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<th>Submitted Date: 8/20/2009 1:55:12 PM</th>
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<td><strong>Funding Opportunity:</strong> Broadband Initiatives Program and Broadband Technology Opportunities Program</td>
<td><strong>Applicant Organization:</strong> OpenBand of Virginia, LLC</td>
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<td><strong>Task:</strong> Submit Application - Infrastructure Programs</td>
<td><strong>Applicant Name:</strong> Sharon Hawkins</td>
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C. Executive Summary

Executive Summary of Project for BIP and BTOP:

8. Infrastructure Projects Executive Summary
OpenBand of Virginia is pleased to propose “LoudounLight”, an ultra-high capacity, open-access, middle mile network in Loudoun County in the world famous northern Virginia “Technology Corridor”. LoudounLight meets and exceeds the expressed needs of Loudoun County, Virginia in its comments before the National Telecommunications and Information Administration and the Rural Utilities Service of April 13, 2009: “A large part of the geographical area of the County has no broadband service, or at best only limited access to wireless service...The County believes that the most cost-effective approach to extending broadband services to as many potential subscribers as possible is to build “middle mile” fiber backbone networks.” OpenBand’s LoudounLight middle mile fiber ring is directly and precisely aligned with the County’s on record objectives.
The LoudounLight Proposed Funded Service Area includes the majority of census tracts in western Loudoun County due to its “middle mile” ring routing. The network also has primary points of presence in eastern Loudoun where it will reside in high capacity, high density collocation centers offering access to regional, national and international carriers. From there, LoudounLight will extend along the County’s northern, western, and southwestern borders, offering interconnection points along this route in underserved rural western Loudoun County. This Proposed Funded Service Area is illustrated on the LoudounLight Middle Mile Fiber Loop Map provided as Exhibit (b) within the Supplemental Information package.

Since it is a middle mile solution traversing the entire County, LoudounLight has the potential to service a large number of the County’s population with a projection of 20,142 households and 2,950 businesses passed by the ring. Similarly, LoudounLight will pass 114 community anchor institutions and critical community facilities.

LoudounLight will offer High capacity circuits (100Mbps+) for telemedicine, distance learning, and other bandwidth intensive applications; Private Wide Area Networks (WANs); High capacity transport/backhaul for continuity of operations; and has the potential to offer Internet Protocol (IP) telephony services; Traditional and Video on Demand/High Definition video services; Managed network services and Web services; and Collaboration portals and Knowledge Management. In addition, LoudounLight will offer 16 points of interconnection along the ring for other last mile providers, middle mile providers, and wide area network customers (including County Government and Educational entities), and will provide competitors access to or use of the system on a non-discriminatory basis at just and reasonable rates, terms, and conditions, to be mutually negotiated.

LoudounLight middle mile services will rely on a newly constructed dedicated high-capacity fiber optic ring. OpenBand will allocate a share of the ring’s capacity to deploy a multiservice SONET network with seven active access nodes throughout the target service area. The multi-service SONET network will delivery point—to-point connectivity ranging from DS-3 and OC-3 levels to Metro Ethernet with to 1Gbps throughput and beyond. In addition to delivering managed services based on the multi-service SONET network, OpenBand will allocate a share of the capacity to offer dark fiber leased services. OpenBand’s active nodes throughout the LoudounLight ring will also allow for installation of signal amplification equipment that may
be required by the dark fiber lease customers. However, both the technologies to be employed and the methodologies to build and manage LoudounLight are standard to OpenBand, as we were in fact the County’s first facilities-based Fiber to the Premise (FTTP) “triple play” service provider in 2001 a full six years before any other service provider, offering 100Mbps residential bi-directional Internet, video, and voice in a package that is still unrivalled by any competition. OpenBand’s management, engineering, and operations team has a 10 year track record in the County, and [-text-redacted-] proves our ability to not only implement and operate LoudounLight but uniquely positions us to be a sustainable broadband service provider. Our proposal offers an 83 mile long “middle mile” ring[-text-redacted-] and passes over 60,000 potential end users, including residential, business and Government customers. In the design, engineering development and construction of the project, OpenBand estimates that in excess of 100 jobs will be created or saved.

