Attachment A

Project name: Chambers County Community Broadband Project
Legal name of entity: Roanoke Telephone Company, Inc.
Mailing address: 236 East Capitol St, Jackson, MS 39201
Name and title of CEO: James Garner, Vice President of Operations
Grant Contact: Lisa Wigington, Vice President of Strategic Operations
Phone: 601-354-9070 Email: LisaW@TEC.com
Autonomous System Number: 17253
List Internet Exchange Membership: Digital Realty Atlanta and Equinix Chicago
PeeringDB entries: https://www.peeringdb.com/asn/17253

Project Description

Description of the Proposed Funded Service Area (PFSA) and why the project is needed
The PFSA is a geographically contiguous unincorporated area (shaded on the attached kmz to clearly define the boundaries) in Chambers county, AL. While this area is not inside the Five Points city limits, it is inside the Five Points Division (a County Subdivision of Chambers County). The county of Chambers, AL has a population of 42,289 inhabitants per the census bureau projection using 2010 census data and projecting thru 2019. The town of Five Points has a population of 143 and is incorporated for approximately one square mile. The Five Points Subdivision has a Z5 Census Class Code which indicates that the Five Points Division is a statistical county subdivision. The Five Points Subdivision has a total population of 2,533 per AL hometown locator data. The PFSA is located outside the city limits, but inside the Five Points Division and is in an unincorporated area of east Chambers county which is considered rural under any definition. The purpose of the Chambers County Community Broadband Project is to utilize state grant funding along with our cash match of 65% to leverage Roanoke Telephone Company, Inc.'s ("RTC's") existing network infrastructure, thus, rapidly expanding broadband services into the underserved areas in the Five Points and northern Fredonia communities in Chambers county, Alabama.

This community reached out to RTC and asked for service because of our fiber construction north of this area. RTC reviewed the FCC map and the ADECA broadband map which both reflect that this area does have a provider serving 25.0/3.0 service. Upon further research, it was determined that the FCC Broadband Map is incorrect and that a provider has reported this area as served and it is not. Citizens have filed disputes with the FCC and the provider has responded that corrections have been issued on the form 477 filing to show the correct offerings in this area as of January 2021. RTC has also gathered surveys from the area documenting the offerings in the community and has attached the dispute with the FCC and the response from the provider, as well as, the community surveys as support for the eligibility of the area. Included with the

surveys are comments added by members of this community describing why the service is so important to them and we urge ADECA to review these comments.

These locations are currently being served over copper by WOW. A map of the area and the location of the closest WOW remote has been marked to show that the distance between the remote and the PFSA concludes that these customers cannot receive a 25/3 service. RTC uses the metric of 8,000 feet to reliably serve 25.0/3.0 over copper and the remote is further than 8,000 feet from this proposed serving area, thus the proposed area should be deemed eligible for this application.

RTC has already invested in and deployed the majority of the technology and infrastructure required to provide a full range of broadband services in the City of Roanoke in neighboring Randolph county and in a portion of the Five Points unincorporated area in Chambers county and would like to continue that infrastructure with the Chambers County Community Broadband Project. RTC is proposing to build approximately 8.7 miles of fiber to reach remote locations in the more rural area of the county that would be too costly to serve without the assistance of this grant funding, thus providing quality high speed internet services to approximately 380 customers, within 152 locations in approximately 3 square miles **of** rural Alabama who currently do not have access to broadband service as defined by the ADECA grant guidelines. RTC plans to build approximately 8.7 miles of distribution fiber to Chambers County Community area, .4 miles of this will be considered middle mile and ineligible. RTC has budgeted this unfunded amount at $16,400 and it will be funded by RTC in addition to the $358,839.00 cash match to make Fiber to the Home (FTTH) service available to all locations within the proposed funded service area. An additional 10 miles of drop fiber will be required to provide up to Gigabit speeds to the estimated 96 locations that are projected to subscribe to the service.

Additionally, these services will be offered with the commitment of RTC to insure excellent local customer care and competitive pricing. Our focus is directed to the drop fiber applications that literally connect the less-seen, rural areas of Alabama with the main broadband centers in the state. A detailed description of the boundaries and project design are in part 2 of this attachment.

Number of Households to be Served	150
Number of Businesses/Industries to be served	2
Number of Community Anchors to be served	0

Number of Households and Businesses Passed: The Chambers County Community Broadband Project service area includes a total population of approximately 380. This area represents an estimated 152 locations per the 911 addresses in the area. Per RTC research two of these locations are businesses and the remaining locations are residential. However, multiple residents expressed the need to work from home during the pandemic and were unable.

