

## Broadband USA Applications Database

**Applicant Name:** Piedmont Municipal Power Agency

**Project Title:** PMPA FiberLink

**Project Type:** Middle Mile

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### Executive Summary

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Q08 Executive Summary Background and Description of Proposed Funded Service Areas Applicant Piedmont Municipal Power Agency ("PMPA") is seeking approximately \$15.6 million in grant funding through the National Telecommunications and Information Administration's Broadband Technologies Opportunity Program ("BTOP") for the construction of a fiber optic communications network in the northwestern portion (known as "Upstate") of South Carolina (the "PMPA FiberLink Project" or "Project"). PMPA is a public body, corporate and politic, of the State of South Carolina and owner of a 25 percent undivided ownership interest in Unit #2 of the Catawba Nuclear Station ("Catawba") located in York County, South Carolina. PMPA, through its ownership of Catawba output and from other sources, supplies wholesale electric services to the ten municipalities in the Upstate of South Carolina that constitute its membership. PMPA's functions include: (i) the reliable delivery of all-requirements power to its Members; (ii) contracting for the reliable delivery of cost-effective supplemental power; (iii) providing for the delivery of excess capacity to the market; and (iv) encouraging the economic development of our Members to ensure their vitality and promote the most effective use of their generation asset. To ensure that the above requirements are carried out efficiently, PMPA has developed a complex communications network for monitoring the power grid, delivering near-real-time grid data for transmission balancing and surplus sales, business continuity/disaster recovery facilities and operations, and supporting various municipal functions in connection with utility tasks and economic vitality. Over time, the demand for communications bandwidth to support the above requirements has escalated geometrically, as have the costs for the delivery of that bandwidth from traditional sources. The escalating costs for traditional services are tied directly to the lack of vital communications infrastructure, having the further consequence of limiting the availability of reasonably priced broadband to the region and thereby creating underserved and un-served areas in the Upstate of South Carolina. The demand on communications infrastructure will continue to escalate as the Nation becomes more concerned with energy efficiency and the desire for superior control over resources through smart-grid technology increases. To curb the overrunning costs of communications, address the paucity of communications infrastructure in the South Carolina Upstate, and support the PMPA Member cities' economic development efforts, through the FiberLink Project, PMPA plans to deploy a 386-mile fiber optic backbone connecting its Members. Given the necessity of communications infrastructure, and in contemplation of other regional objectives, PMPA proposes to build the fiber optic backbone with sufficient capacity not only to fulfill its own immediate and future needs, but also to provide a conduit for vitalizing the region as a whole. Through this Application, PMPA seeks grant funding under the BTOP in order to provide access to broadband service to underserved and unserved areas of South Carolina, to

improve access to, and use of, broadband service by public safety agencies, and to stimulate the demand for broadband, economic growth, and job creation. Under the BTOP, this infrastructure would constitute a "Middle-Mile" project. The proposed fiber build, in the form of a physical ring, will cover a large region of the Upstate of South Carolina, passing through the cities of Abbeville, Clinton, Easley, Gaffney, Greer, Laurens, Newberry, Rock Hill, Union, Westminster, Greenville, Spartanburg, Chester, Winnsboro, Greenwood, Anderson, Clemson, and Liberty. By design, it will traverse the counties of Oconee, Pickens, Anderson, Greenville, Spartanburg, Abbeville, Greenwood, Newberry, Laurens, Fairfield, Union, Chester, York and Cherokee, and exist within the 3rd, 4th, and 5th Congressional Districts of South Carolina. PMPA will begin construction within thirty days of the notice of grant award and contemplates completion of all phases of the construction within two years. Number of households and businesses passed The total number of households that will be passed by the Project is 241,673. The total number of businesses that will be passed by the Project is 18,165. Number of community anchor institutions, public safety entities, and critical community organizations passed and/or involved with the project The Project will be involved with approximately 153 public facilities including hospitals, schools, libraries and health care facilities. Proposed Services and Applications As described in more detail in PMPA's response to Question 10, the Project will provide critical broadband infrastructure that will benefit South Carolina through a number of applications. For example, the Project will facilitate the expansion of medical and health-related programs to areas that are currently physically or financially unreachable, and connect larger hospital complexes with smaller counterparts in more rural communities. The Project will also support multiple municipal services, including public safety and public utility access. Additionally, the Project will provide a sustainable infrastructure to support Smart Grid and Energy Efficiency programs. PMPA is creating partnerships with various public and private entities to maximize the value of the Project. Those entities, which are also described in more detail in response to Question 10, include last-mile service providers and other organizations that will help expand the communications potential of the project. Non-Discrimination and Interconnection Obligations The Project will comply with the non-discrimination obligations contained in the NOFA and will adhere to the principles of the FCC's Internet Policy Statement, dated August 5, 2005. More specifically, PMPA will not favor or disfavor any lawful Internet content or applications. PMPA will post any network management policies in a prominent location on its web site. PMPA will allow interconnection and transport, at reasonable rates and terms, where technically feasible and when it can be done without exceeding network capacity. PMPA agrees to negotiate network interconnection rates and terms in good faith. The building and maintenance of middle-mile infrastructure by public entities such as PMPA allows for the leasing of capacity or fibers to service providers at sufficiently low rates to reduce capital expenditures to the point where a business model becomes sustainable. PMPA, as a public body, will provide the needed transport capacity in a non-discriminatory fashion, encouraging the provision of competitive services throughout the region, stimulating technology adoption and economic development. Type of broadband system that will be deployed (network type and technology standard) The FiberLink Project is based upon the need to provide an open-access dark-fiber network to the communities in the northwestern section of South Carolina. The network will involve approximately 386 route miles of 144-count fiber, to be leased in a non-discriminatory fashion to all interested parties. Applicant Qualifications PMPA is currently a supplier of wholesale electric and information technology services to ten municipalities in the upstate region of South Carolina. PMPA monitors its systems and provides

billing for its services through proprietary applications, as well as manage the operations of the \$1.1B Nuclear Generation asset. As such, management of a wholesale fiber optic network is not far removed from its current duties and responsibilities. The need for any increased resources for sales and maintenance will be handled through outsourcing those needs to qualified providers of those services. PMPA's business partners have already expressed a desire to provide those services to PMPA. Project Costs Engineering plans indicate that the fiber infrastructure will pass through areas that are 50% rural and that the Project will cost approximately \$19,501,020 to complete. This number does not include any operations costs or other costs not allowed by the rules of the program for which it is submitted. PMPA will fully fund the 20% matching requirement under this program through the issuance of bonds. PMPA will supply all financial documentation necessary to establish its stability as a going concern and its inability to pursue this Project without federal financial assistance. Overall expected subscriber projections for the Project At the completion of construction the network will be able to address access nodes with approximately 241,673 households, 18,165 businesses and approximately 153 anchor institutions. Jobs PMPA anticipates that this Project will create or save 200-220 jobs for construction. Moreover, PMPA anticipates that the macroeconomic impact of the Project will be considerable in that it will enable development in the Upstate region. To that end, PMPA estimates that the Project will bring anywhere from 1,000 – 10,000 new jobs over the next several months and years by attracting new business, the growth of last-mile solutions providers, additional research projects, and growth in the medical and educational sectors.