'S DATE	WINDOW CLOSE
Sep 13, 2023	Sep 15, 2023

WINDOW STATUS
OPEN

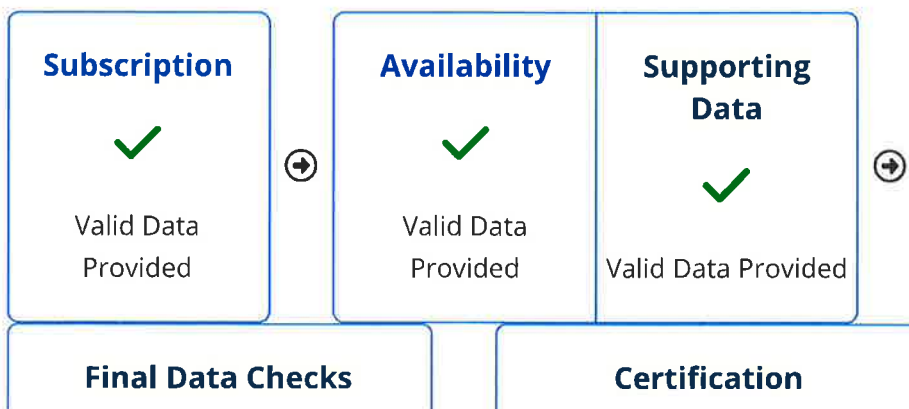
FILING STATUS
Original - Certified


Fixed Data Requests

Fixed Challenges
1

Submission Steps

[Decertify Submission](#)



Verification Complete  Certified

Fixed Submission Data

Service	Subscription Data		Availability Data	
	Subscribers	Files Currently Processing (0)	Locations	Supporting Data
Fixed Broadband	4,405		8,179	✓ 2 of 2
Copper	612		1,221	✓ 1 of 1
Fiber to the Premises	3,793		6,958	✓ 1 of 1
Fixed Voice	1,327			
Non-ILEC	1,327			

Broadband Data Collection System

[Help](#) | [D Long](#)

[Submissions Dashboard](#) / [Submission Overview](#)

Submission Overview

SUBMISSION CERTIFIED

FRN: 0027843333 | Service Provider | EMPOWER
Broadband, Inc.

Data as of December
31, 2022

Biannual Filing Window

DATA AS-OF DATE **WINDOW OPEN**
Dec 31, 2022 Jan 3, 2023

TODAY'S DATE **WINDOW CLOSE**
Dec 12, 2023 Mar 1, 2023

WINDOW STATUS
CLOSED

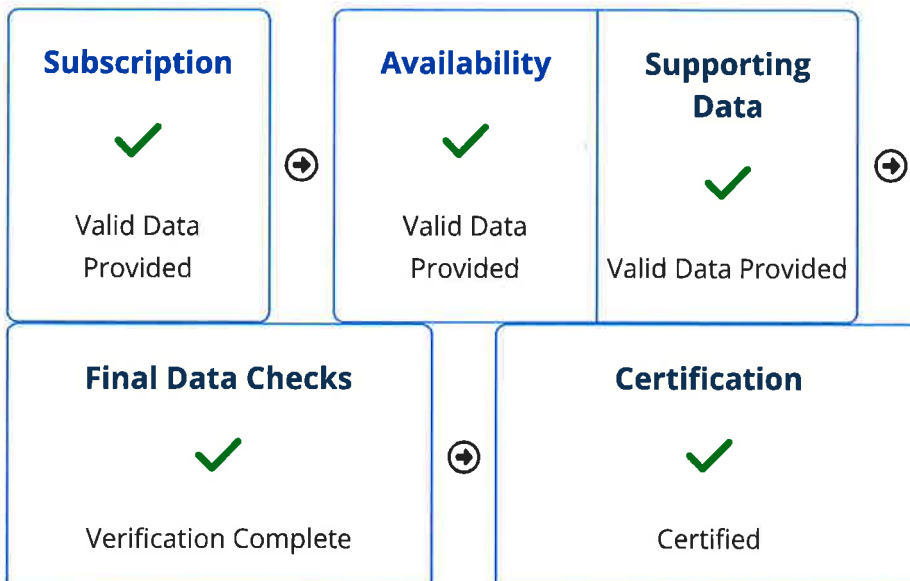
FILING STATUS
Original - Certified

Fixed Data Requests

Fixed
Challenges
0

Submission Steps

[Decertify Submission](#)



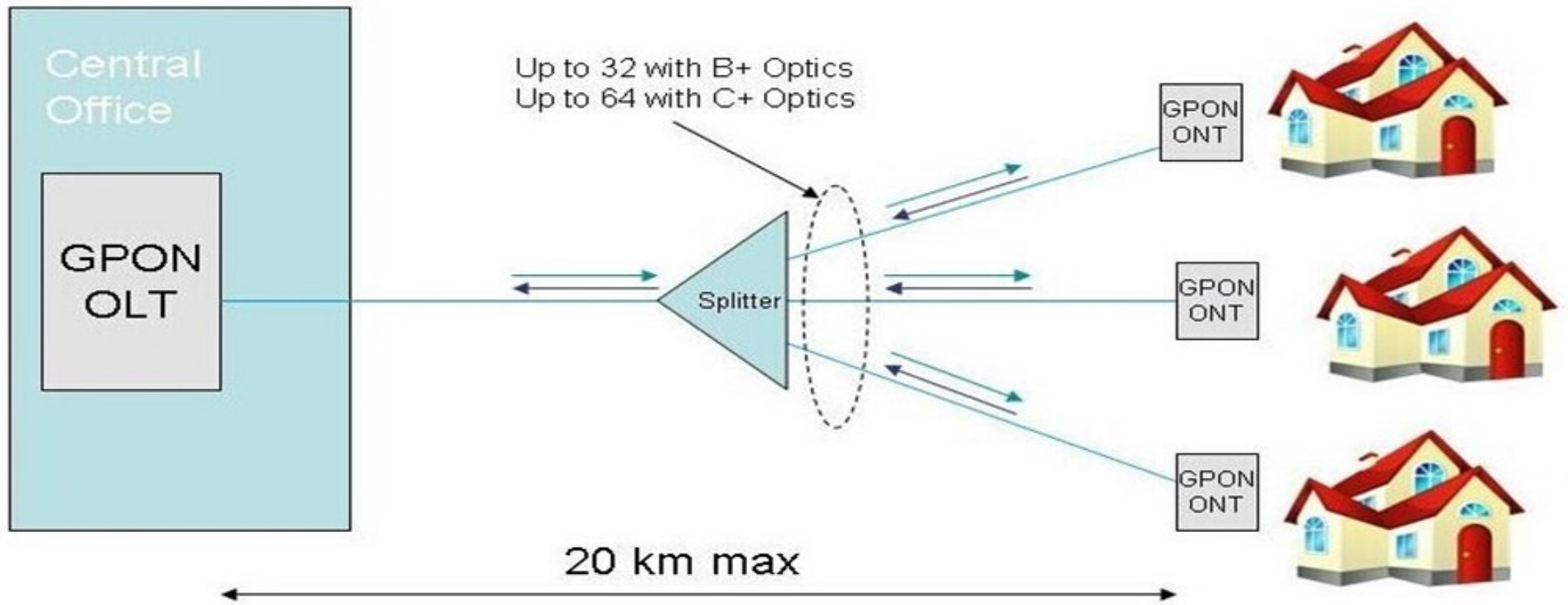
Fixed Submission Data

Service	Subscription Data	Availability Data	
	Files Currently Processing (0)	Files Currently Processing (0)	
	Subscribers	Locations	Supporting Data
Fixed Broadband	3,886	18,435	✓ 2 of 2
Copper	661	5,789	✓ 1 of 1
Fiber to the Premises	3,225	12,646	✓ 1 of 1
Fixed Voice	1,198		
Non-ILEC	1,198		

Continued Narrative

Southside Regional Fiber Broadband Phase 3 Project

- 1) Question 9: Bandwidth Sharing Graphic
- 2) Question 16: Project Management Team Table
- 3) Question 19: Responses for d. and e.



Name	Title	Project Role	Project Responsibilities
Deborah Gosney	Executive Director, Southside Planning District Commission	Project Liaison	Project Oversight and serves as a liaison with the participating Counties
Scott Simpson	County Administrator, Halifax County	Project Liaison	Project Oversight and serves as a liaison with Halifax County
Daniel Whitt	County Administrator, Charlotte County	Project Liaison	Project Oversight and serves as a liaison with Charlotte County
Wayne Carter	County Administrator, Mecklenburg County	Project Liaison	Project Oversight and serves as a liaison with Mecklenburg County
Leslie Weddington	County Administrator, Brunswick County	Project Liaison	Project Oversight and serves as a liaison with Brunswick County
Dr. Charlette Woolridge	County Administrator, Greenville County	Project Liaison	Project Oversight and serves as a liaison with Greenville County
John C. Lee, Jr.	President and CEO Mecklenburg Electric Cooperative (MEC) and EMPOWER Broadband	Corporate management	Project Oversight and serves as liaison with EMPOWER Broadband and Mecklenburg Electric Cooperative (MEC)
Casey Logan	Chief Operating Officer, EMPOWER Broadband	Corporate management	Monitor overall progress of project
Dwayne Long	Vice President of Information Technology, MEC and COO EMPOWER Broadband	Project Manager	Assist in overall progress of project
David Lipscomb	Vice President of Member and Energy Services, MEC	Project Marketing	Advance Project Marketing Program
Carol Ann Jones	Vice President of Finance and Accounting, MEC	Grant Accounting	Tracks grant expenses and prepares reports

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

ATTACHMENT 18: Continued Narrative

19. Commonwealth Priorities (Up to 50 points)

Additional points will be awarded to proposed projects that reflect Commonwealth priorities. If applicable, describe the following:

d. The co-applicant's efforts to mitigate supply chain constraints, including labor shortages and order-to-delivery delays on telecommunications materials required to construct broadband networks.

