

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)
) WT Docket No. 24-99
Expanding Broadband Opportunities in the)
896-901/935-940 MHz Band)

REPLY COMMENTS OF THE UTILITIES TECHNOLOGY COUNCIL

UTILITIES TECHNOLOGY COUNCIL

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To: The Commission

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The Utilities Technology Council (“UTC”) hereby files its reply comments in support of the Petition for Rulemaking in the above-referenced proceeding.¹ UTC supports the Petition because it will enable utilities to increase the capacity of their private long-term evolution (PLTE) networks. At the same time the Petition ensures that incumbents are protected against interference and may negotiate relocation voluntarily. In addition, UTC requests that the Commission partially lift the freeze for the 896-901/935-940 MHz (900 MHz) incumbent licensees so they can apply for new and modified facilities in areas where there are no broadband systems. Comments on the record overwhelmingly support Commission adoption of a rulemaking to permit 5/5 MHz broadband operations in the band, and several comments by utilities also support partially lifting the 900 MHz freeze or otherwise promoting the use of the band by narrowband systems. UTC agrees with petitioners that the bedrock principle of the

¹ Petition for Rulemaking on behalf of Ameren Services Company, Anterix, Inc., Enterprise Wireless Alliance, Evergy, Inc., Lower Colorado River Authority, Portland General Electric, San Diego Gas & Electric, Southern Communications Services, Inc., Utility Broadband Alliance, and Xcel Energy Services, Inc. in WT Docket No. 24-99 (filed Feb. 28, 2024)(hereinafter “Petition”). See also *Wireless Telecommunications Bureau Seeks Comment on Petition for Rulemaking to Expand Wireless Broadband in 900 MHz Band*, Public Notice, DA 24-320, WT Docket No. 24-99 (rel. Apr. 2, 2024).

revised 900 MHz rules should be an entirely voluntary relocation process for narrowband incumbents in the expanded broadband segment of the band, and the remaining narrowband incumbents and complex system licensees should continue to receive all current protection rights.²

This is an opportunity for the Commission to build upon the negotiation-based framework it established for the transition of the 900 MHz band by providing broadband licensees the flexibility to operate 5/5 MHz systems and allowing narrowband incumbents to continue to operate in the band while remaining protected against harmful interference. This represents a logical next step in the evolution of the 900 MHz band, making more efficient use of available spectrum where possible and ensuring coexistence between broadband and narrowband systems. It also expands upon the Commission’s policies to promote spectrum sharing and flexible licensing rules.³ Finally, it advances overarching energy policies by “allow[ing] utilities to develop LTE networks to perform real-time monitoring and active control of their energy distribution systems,” which will in turn “expand our energy production to meet growing demand, while at the same time reducing our emissions to address the challenge of climate

² *Id.* at 2 (adding that “no incumbent would be required to vacate channels in the current 1.5/1.5 and .5/.5 900 MHz narrowband segments at 896-897.5/935-936.5 MHz and 900.5-901/939.5-940 MHz (“900 MHz Narrowband Segments”))

³ Wireless Telecommunications Bureau Seeks Comment on Ways to Facilitate Access to Currently Unassigned Auction Inventory Spectrum for Wireless Radio Services in Light of the Ongoing Lapse of Auction Authority,” WT Docket No. 24-72, Public Notice, DA 24-215 at 3, n. 8 (rel. March 7, 2024), *citing Amendment of the Commission’s Rules with Regard to Commercial Operations in the 3550–3650 MHz Band*, GN Docket No. 12-354, Report and Order and Second Further Notice of Proposed Rulemaking, 30 FCC Rcd 3959, 4048–69, paras. 301–78 (2015) (3.5 GHz Report and Order) (adopting requirements for SAS and SAS Administrators); *Unlicensed Use of the 6 GHz Band*, ET Docket No. 18-295, Report and Order and Further Notice of Proposed Rulemaking, 35 FCC Rcd 3852 (2020) (6 GHz Report and Order).

change.”⁴ Therefore and as described in more detail in its reply comments herein, UTC supports conducting a rulemaking proceeding to implement rules consistent with the Petition and the comments on the record requesting that the Commission allow 5/5 MHz broadband operations while maintaining interference protection for all incumbent narrowband licensees and preserving voluntary relocation rights for narrowband incumbents in the expanded broadband segment of the 900 MHz band as well as any narrowband complex systems.

