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April 11, 2011

VIA ELECTRONIC FILING

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12 Street, SW
Washington, DC 20554

Re: In the Matter of Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, PS Docket No. 06-229; Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, WT Docket No. 06-150; and Amendment of Part 90 of the Commission's Rules, WP Docket No. 07-100.

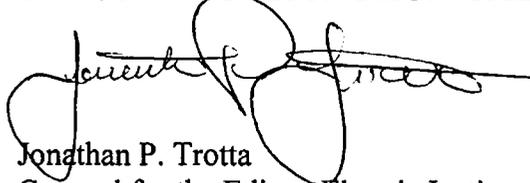
Dear Ms. Dortch:

Enclosed on behalf of the Edison Electric Institute ("EEI") are initial comments in the above-referenced proceedings.

These comments are being filed electronically using the Commission's Electronic Comment Filing System ("ECFS") for inclusion in the record of the above-referenced proceedings.

Respectfully submitted,

STINSON MORRISON HECKER LLP



Jonathan P. Trotta
Counsel for the Edison Electric Institute

Attachment

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Service Rules for the 698-746, 747-762 and 777-792 MHz Bands)	WT Docket No. 06-150
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Amendment of Part 90 of the Commission's Rules)	WP Docket No. 07-100
)	

COMMENTS OF THE EDISON ELECTRIC INSTITUTE

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)	

COMMENTS OF THE EDISON ELECTRIC INSTITUTE

The Edison Electric Institute ("EEI"), on behalf of its member electric utilities, hereby submits the following comments in the above-referenced proceeding in response to the Federal Communications Commission's ("FCC" or "Commission") request for comments on issues related to communications interoperability and nationwide interoperability among public safety broadband networks operating in the 700 MHz band.¹

EEI is an association of United States investor-owned electric utilities and industry associates worldwide. Its U.S. members serve almost 95 percent of all customers served by the shareholder-owned segment of the U.S. industry, about 70 percent of all electricity customers, and generate about 70 percent of the electricity delivered in the U.S. EEI frequently represents its U.S. members before Federal

¹ See FCC, Third Report and Order and Fourth Further Notice of Proposed Rulemaking, WT Docket No. 06-150; PS Docket No. 06-229; WP Docket No. 07-100 (January 26, 2011) ("*Fourth Further Notice*").

agencies, courts and Congress in matters of common concern, and has filed comments before the Commission in various proceedings affecting the interests of its members.

SUMMARY

In this proceeding the Commission is, *inter alia*, generally reexamining its tentative conclusion that under Section 337 of the Communications Act utilities are not eligible to use 700 MHz public safety broadband spectrum because they do not meet that section's "sole or principal" use requirement. More specifically, the Commission is looking at its authority to allow shared use of the public safety broadband spectrum because of the public safety community's desire "to include secondary users such as utilities, public works and others on their network as a mechanism to coordinate common activities and respond jointly to emergencies, as well as a method to spread costs and capitalize on infrastructure sharing opportunities."²

EEI submits that the Commission was incorrect when it tentatively concluded that electric utilities could never be eligible users of spectrum under Section 337. As discussed below, electric utilities can meet Section 337's three-party test for "public safety services," as set forth in the *First Report and Order*. EEI further submits that regardless of whether utilities may in fact be eligible users, under the provisions of Section 337 public safety licensees and electric utilities may enter into lease agreements so long as the spectrum continues to be used principally for public safety purposes.

² Service Rules for the 698-746, 747-762 and 777-792 Bands; Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, WT Docket No. 06-150, PS Docket No. 06-229, PS Docket No. 06-229; Amendment of Part 90 of the Commission's Rules, *Third Report and Order and Fourth Further Notice of Proposed Rulemaking*, ¶135 FCC-11-6 (Released January 26, 2011) (*Fourth Further Notice*).

At the very least, utilities are eligible for prioritized access to spectrum as shared users, and utilities can work with public safety entities to develop methods to ensure such usage will benefit the public at large and will satisfy electric utilities' mandate to serve the public interest and provide critical services relied upon by most, if not all, of this country's government agencies, military bases, public safety and emergency health care services, as well as business and residential users. Electric utilities and public safety entities have a long track record of working closely together in the public interest. EEI and its members believe that shared use of the 700 MHz public safety band by electric utilities is in the public interest due to utilities' unique status as critical infrastructure, and will achieve a level of cost savings only obtainable through efficient joint use of infrastructure, equipment and spectrum. Such use also is consistent with the National Infrastructure Protection Plan³ as well as federal government mandates to improve the efficient use of spectrum.

