

BEFORE THE  
**Federal Communications Commission**  
WASHINGTON, D.C. 20554

In the Matter of )  
 )  
Spectrum Policy Task Force Seeks ) ET Docket No. 02-135  
Public Comment on Issues Related to )  
Commission's Spectrum Policies )

TO: The Spectrum Policy Task Force  
Office of Engineering and Technology

**REPLY COMMENTS OF CINERGY CORPORATION**

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## EXECUTIVE SUMMARY

Critical infrastructure's needs are a vital consideration in formulating future spectrum policy, particularly in today's environment of heightened security. While market-oriented allocation policies are appropriate in certain contexts, the Commission must also recognize those instances in which they should not be employed. Utilities such as Cinergy provide value to society as a whole, and their use of spectrum provides a positive externality. Strict application of market-driven policies, however, will fail to provide for spectrum services that are needed for the common good. As such, the Task Force should recommend preservation of policies, such as the auction exemption for public safety radio services, which will ensure that this market failure is taken into account and that adequate spectrum is provided for utility use.

Utility spectrum requirements are unique in that they demand a high degree of reliability, ubiquitous coverage over utility service areas that do not conform to population boundaries, and immediate access to channels, particularly during emergency situations. Commercial providers generally fail to meet these high standards, requiring utilities to maintain their own networks. Because of these unique requirements, geographic licensing is not a viable option and would be generally inefficient for utilities. In addition, overlay licenses have the potential to preclude utilities from adequately serving their expanding utility service areas.

Interference protection is also an area of critical importance to utilities. As it also recommended in the current proceeding on 800 MHz interference, Cinergy suggests that the Task Force should consider recommending the adoption of modest rule changes to

assist entities in determining their responsibilities for resolving interference, to permit flexible, negotiated agreements regarding interference, and to provide a complaint mechanism including recourse to alternative dispute resolution.

Cinergy also concurs with the Task Force's observation that public safety and critical infrastructure industries require highly reliable radio-based communications. As such, they require adequate interference protection and additional spectrum to ensure the availability of secure, reliable communications now and in the future. While novel sharing mechanisms may be viable, they should not be implemented to the detriment of a utility's system. The utility licensee should be permitted to determine with whom and on what terms sharing occurs, and should also be permitted to preempt shared users when the utility's capacity needs warrant.

Public safety and critical infrastructure industries face new challenges in ensuring both the physical integrity of their networks and the integrity of the data systems that support their operations. Utilities rely on spectrum-dependent technologies to perform these duties and, as illustrated in the NTIA Report on utility spectrum needs, this use will grow in the future. Accordingly, the Task Force should develop policy recommendations that will ensure that utilities may obtain access to the spectrum resources they need.

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**REPLY COMMENTS OF CINERGY CORPORATION**

Cinergy Corporation ("Cinergy"), by and through its undersigned telecommunications counsel, hereby files these comments in response to the Public Notice, DA 02-1311, issued by the Spectrum Policy Task Force ("Task Force") of the Federal Communications Commission ("FCC" or "Commission") on June 6, 2002. In the Public Notice, the Task Force requested comment on a number of issues falling into five broad categories, including: (1) Market Oriented Allocation and Assignment Policies; (2) Interference Protection; (3) Spectral Efficiency; (4) Public Safety Communications; and (5) International Issues. As discussed in more detail below, Cinergy urges the Task Force to consider the needs of utilities and other critical infrastructure services in assessing the future of the FCC's spectrum policy.

## **I. INTRODUCTION**

Cinergy is one of the largest diversified energy companies in the United States and is the parent company of Cincinnati Gas & Electric in Ohio and PSI Energy, Inc. in Indiana. Together, these operating companies serve 1.4 million electric and 455,000 gas customers in Ohio, Indiana and Kentucky. Cinergy uses spectrum-dependent equipment for its land mobile communications system, which operates in the 150, 450, and 800 MHz bands. In addition, Cinergy operates a Multiple Address System in the 900 MHz band and its point-to-point microwave system in the 2, 6, and 11 GHz bands. Cinergy uses its spectrum-dependent equipment for a wide variety of applications, many of which are unique to the utility industry. These systems and applications include two-way radios, private paging, electric and gas distribution system control and data acquisition, generation control, generation scheduling and dispatch, electric system protective relaying, mobile data to field service trucks, electrical feeder lockout alarms, meter reading, voice communications, and data network communications.