I. Introduction

UTC is the international association for the telecommunications and information technology interests of electric, gas and water utilities, pipeline companies and other critical infrastructure industries (“CII”). Its members include large investor-owned utilities who may serve millions of customers across multi-state service territories, as well as smaller rural electric cooperative utilities and public power utilities who may serve only a few thousand customers in rural areas and isolated communities. All of UTC’s members own and operate private internal wireless and wireline communications networks that they use to support the safe, reliable and secure delivery of essential electric, gas, and water services. These communications networks are designed, built and maintained to extremely high standards for availability and resiliency, because they provide mission critical communications and must reach remote areas where commercial communications networks are unavailable, as well as remain operational during emergencies when commercial communications networks are out of service, congested or otherwise insufficient. They also must comply with industry standards for security and reliability because their communications protect against cyber and physical security attacks, as

⁴ *Review of the Commission’s Rules Governing the 896-901/935-940 MHz Band*, Report and Order, Order of Proposed Modification, and Order, WT Docket No. 17-200, 35 FCC Rcd 5183 (2020) (“900 MHz Order”)(Statement of Commissioner Geoffrey Starks).

well as electrical faults that can cause widespread outages if they are not isolated instantly and automatically.

Most of the wireless networks that utilities use are narrowband land mobile radio systems, and utilities rely on them for both voice and data communications. While these systems are highly reliable, they are limited in terms of their capacity because of the narrowband channels they use. While utilities maximize the efficiency of these networks, utilities need additional spectrum to meet increasing demands for higher bandwidth from an increasing number of utility applications, many of which require higher speeds and lower latency. At the same time, utilities are constrained by radio frequency interference and congestion in the spectrum bands they currently use, as well as the reallocation of some of these spectrum bands that has led to the relocation of utility systems out of these spectrum bands. Finding suitable additional or alternative spectrum that provides sufficient quality of coverage, reliability and capacity is difficult for many reasons. Utilities need spectrum in a frequency range below 1 GHz that provides favorable coverage over the large service territories and remote areas that many utilities serve. Utilities also need licensed spectrum that is protected against interference to ensure the reliability of mission critical communications. Increasingly, utilities need spectrum with higher capacity to support wideband and broadband applications for better monitoring and control of operations as well as physical and cybersecurity.

Many utilities are deploying and/or considering deploying private LTE and 5G wireless networks to support their core operations. The 900 MHz band offers wide area coverage, but the 3/3 MHz broadband block may not provide sufficient capacity that utilities need. Hence, the ability to deploy 5/5 MHz broadband systems in the 900 MHz band would provide additional capacity to support higher speed utility applications. Given that the Commission's rules

currently only allow 3/3 MHz operations, the Petition requests that the Commission adopt new rules that would allow 5/5 MHz operations. This would provide the flexibility needed by utilities to either deploy entirely new 5/5 MHz systems or expand existing broadband systems to provide additional capacity. At the same time, the proposed rules would not alter the fundamental approach that protects incumbents from interference and allows for their relocation through voluntary negotiations, including for narrowband incumbents with complex systems.

UTC participated throughout the Commission's proceedings that led to the current rules for 900 MHz broadband operations.⁵ In its comments, UTC supported rules that would allow 900 MHz broadband operations, while protecting incumbent narrowband systems from interference and providing cost reimbursement for the relocation of incumbents out of the broadband block and into the narrowband segment of the band. UTC also filed comments in support of requests to lift the Commission's freeze on the acceptance of applications for new or modified 900 MHz narrowband systems. In those comments, UTC supported limiting relief from the freeze only for incumbent operations, which would help utilities expand coverage or capacity without undermining the purpose of the freeze to prevent speculation and preserve the spectrum environment in the band.

As described in further detail herein, UTC supports allowing 5/5 MHz broadband operations in the 900 MHz while protecting incumbent licensees in the band, consistent with the Petition and UTC's comments in the prior rulemaking proceeding. UTC agrees with petitioners that there is substantial demand for a 5/5 MHz broadband segment in the 900 MHz band, and that utilities are embracing the opportunity to deploy customized 900 MHz broadband networks. Moreover, UTC agrees with petitioners that having the option to deploy 5/5 MHz broadband

⁵ See e.g., Comments of the Utilities Technology Council in WT Docket No. 17-200 (filed June 3, 2019); and Reply Comments of the Utilities Technology Council in WT Docket No. 17-200 (filed July 2, 2020).

systems in the 900 MHz band will enhance the evolution of private wireless broadband in the United States. Circumstances have changed since the Commission previously decided not to adopt a paired 5/5 MHz broadband segment in the 900 MHz band,⁶ such that the Commission should now permit such operations to meet the needs for additional capacity while continuing to protect incumbent operations from interference and allowing them to voluntarily relocate.