I. ELECTRIC UTILITIES ARE ELIGIBLE USERS OF PUBLIC SAFETY BROADBAND SPECTRUM.

Section 337 provides that the Commission shall allocate 24 MHz of spectrum in the 700 MHz Band for "public safety services."⁴ Section 337(f) defines "public safety services" as services (1) the sole or principal purpose of which are to protect the safety of life, health, or property, (2) provided by state or local government entities or authorized non-government entities, and (3) that are not commercially available to the public.⁵ In analyzing the requirement of this statute the Commission has tentatively concluded that

³ *National Infrastructure Protection Plan*, Department of Homeland Security (2009), available at http://www.dhs.gov/xlibrary/assets/NIPP_Plan.pdf.

⁴ 47 U.S.C. § 337 (a).

⁵ 47 U.S.C. § 337 (f)(1).

utilities are not eligible users of the 700 MHz public safety broadband spectrum because they do not meet the "sole or principal" use requirement.⁶ The Commission has come to this conclusion in a somewhat roundabout fashion. First, the Commission argues that since from a statutory perspective the "principal purposes" of utilities are unrelated to public safety, the principal purposes of their communications cannot be to protect the safety of life, health or property.⁷ Next, the Commission concludes from a policy perspective that to allow utilities to access the spectrum on a "priority basis" would not be in the public interest given the limited amount of spectrum available to the public safety community.⁸

EEI urges the Commission to revisit its tentative conclusion because the underlying statutory analysis is flawed.⁹ In fact, this analysis runs contrary to the Commission's earlier finding in the *First Report and Order* where it correctly held utilities were not disqualified "*per se*" under Section 337 because of their commercial status, and that "a commercial utility company, with appropriate governmental authorization, is eligible to hold licenses for spectrum in the 700 MHz band for use when it provides services to protect the safety of life, health or property that it does not make commercially available to the public."¹⁰ The Commission's prior holding, unlike its later tentative conclusion, accurately reflects the plain language import of Section 337. As the Commission initially recognized, the fact that electric utilities may or may not fall within

⁶ See e.g. *Third Further Notice* at 14404-05.

⁷ *Id.* at 14405-06.

⁸ *Id.* at 14406.

⁹ EEI joins in the arguments of the Utilities Telecom Council filed in this proceeding.

¹⁰ *First Report and Order*, 14 FCCR 152, 187 at 187-88.

the agency's definition of a public safety "entity" has no bearing on the three part analysis that should be conducted under Section 337, and any decision made on that basis would be improper.

Electric utilities can meet Section 337's three-part test as set forth in the *First Report and Order*. The principal, if not sole, purpose of their communications is to protect the safety of life, health and property. Their communications generally are not made commercially available to the public. To the extent that utilities such as investor-owned utilities ("IOUs") are non-governmental organizations, they operate pursuant to government certificates of need and necessity, most of which have a mandate to serve their state public utility commissions, and usually have FCC licenses.

With specific regard to the question of whether their communications are used solely or principally for the protection of life, health and safety, utility communications do meet this test. It is beyond argument that electric utilities provide critical services at all times, in both ongoing and emergency situations. Electric utilities are well-recognized critical infrastructure industries ("CII") whose use of spectrum for communications is fundamentally for the protection of life and property, whether to control or monitor generation, transmission and distribution so as to maintain reliable power, or to coordinate restoration or determine where outages have occurred.¹¹ As the Commission has noted, utilities use communications "as a critical tool for responding to emergencies

¹¹ See, e.g., 47 C.F.R. § 90.7. Moreover, Department of Defense documents have identified electric utility infrastructure as critically important to key military facilities, and have indicated that loss of power to those facilities could have significant public safety concerns. See GAO, *Defense Critical Infrastructure: Actions Needed to Improve the Identification and Management of Electrical Power Risks and Vulnerabilities to DOD Critical Assets*, GAO-10-147, at 22 (October 2009), available at <http://www.gao.gov/new.items/d10147.pdf>.