EMPOWER Broadband's material procurement department has worked diligently to ensure that EMPOWER crews have plenty of material on hand to continue construction efforts through a time where material sourcing and supply chain issues have become the new standard. EMPOWER Broadband continues to have well over 500 miles of fiber, on hand, in the equipment warehouse along ample stock strategically scheduled throughout the year. EMPOWER also has contract purchase agreements with several companies to provide materials such as fiber, vaults, cans ADSS single/double jackets, etc. on a scheduled and routine basis to keep supplies well stocked. EMPOWER also has an agreement with its construction contractor for the 2022-2023 VATI awards recently executed to include an agreed upon inventory of supplies for projects currently underway and in the future.

e. The applicant's and co-applicant's efforts to promote broadband adoption, including, but not limited to: telehealth, smart farming, e-entrepreneurship, and distance learning.

EMPOWER Broadband and its county/PDC partner's efforts to promote broadband adaptation tie in closely with its digital literacy efforts. Through marketing materials, social media posts, community events, etc., EMPOWER has stressed the multiple resources that are now available to county residents, thanks to the new broadband services that are available. These resources include telehealth options, not only through health insurance applications available nationwide, but also local options through hospital providers such as Sentara, VCU Community Memorial Hospital, Centra and Duke.

Being a predominately rural community, the implementation of these services will allow agricultural agencies such as Farm Service Authority, Soil and Water Conservation Districts, and Virginia Cooperative Extension Offices to promote remote learning seminars, practices, and tools that are now available to better optimize one's operations. These benefits can offer resources for efficiency in producing their product as well as offering a wider spectrum of platforms on which they can market their goods and promote their businesses.

Remote educational demand has also come to the forefront in recent years, as a result of the impact of COVID-19. Numerous families across our service territory contact us on a regular basis stressing the need for high-speed, reliable internet for their families to attend classes and complete their school activities. Being that many of our residents live in sparsely populated communities, community anchor institutions, such as local libraries, are often far enough away that they become a burden to travel back and forth to in an economical fashion.

EMPOWER



BROADBAND

Powered by MEC

2024 MARKETING PLAN

EMPOWER BROADBAND, INC.
11633 Hwy 92 West, Chase City, VA 23924

Table of Contents

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I. Executive Summary

EMPOWER Broadband, Inc. (EMPOWER) 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 (FTTP) to those unserved and underserved regions across MEC's service territory and its surrounding communities.

II. Marketing Plan Summary

1. The Business

Name: EMPOWER Broadband, Inc.

Structure: Wholly-owned subsidiary of Mecklenburg Electric Cooperative

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

Incorporated: 2019

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 over 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 add fiber facilities and a workforce that can capably design and implement fiber deployment. The MEC team has significant experience in line and fiber construction – having already strung portions of fiber to the offices, substations and across portions of six counties already. Additionally, MEC's IT team has experience in network and fiber-to-the-premise broadband.

Products/Services: EMPOWER provides middle-mile capacity, retail high-speed internet service, as well as voice over IP telephony, high-speed data services, and advanced cloud-based solutions, to nearly 5,000 accounts in the cooperative's service territory in Southside Virginia and northern North Carolina

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.

MEC continues planning fiber deployment to its remaining substations, as well as unserved and underserved routes extending from that backbone, while EMPOWER

seeks to secure funding for additional FTTP customers along and adjacent to those routes.

EMPOWER's long-term goal is to extend fiber throughout MEC's service territory and in surrounding communities.

3. The Market

EMPOWER's target market began with the members of MEC but has now expanded into areas served by Dominion Energy by utilizing their middle-mile fiber assets.

Currently, EMPOWER has the potential to serve nearly 17,500 customers throughout portions of Greenville, Brunswick, Mecklenburg, Charlotte, Halifax and Pittsylvania Counties. Current projects will increase that total to over 30,000 customers by 2025.

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

4. The Finances

Mecklenburg Electric Cooperative spent \$2.6 million dollars to build the fiber optic backbone across its utility infrastructure to connect its substations and district offices – 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 have, and will continue to be, pursued with grant funding from organizations, such as the Virginia Tobacco Region Revitalization Commission (VTRRC), The Virginia Telecommunication Initiative (VATI), Rural Digital Opportunity Fund (RDOF) 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

EMPOWER Broadband, Inc. provides middle-mile capacity, retail high-speed internet service, as well as voice over IP telephony, high-speed data services, and advanced cloud-based solutions, to nearly 5,000 accounts in the cooperative's service territory in Southside Virginia and northern North Carolina.

In April 2019, EMPOWER Broadband, Inc. joined forces with Buggs Island Telephone Cooperative, located in Bracey, Virginia, acquiring both its current telephone and broadband customers, who are mutual Mecklenburg Electric Cooperative members.

All broadband and telephone customers are now served by EMPOWER Broadband, Inc.

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 for 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, both teaching and learning will be transformed.
- Healthcare – By helping bring physicians state-of-the-art equipment to the rural healthcare facilities of Southside Virginia with FTTP that will deliver world class opportunities for remote patient care in the home, and with bandwidth that 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

Following the completion of the fiber backbone, which reaches 172 miles across MEC's service territory – connecting its substations, the three district offices (Emporia, Chase City and Gretna) and the headquarters' office, MEC and EMPOWER

will seek to secure additional funding sources to expand services from that initial backbone to serve our rural communities.

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.

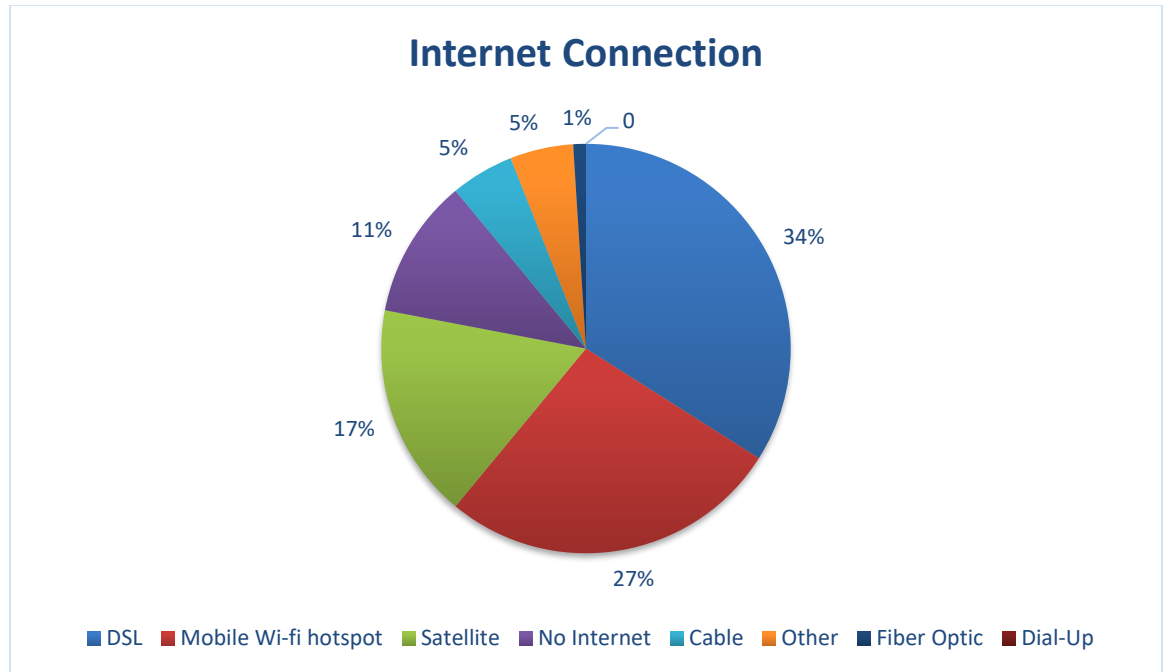
V. The Market

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 time, MEC has built a reputation of trust, commitment and service excellence among its membership. Today, the members of MEC are unable to acquire affordable, dependable, and sufficient high-speed internet services. MEC is uniquely situated in the unserved and underserved 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 assets, a skilled and capable workforce, an established potential customer base, and an established reputation for excellent service and commitment, EMPOWER 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 services are too slow, latency laden, and unreliable for modern applications while DSL is well oversubscribed. With only one percent of our rural members having access to fiber-optic internet service, it was imperative that MEC share with its membership high-speed internet using the fiber-optic cables installed along its system.

3. Target Market

Following the initial backbone phase, MEC has the potential to serve a minimum of 31,859 accounts across the following six counties, which MEC currently serves:

- * Pittsylvania – 6,592
- * Halifax – 6,021
- * Charlotte – 1,135
- * Mecklenburg – 10,070
- * Brunswick – 3,705
- * Greenville – 2,603

**Totals as of January 2022*

It should be further noted that, in partnership with Dominion Energy, EMPOWER has begun providing FTTP services to those outside of its service territory as well.

MEC/EMPOWER has deployed over 1,342 miles of fiber across portions of Brunswick, Charlotte, Halifax, Mecklenburg, Greenville, and Pittsylvania Counties in Virginia and in Warren County, North Carolina.

Over the course of three years, this total will increase to over 3,000 miles and pass over 30,000 homes by 2025 throughout these same counties.

