C. Executive Summary

Executive Summary of Project for BIP and BTOP:

8. Infrastructure Projects Executive Summary
EXECUTIVE SUMMARY

Overview:

This is a critical infrastructure need for the Cherokee Indian Reservation of North Carolina, Cherokee Cablevision is incorporated by the Eastern Band of Cherokee Indians and holds the only franchise issued to provide cable television service on the Cherokee reservation lands in North Carolina. It is more than 99% Indian owned and qualifies as a Small Economically Disadvantaged Rural Business. This system was built in 1980 using 75% federal funding through the Telecommunication Administration and originally provided only CATV service
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<th>Submitted Date:</th>
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<tr>
<td><strong>Funding Opportunity:</strong> Broadband Initiatives Program and Broadband Technology Opportunities Program</td>
<td><strong>Applicant Organization:</strong> Cherokee Cablevision Inc</td>
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<td><strong>Task:</strong> Submit Application - Infrastructure Programs</td>
<td><strong>Applicant Name:</strong> Mr. Charles J Baldwin</td>
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through a coaxial network. It was partially upgraded several years ago to a fiber-deep architecture which delivers broadband internet to approximately 50% of their customer base on the eastern section of the North Carolina reservation. The proposed network upgrade is an FTTH implementation which is 100% "shovel ready" due to existing poles and existing headend infrastructure.

The proposed funded service area under this application is 100% Rural, 100% Remote, and 100% Unserved, as defined in the NOFA. Cherokee Cablevision plays a vital role in the economic development of the communities it serves and recognizes the challenges of providing rural broadband access to all residents within this economically challenged region.

Current Broadband availability:
No other broadband service is available on this portion of the reservation and residents not served by the company’s previously upgraded portion of their network only have access to dial-up. Due to the rugged, mountainous terrain of the reservation, only a hard-wired service can adequately cover all the residents. The company’s existing coaxial network makes construction of this Fiber to the Home (FTTH) upgrade straightforward and cost effective since construction will simply be a fiber optic overbuild along existing coax routes. The new network will provide true, high capacity broadband, enhanced digital CATV and telephone service to all residents, businesses and critical institutions on the reservation.

Service Coverage:
The total service area for the Applicant as of the 2000 census plus, known growth is 4,037 homes passed within 470 census blocks. This includes 2,208 homes and 100 businesses in the area which has been previously upgraded.

The new funding will protect the availability and facilitate the sustainability of broadband for all of those customers; improve broadband capacity; provide improved broadband service through redundant access; improve current CATV service; and.

In addition, the upgraded service area funded by this grant passes 1,829 homes, 32 businesses and 19 critical community facilities representing nearly 50% of the Reservation's population and future growth.

The critical facilities in both the funded and currently served areas will receive deeply discounted service for broadband access. These facilities include the following:

* Emergency Medical Services
* Tribal government buildings
* Bureau of Indian Affairs buildings
* Schools
* Hospitals and medical clinics
* Fire stations
* Employment & job training facilities
* Police stations
* National Park facilities
* Libraries
* Community service facilities

Proposed service offerings:
The new network will provide broadband internet access speeds of 40 Mbps downstream and 40 Mbps upstream to each user. It will also provide enhanced digital CATV service and
Interconnection and Non-Discrimination:
i. The company will adhere to the principles contained in the FCC's Internet Policy Statement (FCC 05-151, adopted August 5, 2005);
ii. The company will not favor any lawful Internet applications and content over others;
iii. The company will display any network management policies in a prominent location on the its web page and provide notice to customers of changes to these policies. The company uses no business practices or technical mechanisms, other than standard best efforts Internet delivery, to allocate capacity; differentiate among applications, providers, or sources; limit usage, and manage illegal or harmful content);
iv. The company will connect to the public Internet directly such that the project is not an entirely private closed network;
v. The company will offer interconnection, where technically feasible without exceeding current or reasonably anticipated capacity limitations, on reasonable rates and terms to be negotiated with requesting parties. This includes both the ability to connect to the public Internet and physical interconnection for the exchange of traffic. The company will maintain its current interconnection, nondiscrimination, and network management practices, which are to provide an open and competitive environment.

Type of broadband system:
The network to be funded by this application is advanced RFOG (RF over Glass) technology with a FTTH architecture. This brings fiber directly to each individual user’s home. The technology uses embedded Gigabit Ethernet protocol but moves it deeper into the network from the hub to the node. Up to 40 Mbps of symmetric Ethernet bandwidth will be delivered to each end user while preserving existing set-top and EMTA services already in place. From the perspective of back office operations such as service provisioning and billing integration, MTA and EMTA equipment continue to work as before. DOCSIS cable modems provide the interfaces for telephone (RJ-11) and data (RJ-45).

Qualifications of the applicant:
The applicant has successfully operated its current coaxial network for almost 30 years. It has operated successfully as an ISP for more than 3 years using that portion of its network which was previously upgraded to provide broadband. Standards of quality for service provisioning and restoration are well established and maintained by the applicant.

Overall infrastructure cost of the broadband system:
$2,760,600

Overall subscriber projections for the project:

Digital TV subscribers: 1454 in funded area plus 1,721 more in old service area who will be receiving digital TV as result of the head end upgrade.

Data Subscribers: 1,351 broadband subscribers in funded area plus 1,598 more who will receive broadband as a result of improvements in head end facilities.

Telephone subscribers: 1,039 telephone subscribers in funded area plus 1,229 more who will receive telephone service as result of the head end upgrade.

Number of jobs expected to be created or saved by the project:
Total jobs created/Saved: 39
Direct & indirect jobs: 22
Induced jobs: 11
Jobs saved: 6

Description of BTOP Project Purpose (BTOP Applicants Only Next Three Questions)

9. BTOP Statutory Purpose:

- Improve access to, and use of, broadband service by public safety agencies.
- Stimulate the demand for broadband, economic growth, and job creation.