执行摘要

REDI Net是一个中型的光纤宽带网络，它将直接服务于123个社区基础设施，总市场潜力为19,227户家庭和1,332家企业。通过与7家服务提供商合作伙伴的强而有力的“最后一英里”策略，REDI Net预计将在第七年达到35%的潜在市场，6,729户家庭和466家企业。该项目将为Rio Arriba、Los Alamos和北部Santa Fe县；城市Espanola；以及五个联邦公认的土著部落：Ohkay Owingeh、Santa Clara、San Ildefonso、Tesuque和Pojoaque。REDI Net遵循CCI的意图，因为它已经采取了对该地区的真正全面的看法，并尽可能地与社区成员和利益相关者合作开发该项目。作为一个开放访问网络，REDI Net将根据无歧视的基础，允许竞争性服务提供商在竞争中性条件下相互连接。这个价值$15,098,643的网络，包括30%的现金和实物匹配，估计可以直接创造115个就业岗位。问题陈述：Northern New Mexico长期以来一直受到宽带投资不足的困扰。一些社区仍然依赖拨号服务，整个地区缺乏可负担的、高带宽的社区基础设施和商业服务。企业级别的服务目前主要由 incumbent carriers 提供，主要是T1线路，大多数机构，尤其是学校、学院和公共安全实体，正试图获得足够的带宽来支持其需要、项目和应用。此外，许多机构甚至无法负担T1线路的价格，这些线路的费用从$350到$1,200不等，不包括安装费用。地区继续经历获得可负担的中段和运输服务的紧缩。高运输成本极大地限制了最后英里的服务提供商的增长。因此，没有真正的竞争可以出现，高昂的价格会转嫁给消费者。这种情况在经济困难地区如Northern New Mexico是不可接受的，缺乏经济负担能力是宽带采用的最大障碍。REDI Net服务区域的宽带采用率估计为40%，里奥阿比拉县、 Española城和北部圣塔菲县的最低收入人口区的最高订阅率为20%。解决方案：REDI Net系统设计由144芯光纤提供Metro Ethernet服务，达到吉比特以太网速度。核心网络使用144芯光纤，通过横向路由与核心光纤连接，以直接连接社区基础设施。网络旨在克服'瓶颈'并允许Northern New Mexico首次抓住21世纪的机会。特别是，REDI Net将使远程学习和先进技术应用成为可能。
schools and community colleges, supercomputing gateways at institutions of higher education, smart grid/green grid applications for rural electric cooperatives, support of economic development for home-based businesses and the burgeoning and high-paying industries of Technology, Media and Renewable Energy. In addition, REDI Net will offer extremely high levels of security and reliability for public safety, telemedicine and Electronic Medical Records (EMR) throughout the region. The project interconnects 123 community anchor institutions in the REDI Net service area. These include 2 colleges, 21 schools, 5 libraries, 11 health care facilities, and 23 public safety entities, including two primary 9-1-1 Public Safety Answering Points (PSAPs). A full 68% of these institutions have provided firm commitments to connect to and purchase services from the network. REDI Net will also provide an affordable and more robust option for transport and wholesale services, which will be open to any qualified service provider, including the incumbents. By providing more bandwidth at lower prices, last-mile providers can grow their customer bases and service areas, and through reduced costs and increased competition, help create a more affordable last-mile environment for all. REDI Net is part of a regional fiber-optic backbone known as the 'REDI Open Networks,' which consists of REDI Net, the Santa Fe e-Cequia (easy grants no. 5644) and Kit Carson Electric Cooperative and Telecom (easy grants no. 5392). These seamless, interconnected networks will allow last-mile service providers to reach new markets outside of their traditional service areas, thereby increasing competition and making service more affordable for end-users. It will also offer the middle-mile providers themselves various options for transport. In addition, the REDI Open Networks are working together to establish a long-term agreement to use RGON fiber for transport to the Gigapop, state's main carrier hotel, in Albuquerque. This agreement will significantly lower the operating costs for each network, making them more sustainable and profitable. The University of New Mexico has submitted a coordinated Round 2 BTOP CCI application (easy grants no. 7237) to upgrade the GigaPop to accommodate traffic from REDI Open Networks and other providers. Qualifications and Partnerships: REDI Net involves an unprecedented number of partnerships and financial commitments among local governments, tribal governments and the private sector. The applicant, the North Central New Mexico Economic Development District (NCNMEDD), is the Council of Governments for the region, and will act as the fiscal agent and administrator of the project. Four sub-recipients will own the actual infrastructure, which will be jointly managed and operated through NCNMEDD's Board of Directors and a Broadband Governance Committee. Established in 1967, NCNMEDD has a strong track record of federal funds management, a reputation for overseeing successful infrastructure projects in the region, and extensive experience with monitoring compliance. One of the advantages of an 'open access' business model is the inclusion of both public and private sector partners in the operations of the network, aligning with core areas of expertise. While NCNMEDD and the sub-recipients will focus on infrastructure investment, qualified private sector companies will be contracted to operate, maintain and deliver consumer applications on the network. NCNMEDD has established partnerships for REDI Net's outside plant maintenance through two established electric utilities, Jemez Mountains Electric Cooperative and the Los Alamos County Utility Department. Both entities have existing vehicles, equipment, and linemen which will eliminate start-up costs and greatly increase efficiencies. Northern NM College in Espanola has agreed to offer training on fiber construction maintenance for linemen at the electric utilities. NCNMEDD is partnering with Kit Carson Electric Telecom for managed network services. With 2,000 telecom customers, Kit Carson has billing,
provisioning and customer support systems already in place, and will provide managed services for REDI Net for an in-kind exchange of fiber, minimizing start up and operational costs.