4. Marketing Strategy

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 & along fiber construction routes
Rack Cards	Member & Energy Services Team	Complete
Brochures	Member & Energy Services Team	Complete
Website	Member & Energy Services Team	Complete
Giveaway Items	Member & Energy Services Team	Complete
Branding Materials (shirts, tent, table cover, display stand)	Member & Energy Services Team	Complete
Promotional/Informational Events	Member & Energy Services Team	As Needed

VI. The Finances

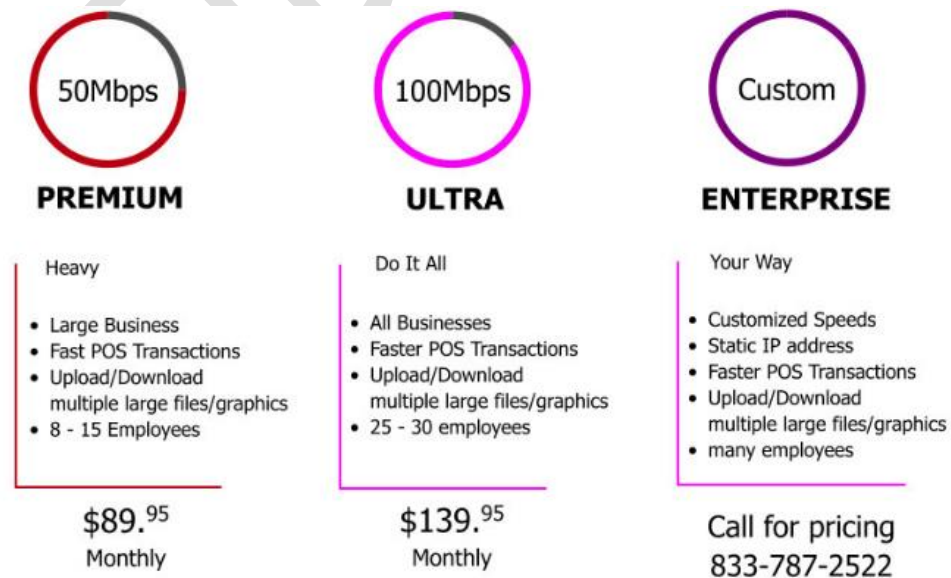
1. Price

Residential pricing structures are as follows:



Add phone service to any data plan for only \$30/Monthly per line, plus taxes and fees.

Commercial pricing structures are as follows:



Add phone service to any data plan for only \$34.95/Monthly per line, plus taxes and fees.

2. Expected Sales

Per EMPOWER's VTRRC grant funding guidelines, MEC had to provide FTTP services to a minimum of 1,300 customers by March 2021, which is a 45.3% take rate. Those guidelines have been met and we continue to use those same projections for all additional projects. When combining current availability with future projects expected throughout 2025, at an expected take rate of 45.3%, an anticipated 12,674 FTTP customer connections are projected in total over the next three years.

EMPOWER's market research, in addition to current EMPOWER FTTP averages, indicates the average take rate of 45.3% is 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.

4. Crisis Management

During the event of unexpected and disruptive events, such as the ones experienced with COVID-19, both Mecklenburg Electric Cooperative and EMPOWER Broadband, Inc., will take the necessary precautions to ensure the safety of its employees, customers and the public -- first and foremost. With that said, we understand that dependable, high-speed internet access is needed more than ever for our community to thrive. Our crews, as well as contract crews, have continued to work around the clock and will continue to do so as long as government restrictions permit. Keeping in mind that utilities are "essential businesses," we must continue to perform daily work to ensure our members and customers have access to electricity and communications mediums during any crisis.

The following precautions will be put back into place for Mecklenburg Electric Cooperative and EMPOWER Broadband, Inc. should another pandemic arise:

- **NO ONE** except for MEC/EMPOWER employees and directors will be allowed in any of the cooperative's facilities, including family members.
- If anyone in an employee's home is sick or running a temperature, the direct supervisor must be notified, and the employee stays home until the person who is sick has been at least 24 hours without a fever.
- All employees must maintain the 6-foot social distancing standard and not congregate in close quarters.

- There is no gathering of more than 10 employees and only then if absolutely necessary. We recognize that outside employees work in the general vicinity of each other; and even then, employees must distance whenever possible.
- Avoid physical contact with co-workers.
- Cleaning services will be doubled at all four facilities with emphasis on disinfectant wipe downs on door knobs, push-bars and other areas that get heavy hand contact.
- All business travel requiring airlines will be prohibited. Personal travel is also strongly discouraged. Supervisor must be notified of all travel outside of region.
- Bottles of disinfecting hand cleaner are available throughout each district office. Employees are encouraged to use frequently.
- There will be limited interoffice travel and interaction among the districts and the EMPOWER Headquarters in Bracey.
- Lobbies are closed to all traffic and will remain closed until further notice.
- Employees are encouraged to bring their lunches and limit interaction with others at restaurants or food service establishments during lunch.
- Outside employees are to limit any interaction with others while in the field. If approached by a member/customer or other individual, employee will politely let them know that they must keep a safe distance and that they can contact the office by phone for assistance.
- Outside employees will avoid coming into the buildings whenever possible.
- Home fiber installs will continue at the discretion of the independent contractor. The contractor will pick up the equipment needed outside the back door, and return all paperwork using outside drop box.
- EMPOWER technicians are dispatched from home for new phone and internet installs and trouble calls and will pick up equipment in the same manner as the independent contractor.
- All deliveries to offices are to be delivered to outside dock and/or porch. No entry!
- Any employee experiencing pandemic related symptoms are to stay at home until symptoms have ceased or as per CDC guidelines.



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2024 LECAP – ACP DOORKNOB HANGER

EMPOWER BROADBAND, INC.
11633 Hwy 92 West, Chase City, VA 23924

Line Extension Customer Assistance Program LECAP

LECAP is designed to extend broadband networks in rural communities and bring high speed internet connections to those homes with low to moderate incomes.

Who benefits from LECAP?

EMPOWER will cover up to 500 feet of the cost to extend broadband service from the main service line to the customer's home. Service extensions in excess of 500 feet will be charged \$6.00 per foot to the customer. If the measurement is over 500 feet, this is when LECAP funds should be requested by the customer.

Eligibility

LECAP will cover 100% of the cost of extending broadband service to qualifying households. Eligibility is determined by annual household income and adjusted based on where you live.

How do I apply?

More information about LECAP and to complete the LECAP application, visit www.dhcd.virginia.gov.lecap.

What do I do if I am approved?

If you qualify for LECAP funding, please reach out to us at 434-372-6156 so that we can proceed with bringing world-class broadband service to your home.

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empowermec.net

1-833-RURALBB

Affordable Connectivity Program (ACP)

The Affordable Connectivity Program (ACP) is an FCC program to help low-income households pay for internet service. The benefit will provide eligible households with a discount of up to \$30 per month towards broadband service.

How to Qualify for an ACP Discount

A household is eligible if a member of the household meets at least one of the criteria below:

- Your income is at or below 200% of the federal poverty guidelines
- Your household participates in other assistance programs.

Visit acpbenefit.org/how-to-apply/ for complete details and/or to apply. Once you are approved by the FCC, call EMPOWER at 1-833-RURALBB (787-2522) to complete the process.

The ACP Program is a federal government subsidy that reduces the customer's broadband internet access service bill and at the conclusion of the program, the household will be subject to the provider's undiscounted general rates, terms, and conditions if the household continues to subscribe to the service.

The ACP benefit is non-transferable and limited to one monthly internet discount per household. Please note: If the household becomes ineligible for the ACP, they will be responsible for paying all discounts unrecovered by EMPOWER.

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empowermec.net

1-833-RURALBB

Stage II Detailed Technical Submission

Date:

Applicant:

FRN:

State(s):

Performance Tier(s):

GENERAL GUIDANCE:

- The use of this template is optional and voluntary.
- This template does not supersede or modify any of the orders, public notices, rules, or policies that have been or will be adopted by the Commission for the Rural Digital Opportunity Fund and Auction 904.¹ See the Commission's Auction 904 website for more information, including a tutorial regarding the Stage II detailed technical submission: <https://www.fcc.gov/auction/904>.
- The long-form is meant to be detailed in nature and approaches an LLD (Low Level Design).
- This is a document submitted from one engineer to another engineer.
- We encourage the use of technically valid TERMINOLOGY.
- We encourage the use of precision language for technical terms.
 - Do not say priority or QoS; Use terms such as: DSCP, Diff Serv, TOS, etc.
 - Do not say routing protocols; Use terms such as: OSPF, IS-IS, EIGRP, BGP, etc.
 - Do not say traffic engineering; Use terms such as: MPLS, VPLS, VLANs, etc.
- This is a forward-looking – future-oriented document for the 10-year span of this program.
- Our questions are asking for the minimum. You can add more.
- Each question must be answered completely. There will be portions of your answers that may be repetitious and may have been used as part of an answer to other questions. This is expected. Answer each question completely where it is asked.
- **The spacing between questions below DOES NOT INDICATE THE DESIRED LENGTH OF YOUR ANSWER. Indeed, the blank lines merely represent a placeholder. LONGER ANSWERS ARE EXPECTED.**
- If an answer encompasses multiple technologies – please use separate paragraphs in your answers below to differentiate between how separate technologies or network designs are to be implemented. For example, one paragraph for fiber, a second for Cable and a third for fixed wireless when answering question 1a) for last-mile. Separate paragraphs could also be done if there are variations in the network due to differences such as state(s) in question 1c).
- Please add equipment and software vendor names for most answers that use equipment and software. Not every minor vendor name but the major or significant vendors.

¹Commission decisions adopting rules and policies for the Rural Digital Opportunity Fund and Auction 904, as well as detailed public notices outlining the procedures, terms, and conditions for the auction control and can be found on the Auction 904 website and through the FCC's Electronic Document Management System (EDOCs) database.

1. Overall Network Design. A long-form applicant, regardless of the technology (or technologies) it proposes to use, is expected to:

a) Describe the proposed last mile architecture(s), design, and technologies².