Cinergy and other energy utilities provide the core resources that permit modern society to function. Cinergy provides electricity and gas to over a million customers in households, schools, hospitals and businesses across three states. The lives of virtually everyone within Cinergy's service territory are touched every day by its utility operations. Without electricity and gas, other industrial and business operations simply cannot be performed. Simultaneously, utilities must also ensure the safety of their crews working on their infrastructure and deliver electricity and gas safely and efficiently to their customers. A misstep can be extremely dangerous and deprive large areas and populations of essential

public services. Cinergy's spectrum usage is an important part of its core operations, ranging from routine maintenance to emergency response.<sup>1</sup>

The importance of Cinergy's spectrum-supported communications cannot be overstated, particularly in the post-September 11 climate. Critical infrastructure industries, such as utilities, are vital to the country, such that their incapacity or destruction would have a debilitating impact on the Nation's economic prosperity and quality of life.<sup>2</sup> Cinergy's private network enables it to serve not only the public's need for reliable electricity and gas services, but to ensure the safety of its employees and to respond in times of disaster or other emergency. This ability must be maintained.

Cinergy applauds the Commission's decision to create the Task Force, to initiate a comprehensive evaluation of the FCC's current spectrum policies and to assess possible improvements in the system. Cinergy believes that the Task Force has the unique opportunity to become a vehicle for change, and urges the Task Force to recommend policies to the Commission that will ensure that the crucial communications needs of utilities are met now and in the future.

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<sup>1</sup> See, e.g., Marshall W. Ross and Jeng F. Mao, Current and Future Spectrum Use by the Energy, Water, and Railroad Industries, Response to Title II of the Departments of Commerce, Justice, and State, the Judiciary, and Related Agencies Appropriations Act of 2001, Public Law 106-553, U.S. Dep't of Commerce, National Telecommunications and Information Administration (Jan. 30, 2002) ("NTIA Report").

<sup>2</sup> See, e.g., Statement of John J. Tritak, Director, Critical Infrastructure Assurance Office, U.S. Department of Commerce, before the House Committee on Science (June 24, 2002), available at <http://www.ciap.gov/publicaffairs.tritak6.24.02.html> ("Tritak Statement").

## **II. CRITICAL INFRASTRUCTURE'S NEEDS ARE A VITAL CONSIDERATION IN DETERMINING THE POTENTIAL LIMITATIONS OF MARKET-BASED SPECTRUM ALLOCATION POLICIES**

### **A. The Public Interest Requires Careful Assessment Of Those Circumstances In Which Other Considerations Outweigh Market-Driven Allocation Policies**

The public interest requires careful assessment of those circumstances in which other considerations outweigh market-driven spectrum allocations. The Commission's spectrum policy must recognize that the "highest valued use" is not necessarily the use that is associated with the highest revenue or highest price. Many commenters agree with this premise, stating that national policy objectives, such as ensuring that adequate, reliable spectrum is available for public safety services cannot be achieved using solely a market-oriented decision making approach.<sup>3</sup> APCO, for example, avers that "[p]ublic safety communications is entirely unrelated to marketplace forces."<sup>4</sup> While commercial providers can place a "price" on the value of spectrum, relative to the revenue or other economic benefit to be received by its use, APCO notes that "a public safety entity cannot place a price on the potential life-saving benefits of communicating effectively with police, fire, EMS and other public safety personnel in the field."<sup>5</sup> The same principle applies to utility use of spectrum. As UTC asserts, "[u]nfettered reliance on market forces to allocate

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<sup>3</sup> See Comments of the Telecommunications Industry Association at 5 ("TIA Comments"); Comments of Bergen County, New Jersey at 3; Comments of United Telecom Council at 5 ("UTC Comments").

<sup>4</sup> Comments of the APCO at 3 ("APCO Comments").

<sup>5</sup> APCO Comments at 3.

spectrum will not promote spectrum services that are needed for the common good."<sup>6</sup>

When this type of market failure occurs, it is up to regulators to step in to protect the public interest and to accommodate these publicly desirable allocations. AT&T states that when market failures can be predicted, "it may be appropriate to modify the standard allocation and assignments process in order to achieve other goals, such as setting aside public safety spectrum and exempting public safety service providers from auction requirements in order to ensure that such services are available."<sup>7</sup> Any policy recommendations formulated by the Task Force must take this economic reality into account.