Number of Critical Community Facilities, Public Safety Entities, etc.: Per the sheriff of the Chambers County Sheriff's Office, the superintendent of the Chambers county school district, and the chief of the Lanett Fire and EMS all critical community facilities who are not located in the proposed funded service area, but serve this community, broadband is essential for these entities to function. Many students live in this area and need access for homework or virtual learning, employees of the Sheriff's office and EMS live in this area and need access for first responder training and to receive communication from these entities to provide these services to the area. These needs have been documented in the attached letters of community leader support.

Proposed Funded Service Area (PFSA) Needs: The inhabitants of Chambers County Community Broadband area need access to health care, government services, and educational and business opportunities, just like every person living in urban areas. Access can only be gained by using broadband services and sophisticated technologies that require high-speed connections. According to the Federal Communications Commission, 39 percent of rural Americans lack access to 25 Mbps/3 Mbps service, compared to only 4 percent of urban Americans. Specifically, in the Chambers County community, current and future generations will be left behind if they are without affordable high-speed broadband service that enables them to tap into health care and educational services, government agencies, and new business opportunities.

Economic characteristics: The Chambers County Community Broadband Project is proposed for rural Chambers county, AL specifically the Five Points Division which, according to census data, has 33.9% of the population under the poverty level, significantly higher than the national average of 10.5% and the average in the state of Alabama at 16.8%. The population in Chambers county reflects an out migration of 1.1% according to census data on county to county migration, which is a five-year study (2011-2016) meaning the population is decreasing because people are leaving the area. The unemployment rate in the Five Points Division is 9.4%, with a median income of $33,036 per household, significantly lower than the average $51,734 in the state of Alabama. In addition, the population of disabled is 18.7%.

Per the 2019 census data projection, 18.4% of the population in Chambers county did not finish high school when polled about educational attainment.

Demographic Information by Division, County and State

(sourced from www.census.gov)

Demographic Statistics based 2019 Estimates Census Data	Five Points Division in which PFSA is located	Chambers County	Alabama
Population	**2,533**	**33,254**	**4,903,185**
Median Household Income	**$33,036**	**$42,289**	**$51,734**
% Population under the Poverty Level	**33.9%**	**17.3%**	**16.8%**
Population of Disabled	**18.7%**	**18.1%**	**15.9%**
Out Migration Trend	**Not available**	**-1.1%**	**-0.1%**
Unemployment Data of Age 20 and Older	**9.4%**	**7.3%**	**7.8%**
Educational Attainment – does not complete high school	**Not available**	**18.4%**	**12.9%**

The PFSA desperately needs the availability of the broadband service. Access to government services and health care through telemedicine for the disabled, educational and business opportunities for the unemployed. According to the Chambers County Economic Development Authority, an educated and trained workforce is the number one key driver for companies looking to locate or expand their businesses. Internet access has become a vital component of both education and workforce readiness. Children are the workforce of tomorrow and education and technical skills are mandatory for preparing them for the job opportunities that will be available when they enter the workforce.

Internet access would provide opportunities for job hunting and for students who need internet access for homework and school projects. According to the Pew Research Center analysis from April 20, 2015, of the Census data, the lowest-income households have the lowest home broadband subscription rates. Roughly one-third (31.4%) of households whose incomes fall below $50,000 and with children ages 6 to 17 do not have a high-speed internet connection at home. This low-income group makes up about 40% of all families with school-age children in the United States, according to the bureau's American Community Survey. Providing opportunity and encouragement to be able to keep up with their classmates and assignments could curb the drop out statistic in Chambers county.

In addition, building broadband to the PFSA would make it more attractive to businesses to locate in the area, providing more job opportunities and providing broadband access to local farmers. Access to broadband would allow their farming businesses to be more efficient, economical and environmentally friendly. Today's farmers and ranchers are using precision agricultural techniques to make decisions that impact the amount of fertilizer a farmer needs to purchase and apply to the field, the amount of water needed to sustain the crop, and the amount and type of herbicides or pesticides the farmer may need to apply. These are only a few examples of the ways farmers use broadband connectivity to achieve optimal yield, lower environmental impact and maximize profits. Farmers rely on broadband access to manage and operate their businesses, the same as small businesses do in urban and suburban America.

Working from home would become an option and would also expand the job opportunities in this area.

Educational challenges: When used as part of a comprehensive educational strategy, technology provides access to tools, resources, data, and support systems that all increase teaching and learning opportunities. Such environments enable individualized, competency-based learning that can take place anywhere and anytime. While there is not a school located inside the PFSA, there are students living in this area. Both inadequate access to the internet and slow internet speeds inhibit schools in rural communities from taking advantage of the online components of personalized learning, as online platforms and materials are not accessible from student homes. This digital divide is known as the 'homework gap' and is defined as the gap between those with access to the internet and those without. Providing the community with broadband access to their homes is necessary for these students to not be left behind.