EMPOWER Broadband, Inc. (“EMPOWER”) a subsidiary of Mecklenburg Electric Cooperative (“MEC”), proposes a Fiber-to-the-Home (FTTH) architecture for the last mile using predominately Gigabit Passive Optical Network (GPON), and as needed, XGS-PON or Active Ethernet architectures. The physical facility will consist of Optical Line Terminals (OLTs), fiber optic cables/drops, optical splitters and the Optical Network Terminations (ONTs). The network will be sufficient to connect all existing census block business, school and residential locations with fiber capable of a nominal symmetrical 1 Gb/s connection.

OLTs will typically be located in existing Substation communications huts (alternatively, where density warrants, in new remote cabinets). All Dielectric Self-Supporting (ADSS) feeder and distribution fiber optic cables will be located on company owned poles in the supply space while the fiber optic drops will be installed in the pole designated communications space. Passive splitters will generally be distributed along the ADSS cable as 1:8 in combination with 1:4 (yielding a final split ratio of 1:32). Where bandwidth needs or customer demands warrant, XGS-PON (10Gb/s). NG-PON (10 or 100Gb/s) or Active Ethernet will be deployed - all three of these technologies are spectrally and physically compatible with GPON.

Standards & Installers for materials and equipment

Fiber Optic Cable	ITU G.652
Fiber Optic Cable Color Identification and Coding	ANSI/EIA-359-A
Optical Fiber Cable Color Coding	ANSI/TIA/EIA-598-C
Requirements for Optic Fiber & Optical Fiber Cable	GR-20-CORE
Ethernet Ring Protection Switching (ERPS)	ITU G.8032
Rapid Spanning Tree Protocol (RSTP)	IEEE 802.1w
Link Aggregation (LAG)	IEEE 802.3ad/802.1AX
Virtual Router Redundancy Protocol (VRRP)	RFC 5798 Version 3 for IPv4/IPv6
Transport Delay, Jitter Loss	Ciena 5160 ITU-T Y.1731
Transport Connectivity Fault Management	Ciena 5160 IEEE 802.1ag
Cable manufacturer	AFL, OFS, Prysmian or Commscope
Remote Cabinets	GR-487
Splitters	Telcordia GR-1221/1209/326
GPON	ITU G.984
XGS-PON	ITU G.9807.1
NG-PON	ITU-G.989
Active Ethernet	IEEE 802.3z/ae
Transport	Ciena 5160
CORE Routers	Cisco 4500
SCADA aggregation	Cisco IE4010
Splitter Manufacturer	Clearfield
GPON OLTs/ONTs integrated 10Gb/s manufacturer	Calix
Remote Cabinets	Calix ODC

All proposed materials and equipment (except XGS-PON/NG-PON) are not only well established within the broadband industry but also already installed and operational within the MEC/EMPOWER network. Additions required to fulfill the requirements of this RDOF commitment will be integrated into the existing

network. The following RDOF locations will be served as follows;

Access Location	Census Block	Aggregation (Substation or Other)	# Locations	Uplink
#1 VA-117-9303001	510259303001	Gasburg	411	2 x 10G
#2 VA-025-9303002	510259303002	Gasburg	316	2 x 10 G
#3 VA-025-9303003	510259303003	Gasburg	83	2 x 10G
#4 VA-025-9303004	510259303004	Gasburg	113	2 x 10G
#5 VA-025-9303005	510259303005	Gasburg	16	2 x 10G
#6 VA-081-8801011	510818801011	Belfield	934	2 x 10G
#7 VA-081-8801012	510818801012	Belfield	191	2 x 10G
#8 VA-081-8801013	510818801013	Belfield	68	2 x 10G
#9 VA-081-8802001	510818802001	Belfield	595	2 x 10G
#10 VA-083-9302023	510839302023	Crystal City	81	2 x 10G
#11 VA-083-9304002	510839304002	Omega	174	2 x 10G
#12 VA-117-9301011	511179301011	Beechwood	195	2 x 10G
#13 VA-117-9302011	511179302001	Beechwood	58	2 x 10G
#14 VA-117-9303001	511179303001	Beechwood	36	2 x 10G
#15 VA-117-9303002	511179303002	Beechwood	258	2 x 10G
#16 VA-117-9308001	511179308001	Omega	30	2 x 10G
#17 VA-143-0106001	511430106001	Mt. Airy	2	2 x 10G
#18 VA-595-8901001	515958901001	Belfield	16	2 x 10G
#19 VA-595-8901002	515958901002	Belfield	2	2 x 10G
#20 VA-595-8902004	515958902004	Belfield	22	2 x 10G

b) Describe the proposed middle mile/backhaul topology³, architecture, design, and technologies.

MEC/EMPOWER currently operates three (3) L3 Area 10 Gb/s Rings: Ring #1 has eight (8) Ciena 5160 Nodes with a two (2) Node collapsed 10Gb/s sub ring, Ring #2 has four (4) 5160 Nodes and Ring #3 has eight (8) 5160 Nodes with a one (1) Node 10 Gb/s sub ring. These L3 Area Rings are all linked together with a multi-10Gb/s fiber optic ring with four (4) of the 5160s serving as network Nodes. These nodes will not only provide for broad band but also the architecture is predicated on maximizing the reliability and availability for Mecklenburg Electric Cooperative’s Supervisory Control and Data Acquisition (SCADA) network. Eight (8) of the nodes will be interconnected with at least two (2) paths. In addition to the aforementioned nodes, EMPOWER will utilize Calix E7 nodes at other Substations.

- c) *Describe the proposed interconnection architecture, design, and technologies solution to connect to the Internet. This will include the likely service providers,⁴ link data-rate/size, locations, dual-homing, and multi-homing characteristics.*

EMPOWER presently has the following ‘First Mile’ data backhaul and Interconnecting links all derived via fiber:

Origination Location	Service or Rate (Gb/s)	Fiber Transport Provider – out of territory	Far End - Internet Provider
Chase City Business Office Ciena 5160	10 Gb/s	Mid-Atlantic Broadband Communications fiber ring network	Pixel Factory – Ashland, VA
Gasburg Substation Hut Ciena 5160	10 Gb/s	Mid-Atlantic Broadband Communications fiber ring network	Pixel Factory – Ashland, VA

Shortest Path First (OSPF) routing protocol improved efficiency between the existing links. All equipment at Pixel Factory is owned, maintained and operated by Pixel Factory.

- d) *Describe the proposed architecture that will be used to provide voice service.⁵ Describe whether the proposed voice services will: 1) be internally provided, 2) use a managed voice service provider, 3) use a voice over the top service, or 4) use another type of voice service.⁶*

Voice Service Architecture (MOMENTUM TELECOM)

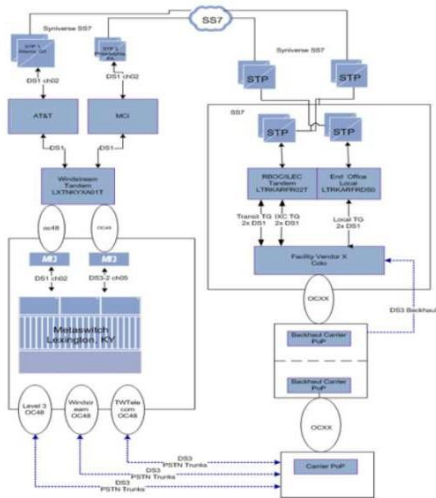
EMPOWER Broadband, Inc. will be offering voice services using Momentum Telecom’s platform, which is comprised of several carrier-class data centers and self-healing fiber optic ring networks. It has multiple layers of redundancy — enabling maximum uptime and continuous operation. To dramatically reduce latency and offer network flexibility, Momentum offers Points of Presence on a worldwide fiber backbone.



Momentum Telecom operates paired BroadSoft® switches in five Tier-1 data centers located across the country. This pairing offers high availability by utilizing session border controller clustering. Local and geographic server redundancy provides zero downtime on upgrades and repairs.

Momentum Telecom uses multiple sites and redundancies throughout the network. The core network architecture for voice switching is a Broadsoft Feature Server to provide customer-side features and switching, a MetaSwitch for PSTN switching and an Oracle/Acme Packet Session Border Controller for

authentication and security. This infrastructure is duplicated in Lexington, Kentucky, Atlanta, Georgia, Phoenix, Arizona, Philadelphia, PA and St. Louis Missouri. Each site is both privately and publicly connected to each other site with fail over points on-site. Public-switched data is encrypted via SS7 128-bit PPTP. With five (5) geo-redundant points of fail over interconnecting with each site a total network failure would only occur should two of the three sites have all three devices fail and all 6 redundant pathways fail. Calculable odds of this are less than 0.0001% (six nines reliability).



MOMENTUM TELECOM has both the MetaSx and Broadsoft Feature server network elements. Signaling System 7 (SS7) and trunk interface protocols of ISDN PRI are inherent within the system. LIDB functionality is supported via the SS7 protocol application in the MetaSx and signaling partners. Physical trunk interfaces are managed via DS1, DS3 and SIP Ethernet interfaces. MOMENTUM TELECOM provides traditional telecom services like operator-assistance, OA, and collect calls as a plug-in to the feature services. Simplified Message Detail Indicator is available via the Broadsoft feature platform. Least Cost Routing is also implemented in the MOMENTUM TELECOM platform and provides alternative routing selections based upon least cost/highest quality routes. Momentum’s proprietary front-end GUI (graphic user interface) provides a simple way to provision, service and support all customers regardless of their service delivery mechanism or network, thus making Momentum’s voice service compatible across nearly all aspects of service delivery. By interconnecting our networks, we can provide a direct connection to our core infrastructure, thus eliminating third party failures.

