Project Description- The Nebraska Advanced Broadband Network (NABN) is a middle mile network designed to deliver IP based broadband services to 12 unserved communities and establish 20 interconnect points to third-party rural providers in Nebraska. This will provide the rural local exchange carriers (RLECs) and other third-party providers with the needed connectivity and technology to provide the latest IP based broadband services to anchor institutions within their serving area. Level of Need- Rural Local Exchange Carriers in Nebraska are starved for broadband connectivity. The current delivery systems for these services are antiquated 'meet points' to a Bell System middle-mile network. These meet points were put into service over two decades ago and are the only connectivity the community has to the outside world. If these connections are limited, so is the whole community. The existing middle-mile network was primarily designed to carry voice traffic and was bound by LATA boundaries, thus isolating parts of the state. The existing middle mile network is designed around antiquated TDM transport equipment that was not designed to carry high bandwidth IP services, which drives up the cost to deliver IP services in some cases by a factor of ten. The proposed NABN is designed to directly connect to tier-one peering points, thus making these services available to the rural communities of Nebraska. Project Purpose- Today most RLEC's have deployed fiber optic facilities within their exchanges. This is a big investment and many are hoping to provide services that will allow them to recover their investment. Once those fiber networks are deployed, the RLEC then faces the challenge of obtaining services to provide over their fiber infrastructure. This is where a state-of-the-art middle-mile network provides value to all anchor institutions within each local provider's area. This is an area that Nebraska has been weak in for many decades. A number of distance learning and healthcare networks must utilize antiquated TDM services in order to stitch together make-shift networks. The NABN is proposing to provide this ubiquitous connectivity through 20 interconnect points, identified as points of interest, placed near each local telephone company exchange. In addition the NABN will serve 12 unserved PFSAs. This is the most efficient way to increase the connectivity to 37 hospital sites and 152 K-12 school sites throughout the state, 104 of which are distance-learning sites. Project Impact - With the combination of 12 PFSAs and 20 proposed rural local exchange carrier interconnects, NABN will connect over 100 communities to tier-one internet peering points, three MSAs and five community hubs in Nebraska. Within these 12 PFSAs and 20 interconnects are the ability to access 223 anchor institutions through third party providers. The NABN will enable hundreds of communities to benefit from the availability of inexpensive broadband services available in major metropolitan serving areas. Dark Fiber will also be available through this network driving the placement of data centers in rural areas. One of the main factors that the content delivery networks such as Yahoo, Microsoft and Google consider...
before placing a data center in a community is the availability of dark fiber. NABN has designed extra fiber capacity into the backbone to accommodate these requests in rural Nebraska. Fit with BTOP CCI Priorities - The goal of the Nebraska Advanced Broadband Network (NABN) is to make advance broadband services available to as many anchor institutions as possible. Today, Nebraska lacks a ubiquitous advanced broadband network serving local exchange providers within rural parts of the state. All of the RLECs in Nebraska must utilize antiquated Bell System meet points that were installed decades ago. These meet points were designed to terminate voice traffic and not data services. The NABN is designed to make IP based services available to all RLEC through 20 proposed interconnect points and to other third party providers through the PFSA POP sites. In turn these local exchange networks and other third party providers will provide the anchor institutions within their service territory access to IP based services. This is the most expeditious and cost effective way to make these services available to 152 K-12 schools and 37 medical institutions that are located in rural areas that the NABN will serve. Key Partnerships- Pinpoint Network Solutions, LLC (Pinpoint) has tentatively agreed to enter into a public/private partnership with the Mid-Plains Community College Area (MPCC) with an intent to provide broadband services and network options that are redundant and reliable. The NABN project will provide broadband services for a major portion of the communities that MPCC serves. Pinpoint has also received a letter of support from the Ponca Tribe of Nebraska. Citing the 'dearth of adequate broadband' and a 'lack of robust broadband availability,' the Ponca Tribe 'strongly endorses' funding of the NABN and looks forward to connecting to the network via fiber and wireless connections. Open Network Policy- Pinpoint will comply with the four broadband principles established by the Federal Communications Commission in its 2005 Internet Policy Statement. In addition, all existing Pinpoint subscribers are, and all new customers of NABN will be, entitled to access lawful Internet content of their choice. Further, Pinpoint will not favor any lawful Internet applications and content over others. Also, Pinpoint customers will be permitted to run applications and services of their choice (subject to the needs of law enforcement) and connect their choice of legal devices that do not harm the network. Pinpoint agrees with the FCC that consumers are entitled to competition among network providers, application and service providers, and content providers. Accordingly, where feasible from a capacity perspective, Pinpoint will offer a wholesale program to resellers to connect to the network and provide service to customers. Pinpoint also will make affordable access available to other operators who wish to bring wireless broadband services to the area using the radio towers that will be built along the Nebraska Advanced Broadband Network. Pinpoint will display its network management policies in a prominent location on its web page and provide notice to customers of changes to these policies. In addition, Pinpoint customers will be able to connect to the public Internet directly through Pinpoint Internet peering points in Denver and Chicago. Finally, Pinpoint will offer interconnection, wherever it is technically feasible without exceeding current or reasonably anticipated capacity limitations, on reasonable rates and terms to be negotiated in good faith with all requesting parties and will commit to binding private arbitration of any interconnection disputes that arise. Organizational Readiness- Pinpoint has provided middle-mile services and other related services for over four years. Pinpoint has a successful track history of managing and operating a middle mile network to deliver broadband services. Pinpoint currently operates and manages a middle-mile network that spans from Denver to Chicago for the purpose of distributing Internet Access and dedicated IP services. The proposed model of interconnecting to communities for the delivery of broadband services to third party service providers is
a model that Pinpoint has utilized for the past four years. Pinpoint has an established team of professionals that have collectively over 120 years of experience in Project Management, Outside Plant Engineering, Transport Engineering, Construction Management, Network Management, IT, computer support, and billing services. Pinpoint currently has the following Departments in place: Sales- Full sales staff serving the state of Nebraska with expertise in the areas of dedicated internet access, broadband, and Ethernet services IT Department with fully operation NOC- IT staff with Cisco certified technical personnel on staff and 24/7 Network Operations Center (NOC) in operation Billing and Provisioning Department- Currently provide billing to thousands of residential customers and a broad base of business customers with in-house provisioning team Engineering Department- Two Registered Professional Engineers on staff with over 120 combined years of engineering expertise in fiber optics, network design and implementation, cable construction, and wireless and microwave networking Customer Service/Care Department- Fully operational customer service/care staff and customer care manager on staff Operations- Staff of operations experts with over 120 combined years of successful management and operations experience.