Health care needs: There are no public medical clinics or hospitals in the PFSA however, as documented in the letter from the Randolph County Healthcare Authority, it is vital for rural areas like the Five Points community for residents to have access to patient care through telemedicine and online portals. Hospital-based telemedicine and remote monitoring capabilities that extend access to specialty care and other services are becoming an increasingly popular

option for patients and providers. The use of telemedicine and remote monitoring tools that extend care into the home are applicable to many healthcare situations ranging from primary care to emergency care.

As more healthcare consumers cite the benefits of telemedicine, such as convenience and lower travel costs, hospitals are beginning to meet consumer demands while capitalizing on the improvements telemedicine brings to their healthcare services.

Patients can monitor their vital signs and answer symptom questions daily through a single user portal. Portals can be customized to a patient's specific disease condition and experience, and can be used by patients to alert providers about health conditions in real time.

The aim of telemedicine and patient monitoring is to improve health outcomes for chronic conditions involving cardiac disease, respiratory issues, and diabetes. These new digital healthcare initiatives also help with organizational goals such as reducing hospital admissions and keeping patients comfortable in their homes. With the high population of disabled in this community the need for online patient care can be remedied by the availability of broadband service.

2. System Design

A detailed description of the existing network: TEC has been meeting the communication needs of the rural south since 1923. Roanoke Telephone Company, Inc. (RTC) is a wholly-owned subsidiary of TEC and has provided voice service since 1951 and internet service since 1995. Currently, RTC serves voice to 2,231 customers in its certificated area and internet service to 2,013 customers in Randolph and Chambers counties, AL and has made broadband available to over 98% of the approximately 160 square miles of the incumbent ILEC service area. Currently, RTC passes approximately 10,675 locations with broadband service in Randolph and Chambers counties in Alabama. With RTC's highly skilled and experienced customer care and technical staff of 11 employees located in Roanoke, AL, the company is positioned to give superior service to customers and has the tier two support from the TEC corporate office located in Jackson, MS for design and construction of fiber plant and maintenance of the network.

Standards based, RUS approved, technology is used, and the network has been constructed using RUS standard construction practices. RTC currently has 31 remote concentrators (Adtran TA5000) positioned throughout its network, which are served as fiber to the node (FTTN). Approximately 70% of the cable plant is copper. Utilizing ADSL2+ and VDSL technology in the remotes, this copper plant is being bonded to provide 25.0/3.0 broadband service up to 8,000 feet of the remote concentrators. Each serving remote has been constructed with carrier grade DC power plants and batteries with at least 8 hours of backup in the event of a long-term power

outage. All sites are monitored by remote alarm systems and alarms are responded to 24X7 by on-call and network operations center (NOC) personnel. If the commercial power were to be affected for an even longer period, TEC can provide longer-term temporary power via fixed or portable generators as necessary. A detailed disaster recovery plan is on file and updated annually.

Approximately 30% of the infrastructure is fiber and serves fiber to the home network design. The equipment strategy for any expansion project is to leverage existing fiber as much as possible to deploy a Gigabit Passive Optical Network (GPON) Fiber to the Home (FTTH) solution using the Adtran TA5000 platform. Customers served by a GPON connection will have a 2.4Gbps/1.2Gbps GPON connection from the Optical Network Terminal (ONT) at their home through distributed 1:32 optical splitters to the serving remote Optical Line Terminal (OLT). The Chambers County Community Broadband Project will not require upgrades to the existing network, but will be an extension of that network utilizing the FTTH network design described here.

This GPON capacity will easily scale to provide Gigabit service for these customers. However, if more bandwidth were to be required, NG-PON2 or XGS-PON at 10Gbps or Point to Point 10Gbps connections or higher could be deployed on an as-needed basis over the proposed Fiber optic cable. Latency within the proposed Adtran FTTH equipment ranges from microseconds to around 3-5ms, depending on location.

A centralized network operations center (NOC) is located in Jackson, MS and operated by another wholly owned subsidiary (LecNet, Inc.) of RTC's parent company, Telephone Electronics Corporation (TEC) and has multiple 10 GB redundant transport routes from the company to the NOC. LecNet's Internet peering connections and routers are monitored by the NOC personnel and three upstream providers, Cogent, CenturyLink and AT&T, to ensure redundancy and adequate bandwidth and IP addresses are available to our broadband customers. LecNet also peers at 350 East Cermak (Chicago) and 56 Marietta (Atlanta) via multiple CSpire 10 Gbps transit links. Additionally, LecNet hosts Netflix, Google and Akimai caching servers at the NOC in order to minimize streaming congestion on the network. In total, LecNet has 50 Gbps of internet transport and transit bandwidth, with the ability to scale it higher as bandwidth usage grows. This network facilitates excellent response times across the network with minimal latency. Overall latency from LecNet's network edge to our Internet peering locations is typically well below 20ms.