Circumstances have also changed such that the Commission should consider partially lifting the 900 MHz freeze to allow narrowband incumbents to apply for new and modified facilities to meet their increasing communications needs, as requested in UTC's pending Petition for Reconsideration or Clarification.⁷ The Commission can now partially lift the freeze and still preserve the spectrum environment by providing a limited exception from the freeze to allow incumbents in the band to apply for new or modified facilities. In the 900 MHz Order, the Commission stated that it would evaluate the success of the 900 MHz band realignment and explore whether to adopt an additional mechanism to transition the 900 MHz band to broadband, including partially lifting the freeze.⁸ This Petition provides an opportunity to continue the transition to broadband while providing relief from the freeze to the limited extent to permit incumbents to expand their systems if they choose to do so.

⁶ 900 MHz Order at ¶33 (not finding that adopting “a paired 5/5 megahertz broadband segment is in the public interest at this time,” and agreeing that “consideration of any broadband operations beyond the Commission’s 3/3 megahertz proposal is currently premature.”)

⁷ See Petition for Reconsideration or Clarification of the Utilities Technology Council, WT Docket No. 17-200 at 1 (filed Oct. 28, 2018)(seeking reconsideration or clarification from the Commission that the freeze “would only apply to applications by entities that are not affiliated with current licensees in the 900 MHz band (i.e., non-incumbents).” *But see* 900 MHz Order at ¶176 (maintaining the freeze on new and modified B/ILT licenses except for relocation purposes tied to prospective broadband licensees’ transition plans “because doing so enables a more efficient transition to the provision of broadband through a realigned 900 MHz band.”)

⁸ *Id.* at ¶48.

This is precisely the kind of flexibility that will unleash the true potential of the 900 MHz band and maximize its effective use. The transition to broadband should provide broadband licensees the flexibility to expand the capacity of their systems by adopting a 5/5 MHz band configuration. At the same time the Commission should provide flexibility to enhance this continued evolution of private wireless broadband, it should also provide flexibility for incumbent narrowband licensees to expand their existing systems where they need to do so. The reality is that there is still a place for narrowband operations in the 900 MHz band, particularly in parts of the country where it may not be economically feasible to deploy private broadband wireless systems. So, why not permit 5/5 MHz broadband operations in certain areas of the country, if coexistence between broadband and narrowband operations in the 900 MHz band can be preserved?

To be sure, the Petition requests certain modifications to the rules and several comments on the record have suggested additional revisions.⁹ Inherently, the proposal is straightforward,

⁹ See e.g., Petition at 11 (stating that the current rules require minimum modification to accommodate a 5/5 megahertz 900 MHz broadband option, and listing several proposed changes to the rules). See also *Id.* at Attachment A (identifying relevant provisions within the Commission’s rules and the proposed changes to those provisions). And see Comments of the American Petroleum Institute in WT Docket No. 24-99 at 6-9 (filed Apr. 26, 2024)(recommending that the Commission 1) protect narrowband incumbents in the 900 MHz band; 2) provide priority access for narrowband incumbents in the 900 MHz to relocate to channels in the 800 MHz band; and 3) expand eligibility in the 800 MHz frequency pools to allow licensing of 900 MHz band incumbents). Comments of Nextera, Energy, Inc. at 5 (filed Apr. 26, 2024)(requesting that the Commission clarify the existing definition of a “complex system” in Section 27.1501, so that the rule tracks the language in the 900 MHz Order by stating “e) Complex system. A covered incumbent’s system that consists of 45 or more functionally integrated sites **as of May 13, 2020. Incumbent licensees that qualify as complex as of May 13, 2020, may make network adjustments that reduce the number of functionally integrated sites below 45 without losing complex system status.**” Emphasis in original.); Comments of Motorola in WT Docket No. 24-77 at 5-7 (stating that the “900 MHz band should continue to support both narrowband and broadband use cases,” and ensure the protection of narrowband incumbent operations, permit narrowband incumbents to renew their licenses, apply for new authorizations, modify their existing licenses to be able to expand their existing footprint; and voluntarily relocate and receive compensation for their relocation costs.); *Id.* at n. 21 (stating that the Commission should waive the temporary freeze, upon request, and permit narrowband incumbents to file applications for new and expanded licenses where broadband systems have not been deployed.); and Comments of Oncor Electric Delivery, Inc. in WT Docket No. 24-99 at 1-9 (filed Apr. 26, 2024)(requesting that the Commission provide a modest exception to the 900 MHz freeze for “900 MHz licensees that can demonstrate legitimate and compelling business reasons to secure authority to make modifications and additions to their licenses.”)