that could impact hundreds or even thousands of people... Although the primary function of these organizations is not necessarily to provide safety services, the nature of their day-to-day operations provides little or no margin for error and in emergencies they can take on an almost quasi-public safety function. Any failure in their ability to communicate by radio could have severe consequences on the public welfare...utility companies need to possess the ability to coordinate critical activities during or following storms or other natural disasters that disrupt the delivery of vital services to the public such as provision of electric, gas, and water supplies."¹² Clearly, utility crews do act as first responders and often are the initial first responders on scene.¹³ Electric utilities rely on use of spectrum to facilitate the natural recovery of infrastructure. This includes use of voice and voice-over-internet ("VoIP") technologies to more effectively dispatch field crews. In addition, utility efforts to improve their core infrastructure will provide greater service reliability and network security, thereby better protecting the electric grid from cyber attack. Use of a secure public safety network will facilitate this effort, which clearly is in the public interest.

Electric utilities have critical and non-critical services, and need spectrum for critical applications. Utilities need a communications platform to coordinate with other utilities in both ongoing and emergency situations as they engage in mutual assistance and coordinated response with other public safety entities. Consequently, use of the spectrum for purposes such as service restoration and emergency response are clearly for

¹² *Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services*, PR Docket No. 92-235, *Second Report and Order*, 12 FCC Rcd 143, 14329 (1997).

¹³ Electric utilities fall within the definition of "first responders" under Homeland Security *Presidential Directive 8* because they "in the early stages of an incident are responsible for the protection and preservation of life, property, evidence, and the environment." Homeland Security *Presidential Directive / HSPD-8* at <http://www.fas.org/irp/offdocs/nspd/hspd-8.html>

the purpose of protecting life and property – including the safety and protection of electric utility service personnel and consumers.

Electric utilities can also meet the requirements of the other prongs of the requirements of Section 337. Utility communications services are not commercially available to the public. Likewise, utility networks are used for internal purposes and not made available to the public. Utility use of communications traditionally has been considered only private, internal use.

As noted previously, to the extent utilities such as IOUs are non-governmental organizations, they operate pursuant to government certificates of need and necessity, usually have FCC licenses, and can obtain further authorization as may be required by the Commission before actually utilizing the spectrum.

Finally, as discussed below, the Commission's concern regarding capacity is an issue which can be addressed through a variety of means.

II. ELECTRIC UTILITIES AND PUBLIC SAFETY LICENSEES MAY ENTER INTO LEASE AGREEMENTS.

EEI submits that regardless of whether electric utilities are direct providers of public safety services, shared use of the public safety spectrum is permitted under Section 337 and the Commission's concerns about its authority to permit such use are unwarranted.¹⁴ In particular, contrary to the Commission's previous tentative conclusions,¹⁵ the plain language of Section 337 does permit an authorized public safety licensee to enter into a lease agreement with an IOU as long as the spectrum continues to

¹⁴ *Fourth Further Notice* at ¶135.

¹⁵ *Id.* at ¶134.

be used by that licensee principally for public safety purposes and is not made commercially available to the public. In such a case, all three of Section 337's requirements are met. The Commission recognized this possibility in its *Second Further Notice* where it indicated that "pursuant to the statutory definition [under Section 337], a service can still be considered a "public safety service" even if its purpose is not solely for protecting the safety of life, health or property, so long as this remains its "principal" purpose."¹⁶ The Commission then went on to say:

Taken to an extreme, this reasoning could even permit the Public Safety Broadband Licensee to provide spectrum access to small numbers of entities with no connection to public safety under the rationale that the bulk of the Public Safety Broadband Licensee's services would remain that of providing the public safety entities access to spectrum for use in safeguarding life, health or property. Moreover, the Public Safety Broadband Licensee could arguably leave entire pockets within its nationwide service area served only by such non-public safety entities, based on this same rationale that the small amount of non-public safety use - relative to the nature of the overall use across the country - does not alter the fact that the principal purpose of the service remains public safety.¹⁷

The Commission however rejected such an outcome not because it was precluded by the statute but because in the Commission's judgment it was neither "consistent with the spirit of Section 337(f)(1)(A)" nor good policy because of the finite amount of spectrum.¹⁸

In contrast, earlier in its *First Report and Order* the Commission admitted that Section 337(f) was silent on the "shared use" question, at least with regard to non-

¹⁶ Service Rules for the 698-746, 747-762 and 777-792 Bands; Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, WT Docket No. 06-150, PS Docket No. 06-229, PS Docket No. 06-229, *Second Further Notice of Proposed Rulemaking*, 23 FCC Rcd. 8047, 8061 (2008) (*Second Further Notice*).