A detailed description of the proposed network: The equipment strategy for this expansion project is to leverage existing fiber to deploy a Gigabit Passive Optical Network (GPON) Fiber to the Home (FTTH) solution using the Adtran TA5000 platform. Customers served by a GPON connection will have a 2.4Gbps/1.2Gbps GPON connection from the Optical Network Terminal (ONT) at their home through multiple distributed 1:32 optical splitters to the serving remote Optical Line Terminal (OLT). The

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The proposed plan is to connect to the existing fiber located on CR 286 and build .4 miles to reach the PFSA (this will be considered ineligible middle mile and funded by RTC in addition to the cash match). The funded area will begin at the intersection of CR 286 and CR 266 and 8.3 miles of core fiber will be constructed to serve all of the locations inside the shaded serving area (see attached kmz). An OLT will be installed in an existing remote office location to feed the PFSA and an LCP cabinet and two distributed 1:32 pole mounted optical splitters have been planned to be placed strategically in the proposed funded service area to ensure scalability. This proposed design will deploy single mode fiber optic cables constructed utilizing RUS approved construction techniques. All the fiber will be buried and placed in existing previously disturbed public rights-of-ways. To provide a more secure reliable fiber footprint all the buried fiber will be placed at a minimum depth of 36 inches unless other depths are required by the affected highway, railroad, municipalities or other authorities. The two methods of buried construction that will be utilized are predominately plowing/trenching with directional boring utilized when road or stream or other types of crossings are required. Directional boring will also be utilized when it is not possible to plow or boring is more feasible construction. Along the buried fiber route, flush-mounted handholes will be deployed with the proposed fiber being accessible at each location. This will allow for easy access to the network and makes future expansions more economical and feasible.

OSP contractors will complete RUS bidder qualification forms and be cleared by engineering to have experience with RUS standards of construction and will construct the middle mile construction. All activity will be supervised by resident engineers and inspectors from Joseph D. Fail Engineering

Company (JDFEC), a licensed engineer, a member of ACE, with over 50 years of experience with RUS projects. JDFEC has also reviewed the network diagram and system plan and approved the project.

At the completion of distribution fiber construction, RTC technicians will install the OLT and LCP cabinet. The service will be marketed during the core fiber construction and as the service is sold, local outside plant employees or contractors will bury the drop fiber and install the CPE to turn up the customers. The estimated number of establishments to be served following the distribution fiber build is estimated based on the internet take rate average in rural America, which is 63% per the study released by Pew research' "Digital gap between rural and nonrural America persists", published May 19, 2017. Per the E911 addresses, the establishments passed will be 152 and using a 63% take rate will calculate to be 96. Every household and business within the PFSA will be offered broadband service at 250.0/250.0 or more when the system is complete. The distribution fiber build has been carefully planned to follow the county roads to cover all existing locations and two handholes have been planned every mile with slack fiber to allow for future growth. The LCP cabinet and distributed splitters ensure the fiber scalability for growth or expansion as needed.

The PFSA will be built for up to a Gigabit offering and will not be oversubscribed at all based on the minimum required offering of 50.0/5.0 per user. Standard GPON technology will have virtually no link loss. All systems will maintain a redundant failover to maintain a high state of system availability.

3. Discussion of internet speeds, service tier and pricing levels: The service will be marketed during the mainline or distribution construction and as the service is sold, local outside plant employees and/or a contractor will bury the drop fiber and install the CPE to turn up the customers. The estimated number of establishments to be served following the mainline or distribution fiber build is estimated based on the internet take rate average in rural America, which is 63% per the study released by Pew research' "Digital gap between rural and nonrural America persists", published May 19, 2017. Per the E911 addresses, the establishments passed will be 152 and 63% take rate will calculate to be 96 over a two-year period.

Service Tier (no data limits)	Business	Residential
250.0/250.0	$119.00	$54.95
500.0/500.0	$189.00	$64.95
940.0/940.0	$269.00	$79.95

4. Technical Evaluation, Timeline and Explanation of Total Project Costs: The total infrastructure cost for the proposed Chambers County Community Broadband Project is $568,460.00 The infrastructure is proposed to be funded through the use of Alabama Broadband Accessibility Grant funds in in the amount of $193,221.00 and RTC cash match in the amount of $358,839.00 with an additional investment by RTC for middle mile of $16,400. RTC will fund continuing operating expenditures from internal working capital available funds.

Attachment A-4 is a technical evaluation of the project certified by an engineer, containing our project cost estimate, project schedule and timeline, as well as, a .kmz file of the proposed project.