makes common sense and is overwhelmingly supported in comments on the record. Therefore, UTC submits its comments in support of the Petition and requests additional revisions, consistent with the comments on the record and UTC’s pending Petition for Reconsideration or Clarification of the freeze.

II. Utilities Need Access to Additional Wireless Communications Capacity

As numerous comments on the record explain, utilities need access to additional wireless communications capacity to support their core operations. Ameren states that “[e]xpanding high-speed communications infrastructure will enable Ameren to provide a robust and secure solution throughout its service territory, which is necessary for critical utility and customer data transport between control centers, data centers, server farms, remote data collectors, and devices.”¹⁰

Likewise, San Diego Gas & Electric states “[t]he energy sector's transition towards more dynamic and distributed systems requires substantial data throughput and low latency communications,”¹¹ and it adds that “the electrification of transportation, the rise of smart cities, and the increasing consumer adoption of IoT devices are trends necessitating robust and scalable communication networks.”¹² Finally, EEI confirms that “[electric companies need exclusive broadband spectrum providing the high data capacity and low latency necessary for deploying technologies and applications that support the increasing reliability, security, and efficiency needs of the nation’s energy infrastructure.”¹³

¹⁰ Comments of Ameren Services Company Regarding Petition for Rulemaking to Expand Wireless Broadband in 900 MHz Band in WT Docket No. 24-99 at 7 (filed Apr. 26, 2024)(hereinafter “Comments of Ameren”).

¹¹ Comments of San Diego Gas & Electric Company in WT Docket No. 24-99 at 2 (filed Apr. 26, 2024).

¹² *Id.* at 5.

¹³ Comments of the Edison Electric Institute in WT Docket No. 24-99 at 3 (filed Apr. 26, 2024).

Some of the utility applications driving the need for additional capacity include advanced metering infrastructure 2.0 (AMI 2.0),¹⁴ integration of distributed energy resources (DER),¹⁵ voice over LTE (VOLTE) and mission critical push-to-talk (PTT),¹⁶ and multiple other applications, including but not limited to SCADA remote engineering access; fault monitoring; distribution line devices; network underground devices; online dissolved gas analysis; condition based maintenance monitoring; transmission line switches; commercial and industrial metering; environmental monitoring; gas measurement data collection; hydro-monitoring for generation; load curtailment notification; transmission tower light monitoring; network lighting controls; voltage monitoring and adjustment; mobile computing; and mobile hotspots (*e.g.*, for storm recovery teams).¹⁷

III. Utilities Need Access to Additional Licensed Spectrum and Private Internal Communications Networks to Support Mission Critical Communications.

To support mission critical communications utilities need access to spectrum on a licensed, exclusive use basis¹⁸ for private internal communications networks.¹⁹ Licensed spectrum is protected against interference and licensed radio systems are permitted to operate at

¹⁴ Comments of San Diego Gas & Electric at 3 (describing AMI 2.0 functional characteristics).

¹⁵ Comments of Dominion Energy, Inc. at 5 (stating that 5/5 MHz would support low-latency applications and adding that “[o]ne primary example would be to support direct transfer trip (“DTT”) applications for the integration of renewable energy sources.”)

¹⁶ *Id.* at 4.

¹⁷ Comments of Southern Communications Services in WT Docket No. 24-99 at 3 (filed Apr. 26, 2024).

¹⁸ Comments of Edison Electric Institute, Utilities Technology Council, Utility Broadband Alliance, FirstEnergy Corp., Southern California Edison, and Southern Company Services, Inc. in WT Docket No. 24-72 at 3-4 (filed Apr. 8, 2024)(emphasizing that “utilities and other operators of critical infrastructure require access to spectrum on a licensed, exclusive use basis.”)