¹⁷ *Id.*

¹⁸ *Id.*

commercial public safety services.¹⁹ To the contrary, EEI submits that the issue is not the statute's "silence" but that Section 337 permits shared use as long as the three requirements are met.

The Commission's initial reading of the plain language of Section 337 was correct. The statute must be read in the disjunctive in that it uses the phrase "sole or principal" and not "sole and principal." Therefore, assuming *arguendo* that utilities are not eligible to be licensees, Section 337 still permits the use of the spectrum for purposes other than "solely" for the protection of the safety of life, health and property as long as the public safety licensee continues to use the spectrum principally for public safety purposes. Any other reading of the statute would have the effect of rendering meaningless the statute's intentional use of the term "principal." Courts traditionally have rejected statutory interpretations such as the Commission's that would render a statutory provision meaningless.²⁰

In coming to its subsequent tentative conclusions barring utility eligibility to use the 700 MHz spectrum in any fashion, the Commission appears to have been concerned as much about policy considerations, such as the finite capacity of the spectrum and adhering to the "spirit" of the law, as it was about statutory construction.²¹ However, the interpretation put forward herein is not contrary to the spirit of Section 337 and the capacity issue can be addressed by agreement of the parties. By definition, the public

¹⁹ *First Report and Order*, 14 FCCR at 187.

²⁰ See, e.g., *Halverson v. Slater*, 129 F.3d 180, 185 (D.C. Cir. 1997) ("Congress cannot be presumed to do a futile thing"); *RCA Global Commc'ns, Inc. v. FCC*, 758 F.2d 722, 733 (D.C. Cir. 1985) (a proposed statutory construction that "would deprive" a statutory exemption "of all substantive effect" would produce "a result self evidently contrary to Congress' intent").

²¹ *Third Further Notice* 23 FCCR at 14405-06.

safety licensee would have the necessary authorization and the spectrum use would remain principally to provide public safety purposes. Moreover, an IOU's use of spectrum for traditional utility purposes has classically been held to be only private, internal communications. Further, in adopting Section 309, Congress recognized that utility services are "private in nature," non-commercial, and offered to "protect the safety of life, health or property."²² Additionally, in the course of the deliberations regarding the 1997 Budget Act the following colloquy took place:

Sen. Bryan: I rise in support of the proposal to ensure that sufficient radio spectrum is made available for public safety and maintenance of the Nation's critical infrastructure, such as pipeline, railroad, and electric, gas and water utility services... I hope the FCC will promote the development of shared public safety/public service radio systems [...].

Sen. McCain: I would also like to offer my support for the allocation of new spectrum for use by public safety and public services organizations and would urge the FCC to adopt rules that would facilitate, if not promote, the development of shared radio systems by such entities.²³

Since, as demonstrated by the preceding passage, Congress has recognized the important public safety role played by utilities, spectrum usage on a shared basis would be consistent with Section 337.²⁴ Consequently, the Commission should not attempt to distort the text of the statute in order to achieve a policy objective, particularly where, as here, the use by IOUs of spectrum for communications on a non-commercial shared

²² H. Rpt. 105-49, p H6173 (June 29, 1997).

²³ *Congressional Record*, p. S6325 (June 25, 1997).

²⁴ Moreover, the Senate's later indication that Section 309 (which contains definitional language similar to that in Section 337 but applies instead to public safety radio services) was "broader" than Section 337 in no way addressed the issue of whether public safety entities were prevented from sharing spectrum with utilities. CONF. REP. 105-217.

basis, pursuant to an agreement with an authorized public safety licensee, has been acknowledged to be a "policy goal...worth of pursuit."²⁵

III. SHARED USE OF SPECTRUM BETWEEN UTILITIES AND PUBLIC SAFETY ENTITIES IS ACHIEVABLE PROVIDED THE COMMISSION SUPPORTS SUCH EFFORTS THROUGH FLEXIBLE GUIDELINES.

