

C Executive Summary

C8. Executive Summary of Project for BIP

The LISCO SE Iowa Broadband Project (Project) covers 2,038.7 of Iowa's 56,276 square miles in southeastern Iowa, including most of Keokuk, Washington, Wapello, Jefferson, Henry, Des Moines, and Lee counties. The service area includes 77,292 people and 32,092 residences and businesses in 27 towns and unincorporated rural areas.

According to our survey, 98% of the service area is underserved in all three categories (by square miles). The Project will offer 100 Mbps fiber optic service to 14,211 of the 32,092 households and businesses, and an additional 187 community facilities and at least 3.3 Mbps and up to 23 Mbps wireless service to the remaining 17,881 households and businesses using a combination of WiMax and 900 Mhz Motorola Canopy wireless access points. Partnerships are in place with five community organizations to provide 100 Mbps service: for telemedicine at three hospitals, interconnecting schools in different towns and the school district offices, emergency 911 dispatch and follow-up services, interconnecting the police station to a court house, and interconnecting various offices within the Iowa Department of Corrections.

This area of rolling hills and modest-sized farms has only one town with even 25,000 people (Burlington, excluded from the Project) and has long lacked modern high-speed Internet facilities. LISCO was the first to offer dial-up Internet service in the area in 1995. A few intrepid pioneers have attached 2.4Ghz WiFi access points at the tops of silos, but service is limited because of the terrain, foliage, and limitations of the technology. Development in the smaller towns is hampered by lack of broadband speed. Since LISCO overbuilt the town of Fairfield, Iowa, the town has jumped on the opportunity for 100 Mbps Internet speeds, and surrounding towns are eagerly anticipating similar service.

QUALIFICATIONS OF THE APPLICANT THAT DEMONSTRATE THE ABILITY TO IMPLEMENT AND OPERATE A BROADBAND INFRASTRUCTURE, AND/OR BE A SUSTAINABLE BROADBAND SERVICES PROVIDER

LISCO has provided Internet service in SE Iowa since 1995 and broadband since 1998. In that time we have had as many as 14,000 dial-up, broadband, and telephone customers and have the customer service, provisioning, and billing systems in place to handle similar numbers of additional broadband customers. We have worked with the two ILECs in our service area for the past nine years and have the interconnection systems in place to efficiently convert customers to our network in all of the project areas. The four key managers, Finance, Engineering & Operations, Sales & Marketing, IT & Legal, have been serving in these capacities for an average of seven years. All intend to continue working at LISCO.

LISCO, working with the engineering firm of Kadrmas, Lee & Jackson (KL&J), successfully implemented, managed and now operates a fiber optic overbuild of Fairfield, Iowa sponsored by RUS Broadband Loans granted in 2006 and 2008. LISCO has engaged KL&J for this project as well, and with the same personnel in place at both companies, we look forward to repeating this success in two slightly smaller towns as well as a number

of much smaller communities. LISCO, as before, will secure relevant licenses, agreements, and drop permits; will prepare sites for efficient deployment both for inside and outside requirements; and will then provide the necessary business, engineering, provisioning and operational support systems to maintain the network and add additional customers. KL&J will perform overall engineering services, engage contractors to lay drops, mainline and inter-city fiber, and oversee their work.

OPPORTUNITIES THE PROPOSED SYSTEM SEEKS TO ADDRESS

LISCO has non-redundant inter-office IRU fiber between its major towns with purchased bandwidth as backup. The new system of fully redundant fiber will permit us to expand our relationships with hospitals, police, and other critical community facilities. (See G41 for partnerships in place.) The inter-office backbone will also allow us to serve many wireless towers and provide FTTP to many small towns (pop. 100-1000) that otherwise have limited DSL service. This will blanket our service area with 3.3-23 Mbps (wireless) to 100 Mbps (FTTP).

NUMBER OF HOUSEHOLDS AND BUSINESSES PASSED

There are 30,203 households and 1,889 businesses for a total of 32,092 in the Project service area according to US Census data.

NUMBER OF COMMUNITY ANCHOR INSTITUTIONS, PUBLIC SAFETY ENTITIES, AND CRITICAL COMMUNITY ORGANIZATIONS PASSED AND/OR INVOLVED WITH PROJECT (E.G., HEALTH CARE, EDUCATION, LIBRARIES, ETC.)