OpenBand and LoudounLight therefore offer a truly unique and discriminating value proposition: A middle mile network that directly supports the objectives and evaluation factors of the NOFA; that is directly aligned with OpenBand’s core competencies; and that directly supports Loudoun County’s objectives as recorded with the RUS and NTIA. Please see the LoudounLight Value Proposition, provided as Exhibit (h) within the Supplemental Information package, for greater detail on how the following objectives align:

1) ARRA PROJECT PURPOSE
   > OpenBand and LoudounLight Congruence with ARRA:

   o OpenBand’s LoudounLight network addresses a compelling problem the statute is intended to resolve, and offers an effective solution to the problem.

   o As an open, carrier neutral middle-mile span with points of interconnection throughout the County in both served and underserved areas, LoudounLight established a model that may be replicated for future project

   o LoudounLight has broad significance in that it addresses 4 of 5 BTOP statutory purposes

   o LoudounLight goes beyond broadband to provide more robust education, health
care, and other broadband service options through OpenBand’s managed services platform and professional consulting services

- OpenBand has Teaming Agreements in place

2) ARRA PROJECT BENEFITS
   > OpenBand and LoudounLight Congruence with ARRA:

   - LoudounLight offers 16 points of interconnection with 3 last mile networks, 114 community anchor institutions and critical community facilities; and the potential to connect 60,000 end users

   - LoudounLight offers the only open access, ultra-high capacity (100Mbps to Gigabit+) middle mile network in the area, with 12 points of interconnection within underserved areas in Loudoun County

   - LoudounLight is ideally suited to address the needs of the area by its direct alignment with the County’s comments to the RUS/NTIA

   - The LoudounLight network provides 192 fiber optic strands and a potential of multiples of 10 Gbps capacity to service all last mile networks, public anchor and safety institutions, and end users, and is scalable to meet current and future needs

   - LoudounLight pricing is competitive with all other existing middle mile service offerings, and OpenBand has compared pricing with regional benchmarks to demonstrate its affordability

   - OpenBand and LoudounLight exceed the minimum requirements for interconnection established in the NOFA, and commit to binding arbitration of disputes concerning interconnection

   - OpenBand has provided its nondiscrimination and interconnection policies in this proposal and will display such on its webpage post award
3) ARRA PROJECT VIABILITY
   > OpenBand and LoudounLight Congruence with ARRA:

   o LoudounLight’s design is comprehensive, clear, detailed and coherent and offers middle mile paradigm that is applicable to other underserved localities with its emphasis on connectivity with all County anchors, terrestrial and wireless backhaul, lit and dark fiber, scalable capacity, and open access.

   o OpenBand has a unique and truly distinct organizational capability to build and operate LoudounLight, as the first FTTP provider in the County, and a management team with 10 year track record operating a commercial and residential Voice/Video/Data triple play network.

   o OpenBand is ready to start the project today and will be substantially complete in 2 years given our existing workforce and subcontracting pool.

   o OpenBand has all licenses, franchises and regulatory approvals necessary.

4) ARRA PROJECT BUDGET AND SUSTAINABILITY
   > OpenBand and LoudounLight Congruence with ARRA:

   o OpenBand’s budget is concise, clear, comprehensive, and fully vetted in that we have 10 year cost history for aerial and underground fiber construction. Our allocation of funds is sufficient to cover the LoudounLight build.

   o OpenBand has the personnel and resources to sustain LoudounLight beyond the funding period, as we are a growing local business with committed funding sources. In
addition, we have carefully assessed marginal increases in O&M costs versus transport segment absorption rates with the construction of LoudounLight and our financial projections indicate long term viability once the system is constructed.

- OpenBand will provide [redacted] of the funds required in cash to construct LoudounLight through a long term loan [redacted]