The Commission in its *Fourth Further Notice* has asked how utilities' access to spectrum on a shared basis might work, how public utilities and public safety entities might collaborate to design a system that provides for this arrangement; how prioritization of access should be addressed; whether and how utilities could be afforded primary status at times; how authorization for shared usage might be obtained; and what role utilities should play in the build-out of public safety broadband networks.

As an initial matter, Section 337 of the Communications Act permits shared use, so long as the principal purpose of the network remains for public safety services. EEI and its members believe that network service can be used on a shared basis, provided public safety entities and electric utilities reach agreements as to reasonable terms for access to and prioritization of network traffic.²⁶ A threshold issue for utilities is a need

²⁵ *Fourth Further Notice* at ¶135. Clearly the recommended approach is in the public interest and mirrors that suggested by the Commission in the National Broadband Plan. See FCC, *Connecting America: The National Broadband Plan* at 252-53, available at, <http://www.broadband.gov/download-plan>. The Commission should not let its flawed analysis preclude it from taking an action that it knows to be in the public interest.

²⁶ While shared use represents one option for meeting electric utilities' communications needs, EEI notes that this approach in no way diminishes or eliminates the need for utilities to have other options for their communications requirements, including additional private spectrum. Electric utilities' spectrum needs are detailed in EEI's comments in response to the Department of Energy's request for information regarding utility communications requirements. See Comments of EEI, Department of Energy, *Implementing the National Broadband Plan by Studying the Communications Requirements of Electric Utilities to Inform Federal Smart Grid Policy* (July, 2010), available at http://www.gc.energy.gov/documents/EdisonElectric_Comments_CommsReqs.pdf; see also Reply Comments of EEI (August 2010), available at http://www.gc.energy.gov/documents/Edison_Reply_Comms.pdf. EEI reaffirms its position taken in those

for assured access to some level of service that cannot be terminated regardless of the circumstance. If utilities cannot be assured of such access and priority, the network service likely will perform no better for utilities than existing commercial services provided by common carriers.

Additionally, certification processes for shared users should be managed at a local level, and shared usage agreements should be negotiated between utilities and licensees based on the unique needs of the parties to those agreements. The Commission should be available to address any subsequent disputes that may arise. Utilities also should have an active role in the build-out of wireless networks to ensure their design coordinates with the reliability needs of utilities and public safety entities.

A. Shared Usage Must Not Be Limited by the Commission and Should Be Addressed at the Local Level.

In its *Fourth Further Notice*, the Commission asks whether it should impose limits on the amount of shared use permitted to ensure that the "sole and principal" use of the network remains tied to public safety. The Commission goes on to ask what types of limits it might put into place, how it should measure shared usage, and should it address usage on a national basis. In addition, the Commission asks whether shared usage, in order to qualify for access, should be required to have a quasi-public safety focus or some other public safety nexus.

In order for shared use to work, utilities must be assured that there will be no limits to such use, and that sufficient amounts of shared space will be available at all

comments regarding electric utilities' need for dedicated spectrum to meet their current and future communications needs.

times to support utility services, including during and immediately following severe weather events and other emergencies. Maintaining a stable grid during numerous types of events – natural and otherwise – is in the interest of public safety, as reliable power is needed for military bases, government and public safety facilities, as well as hospitals, traffic signals and other critical infrastructure. In addition, utilities are critical infrastructure under Executive Order 13288,²⁷ which further requires Federal, state and local agencies as well as private entities to coordinate efforts to ensure rapid restoration of energy production, transmission and distribution systems.²⁸ Therefore, in the interests of public safety, utilities as shared users should not be subject to prescriptive limitations in accessing public safety networks.

The balance of shared usage needs will vary between public safety jurisdictions, and should not be addressed by the Commission on a national basis. Instead, these issues are best handled at local or regional levels. EEI supports a nationwide, interoperable network, but believes that establishing a uniform approach to determine a set amount of shared use permitted on this network will stifle innovation and limit the flexibility required by public safety network operators and utilities to meet their unique needs.

The Commission should avoid measuring or limiting permissible shared use, since doing so likely will result in a framework that fits the needs of no operator, and that reduces the value of the network for all parties. In addition, it would be spectrally inefficient for the Commission to limit shared use to some fixed percentage of network

²⁷ Executive Order 13288, Establishing the Office of Homeland Security and the Homeland Security Council (2001), available at http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=2001_register&docid=fr10oc01-144.pdf.