Ongoing access to the Public Switched Telephone Network (PSTN) for signaling and voice services are available to all existing customers – via the managed voice service provider Momentum Telecom and is accessed at Ashland, Virginia. This system has already proven to be highly reliable for EMPOWER’s existing customers. The Calix ONTs support Session Initiation Protocol (SIP) based voice service. An Integrated Access Device (IAD) function is embedded in the ONT and interfaces to the POTS interfaces on the ONT. The ONT performs the call handling and IP packetization required for VoIP implementation, Voice services are delivered in conjunction with the contracted voice service provider. The ONT SIP solutions supports standard voice service offerings including Caller-ID, Call Waiting, Call Transfer, Three-Way Calling, Distinctive Ring, Ring Splash and E911. Additionally, Calix will support H.248 or Media Gateway Control Protocol (MGCP). All new broadband customers will be provided an option for SIP voice services described above.

e) Describe the network’s scalability to support customer growth and network data usage growth

to account for: 1) ever increasing application requirements, 2) increasing quality demands, and 3) lower response/latency demands for ever increasing usage of highly interactive applications.

The scalability will reside in the following physical forms working from the customer location all the way to the Internet Service Provider Location: (1) individual customer connection speeds will be adjusted to the customer desired rate to meet specific needs, (2) for middle mile, (serving OLT back to the Border Router) the dual links (10 Gb/s) will be upgraded or augmented once peak throughput reaches 80% and (3) as the dual backhaul links from the Border Router to Pixel Factory reach 80% of capacity, they will be augmented in 10 Gb/s increments. Scalability of voice connections to Momentum is not and will not be an issue – the 1 Gb/s Ethernet connection link will handle at least 15,625 simultaneous calls. The existing network is designed and constructed to support the following: <1% packet loss, <80ms jitter and <12ms latency.

f) Describe the design and features that it proposes to implement that will: improve reliability (such as redundancy) for equipment, links and software; dual homing; and multi-homing connectivity.

Power: Network -48VDC power sources will consist of N+1 rectifiers with battery backup and the commercial AC is available directly from an adjacent substation (except for Chase City which has a standby generator). All Ciena 5160 nodes, Cisco 4500 Routers and Calix OLTs will be fed from two (2) fused positions off the -48VDC sources. Physical links (other than customer ONTs) will always be designed, equipped and configured for redundancy – the major backbone elements will be on geographically diverse rings or a mesh configuration. Internet backhaul will be routed via two (2) geographically diverse links to a connection with MBC which operates rings covering all of southern Virginia and provides for backhaul redundant paths from South Hill to Ashland, Virginia. Momentum Telecom operates their softswitches, feature servers and Session Border Controllers pairs in geographically diverse locations and datacenter environments. Pixel Factory provides equipment in a hardened environment with redundant power and environmental conditioning. The Calix OLTs and ONTs are also temperature hardened. Customers desiring continuous Internet service during power outages can opt for battery backup provided by EMPOWER or other units of their choosing.

g) Describe network infrastructure ownership. Indicate which parts of the network will use the long-form applicant's or another party's existing network facilities, including both non-wireless and wireless facilities extending from the network to customers' locations. For non-wireless facilities that do not yet exist, the description should indicate whether the new facilities will be aerial, buried, or underground. This includes leased lines, transit services, rented tower space for radios, etc.

There will be no wireless. Mecklenburg Electric Cooperative (MEC), the parent company of EMPOWER, will own or provide via joint-use agreements, all pole space and ADSS cables for backhaul, backbone and distribution plus access cases. In addition, MEC will lease EMPOWER fiber drops. EMPOWER will own Calix OLT/ONTs. MEC will own all Ciena 5160 and Cisco 4010/4500 equipment. Backhaul to the Internet will be owned by MEC to the meet point with MBC in South Hill at which point all fiber facilities will be owned and operated by MBC the remainder of the distance to Ashland, VA Pixel Factory datacenter.

Backhaul and Data Consolidator/Internet Provider

MBC (backhaul network) and Pixel Factory (Data Consolidator/Internet Provider)



EMPOWER Broadband, Inc is utilizing the MBC's Open-Access network to connect to a redundant data provider (Pixel Factory) in Ashland, VA over multiple redundant 10 Gb/s connections. Multiple points of entry into the MBC network will be used to create redundant routes to the Internet and VoIP providers. MBC dark fiber IRU's are also being utilized as an important part of the redundant links being established. The

primary Internet Data provider (Pixel Factory) has multiple connections from Richmond North and South to places such as Ashburn and Atlanta. MBC owns and operates more than 1,800 miles of open-access fiber optic network in 31 counties in Southern Virginia. MBC owns the fiber sheath, the colocation facilities, and the electronics. MBC uses Ciena 6500 for SONET/TDM; Ciena Z-Series platform and Accedian for Layer 2 Ethernet Transport Network; and Infinera DTN for a 400Gb/s wavelength network and has recently-installed the new DTN-X system, which provides 4 Terabits of transport capacity.

MBC has fiber IRU agreements in place for diverse connections from the Southern Virginia regional network to Northern Virginia and key markets in the Southeastern United States. Part of their ring terminates in Richmond at the Pixel Factory Data Center.

All equipment such as routers and fiber terminations at Ashland, VA will be owned by Pixel Factory.

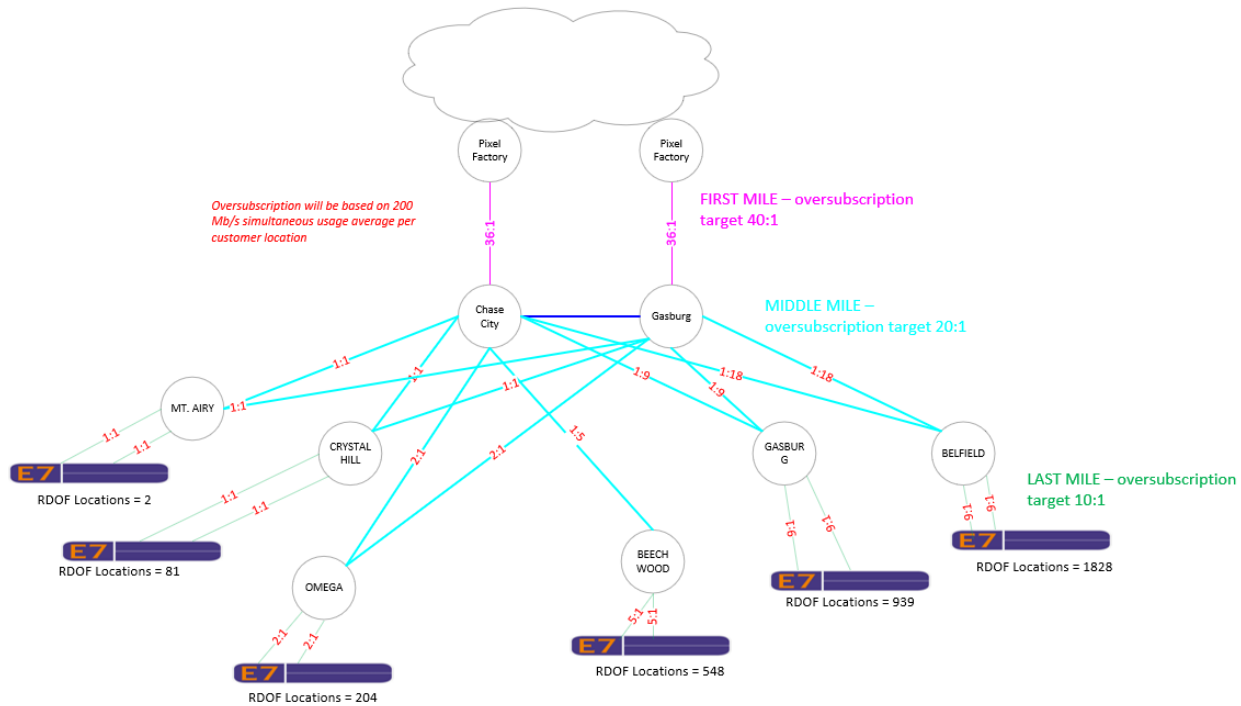
h) Provide technical information about the design methods, “rules of thumb,” and engineering assumptions used to size the capacity of the network’s nodes (or gateways), links and wireless base stations. These are often expressed as ratios, such as “oversubscription ratio” applied in the middle-mile/backhaul and interconnection network levels that funnel the consumer traffic to the Internet.⁷ The information provided should demonstrate how the required performance for the relevant performance tier will be achieved during periods of peak usage, downstream and upstream speed, and latency assuming a 70% subscription rate by the final service milestone. For example, the diagram below shows the various oversubscription ratios, link media (wired, wireless, etc.), redundancy and multi-homing in a visual format.⁸ It can also be described in text with no need for a diagram. Regardless, we do expect sufficient technical detail rather than a simplistic approach.⁹ We expect several ratios as shown and not a simple statement that the network “will use a 20:1 ratio” since ratios are generally different at different levels and locations.

All OLT locations will be interconnected with two (2) 10 Gb/s links on fiber optic cables – these links will operate in redundancy; one (1) of the existing nodes that is proposed to support RDOF locations will be operated in a subtending collapsed ring configuration; the remaining 19 locations will be configured and integrated into 1 of the 3 existing Area Rings.