Documentation of Broadband Availability (all support attached)

Resource	Contact Person	Result
Copy of FCC Dispute Response from WOW	Provided by Donald Smith (resident in service area) Donald Smith Email: foretg2003@icloud.com	Citizens of the PFSA contacted the FCC and disputed the FCC Broadband Map which showed their area as served 25/3 or greater. The provider responded with a letter saying its form 477 would be corrected in a January 2021 filing.
Residences and businesses within the PFSA	Surveyed and confirmed with 48 locations throughout the PFSA and surrounding area	25.0/3.0 broadband was not available from any terrestrial broadband source to these locations – signed letters from homeowners in the community are attached
Map	WOW (provider claiming service in the area)	Map reflects the location of the remote serving this area over copper and the distance from the PFSA. ADSL or VDSL at this distance over copper cannot serve 25/3. Map also includes all addresses completing a survey or filing a complaint with the FCC.

5. Description of Applicant: TEC has been meeting the communication needs of the rural south since 1923. Roanoke Telephone Company, Inc. (RTC) is a wholly-owned subsidiary of TEC and has provided voice service since 1951 and internet service since 1995. Currently, RTC serves

voice to 2,231 customers in its certificated area and internet service to 2,013 customers in Randolph and Chambers counties, AL and has made broadband available to over 98% of the approximately 160 square miles of the incumbent ILEC service area. Currently, RTC passes approximately 10,675 locations with broadband service in Randolph and Chambers counties in Alabama. With RTC's highly skilled and experienced customer care and technical staff of 11 employees located in Roanoke, AL, the company is positioned to give superior service to customers and has the tier two support from the TEC corporate office located in Jackson, MS for design and construction of fiber plant and maintenance of the network.

Discussion about Key management:

Management Team Experience:

Joseph D. Fail

Leading TEC and Roanoke Telephone Company, Inc. (RTC) is our President, Mr. Joseph D. Fail. Mr. Fail has been President and majority stockholder of TEC since 1990. Mr. Fail currently is President and Chairman of the Board for the majority of TEC's subsidiary companies. Mr. Fail graduated from Bay Springs High School and furthered his education at Louisiana State University by receiving a Bachelor of Science Degree in Electrical Engineering in 1961. At this time, he began his telecommunications career with Bay Springs Telephone Company, Inc. in Bay Springs, Mississippi. In 1968, Mr. Fail formed Joseph D. Fail Engineering Company, specializing in telecommunications engineering. In 1972, Mr. Fail formed TEC, the parent company for RTC.

Mr. Fail has served as President of the Eastern Borrowers' Association (EBA), served on the Board of Directors for many years. Mr. Fail has been a Director and President of Alabama-Mississippi Independent Telephone Association. He is a member of the National Society of Professional Engineers, Mississippi Engineering Society, Association of Communication Engineers, and the Independent Telephone Pioneer Association. He is a Board Member at William Carey College in Hattiesburg, Mississippi. He is a member of the Bay Springs Chamber of Commerce.

Mrs. Joey F. Garner

Joey F. Garner serves as Executive Vice President at TEC. Joey has thirty years' experience in the telecommunications industry and has worked with TEC and its subsidiaries, including Roanoke Telephone Company, Inc. (RTC) since 1991. She is a graduate of Vanderbilt University where she received a Bachelor of Arts in English.

Through her years of employment with TEC, Joey has worked in various departments. She established TEC's marketing department in 1993. At this time, Joey worked closely with TEC's local telephone companies, including RTC, to develop an annual marketing plan and budget for each

company. She subsequently worked with TEC's Commercial and Employee Benefit Department. Since 2011, Joey has served as TEC's Executive Vice President, leading the company's future planning with vision and commitment. She works closely with each department Vice President and Director to ensure TEC is a leader in product development, sales, technology, and customer experience. Joey is a board member for several of TEC's companies, including RTC. She was selected as Mississippi's Business Woman of the Year in 2009. Joey is a past board member of OPASTCO and of the Alabama-Mississippi Telephone Association (AMTA). In 2018 she was recognized as one of Mississippi's top CEOs. She currently serves as a board member for the OmniBank.

Mr. Joseph C. Piro

Joseph C. Piro has over thirty years' experience in the telecommunications industry in the area of Finance and Administration. He has been employed by TEC since 1994. He currently serves as Vice President of Administration and Treasurer for TEC. Mr. Piro's current areas of responsibility include Accounting and Human Resources.

Recently, Mr. Piro was key in the centralization of TEC's Human Resources Department and the standardization of policies and practices that involve hiring, employee retention, benefits, safety, and payroll. He also coordinated and worked closely with RTC and TEC subsidiaries in the centralization of cash management to provide increased earnings on excess cash and improved internal controls over accounts payable. Additionally, Mr. Piro led the team of TEC management that established electronic data storage for more efficient use of resources including the ability to retrieve documents through remote connections.