²⁸ *Id.*, Section F ("Response and Recovery").

capacity, or to state that certain users must always be considered shared users regardless of any unused capacity on the system.

Typically, when the Commission allocates a band of spectrum for a particular use, it does not measure actual use of that band to determine if it is being used “principally” for the allocated purpose. Rather, the Commission creates the allocation, defines eligibility for users and permissible uses, and sets regulatory requirements to make the band principally useful for the intended use. The same approach should hold true for the 700 MHz allocation – the Commission is not required under the statute to continually monitor usage after allocation for public safety, and instead should create a regulatory process to ensure availability of spectrum for public safety purposes. Further, even if the network were used exclusively by public safety entities, it would be impossible for the Commission to enforce a requirement that all traffic be for public safety.

The Commission instead should create a set of general guidelines and goals for shared use, and leave more specific network design and implementation issues to system operators who are better positioned to make such determinations. The character of the 700 MHz spectrum as “public safety” can be maintained through guidelines and contractual arrangements developed by entities sharing the network in each locality or region. In addition, prioritization of traffic can be used to ensure that the principal use of the allocation remains for public safety. Therefore, entities should develop protocols for prioritizing traffic on the network based on their unique needs. It would be helpful, however, to prohibit “commercial” service on the network, in order to ensure that the system will only be used by entities that will use it to fulfill their own internal communications requirements.

It is worth noting that there likely will be sufficient bandwidth for all parties to the network if proper technology is used and the network is appropriately managed. Such technology could manage co-existence of parties seeking to share network spectrum and infrastructure, and make it easier to coordinate shared usage of spectrum. Long Term Evolution ("LTE") technology in particular has the ability to provide allocation capability as well as a convergence of voice, data and video over a shared infrastructure. This technology could regulate usage and over-subscription of capacity, and may provide a shared usage schema that eliminates the need to consider the question of shared usage. As a result, agreements could be reached between entities on a network that satisfy the essential needs of both parties.

B. Prioritization of Shared Use Requires A Flexible Approach and Should Be Negotiated Between Parties to a Shared System.

The Commission asks whether traffic from shared users should be afforded a lower priority, and whether the Commission should require prioritization or limit shared user communications to those that protect the safety of life, health and property. The Commission goes on to inquire how such limitations or prioritizations could be enforced.

As an initial matter, not all traffic from public safety entities or utilities would need to be classified as "critical." Utilities, as well as public safety entities, operate both critical and non-critical services, and require priority shared access only for critical services with public safety impacts. What constitutes a critical utility service may vary between regions and, therefore, prioritization guidelines for shared use should be flexible to permit utilities and public safety entities to work together in determining how best to manage prioritization.

Generally, however, there are four primary utility application groups that likely would make use of a broadband public safety infrastructure: (1) Voice, such as push-to-talk dispatch for field crews, is an essential service during restoration and service switching operations; (2) mobility, similar to voice, is essential to support service restoration and field service dispatch; (3) Supervisory Control and Data Acquisition ("SCADA") telemetry; and (4) Distribution Automation,²⁹ which enables automatic and remote switching of lines, and allows utilities to identify and isolate faults and to monitor grid health and emergency restoration efforts in real-time. Distribution automation improves reliability through real-time monitoring and intelligent control in normal and emergency operations, and enables faster service restoration. Automated line switching capabilities allow important service restoration efforts to occur without endangering utility crews who otherwise must manually operate distribution switches. As a result, distribution automation serves an important public safety function for field crews and the public at large. EEI notes that use cases beyond these four could also leverage public safety infrastructure (e.g., video surveillance of electric system events; electric system physical security; data collection points for disparate utility communications systems; fixed voice in remote areas, etc.). Therefore, flexibility is needed to allow utilities to rely on prioritized shared access such that they can manage their operations based on varying circumstances.

The Commission should not require utilities to accept preemptible network status. Instead, all users should be allowed to use the network in accordance with an established

²⁹ Distribution Automation is one of several components of Grid Modernization, which also includes Dynamic Line Loading and the additional use of technology to optimize the transmission and distribution systems.

prioritization framework, based on users' priority level and need to access the system. If utilities always are subject to preemption, they will use the network only for lower priority traffic – traffic which could have been placed on commercial networks at the outset. Utilities will not invest in public safety networks knowing that their most critical traffic could be preempted when they need it the most. This approach would place the public safety network on par with commercially available services, negating the inherent advantages of a private network.