¹⁹ *Id.* at 3 (explaining how electric utilities use a variety of communications technologies and services to support the safe and efficient generation, transmission, and distribution of energy services to the public and they directly operate communications networks in a way that meets the levels of reliability and resiliency necessary to support the clean, safe, efficient, and reliable delivery of essential electric services to the public.)

higher power generally than unlicensed wireless systems, thereby providing greater reliability and coverage, which is essential to support mission critical communications, such as those protecting the safety of personnel or the operational reliability and security of electric, gas and water infrastructure.²⁰ Moreover, utilities own, maintain and operate private internal communications networks to ensure reliability and security, because commercial broadband service providers generally cannot meet the levels of coverage, capacity, reliability, and security required by utilities for mission critical communications, and they do not generally provide dedicated bandwidth to ensure low-latency communications.²¹

IV. Utilities are Pursuing PLTE Solutions to Meet Their Capacity, Coverage and Security Requirements for Mission Critical Communications.

The comments on the record reflect the growing number of utilities pursuing PLTE solutions to support their mission critical communications requirements.²² For example, Southern Company was the first utility to deploy PLTE in the 800 MHz band in 2018, and it has “experienced first-hand the ways in which broadband can provide effective and valuable support to utility operations,” providing high capacity, low latency communications that is “necessary for the deployment of technologies and applications that support the increasing

²⁰ *Id.* at 4 (explaining that “utilities and other operators of critical infrastructure require certainty regarding the reliability, performance, and security of the spectrum available to them to justify long-term investment in the deployment of advanced communications systems and technologies to support their provision of essential services to the public.”)

²¹ Comments of Southern Communications Services in WT Docket No. 24-99 at 3. (“In many cases, commercial broadband service providers generally cannot meet the levels of coverage, capacity, reliability, and security required by utilities and CII and are unable to provide the dedicated capacity needed for data-intensive, low latency CII applications and uses.”)

²² *See* Comments of Ameren; Comments of Dominion Energy, Inc.; Comments of the Evergy Companies in WT Docket No. 24-99 (filed May 2, 2024); Comments of Lower Colorado River Authority in WT Docket No. 24-99 (filed May 2, 2024); Comments of San Diego Gas & Electric Company; and Comments of Southern Communications Services (all supporting the Petition for Rulemaking to permit

reliability, security, and efficiency needs of the nation’s energy infrastructure.”²³ Similarly, Ameren was the first to deploy PLTE in the 900 MHz band, and it states that “PLTE is an ideal solution to provide communication for a wide variety of use cases,” adding that “a PLTE cellular solution allows Ameren to have more control over capacity and prioritization of data flow with high-volume applications, ensure reliability and resiliency of the network, and ensure cyber security standards and protocols.”²⁴ Lower Colorado River Authority reports that it will be deploying a PLTE network in the 900 MHz band covering 68 counties and more than 30 cities in LCRA’s wholesale electric, transmission, and water service areas, “which will provide a host of capabilities including grid awareness, communications and operational intelligence that will enhance resilience and spur innovation.”²⁵ Other utilities such as Dominion Energy are operating PLTE networks under experimental authorization,²⁶ or are “actively investigating” using PLTE in the 900 MHz band like Oncor Electric Delivery²⁷. These utilities illustrate the trend among utilities using or examining PLTE to support their increasing communications demands to support mission critical communications.

V. The Commission Should Permit Utilities to Operate 5/5 MHz PLTE Systems in the 900 MHz Band.

As utilities face increasing communications demands and many utilities are pursuing PLTE solutions, the Commission should permit utilities to operate 5/5 MHz broadband systems in the 900 MHz, as requested in the Petition. UTC agrees with petitioners that the Commission

²³ Comments of Southern Company Services in WT Docket No. 24-99 at 3.

²⁴ Comments of Ameren in WT Docket No. 24-99 at 8 and 9.

²⁵ Comments of Lower Colorado River Authority in WT Docket No. 24-99 at 2 (May 2, 2024).

²⁶ Comments of Dominion Energy, Inc. at 2.