Mr. Piro brings years of experience with TEC companies and has great management skills that he has exemplified during his twenty-five years of service with TEC. He has implementing improved management reporting timelines for financial statement presentations that greatly have benefitted all TEC companies. With his various responsibilities at TEC, Mr. Piro has exhibited leadership qualities that will enhance the ongoing survivability of TEC.

Mr. Piro currently serves on the Board of Directors for numerous TEC subsidiary companies. He graduated from Northeast Louisiana University in 1986 after earning a Bachelor of Business Administration Degree in Accounting. He is also licensed in the State of Mississippi as a Certified Public Accountant.

Mr. James W. Garner

James W. Garner is Vice President of Operations for TEC. James leads a comprehensive array of operations teams in every aspect, including strategic planning, budgeting, project management,

construction, technology upgrades, new service implementation, and maintenance. He works daily with the operations team members to ensure TEC provides quality broadband and voice services to TEC customers throughout the southeast.

As part of his duties, James oversees the network deployment and management for TEC, working with subsidiaries, end users, and supply chain vendors. This effort includes securing diverse, redundant broadband connections that ensure business continuity and reliability. James has played a pivotal role in the implementation of TEC's cloud communication products including IP PBX, SIP Trunks and privatized VoIP and is an integral part of TEC's continuous efforts to be a leader in the rapidly-changing technology industry.

Drawing on experiences dating back to 1992 when James joined the TEC team, he has worked closely with every aspect of the telecommunications networks from engineering, design, construction to regulatory compliance As new technologies emerged, James led the operations team in the introduction of high-speed Internet access to customers, both in the residential and business markets and James continues this leading-edge technology implementation with cloud-hosted solutions, fiber optic broadband deployments, and enhanced carrier networks for TEC and its customers.

James is particularly active in special projects involving strategic fiber optic and ethernet deployments to for TEC. These projects span a four-state area and involve coordination of financial planning, construction, and installation.

James is a graduate of Mississippi State University with a Bachelor of Science and a Masters of Science Degree in Mechanical Engineering, where he focused his post-graduate work on thermal analysis and fluid dynamics. After working at Rockwell International on various NASA Space Shuttle and Department of Defense weapons projects, James began working for TEC in 1992. Currently, James serves as board member for a number of TEC's subsidiaries. He also is a board member and past president of the Tennessee Telephone Association. He is a past president of the Alabama Mississippi Telephone Association.

Ms. Lisa Wigington

Lisa Wigington is Vice President of Strategic Operations for TEC. Lisa holds a Bachelor and a Master of Professional Accountancy from Mississippi State University and worked in public accounting for the regional firm Whitaker, Lipp and Healea for four years before moving to the telecommunications industry. Lisa is a Certified Public Accountant and holds a Certification as a Project Management Professional. She has been employed with TEC for 26 years, first in the financial department and currently in operations, creating models for new products and product lines, construction budgets and grant applications and managing the initiation, planning and

execution of those projects.

Lisa was the leader in TEC's billing conversion for nine of the TEC affiliates, including Roanoke Telephone Company, Inc. (RTC). Lisa created timelines, gathered a small conversion project team and assigned tasks. The team converted over 30,000 billing records for the nine companies, including building call plans, testing and analyzing call records side by side, creating plant facilities records and CABs billing records for each of the nine companies over an eighteen-month period. When the conversion was complete, Lisa assembled a Billing Operations Support team and trained them to continue the everyday operations of the billing system and to support the companies. This process also included preparing a set of operations procedures for the monthly billing cycle.

Lisa also researched and led TEC's introduction of a home security division which was launched in three companies. Lisa created the financial model and assembled security teams at each of the companies, set up training for certifications for these members, and created all required forms for the sales agreements and installation checklists. Lisa also set up an agreement with a third-party monitoring company for the monitoring support. An incentive sales plan was then created, and the team has become very successful.

Since 2008, Lisa has worked with the TEC Operations team, consisting of James Garner, Forrest Collier and Brent Fisher on several additional projects including the Ethernet upgrade project, IPTV project, the soft switch installation project for six telephone companies and most recently the mapping migration and upgrade for six companies. Lisa and the team have a close working relationship to the engineering consulting firm and are heavily involved in the construction projects for all the affiliate companies, including RTC. The operations team is responsible for developing construction projects, creating a capital budget, creating and managing the timelines and action items for each project and is in constant communication with the company plant personnel, engineers and contractors to ensure execution of each project.