Prioritization should be treated as a private decision among parties to a shared system. As stated above, while the Commission could develop broad guidelines to serve as a default prioritization mechanism (e.g., using the model of priorities in the Telecommunications Service Priority System or the Wireless Priority Service), it should not define priorities in any detail, but instead should allow priorities to vary between regions and as different types of entities seek to use the network. For example, some municipal governments may wish to use the system for all city services, including those services not for “public safety.”³⁰ Government traffic from such cities should not receive priority automatically ahead of all non-government traffic, as some low-priority government uses (e.g., management of a municipal golf course) should be outweighed by essential non-government uses (e.g., private ambulance services or electric utility service). In all instances, however, public safety services should receive priority access in times of regional or national emergency.

³⁰ As a general matter, EEI believes practices such as these should be discouraged. Allowing the private, secure network to be polluted with such non-critical use traffic would place the system on par with commercially available networks, and discourage utility investment in public safety networks.

A two-tiered routing priority methodology may serve as a useful model for prioritizing access at the local level. The first tier would route priority for all traffic across the network during normal operations, while the second tier would be implemented during a "declared" emergency and would disrupt certain services. This model could also ensure that certain core services (e.g., voice and data services necessary for electric system operation and restoration) are not disrupted under any circumstance. At this stage, however, further discussion is needed to determine how such a structure would work and be implemented.

In addition, the LTE technology infrastructure provides for nearly unlimited variation in prioritization levels, and Quality of Service ("QoS") capabilities manage forwarding treatment of packets through networks, to facilitate priority queuing of traffic based on designated application priority. As stated above, this technology enables shared usage of spectrum through configuration management. Low-priority applications could be assigned lower QoS values to permit critical traffic, as defined by the primary user, to always maintain priority.

C. Consent and Certification of Shared Users Should Be Managed Locally Through Shared User Access Rules.

In its *Fourth Further Notice*, the Commission asks how it might ensure authorization and consent for shared usage, and who should facilitate access for shared users – a public safety broadband licensee, or a network operator. The Commission goes on to inquire what type of model it should consider for facilitating shared user access, and how shared use should be monitored and enforced.

EEI and its members believe that consent for shared usage and certification of shared users is best addressed at the local level, and should be determined by a public safety entity that, in its own right, is eligible to share the network in a given area. In practice, this would enable a public safety entity to share its eligibility to use a network with a non-governmental organization it believes should be a part of that network. Rules should be implemented to manage authorizations, with separate rules governing usage under normal conditions and usage in the event of emergency. Shared user access rules must also be negotiated and developed quickly to ensure the value of public safety networks for utilities.

EEI recognizes that there are competing concerns as to which entity or entities should primarily be responsible for facilitating shared access. In particular, there is concern that the national licensee is already too closely controlled by public safety organizations, and is unlikely to permit utilities to have meaningful network access. Conversely, vesting total discretion in local public safety agencies could create an unmanageable patchwork of network rules, making it difficult for larger utilities to contract for network access. One option for shared user access rules involves the Commission setting limits or boundaries on the authorities of the national licensee as well as local or regional users groups. This model would permit the national licensee to establish technical and networking standards, and to facilitate the network build-out and interoperability. The state and regional organizations, then, could develop policies and guidelines on prioritization.

Alternatively, local control over shared network access could be vested in a state agency with a broader mandate than law enforcement. Using a state agency with a

broader mandate could help to avoid political issues which might arise when dealing with state and local law enforcement, who often complicate efforts to share communications networks with non-public safety agencies.

Authorization and consent for shared usage should not be handled by the FCC, and EEI urges the Commission to avoid imposing burdensome regulations or filing obligations on the approval of licenses to access public safety networks. To do so surely would discourage public safety entities from working with utilities to develop and operate these important networks.

CONCLUSION

WHEREFORE, for the foregoing reasons, EEI respectfully requests that the Commission consider these comments and ensure that any Commission action taken regarding eligibility and access to use the 700 MHz public safety broadband spectrum is consistent with them.

Respectfully submitted,

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