Utilities such as Cinergy provide value to society as a whole and their use of spectrum provides a positive externality for society.<sup>8</sup> Therefore, the Commission must support their operations. The spectrum that utilities use is generally not a revenue-producing asset for them, and as such, they can not compete with commercial carriers for spectrum at auction.<sup>9</sup> It is evident from the exemption provided to public safety services, including utilities, in section 309(j)(2) of the Communications Act of 1934, as amended, that Congress recognized the need to account for this market failure and to ensure that utilities and similar entities have access to spectrum for critical noncommercial uses that

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<sup>6</sup> UTC Comments at 5.

<sup>7</sup> Ex Parte Comments of AT&T Wireless Services, Inc. at 8-9 (July 12, 2002).

<sup>8</sup> Externalities cause private marginal benefits or marginal costs to differ from societal ones. Positive externalities in production or consumption can prevent a transaction from occurring, as economic agents fail to capture all the benefits of their activities and as such receive insufficient incentive to produce. Regulation, such as mandates, taxes, and subsidies, may correct externalities by changing the change the private marginal benefits or costs to compel provide the incentive that was previously lacking. Janusz R. Mrozek, 30 *Journal of Economic Education* 411, 416 (Fall 1999).

<sup>9</sup> *See* Comments of Association of American Railroads at 21-22 ("AAR Comments").

benefit the public as a whole. The Public Safety Wireless Network ("PSWN") also recognizes this, stating that the Task Force must "preserve the hard-won spectrum that has been identified for use in support of critical national safety, security and public welfare interests."<sup>10</sup> Moreover, PSWN avers that spectral protection and assurance, including the exemption from competitive bidding, must be preserved in order to maintain and assure the future optimal provision of wireless services for public safety and public service entities.<sup>11</sup> Strict reliance on market-oriented policies, therefore, is not prudent.

## **B. Regulatory Flexibility**

When appropriately applied, regulatory flexibility has the potential to increase the use of currently underutilized spectrum. Any move to increase flexibility, however, must also accommodate the communications needs of public safety and critical infrastructure industry users.

Cinergy and other utilities require spectrum for communications systems that have a number of features that are unique to utility and other critical infrastructure users. Chief among these attributes are: (1) an extremely high degree of reliability; (2) ubiquitous coverage over service areas that do not conform to population boundaries such as Economic Areas; and (3) immediate access to channels, particularly during times of natural disasters, accidents and other emergency situations. It has generally been Cinergy's experience that the only way to ensure that all of these needs are met is to control and maintain a private network.

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<sup>10</sup> Comments of the Public Safety Wireless Network at 7 ("PSWN Comments").

Contrary to the assertions of Ericsson,<sup>12</sup> it has been Cinergy's experience that commercial providers generally fail to meet one or more of the requirements that Cinergy and other utilities demand from their communications systems in order to ensure that the safety and integrity of their infrastructure is adequately maintained. While Cinergy has used alternatives to its own private wireless communications systems in limited circumstances, Cinergy has found that the alternatives specifically available to it often do not meet the high standards and functionality described above.

Commercial wireless providers often fail to offer or guarantee the high level of performance that utilities require of their mobile operations. Utilities typically configure their private internal communications systems to provide wireless service over their entire utility service area, concentrating their spectrum holdings at locations with the highest level of utility use, which is often not in densely populated areas. A commercial carrier's system may not cover a utility's service area as extensively as the utility's own system and may not provide capacity at peak loading sites. For example, sites with a high degree of activity based on their complexity and importance require more capacity. Most commercial carriers do not offer fleet dispatch service, which is critical to Cinergy's operations, as it undoubtedly is for other utilities as well. Although one national carrier offers a fleet dispatch functionality, it has been Cinergy's experience that this functionality is not available in about one-third of Cinergy's utility service area in Indiana.

Commercial carriers also typically provide seamless service only in areas where it makes economic sense to do so, usually in metropolitan areas and along major interstate

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<sup>11</sup> Id.

highways. As a result, commercial carriers may not provide coverage at all in remote areas or may not provide coverage that is seamless. If a single carrier does not cover a utility's entire service area, a utility would need to use multiple carriers or maintain its private internal communications system as well as contract for commercial service.

Additionally, utilities typically build a level of redundancy and reliability into their wireless systems to insure service availability at all times. For example, many utility communications sites have independent back-up power sources. A commercial carrier may or may not have the same level of reliability built into its system.<sup>13</sup> Because they are specifically designed for redundancy, a utility's communications system is unlikely to be adversely affected by natural disasters or other adverse conditions. For example, in January of 1998, a series of ice storms swept through New England causing extensive damage to the critical infrastructure. The ability to communicate was also hampered by the storm. "The destruction of large numbers of distribution poles and their attached cables combined with widespread electric service outages to telephone switching centers severely disrupted communications over the public-switched telephone network, fiber optic, and cellular systems . . . The most reliable means of communications was found to be the utility owned and operated microwave and mobile radio systems."<sup>14</sup>

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<sup>12</sup> Comments of Ericsson, Inc. at 9-10 ("Ericsson Comments").