Oversubscription ‘Rule of thumb’ is 10:1 for the “Last Mile”, 20:1 for “Middle Mile” and 40:1 for “First Mile” based on an average worst case simultaneous location bandwidth usage (200 Mb/s); the computed oversubscription ratios for 20 RDOF service areas breakdown as follows: 12 have no oversubscription, 6 locations will be between 2-5:1 and 2 will be 6-10:1. The 10 Gb/s links from the OLTs to the Router will be 12 locations with no oversubscription, 6 with 4-10:1 and two (2) with 12-20:1. Presently, none of the existing Middle Mile oversubscriptions approach 20:1 even when computed at 200 Mb/s average simultaneous data usage per location; as RDOF Locations are added, the transport facilities will be upgraded or augmented to maintain at least 20:1 by increasing the individual Calix OLTs from redundant 10 Gb/s in increments of 10 Gb/s as required. The First Mile existing 2 x 10 Gb/s computes to be 36:1 with 100% RDOF location (3602) take rate. At any time, upon peak throughput reaching 80% link capacity bandwidth augmentation will be engineered and installed. The following table is the calculated oversubscription by site:

Tracking # (Exhibit A)	Census Block #	Item	County	RDOF Locations	VA 911 Locations	Area (Sq. Mi.)	Access OLT	Aggregated Bandwidth	Last Mile Oversubscription
1	510259303001	VA-025-9303001	Brunswick	411	402	20.53	Gasburg	8.04E+10	4
2	510259303002	VA-025-9303002	Brunswick	316	370	18.86	Gasburg	7.40E+10	4
3	510259303003	VA-025-9303003	Brunswick	83	77	4.46	Gasburg	1.54E+10	1
4	510259303004	VA-025-9303004	Brunswick	113	95	2.58	Gasburg	1.90E+10	1
5	510259303005	VA-025-9303005	Brunswick	16	19	0.99	Gasburg	3.80E+09	0
6	510818801011	VA-081-8801011	Greensville	934	971	53.03	Belfield	1.94E+11	10
7	510818801012	VA-081-8801012	Greensville	191	183	11.69	Belfield	3.66E+10	2
8	510818801013	VA-081-8801013	Greensville	68	67	2.74	Belfield	1.34E+10	1
9	510818802001	VA-081-8802001	Greensville	595	578	38.97	Belfield	1.16E+11	6
10	510839302023	VA-083-9302023	Halifax	81	85	3.12	Crystal Hill	1.70E+10	1
11	510839304002	VA-083-9304002	Halifax	174	152	5.88	Omega	3.04E+10	2
12	511179301011	VA-117-9301011	Mecklenburg	196	196	7.99	Beechwood	3.92E+10	2
13	511179302001	VA-117-9302001	Mecklenburg	58	59	2.11	Beechwood	1.18E+10	1
14	511179303001	VA-117-9303001	Mecklenburg	36	41	1.43	Beechwood	8.20E+09	0
15	511179303002	VA-117-9303002	Mecklenburg	258	263	16.05	Beechwood	5.26E+10	3
16	511179308001	VA-117-9308001	Mecklenburg	30	27	0.59	Jonesville	5.40E+09	0
17	511430106001	VA-143-0106001	Pittsylvania	2	0	0.05	Sheva	0.00E+00	0
18	515958901001	VA-595-8901001	Emporia	16	16	0.02	Belfield	3.20E+09	0
19	515958901002	VA-595-8901002	Emporia	2	6	0.03	Belfield	1.20E+09	0
20	515958902004	VA-595-8902004	Emporia	22	20	0.06	Belfield	4.00E+09	0
				3602	3627	191	Total Backhaul =	7.256E+11	38 = Overall backhaul oversubscription

The oversubscription is depicted below.



Calix OLT systems support flexible line of high-capacity line cards and modules offering carrier grade services and technologies. All line cards and modules integrate non-blocking, full duplex switches and the capability to aggregate standards-based Ethernet traffic from the full range of Calix broadband solutions, customer-provided Ethernet switches and customer-provided routers. The Calix OLTs will deliver high-density aggregation and transport flexibility to support 10 Gb/s business and residential services. Uplink and downlink aggregation can be provided through the use of Gigabit Ethernet interfaces ranging from 1 Gb/s, 10 Gb/s, 40 Gb/s to 100 Gb/s. This equipment will support the following protocols:

- ITU G.8032 Ethernet Ring Protection Switching (ERPS)
- IEEE 802.1w Rapid Spanning Tree Protocol
- IEEE 802.3ad/802.1AX Link Aggregation
- Interface with RFC 5798 Virtual Router Redundancy Protocol Version 3 for IPv4 and IPv6.

³ For example, describe its network topologies (the layout pattern of interconnections between node devices in a network). There are many different types of network topologies, including point-to-point, linear, daisy-chain, bus, tree, star, ring, dual-ring, mesh (partial & full), and hybrid. There are also technology-specific topologies such as FTTH, FTTN, HFC, PTP, PTMP, and ERPS.

⁴ This includes selected transient or Internet service provider names and IXP location names or at a minimum city and state location.

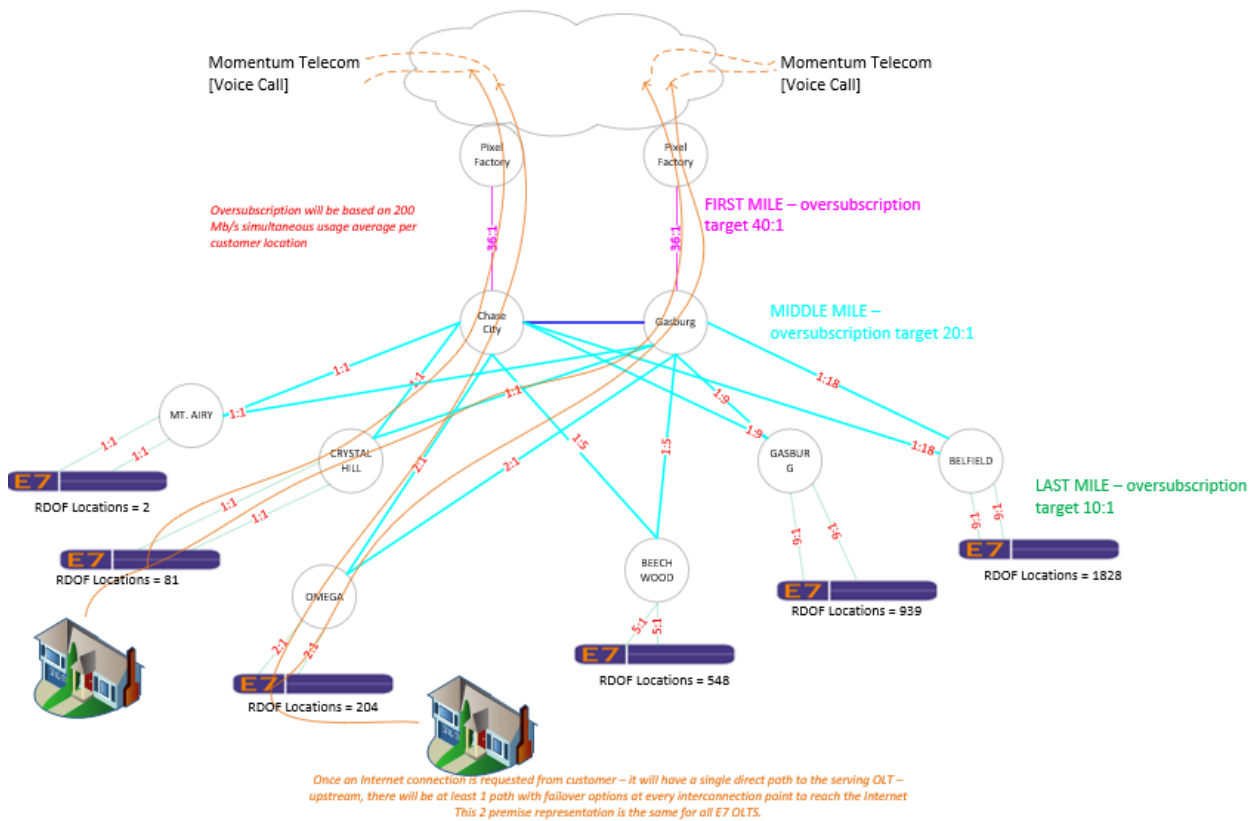
⁵ If the long-form applicant obtains these or other voice service functions as services from another provider or providers (for example, an over-the-top VoIP provider, or an incumbent or competitive local exchange carrier), the

description should so indicate. Voice solutions are a collection of integrated sub-systems dependent on selected architecture and design implementation. These architectures can include items such as: SIP, H.323, and MGCP; internal trunking, e.g., SIP trunks; quality of service protocols and use; connectivity to the PSTN and other VoIP providers; associated internal traffic-engineering to support voice quality; and more. If the applicant is using a hosted or Managed Service Provider (MSP) for its voice solution it must provide and sufficiently describe its infrastructure support. Such network infrastructure support solutions may include Quality of Service (QoS), voice paths setup by traffic-engineering protocols, trunking, and other methods, e.g., when using a voice MSP (Managed Service Provider).

⁶ See *Rural Digital Opportunity Fund Phase I Auction Scheduled for October 29, 2020; Notice and Filing Requirements and Other Procedures for Auction 904*, AU Docket No. 20-34 et al., Public Notice, 35 FCC Rcd 6077, 6127-29, paras. 135-39 (2020) (*Auction 904 Procedures Public Notice*). (describing how an ETC must offer qualifying voice service using its own facilities, at least in part).

i) Finally, describe how the long-form applicant's design will meet the peak period end-to-end performance requirements for the path from the consumer premises to the Internet. This requires that the applicant detail consumer path use case(s) that the long-form applicant will use to move traffic to and from the consumer premises to the Internet. This description should define the technical, planning and capacity parameters that a stream of packets would experience along this end-to-end path. For example, the diagram below shows five paths labelled A through E. This includes various oversubscription ratios, link media (wired, wireless, etc.), redundancy, and multi-homing characteristics. However, the diagram does not show the equipment types and other information that might be relevant to the long-form applicant's network.

The diagram below is representative of typical path of Internet access – all links are via fiber optic cables.



