

Responses of the National Rural Electric Cooperative Association, the National Rural Telecommunications Cooperative, and the National Telecommunications Cooperative Association

To the Notice by the National Telecommunications and Information Administration

On

Development of the State and Local Implementation Grant Program for the Nationwide Public Safety Broadband Network

I. Introduction

The National Rural Electric Cooperative Association (“NRECA”), the National Rural Telecommunications Cooperative (“NRTC”), and the National Telecommunications Cooperative Association (“NTCA”) (collectively the “Rural Commenters”) appreciate the opportunity to file comments in response to the NTIA’s May 16, 2012 Notice.

As a coalition of groups focused on providing services to rural America, the Rural Commenters are uniquely qualified to assist NTIA in addressing several requirements in the Middle Class Tax Relief and Job Creation Act of 2012. Congress recognized the need to address rural concerns by requiring the First Net Board to have sufficient representation from rural interests. Further, the Act requires the First Responder Network Authority, in carrying out its duties, to devise deployment phases with substantial rural coverage milestones.¹

II. Background on the Commenters

NRECA is the national service organization for more than 900 not-for-profit rural electric utilities that provide electric energy to approximately 42 million people in 47 states or 12 percent of electric customers. Kilowatt-hour sales by rural electric cooperatives account for approximately 11 percent of all electric energy sold in the United States. In addition to providing electricity, NRECA members have a strong commitment to social and economic development in the communities they serve.

NRTC represents the advanced telecommunications and information technology interests of 1,500 rural utilities and affiliates in 48 states. NRTC provides products and services developed specifically to meet the needs of rural telephone and electric utilities and their customers: examples include satellite broadband, full service Internet access and support, integrated smart grid technologies and energy efficiency solutions, wireless technologies, long distance programs, wholesale 2G/3G mobile voice and data services, IP backbone services, network monitoring, and programming distribution rights for video providers.

¹ Section 6206(b)(3) of the Middle Class Tax Relief and Job Creation Act of 2012

NRTC is driven by its members' commitment to provide their communities with innovative telecommunications solutions and a vision for continued viability. Our organization helps ensure our members' success by aggregating their individual buying power, negotiating national contracts, and supporting business solutions which expand their service offerings. NRTC was founded in 1986 by the National Rural Electric Cooperative Association and the National Rural Utilities Cooperative Finance Corporation, and operates today with board members representing both the rural telephone and rural electric communities.

NTCA represents nearly 600 rural telecommunications providers. All of NTCA's members are local exchange carriers who provide telephone service to their rural communities. Many of NTCA's members also provide wireless, video, broadband Internet, satellite, and/or long distance services to their subscribers. Each NTCA member is a "rural telephone company" as defined in the Communications Act of 1934, as amended. About half of NTCA's members are cooperatives and the other half of members are commercially owned companies. NTCA's mission is to advance communications services to rural America by ensuring the viability and vitality of our members.

III. General Comments

The Rural Commenters look forward to partnering with other public safety stakeholders involved in creating, managing and operating the First Responder Network Authority. As owners and operators of facilities, networks and infrastructure, we stand ready to assist NTIA and others in creating and successfully operating a nationwide interoperable public safety broadband network.

Electric Cooperatives have a legal "obligation to serve" the end-users within their service territories on just and reasonable terms and without discriminating. Simply stated, *electric cooperatives* are the entities responsible for "keeping the lights on." They respond in emergencies, coordinating their activities with police, fire, ambulance and other public safety entities at the scene. Given the inherent dangers of electric service, all electric utilities have a duty to protect the general public from hazards associated with its generation and delivery. An electric cooperative's obligation to serve, therefore, is imbued with a responsibility for public safety.

Similarly, telephone companies are common carriers who provide the essential communications networks for their communities. Funding is often scarce in rural, difficult to serve areas and public safety must rely on its partnership with the local telecommunications providers to ensure that emergency communications are transmitted.

NRECA members have successfully partnered with state and local public safety entities. For example, Holy Cross Electric Association, a rural electric cooperative serving electricity and natural gas in three Colorado counties, shares public safety frequencies in the 700 and 800 MHz bands with Colorado's statewide digital trunked radio system. In its waiver request to the FCC to allow this sharing, the State of Colorado noted that:

"Holy Cross Energy's electric power maintenance and restoration efforts must be coordinated with public safety and homeland security functions in the event of the

kinds of events mentioned above. There is a natural fit between public utilities and Public Safety agencies that compels all of these entities to work together. It makes sense to integrate communications capabilities of these entities as well."²

Eleven of the 25 distribution cooperatives in the state of Ohio currently share in the Ohio Multi-Agency Radio Communication System, an 800 MHz trunked voice and data system. The system provides statewide interoperability to more than 700 local, state and federal public safety agency users throughout Ohio.