<sup>13</sup> In August of 2001, thousands of cellular customers in the Washington, D.C. area lost service for more than eight hours due to a loss of commercial power at a cellular switching station. *Business Briefs*, San Antonio Express-News, August 10, 2001 at 2E.

<sup>14</sup> North American Electric Reliability Council, 1998 System Disturbances, Review of Selected Electric System Disturbances in North America (May 2001) at 11.

Furthermore, in the event of a failure in the commercial provider's system, a utility would have little control over how quickly service is restored or if service will be restored based on the utility's priorities. Utilities need to control their own private internal communications systems to ensure that service will be restored based on their priorities.

In addition, commercial providers may change the nature of their service offerings at the end of a contract term, which could place utilities in the position of having to choose between either a lengthy contract term or uncertainty with respect to the terms of their service. While these issues could be addressed to some degree in the contract process, utilities require a high degree of consistency and reliability in their wireless communications capabilities, which generally makes commercial options unrealistic for critical communications needs.

Utilities must also be able to use their private internal communications systems during a storm or other natural disaster, because that is the time when emergency repairs are most likely to be required. Such times are also subject to heavy demand for communication by the public at large.<sup>15</sup> Utilities must be able to rely on their communications systems twenty-four hours a day, seven days a week.

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<sup>15</sup> *In the Matter of The Development of Operational, Technical and Spectrum Requirements For Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010; Establishment of Rules and Requirements For Priority Access Service*, WT Docket No. 96-86, *Second Report and Order*, 15 FCC Rcd 16720, 16725 ¶ 11 (2000).

**C. Geographic Licensing And Overlay Licensing Would Jeopardize Utility Operations**

For many of the reasons the American Petroleum Institute ("API") notes, geographic licensing does not meet the needs of many private radio users, including electric and gas utilities such as Cinergy.<sup>16</sup> If required to rely on geographic licensing, utilities may be forced into "over-licensing" to cover their service territories or "under-licensing," which may result in intolerable coverage gaps. Neither scenario is an effective or efficient use of spectrum. As API also notes, even under flexible policies permitting disaggregation or partitioning, transaction costs and the possible loss of the ability to ensure highly reliable and available operations limit the practical availability of these tools for private radio users such as utilities.<sup>17</sup>

Conversely, site-by-site licensing "enables a private licensee to tailor its system to its individual coverage requirements, thereby making more efficient use of the spectrum."<sup>18</sup> As recently as the May 2002 Order establishing service rules for seven frequency bands transferred from the NTIA for non-government use, the Commission recognized the continued viability of site-by-site licensing and the benefit to the public interest that it can provide.<sup>19</sup> This is also the case with utility operation due to the unique contours of their service areas.

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<sup>16</sup> See Comments of American Petroleum Institute at 7 ("API Comments").

<sup>17</sup> API Comments at 7.

<sup>18</sup> API Comments at 7.

<sup>19</sup> In re Amendments to Parts 1, 2, 27 and 90 of the Commission's Rules to License Services in the 216-220 MHz, 1390-1395 MHz, 1427-1429 MHz, 1429-1432 MHz, 1432-1435 MHz, 1670-1675 MHz, and 2385-2390 MHz Government Transfer Bands, FCC No. 02-152, *Report and Order*, WT Docket No. 02-8 (rel. May 24, 2002) ("We believe that a

Similarly, "overlay" auctions can in fact result in inefficient use, which may jeopardize critical utility spectrum operations. In typical overlay auctions, land mobile incumbent licensees are allowed to continue to operate within their existing interference contour. At the same time, however, incumbent licensees are typically precluded from expanding their interference contour in any direction without the consent of the auction winner. It is unlikely that the auction winner would grant its consent. Indeed, one of the auction winner's prime motivations is to clear as much of the spectrum as possible to enhance the value of its assets. If the incumbent licensee needs to expand its interference contour, the auction winner has extraordinary leverage over the incumbent licensee.

If a utility cannot expand its private internal communications systems to cover new or expanded service areas this will impair its ability to utilize its land mobile communications system. The system in essence becomes "landlocked" and can not be dynamically reconfigured to meet a utility's changing needs.