2. ***Project Plan.*** *The applicant will provide a project plan that describes a network build-out schedule that includes but is not restricted to plans for constructing last mile and middle mile facilities.*

a) *The build-out schedule should include when (month, quarter or projected date) and where (geographic description, county, city, town, CBG, census tract; note the state or higher level is not acceptable).*

b) *The build-out schedule should show the long-form applicant's projected milestones on an annual basis, including achievement of the interim service milestones described in section 54.802(c) of the Commission's rules and completion of the network for the number of locations determined by the CAM by the end of the sixth year of support.*

c) *The project plan and included schedule should incorporate detailed information showing how the long-form applicant plans to offer, to at least 95% of the required number of locations in each relevant state, voice and broadband service meeting the relevant performance requirements when the system is complete.*

3. **Network Management and On-going Operations.** *The applicant's detailed description should:*

- a) *Describe the applicant's plans for monitoring network usage/capacity, performance, congestion, and other parameters.*¹⁰

Network Monitoring and Management

EMPOWER will be utilizing SolarWinds NetFlow Traffic Analyzer, bandwidth monitoring software and Calix Cloud creating a clear visibility to monitor the network, discover traffic patterns, and avoid bandwidth hogs. The combined monitoring solutions provide faster troubleshooting, increased efficiency, and greater visibility into malicious or malformed traffic flows. The cloud-based Calix Support Cloud solution provides EMPOWER with the means to quickly resolve subscriber connectivity concerns. By identifying Wi-Fi network and device performance status, support staff can proactively address any issues before subscribers become aware of them. This results in reduced annual call volumes by as much as 10%, shortened call times by as much as 25%, and lower truck rolls by 50%, all contributing to increased customer satisfaction and retention.

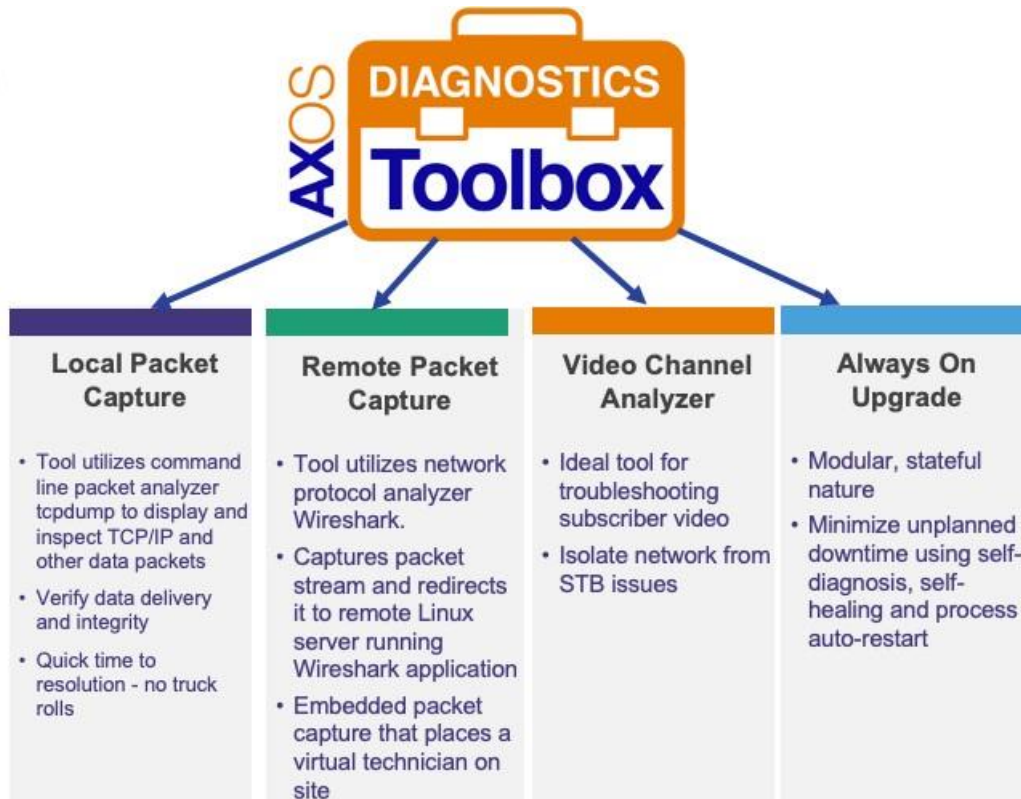
The Calix Wi-Fi Access Point (AP) or Residential Gateway (RG) is a critical part of the home network. With Calix Support Cloud, the AP may be managed using the TR-069 protocol, leveraging TR-098 and TR-181 data models to monitor key Wi-Fi performance indicators which includes PHY (Physical) Rate, adjacent channel and non-Wi-Fi interference, coverage, and quality of experience. Calix Support Cloud provides front-line help desk with a powerful automated issue resolution service to improve customer satisfaction and significantly reduce support costs. Support Cloud will empower us as a service provider to: Discover ways to eliminate or shorten support calls, Simplify issue resolution and eliminate unnecessary truck rolls Reduce the number of RMAs during troubleshooting, Elevate Support teams so they can upsell new services. Additionally, Calix Integrated Diagnostics Toolbox enables the service provider to verify data delivery and service integrity quickly and easily at the access edge.

Calix also offers the Services Management Connector (SMx), designed to provide complete Fault Configuration, Accounting, Performance and Security (FCAPS) for Calix Intelligent Access Edge systems. SMx provides the security, availability and performance requirements of all operator tiers in telecommunication and multiservice operator networks. SMx Fault Management includes alarming on physical and logical managed entities, supporting:

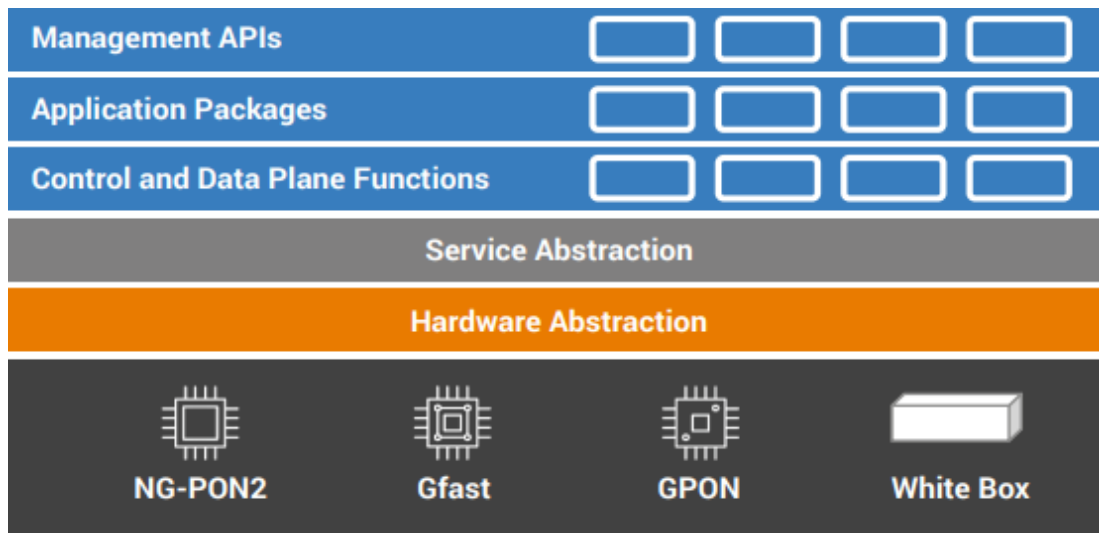
- Alarm aggregation, browsing, reporting
- Alarm history, browsing, reporting

SMx Performance Management also includes alarming on physical and logical managed entities, supporting:

- Real time statistics on NNI and UNI ports
- Node, port service performance
- Performance Measurement based on IPFIX



The AXOS architecture inherent in the Intelligent Access Systems uses a hardware abstraction layer (HAL) that isolates the reusable software modules from above the hardware-specific chipset drivers below. As a result, the HAL makes it possible for services providers to adopt new physical layer technologies in the access network quickly and cost effectively and without any disruption to existing subscriber services.



b) Describe how the applicant will maintain the performance and quality of the service for the duration of the 10-year support term.¹¹

EMPOWER, has committed to acquiring the best suitable equipment and facilities along with hiring the best installation contractors and partnering with Momentum Telecom, Pixel Factory and MBC and thusly, has demonstrated the ability to select solutions and partners to create not only a working system but also a system which delivers services at economical price points. The backbone of the network was originally created by MEC to evolve electrical power delivery management and monitoring to a higher standard – the same team that made this commitment, drives EMPOWER as the broadband system grows and standards are raised. Thus, having demonstrated how to make value judgments and adapt network needs in an evolving energy delivery world, the EMPOWER team is confident in moving forward with not only major customer growth but also with increased services and standards. Further, using the MEC historical business model as a guide for fundamental commitment, EMPOWER is equally committed to hiring, training and retaining a work force which is up to the task of delivering high quality broadband services.

c) Describe who will provide these services. Will the applicant: 1) use existing internal organizations, 2) use contracted management service providers, 3) create new internal organizations, or 4) engage new contractors?

EMPOWER currently has no plans to change cable plant construction contractors, equipment vendors, specialized support service providers and technical support services so long as those services continue to maintain high quality, a commitment aligned with EMPOWER business needs and are competitively priced. However, EMPOWER, as a subsidiary of MEC, will not sacrifice or dilute the 80-year commitment history serving the southern Virginia area for any contractor or vendor. New cable construction contractors become available on a regular basis – they are investigated and evaluated to determine worthiness of being added to the Bidders List. As EMPOWER continues to grow and expand, we will continue to evaluate the composition of our core business, certain aspects will be brought inhouse and others might be outsourced depending on the Organizational needs. Presently, Calix, Ciena and Cisco provide for our electronics needs – their pricing and support is competitive. Pixel Factory is a relatively new company, big enough to handle and support our present Internet access needs and MBC is of a similar southern Virginia spirit and commitment whose network makes it easy to get to the outside world economically. Both Pixel Factory and MBC maintain 7x24x365 NOC centers and have provided excellent service and have been responsive to our needs.

d) Describe how the applicant will comply with Commission performance measures for speed and latency.¹² The description should include whether the applicant plans to use the Measuring Broadband America (MBA) system, off-the-shelf testing mechanisms such as existing network management systems and network management tools, or provider-developed self-testing mechanisms.