Similar sharing arrangements are in place in Douglas County, Oregon, and the State of Illinois.

Members of the Rural Commenters' associations will be able to identify current infrastructure that may be available to be leveraged into FirstNet. NRECA members conduct regular audits and inspections of the approximately 35 million electrical poles under their ownership and control, and could play a crucial role in identifying existing facilities that could be used as part of FirstNet, as well as identifying where new or upgraded facilities need to be located. The rural telephone companies have built out and continue to maintain both wired and wireless telecommunications networks, with over 92% of their customers having access to broadband services. Their expertise and available resources will be invaluable as FirstNet moves forward with its mission.

Finally, all three of the organizations that comprise the Rural Commenters are national in scope. As national organizations, the Rural Commenters are constantly surveying members on a variety of issues, creating and managing listservs through which our members share data and information on best practices and lessons learned, and mapping the assets of our memberships. We believe this scope and capability could be very helpful to NTIA and FirstNet in carrying out its mission.

IV. Answers to some of NTIA's specific questions

In this section, we answer only those questions in the Notice that pertain to the role of private entities and public/private partnerships.

NTIA Question

1. Section 6206(c)(2) of the Act directs FirstNet to consult with regional, State, tribal, and local jurisdictions about the distribution and expenditure of any amounts required to carry out the network policies that it is charged with establishing...
 - a. What data should the States compile for the consultation process with FirstNet?

² Request for Waiver of Section 90.179 of the Federal Communication Commission's Rules by Holy Cross Energy and the State of Colorado (filed May 15, 2008)

Response of the Rural Commenters

Leveraging existing commercial wireless infrastructure to speed network deployment is an important first step for FirstNet to achieve its stated goals in an expedient and efficient manner. However, FirstNet should not look to nationwide commercial wireless interests alone as the sole resource to accelerate or improve the economies of network deployment. Large wireless providers generally focus their activities around more populated areas, but as demographic analysis of the U.S. clearly illustrates, a high percentage of the population occupies relatively little area.³ Despite their extensive networks, much of the country is served by small wireless providers and there are still areas within the US without commercial wireless coverage. Moreover, even to the extent that national providers do operate in rural areas, the core connections to cell towers and other wireless infrastructure used by national companies in those areas – the backhaul facilities needed to avoid congestion on wireless networks – are often supplied by rural telcos and other local operators. The needs of first responders extend beyond the borders of our metropolitan areas and as such the State and Local Implementation grant program should be focused on comprehensive and complete survey of infrastructure that could be leveraged for the FirstNet network.

For FirstNet to truly achieve a rapid and economical network deployment the Rural Commenters believe that leveraging infrastructure of electric utilities and telecommunications providers – particularly infrastructure located in rural areas – should be tantamount to leveraging existing infrastructure available through the large commercial wireless interests.

Such infrastructure includes:

- Fiber optic networks suitable for both last-mile backhaul and mid-mile transport of traffic within the FirstNet network. Many rural telephone companies have deployed fiber within their service territories and in 20 states, most of which have a high percentage of rural areas, these same telephone companies have formed statewide fiber networks interconnecting their local exchanges (and many cell towers) throughout the state.⁴ Electric utilities have also undertaken fiber deployments, generally within their electric distribution service area, to support utility grid communications and other applications.⁵
- Utility right-of-ways and real estate assets. Utility right of ways can enable rapid and economical solution deployment of additional fiber to provide backhaul or transport. Further, in areas without commercial wireless service it will be necessary to deploy new towers and the real estate assets of the electric and telephone utilities (e.g., substation locations) could be applied in new site construction.

³ For example, the top 250 Cellular Market Areas contain approximately 74% of the total US population but encompass just 14% of the total US land area.

⁴ For example, Dakota Carrier Network is a partnership of 15 independent rural telecommunications companies representing 85% of all the telephone exchanges in North Dakota and over 90% of the state's total surface area. DCN and its member companies have over 10,000 miles of fiber optic cable installed across North Dakota.

⁵ Sho-Me Technologies, a subsidiary of Sho-Me Power Electric Cooperative in Marshfield, Missouri, has operated an advanced fiber network since 1997. Sho-Me Technologies' network now spans over 2,000 miles, with over 120 points of presence.

- Transmission poles and towers. The extensive network of electric transmission towers and poles (particularly those positioned in advantageous terrain locations) can be utilized for cell sites.
- The extensive fixed and mobile wireless networks of rural providers.