²⁷ Comments of Oncor Electric Delivery Company, LLC in WT Docket No. 24-99 at 2-3 (filed May 2, 2024).

should establish rules to permit 5/5 MHz operations in the 900 MHz band while continuing to protect incumbent narrowband systems from interference and ensuring negotiated relocation of incumbents in the expanded broadband segment of the band, including incumbents operating complex systems. UTC also agrees with comments in support of the petition that the 900 MHz broadband rules have proven effective and require minimal change to accommodate an expanded broadband segment.²⁸ Therefore, UTC supports the Petition, including the minimal modifications to the rules that have been proposed.²⁹

As comments by utilities on the record explain, allowing 5/5 MHz operations in the 900 MHz band will spur deployment of broadband operations³⁰ and support the expanding communications needs of utilities.³¹ It will also limit 5/5 MHz broadband operations to areas of the country where 5/5 MHz broadband systems can be deployed without disruption to existing narrowband operations. This would be a win-win that would provide utilities an option to increase the capacity of their broadband systems, and it would allow utilities with incumbent systems to continue to operate those narrowband systems without interference or mandatory relocation. Comments on the record by utilities have explained the need to expand the capacity

²⁸ See *e.g.*, Comments of Anterix in WT Docket No. 24-99 at 4-5 (filed May 2, 2024)(describing Anterix’s outreach efforts with incumbent and adjacent channel operations in the 900 MHz band and adding that “Anterix is confident that the current rules will provide superior protection to [narrowband PCS and air-to-ground incumbents] than would be available from high-power narrowband systems operating at both 900 MHz Band band edges,” and it “intends to continue working with both entities to ensure that 900 MHz broadband, air-to-ground and NPCS systems all enjoy maximum utilization of their assigned spectrum while avoiding inter-system interference.”)

²⁹ See Petition at 11-12 (summarizing the modifications of the current rules for broadband 900 MHz operations). See also Attachment A (applying the interference protection and performance requirements of the existing 900 MHz broadband operations to the proposed 5/5 MHz operations, and modifying the Commission’s rules to add the 5/5 MHz broadband allocation.)

³⁰ Comments of San Diego Gas & Electric at 1-6.

³¹ Comments of Southern Company Services at 1-6.

of their existing 3/3 MHz broadband operations, and other comments by utilities have explained that narrowband systems need to be protected against interference and allowed to continue to operate in the band. Therefore, UTC echoes these comments in urging the Commission to establish rules that would promote broadband operations in the 900 MHz band while protecting incumbent systems, consistent with the relief requested in the Petition.

VI. The Commission Should Partially Lift the 900 MHz Freeze.

In addition to supporting the Petition, UTC also supports comments on the record requesting that the Commission partially lift the freeze on applications for new or modified narrowband facilities in the 900 MHz band. UTC agrees with these comments that the Commission should partially lift the freeze in such a way that would preserve the 900 MHz band for broadband operations but still allow incumbents to expand the coverage or otherwise modify their existing systems to continue to support their communications needs. There is a balance that can be struck here by lifting the 900 MHz freeze without undermining its original purpose. Moreover, the underlying purpose of the freeze may no longer apply, given the extent to which the band has already been cleared. The remaining incumbents will either continue to operate on a narrowband basis or they may decide to voluntarily relocate through negotiations with a broadband licensee. By limiting the lifting of the freeze so that only incumbents are allowed to apply for new or modified facilities, the Commission can maintain the spectrum landscape and prevent speculation by new entrants. Practically, this appropriately balances the interests at stake and serves the public interest. Narrowband incumbents can maintain their systems and expand them as needed, while broadband licensees can deploy facilities in the remaining areas of the country and/or negotiate the relocation of incumbents where the parties agree.

This is consistent with comments on the record that support both narrowband and broadband operations in the 900 MHz band, and it is consistent with comments that request lifting the freeze. The reality is that there are areas of the country and different communications requirements where it may make more sense to deploy narrowband systems on a cost-effective basis. The comments on the record reflect this reality. For example, Oncor states that it “remains mindful of the fact that most of the counties that it serves are very rural, some with extremely low population densities,” such that Oncor is not in a position to initiate a conversion to broadband as rapidly as other major utilities in more populated areas of the country.”³² Similarly, AAR states that railroads fully intend to remain in the 900 MHz band, and “AAR’s ribbon license must be protected to maintain safe rail operations and enable the railroads to expand and deploy the innovative next generation services to be launched in this band.” API states that petroleum companies “operate very large 900 MHz narrowband radio systems enabling wireless voice communications that support operations at their major petroleum refineries, petrochemical plants, and natural gas liquids (“NGL”) fractionators,” which provide “essential wireless communications to several thousand employees and contractors that comprise the workforces at these large petrochemical complexes,” such that the narrowband incumbents must be protected and be given priority to relocate into the 800 MHz band.³³ Motorola expresses similar concerns about the need to protect narrowband incumbents, stating “[t]here are many SMR, B/ILT and critical infrastructure systems that rely on the two-way radio services powered by narrowband incumbents to provide safety-related and emergency response communications,

³² Comments of Oncor Electric Delivery at 3.