Calix has developed a dynamic broadband performance testing solution to ensure service providers can easily leverage Calix Support Cloud (CSC) as a test controller and the EXOS-enabled GigaSpire system as the test client in an FCC-approved testing framework. This configuration gives CSC and EXOS-enabled GigaSpire Customers a turnkey-solutions that requires no standalone hardware or additional agents. CSC has the following enhancements:

- **Enhanced Test Reporting:** provides the ability to quickly identify FCC-compliant Ookla servers, including support for primary and secondary server selection (provided the CSP meets FCC test path requirements, CPE to Server), and record results for every test attempt in a new, visually appealing, easy to read report format.
- **Increasing Testing Flexibility:** Calix EXOS updates include testing and reporting capabilities that meet the latest FCC requirements, meaning tests can be run on any GigaSpire BLAST or GigaCenter system as well as on all TR-181 or TR-089 certified

third-party systems.

Further, EMPOWER will engage both Pixel Factory and MBC on a regular and ongoing basis to provide circuit traffic data, outage and latency numbers and will seek to continually to upgrade the acceptable baseline minimums necessary to remain competitive with similar providers.

The Ciena 5160 nodes have the capability to provide delay, jitter and loss data per ITU-T Y.1731 and also provide Connectivity Fault Management per IEEE 802.1ag.

¹¹ Widely used network level performance management techniques include traffic-engineering, Quality of Service, over-building/scalability, redundancy, load-balancing, equipment that easily allows upgrades and a variety of other techniques. Relevant information can include oversubscription ratios at all network levels, assumptions, specific calculations, and most importantly PEAK period impact. Lastly, the answer must provide and sufficiently describe the rules of thumb and effective corrective actions as requested for all three levels of the network (last-mile, middle-mile, and core/Internet-connections).

¹² See generally *Connect America Fund*, Order, 33 FCC Rcd 6509 (WCB/WTB/OET 2018) (CAF Performance Measures Order). Further modifications were made to the performance measures requirements in subsequent reconsideration orders. See *Connect America Fund*, Order on Reconsideration, 34 FCC Rcd 8081 (WCB/WTB/OET 2019) (CAF Performance Measures First Reconsideration Order); *Connect America Fund*, Order on Reconsideration, 34 FCC Rcd 10109 (2019) (CAF Performance Measures Second Reconsideration Order) (describing the methodologies for the Commission's performance measures).

4. Network Diagram. The network diagram must be certified by a professional engineer and should:

- a) Identify all wireline and wireless segments of the proposed networks. This should include applicable middle-mile/backhaul and interconnection network infrastructure. These are also commonly referred to as “links” between the nodes. These descriptions should indicate the media/link technology, data-rate/speed, and topology if point-to-point, ring, etc.**
- b) Uniquely identify (i) major network nodes¹³ including their manufacturer and model, as well as their functions, locations,¹⁴ and throughput/capacity;¹⁵ (ii) access nodes or gateways,¹⁶ including their technology, manufacturer and model, location, and throughput/capacity; and (iii) major inter-nodal links (not last mile),¹⁷ and their throughput/capacity.**
- c) Indicate how many locations/consumers will be offered service from each access node or from each gateway, and which performance tier or tiers will be supported at each access node.**
- d) Indicate what parts of the network will be new deployment and what parts will use existing network facilities.**
- e) Identify specialized nodes used in providing voice service, such as SIP servers, PSTN gateways or voice OTT providers.**
- f) Explain how nodes or gateways are connected to the Internet backbone and Public Switched Telephone Network. Show redundancy, dual- or multi-homing configurations.**

¹³ Major nodes include, but are not necessarily restricted to, routers, SIP Proxies, soft switches, and databases, e.g., DNS services, used to route Internet communications and voice calls; and Points of Interconnection with the Public Switched Telephone Network and the Internet core.

¹⁴ A long-form applicant should provide a reasonably descriptive label for where the node is located. For example, identify the city or town, village or suburb where the node is located. Street address and latitude/longitude are not required but can also be used.

¹⁵ Capacity should be measured in Gigabits per second for routers, calls per hour for SIP proxies and soft switches, queries per minute for databases, and appropriate units for other nodes.

¹⁶ An access node connects a customer’s connection to the core of the network. Access nodes include wireless base stations, digital subscriber line access modules, cable modem termination systems, and optical line terminations, among others. Access nodes are sometimes referred to as aggregation nodes. When we reference gateways, we are referring to the gateway earth stations used by satellite providers.

¹⁷ Include links that connect access nodes to the network core, among other major inter-nodal links. Each inter-nodal link should be identified by specifying the nodes at the ends of the link.

5. ***Terrestrial Fixed Wireless. A long-form applicant that proposes to use terrestrial fixed wireless technologies should: NOT APPLICABLE***

- a) ***Explain, with technical detail, how the proposed spectrum can meet or exceed the relevant performance requirements at peak usage periods.¹⁸ Clearly identify the licensed and unlicensed spectrum that will be used.***
- b) ***Provide the calculations used,¹⁹ for each performance tier and frequency band, to design the last mile link budgets in both the upload and download directions at the cell edge,²⁰ using the technical specifications of the expected base station and customer premise equipment. Submit assumptions regarding fading statistics, cell edge probability of coverage, and cell loading for each relevant performance tier.***
- c) ***Provide coverage maps for the planned and/or existing networks that will be used to meet the Rural Digital Opportunity Fund public interest obligations, indicating where the upload and download speeds will meet or exceed the relevant performance tier speed(s).²¹ The coverage maps should be provided for each interim and final service milestone and should display the required service areas and target locations (or a representation thereof).²²***

¹⁸The justification should clearly define all relevant assumptions including, but not limited to, oversubscription ratio, number of locations, spectrum efficiency, bandwidth, peak periods required user data rate, and peak periods network loading.

¹⁹This should include a description of all design assumptions, including, but not limited to, coverage reliability, fade margins, required frame error rate, required signal-to-noise ratio, and modulation/coding scheme associated with frame error rate and signal to noise ratio.

²⁰The term cell edge is commonly used to describe the edge of the base station coverage area beyond which performance goals cannot be achieved. A support recipient cannot report a location as served in satisfaction of its Auction 904 deployment obligations until it is capable of providing a voice and broadband service meeting the relevant performance tier and latency public interest obligations to that location within 10 business days upon request. *Auction 904 Procedures Public Notice*, 35 FCC Rcd at 6084-85, para. 17.

²¹Typically, a coverage plot must demonstrate that service to a proposed location will meet or exceed the prerequisite broadband speed and voice service requirements. Unlike legacy technologies, current and future generation technologies typically use speed for such coverage plots.

²²Coverage map guidelines are provided in the wireless coverage maps data specification posted on the Auction 904 website under the “Education tab.”

- d) *Provide detailed radio access network (RAN) infrastructure information used to generate the coverage maps for each unique cell including longitude, latitude, antenna height, antenna orientation, antenna down-tilt, antenna model, antenna system configuration,²³ effective radiated power, operating spectrum amount, operating spectrum type, and operating radio technology.*
- e) *Describe the underlying propagation model used to prepare the coverage maps and how the model incorporates the operating spectrum, antenna heights, distances, fading statistics, terrain resolution, and clutter resolution.²⁴*
- f) *Describe the underlying cell site and generally, radio frequency (RF) access network capacity management and traffic engineering models or concepts.²⁵ Also describe any adjunct carrier aggregation or spectrum sharing techniques and if the proposed system could accommodate these features, if needed.*
- g) *Describe, for each relevant performance tier and latency combination, the base station equipment that the long-form applicant plans to use.²⁶*
- h) *Describe the planned customer premise equipment configuration.²⁷*

²³ For example, transmit diversity, multiple-in-multiple-out (MIMO) and beam switching.

²⁴ A long-form applicant should provide vendor references and publicly available publications for the utilized model, digital elevation, and clutter data.

²⁵ In order to fulfill this requirement, the long-form applicant could describe the concept and specific best practices the applicant currently follows or intends to implement.

²⁶ Such a description should include technology, speed, number of sectors, average number of subscribing locations per sector, frequency band, channel bandwidth, frequency reuse, antenna gain, diversity configuration, estimated losses, estimated height above ground, base station coordinate in NAD 83, and any other relevant information. A long-form applicant should also include vendor specification data sheets or other supporting documents.

²⁷ Such a description should include technology, applicable frequency band, speed options, antenna gain, diversity scheme and modem specifications. A long-form applicant should also include vendor specification data sheets or other supporting documents.

6. ***Satellite Technologies.*** *A long-form applicant that proposes to use primarily satellite technologies should:*²⁸ ***NOT APPLICABLE***

a) *Describe how many satellites that are in view simultaneously from any specific location will be required to meet the relevant Rural Digital Opportunity Fund public interest obligations.*

b) *Describe how many uplink and downlink gateway antenna beams will be required on each satellite, and the capacity of each beam in megabits per second. For each winning bid area/state to be served, provide both the uplink and downlink beams, provide the gateway call sign, beam ID, frequency bands used, and location (city/state).*

c) *Describe how many uplink and downlink user antenna beams will be required on each satellite, and the capacity of each beam in megabits per second.*

d) *Describe how the gateway capacity is connected to user beams on the satellite, in terms of beams and data capacity per beam.*

e) *Describe how much satellite capacity (in gigabits per second) the applicant plans to reserve, by winning bid area/state, to serve the locations required under applicant's award and to achieve the required service milestones.*

f) *Describe whether the capacity on the uplink and downlink beams would be able to be reallocated once a satellite commences operation, if the subscription rate is less than 70% in one beam but more than 70% in another beam. If there are circumstances in which such reallocation would not be possible, please describe those circumstances and the states impacted.*

²⁸This does not include long-form applicants that intend to use satellite technologies primarily for backhaul.