In 2010 Lisa wrote a Broadband Initiatives Project (BIP) application for National Telephone of Alabama, Inc., which was awarded by RUS. Lisa and the operations team successfully managed the construction and all compliance reporting of this successful BIP project and it was completed on time and within budget. She currently is responsible for grant applications and implementation of awards for TEC.

Lisa's experience in the industry and her knowledge of financial applications make her a leader at TEC. She plays a key role in coordination among the marketing, sales and operations departments.

Mr. John Cole

John Cole joined TEC in 2002. Prior to TEC, John operated and held partial ownership of a dialup internet company in Tennessee a that, through periods of expansion, served six counties. A subsidiary of TEC acquired the company in late 2001. John currently serves as Director of Network Operations at TEC and administers daily support, design, and operation of broadband and voice platforms for Roanoke Telephone Company, Inc. (RTC) and other TEC subsidiaries.

John's technical background and experience includes engineering design, support, and operation of carrier LAN/WAN infrastructure and CLASS 4/5 telephone voice switching platforms. Leveraging his 21 years of experience in telecommunications, John is tasked with and serves an important role in growing and maintaining TEC's broadband network that delivers much needed high-speed connectivity to rural, underserved areas of the Southeast. As a member of TEC's operations team, John works closely with all TEC companies to ensure broadband and voice services are delivered on robust, reliable, and efficient platforms and network infrastructure.

John attended the University of Tennessee at Martin and holds multiple telecom industry specific certifications pertaining to carrier network and voice hardware platforms and design. John also took an interest in his community at an early age by attending Crockett Youth Leadership and Adult Leadership programs. Currently, John is serving his fourth year as President of the Crockett County Chamber of Commerce, and thirteenth year as a member of the Crockett County Board of Education, seven of which he has served as the Vice Chairman. John has also achieved Level IV Boardmanship status from the Tennessee School Boards Association. John is also a Tennessee College of Applied Technologies (TCAT) Institutional Advisory Board Member. Striving to invest in the community that has invested so much in him, John is involved in many local organizations such as Relay for Life, Friendship Merchants Association, West Tennessee Cotton Festival, Crockett Mills Community Center and The Crockett Christmas Store.

Mr. Forrest Collier

Forrest began his career in the telecommunications industry in 1984 with Radio Engineering and Maintenance Company (REMCO) as a Communications Technician. He then worked for Western Union Telegraph Company as a Microwave Maintainer supporting networks throughout Ohio. Forrest returned to REMCO as Service Manager, coordinating the technical service operations. He also served as Systems Operations Manager for Paging USA in Indianapolis, Indiana, with the responsibility for wireless networks throughout the state of Indiana.

Forrest later returned to Ram Technologies, the parent company of REMCO, as Vice President of Engineering. At the sale of Ram Technologies, Forrest merged into the purchasing company, Unity, as Vice President of Engineering. Later, Forrest accepted a position with Cadence Design

Systems as a Project Manager and Freescale as Analog Products Division, World Wide Program Controller with oversight for projects globally. He later accepted the position as Project Management Office Manager coordinating project management for Analog globally with a staff of 25 project managers. Freescale executed IC design projects for companies including Sony, Samsung, Visteon, CASS Automotive, Intel and many others. The PMO team was responsible for developing budgets and timelines and managing project teams with monitoring / controlling project cost, scope and schedule. While at Freescale, Forrest received his Project Management Professional (PMP) Certification from the Project Management Institute.

In 2008 Forrest joined TEC and now serves as the Director of Plant Operations. In this role, Forrest leads the Outside Plant Operations in TEC's six telephone companies, including Roanoke Telephone Company, Inc. (RTC). Forrest works with the various markets coordinating outside plant and facilities issues and safety. He manages the construction efforts in these markets, working with internal crews and third-party vendors. Forrest's vast experience in project management enables him to lead numerous assignments across all markets. He works closely with other groups within the operations department to insure TEC's plant is maintained and technicians are trained to provide quality service to customers. While at TEC, Forrest has driven numerous projects including the renovation of multiple offices and upgrades of central office facilities. Additionally, Forrest has implemented safety procedures at RTC and other telephone companies. Forrest works daily with the operations management team to insure directives are communicated with local managers and implemented according to the proper guidelines.

Project Team Track Record

Roanoke Telephone Company, Inc. (RTC) management team has a combined total of over 200 years of experience in the telecommunications industry. The team working to secure and proceed with this project consists of Mr. Joseph Fail, Mr. Joe Piro, Mr. James Garner, Mrs. Joey Garner, Ms. Lisa Wigington, Mr. Forrest Collier, Mr. John Cole and Mr. Michael Caypless as well other experienced managers and staff. The majority of these team members average over twenty years of experience working with RTC and its sister companies. This is basically the same core management team that was awarded the BIP project by RUS at National Telephone of Alabama, Inc. which was successfully completed on budget and on time.