The anchor institutions (including hospitals, courthouses, emergency services, schools, and corrections), total 187 in the service area, which is in addition to the 32,092 households and businesses.

PROPOSED SERVICES AND APPLICATIONS FOR THE PROPOSED FUNDED SERVICE AREAS AND USERS

LISCO will provide FTTP with 100 Mbps Internet access, flat rate local and long distance telephone service, and 140+ channels with 30+ HD channels of video to residences, and similar services with the exception of metered long distance services for businesses. We will provide 3.3 – 23 Mbps Internet service using WiMax or 900 Mhz Motorola Canopy wireless and flat rate local and long distance telephone service to residences within the service area that lack sufficient building density for FTTP, again with the exception of metered long distance services for businesses. Additionally we have an arrangement to provide a private network interconnecting three county health care centers and a radiology clinic. Other hospitals are expected to join this network later.

100 Mbps bi-directional broadband also enables high-definition video monitoring, on-line backups, multiple operations centers and many other applications.

APPROACH TO ADDRESSING THE NON-DISCRIMINATION AND INTERCONNECTION OBLIGATIONS

1. LISCO adheres to the principles contained in the FCC's Internet Policy Statement (FCC 05-151), which fosters network neutrality in order to promote the open and interconnected nature of public Internet;
2. LISCO does not favor any unlawful Internet applications and content over others;
3. LISCO will display any network management policies in a prominent location on its web page (Home Page) and provide notice to customers of changes to these policies;
4. LISCO will connect to the public Internet directly, such that the project is not an entirely private closed network;
5. LISCO will offer and support 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 traffic. Interconnection will be at any of LISCO's offices in which FTTP is offered and requires an entrance facility for cross-connection. The requesting party will pay all upfront costs. Interconnection does not provide access to dark fiber local loops.

TYPE OF BROADBAND SYSTEM THAT WILL BE DEPLOYED (NETWORK TYPE AND TECHNOLOGY STANDARD)

The FTTP system uses a 40 Gbps redundant backbone (e.g. offered by Corrigent) passing through all FTTP communities and wireless towers. Each community with FTTP uses a homerun architecture with a dedicated fiber between each backbone remote terminal and the homes it serves or multiple remotes interconnected with 10Gbps transport. The ring and drops to the homes/businesses are all Ethernet. Equipment from Occam (or ReadyLinks) is used in the CO/RT and at the home.

The wireless broadband towers are interconnected via the 40Gbps redundant backbone and include dual radios, WiMax, and 900 Mhz Motorola Canopy. End user equipment is also from Motorola.

OVERALL INFRASTRUCTURE COST OF THE BROADBAND SYSTEM

The overall infrastructure cost for the Project is \$70,028,640.

OVERALL EXPECTED SUBSCRIBER PROJECTIONS FOR THE PROJECT

LISCO projects 12,165 customers (including critical institutions) using approximately 23,698 services.

NUMBER OF JOBS ESTIMATED TO BE CREATED OR SAVED AS A RESULT OF THIS PROJECT

LISCO intends to add 22 staff to its payroll over the time of the project. We also anticipate that KL&J and subcontractors building out the network will create jobs for additional people. If half of the \$70M (\$35M) is paid to contractors at \$35K/yr/contractor, 333 jobs lasting three years would be created or saved. Additional jobs will be created or saved at equipment manufacturers. The other \$35M will be spent on equipment. Occam, our primary FTTP equipment manufacturer has a ratio of \$400K

revenue per employee per year. We used this as an estimate for the firms we'll be buying equipment from, so this would create or save an additional 29 jobs in various manufacturing companies. If we assume these manufacturers also use half of their revenue to buy parts from other manufacturers and that there are 3 levels of such purchases, an additional 15 jobs are created.

The above LISCO estimate totals 399 jobs lasting at least three years. LISCO also used the *Stimulus Jobs Impact Calculator* from the American Council for an Energy-Efficient Economy website to calculate the jobs estimated to be saved or created as a result of the project. We used an annual energy savings of zero. The estimated total of jobs created or saved by the Project using this method is 405 in year 1, 403 in year 2 and 402 in year 3. Thus, the two methods produce similar results.

Increased broadband usage among new and existing subscribers will lead to long-term project sustainability and economic development throughout Southeast Iowa.