³³ Comments of the American Petroleum Institute (API) in WT Docket No. 24-99 at 2 (filed May 2, 2024).

including utilities, refineries, and railroads, among others.”³⁴ Finally, many utilities, including several who support the Petition, also support the need to preserve the band for narrowband operation and protect narrowband incumbents from interference, particularly complex narrowband systems.³⁵

Given the interest among utilities and other critical infrastructure in continuing to operate and protect narrowband systems in the 900 MHz band, the Commission should consider partially lifting the freeze so that narrowband incumbents can expand the coverage and otherwise modify their systems as necessary. As Oncor explains, the freeze was supposed to be temporary when the Commission established it in 2014, and the Commission promised to revisit the freeze in 2021, including potentially “lifting the application freeze to permit new and expanded use of 900 MHz narrowband operations beyond incumbent relocations.”³⁶ As the freeze has been in place for more than half a decade and imposes a substantial burden on the maintenance and effective operation of narrowband networks used for critical communications services, Oncor requests that the Commission adopt an order that establishes a modest exception to its freeze to permit existing 900 MHz licensees that can demonstrate legitimate and compelling business reasons to

³⁴ Comments of Motorola Solutions, Inc. in WT Docket No. 24-99 at 5 (filed May 2, 2024)(adding that critical infrastructure’s narrowband use cases include, among other things, public safety communications, nuclear power plant security, utility service restoration and maintenance, smart grid applications, and emergency communications. And with the increasing frequency and intensity of natural disasters, critical infrastructure systems will need to rely on narrowband services for disaster communications and response.”)

³⁵ *See e.g.* Comments of Nextera Energy at 4 (stating that “[a]s the licensee of a 900 MHz narrowband complex system, FPL has invested hundreds of millions of dollars to build its integrated system and requires certainty that its system will be able to operate without disruption or interference from a broadband licensee.” *See also* Comments of Lower Colorado River Authority at 3 (stating that at the same time that it supports the Petition, “LCRA is committed to ensuring that its and other existing narrowband systems are protected from interference from broadband networks.”)

³⁶ Comments of Oncor at 4, *quoting* 900 MHz Order at ¶48.

secure authority to make modifications and additions to their licenses.³⁷ Similarly, Motorola encourages the Commission to ensure that narrowband incumbents can continue to renew their 900 MHz Band authorizations, apply for new authorizations, and modify their current licenses to expand their geographic footprints in counties that have not negotiated 5/5 megahertz broadband deployment.”³⁸ UTC agrees that the Commission should partially lift the freeze and allow incumbents to apply for new or modified facilities in the 900 MHz band, consistent with its reply comments herein as well as its pending Petition for Reconsideration or Clarification.

³⁷ *Id.* at 1, 5-6.

³⁸ Comments of Motorola Solutions, Inc. at 6, and n. 21 (stating that “[t]he Commission should waive the temporary freeze, upon request, and permit narrowband incumbents to file applications for new and expanded licenses in markets where 5/5 megahertz broadband has not yet been deployed per the FCC’s current 900 MHz rules”)

CONCLUSION

UTC and other commenters on the record support the Petition in recognition that electric, gas and water utilities and other critical infrastructure industries need access to exclusive use broadband spectrum to provide the high data capacity and low latency necessary for deploying technologies and applications that support the increasing reliability, security, and efficiency needs of the nation's energy infrastructure.³⁹ UTC also supports the Petition because the proposed rules would continue to protect incumbent narrowband systems from interference and ensure negotiated relocation of narrowband incumbents, including complex systems. In addition, UTC echoes the comments requesting the Commission to partially lift the freeze to enable incumbent narrowband systems to expand their coverage or otherwise modify their facilities as needed. Therefore, the Commission should adopt a rulemaking consistent with the Petition and consistent with UTC's reply comments herein and on the comments on the record as a whole.

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³⁹ Comments of the Edison Electric Institute in WT Docket No. 24-99 at 3 (filed May 2, 2024).