Mr. Garner is leading the effort to reach more rural customers in Randolph County. As Vice President of operations for TEC, Mr. Garner works with RTC and sister companies on a daily basis to ensure that all projects are complete and goals are fulfilled. He works closely with the management team of Lisa Wigington, Forrest Collier and John Cole to make sure the network is at full capacity to serve RTC customers. Mr. Garner, Ms. Wigington, Mr. Cole and Mr. Collier

currently meet weekly to coordinate all outside plant and central office functions at RTC. The team plans to continue this type of planning session with the direct focus on the Chambers County Community Broadband Project if our application is approved.

Within the realm of the proposed funded service area, RTC plans to follow similar steps that currently are followed for new technology and product offerings. Under the leadership of Mr. Garner, the operations department introduces new technologies for RTC and sister companies. Ms. Wigington and Mrs. Garner review the offerings and suggest new product packages and pricing. Once the new products are approved by Mr. Garner, the experienced staff of Mr. Collier and local staff will assist with the implementation in Randolph County. All aspects of a new product are reviewed and discussed by the team working on this project. These aspects include cost, revenue, billing, network management, implementation, training, and marketing. Each team member has special talents that combine with others to insure every detail is covered thoroughly and diligently.

Description of company's workforce: With RTC's highly skilled and experienced customer care and technical staff of 12 employees located in Roanoke, AL the company is positioned to give superior service to customers and has the tier two support from the TEC corporate office located in Jackson, MS for design and construction management of fiber plant and maintenance of the network. Outside contractors will be used for construction through a bid process in accordance with RUS guidelines. This project will be completed within the two years.

6. Applicant's average pole attachment rates: RTC does not lease poles to other utilities unless in a joint attachment arrangement with electric utilities at their specified rate.

7. Minority Business Enterprises: RTC uses KGPCo as its primary distribution vendor for electronics and materials. KGPCo is certified by the Women's Business Enterprise National Council (WBENC) and California Public Utilities Commission Utilities Supplier Diversity Program as a Women Business Enterprise (WBE). KGPCo is committed to actively seeking products and services from diversity organizations to further the efforts of broad collaboration and the advancement of these companies.

8. Middle Mile Projects: The Chambers County Broadband Project is not a middle mile project and utilizes core distribution fiber to provide broadband access to end users. This PFSA will require .4 miles to be built from our current fiber to reach the area and RTC will fund this portion and not include in the grant application.

9. Economic development projects: While there are no critical or safety institutions inside the proposed funded service area, due to the recent pandemic many residents of the area have had the need to work from home or were unable to qualify for employment that required a certain

bandwidth speed a their residence. Comments from residents on their inadequate service and how it affects their lively hoods:

"I recently was unable to get a job working from home because of a poor upload speed."
Scott Blair 1220 CR 220

"My wife is a school teacher and our Hughes Net service is so poor that she has to leave our home and drive into Lagrange to a "hot spot" so she can conduct her classes from her car. She has even taken our pontoon boat out into lake where she can get cell coverage and conducted classes from there."
Scott Hackney 1034 County Rd 520

"I have Viasat (Hughes Net) and the service is so poor most times I cannot check email, or get news and weather. My bill started out at $49.95 a month but now I pay almost a $100.00 a month for service that I cannot use."
Becky Adams County Rd 272

"I am trying to operate a home-based business and my internet service is so poor I often have to go into town to a hot spot."
Melissa Mitchell, DBA God's Country Riding Camp
1337 County Rd 272

"I was recently laid off and did not have sufficient bandwidth to support a work at home job and missed some job opportunities because of this.
2410 CR 263

Per the sheriff of the Chambers County Sheriff's Office, the superintendent of the Chambers county school district, and the chief of the Lanett Fire and EMS all critical community facilities who are not located in the proposed funded service area, but serve this community, broadband is essential for these entities to function. Many students live in this area and need access for homework or virtual learning, employees of the Sheriff's office and EMS live in this area and need access for first responder training and to receive communication from these entities to provide these services to the area. These needs have been documented in the attached letters of community leader support.

While there is not a school located inside the PFSA, there are students living in this area. Both inadequate access to the internet and slow internet speeds inhibit schools in rural communities from taking advantage of the online components of personalized learning, as online platforms and materials are not accessible from student homes. Per the Superintendent of the Chambers County School District, Casey Chambley, virtual learning is essential, and has been made even more predominant during the pandemic. Additional comments from residents below:

"My kids are unable to do school work at home with the current service we have because it is too slow."
Sarah Barninger 3261 CR 263

"My children need better service to meet technology demands of school. I need it to teach from home. We are all having to use zoom at the same time, which causes issues with current speed."
Susan Prestidge 1010 CR 446