In more urban areas, electric utilities are already making their assets available to commercial wireless operators to facilitate their network deployments. In rural markets, rural local exchange carriers and statewide fiber networks provide backhaul services to commercial wireless providers. And several rural providers own and operate wireless networks. It is only logical and efficient that these assets should be leveraged for the FirstNet network. However, to do so, the State and Local agencies that will advise FirstNet must fully engage with rural utilities to ensure that data on their networks is obtained and incorporated into the implementation plan.

- b. Should this activity be covered by the State and Local Implementation grant program?

Response of the Rural Commenters

Yes, to the extent that State and Local agencies will incur costs. For the most part, the telephone and electric utilities can readily provide the data necessary for inclusion in the implementation plan. There may, however, be other costs unforeseen at this time, to collect, analyze and report on data provided by rural utilities.

NTIA Question

2. The Act requires that each State certify in its application for grant funds that the State has designated a single officer or governmental body to serve as the coordinator of implementation of the grant funds.
 - b. Who might serve on the governmental body (e.g., public partners, private partners, technical experts, Chief Information Officers, SWIC, finance officials, or legal experts)?

Response of the Rural Commenters

Private partners including rural electric cooperatives and rural telecommunications companies should serve on the relevant state governmental body. Successful partnerships are characterized by constant communication, consultation and coordination. Private partners bring to the table technical, legal and financial expertise critical to the success of the FirstNet. For example, rural electric cooperatives and rural telecommunications providers have expertise in the specific terrain challenges within their service territories. As owners and operators of approximately 35,000,000 distribution and transmission poles and facilities, we can also assist in maintenance requirements and schedules for these facilities.

NTIA Question

5. How should States and local jurisdictions best leverage their existing infrastructure assets and resources for use and integration with the nationwide public safety broadband network?

...

- c. How will States include utilities or other interested third parties in their planning activities?

Response of the Rural Commenters

We encourage the states to include utilities, particularly rural electric cooperatives and rural telecommunications companies, as early as possible in the planning stages to create and operate FirstNet. Members of the Rural Commenters' associations will be able to help the states assess what infrastructure exists, what opportunities and challenges are within the rural areas of each state, and what role the member would like to play. Including these resources should be a primary principle as the states and NTIA develop plans.

NTIA Question

- d. Should NTIA encourage planning for the formation and use of public/private partnerships in the deployment of the nationwide public safety broadband network? If so, how?

Response of the Rural Commenters

In a word – ABSOLUTELY! Failing to account for and leverage existing facilities and public/private partnerships would be inefficient and could result in significant misuse of scarce financial resources. As stated above, NRECA and NTCA members have successful experience partnering with public safety entities in at least four states. We are committed to sharing our lessons learned from those partnerships with the state entities and NTIA. We recommend a workshop early in the process where states that have partnered with electric utilities and/or telecommunications companies and their utility partners can share lessons learned and recommendations going forward. This critical experiential data can be shared in live workshops held regionally or nationally, or via webinar or other internet aided technology. Rural Commenters stand ready to assist in organizing and/or hosting such a workshop or series of workshops.

NTIA Question

10. What factors should NTIA consider in prioritizing grants for activities that ensure coverage in rural as well as urban areas?

Response of the Rural Commenters

Rural Commenters suggest that the following factors should be considered in prioritizing grants to ensure coverage in rural areas:

- Status and capabilities of public safety infrastructure in the area.
- Frequency of natural disasters as a measure of how frequently first responders and their partners will need to rely on the network.
- Existing partnerships: to the extent that a grant applicant is operating in partnership with a local electric utility or telecommunications company, that grant should be given a higher priority. This recommendation is based on our observation that earlier funding for public-private partnership based work will give NTIA and FirstNet rich and varied data on the operation of partnerships and create a path to take advantage of lessons learned as other parts of the network are stood up.

Respectfully submitted,

Martha Duggan, Senior Principal, Regulatory Affairs
National Rural Electric Cooperative Association
4301 Wilson Blvd.
Arlington, VA 22203
Email: Martha.Duggan@NRECA.coop
Phone: (703) 907-5848

Jill Canfield
Director, Legal & Industry
National Telecommunications Cooperative Association
4121 Wilson Blvd.
Arlington, VA 22203
Email: JCanfield@NTCA.org
Phone: (703) 351-2020

Kurt Schaubach, Chief Technology Officer
National Rural Telecommunications Cooperative
2121 Cooperative Way
Herndon, VA 20171
Email: KSchaubach@NRTC.coop
Phone: (703) 467-1420