For example, a utility's service area often includes both rural and metropolitan areas. Utilities often need to license more frequencies in metropolitan areas because they provide service to more customers and as a result, the infrastructure in the metropolitan area can be quite complex. As the population grows, the metropolitan areas will often expand into the rural areas. Utilities will therefore, need to license additional frequencies to provide the same level of service in areas where the population grows. If an overlay auction has occurred, there will be no additional frequencies to license. Instead of using

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site-by-site licensing scheme with frequency coordination in this instance will facilitate a more expeditious and predictable administration of licenses in this band, with minimal regulatory intrusion consistent with our overall spectrum management objectives.").

five frequencies to provide maintenance support for 50,000 utility customers, the same five frequencies might be needed to support 100,000 utility customers. The institution of overlay auctions in the spectrum bands currently used by the utilities would negatively impact the utilities' ability to respond to increased communications demands arising as a result of system growth.

#### **D. The FCC's Auction Authority**

There is currently *no* exclusive spectrum allocation for critical infrastructure entities,<sup>20</sup> and what spectrum is available is highly congested. Some projections indicate that the utility industry alone will require an additional 6.3 MHz of spectrum by 2010.<sup>21</sup> Utilities do not have sufficient spectrum for current operations, and will be further constrained in the future, as needs increase.<sup>22</sup>

As discussed above, section 309(j)(2) of the Communications Act, as amended, represents Congress' assessment that strict employment of market-oriented policies will fail to account for the vital noncommercial communications needs of public safety radio services users such as electric and gas utilities. This assessment is as valid today as it was when enacted, and the need for spectrum for public safety radio services is more pressing than ever in the recent climate of heightened national security. As such, the Task Force should keep Congress' assessment and the increasing needs of utilities in mind when it formulates its policy recommendations regarding critical infrastructure spectrum uses. The

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<sup>20</sup> UTC Comments at 6.

<sup>21</sup> NTIA Report at xxi.

<sup>22</sup> Comments of Dominion Resources, Inc. at 4 ("Dominion Comments").

Task Force has the opportunity to prevent the abrogation of the statutory rights of utilities and other public safety radio services users and to preserve essential public safety and critical infrastructure communications.

### **III. INTERFERENCE PROTECTION IS IMPERATIVE FOR CRITICAL INFRASTRUCTURE USERS**

As UTC notes, utilities are all too familiar with the problems associated with harmful interference.<sup>23</sup> As evidenced by the conflicting statements in the comments submitted in the current proceeding on 800 MHz interference,<sup>24</sup> there is some confusion with respect to not only to defining what constitutes harmful interference, but also as to who bears the responsibility of resolving the interference once identified. A number of parties in that proceeding assert that an entity can be in technical compliance with the Commission's rules and still cause harmful interference. Still others, however, point to the Commission's existing rules, particularly section 90.173,<sup>25</sup> as a prohibition upon this type of interference. To the extent that a loophole exists that does permit interference to occur despite technically complying with Commission rules, that loophole must be closed in order to encourage efficient spectrum use.

In its comments to the Commission in the ongoing 800 MHz proceeding, Cinergy and several other utilities recommended an interference resolution mechanism that also

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<sup>23</sup> UTC Comments at 7.

<sup>24</sup> *In re Improving Public Safety Communications in the 800 MHz Band; Consolidating the 900 MHz Industrial/Land Transportation and Business Pool Channels*; WT Docket No. 02-55, *Notice of Proposed Rule Making*, 17 FCC Rcd 4873 (2002) ("800 MHz Proceeding").

<sup>25</sup> 47 C.F.R. § 90.173 (2001).

may be applied outside of the 800 MHz context.<sup>26</sup> Specifically, Cinergy advocated several modest rule changes, such as creating presumptions as to the source of interference, which would aid in identifying the responsibilities of parties with respect to interference resolution. In addition, Cinergy suggested that the FCC should permit innovative, negotiated solutions such as spectrum swaps to resolve individual interference situations. As a last resort, Cinergy also suggested that complaint and resolution procedures, including the possibility of arbitration with appeal rights, be established in order to provide an appropriate forum for airing complaints and to provide an additional economic incentive for parties to find a negotiated solution. Cinergy believes that negotiated, flexible solutions with recourse to alternative dispute resolution is a viable interference resolution mechanism, and is preferable to possible relocations, reallocation or other highly disruptive interference mitigation techniques.<sup>27</sup>

#### **IV. SPECTRAL EFFICIENCY**

Cinergy concurs with Boeing that the FCC should "not attempt to make efficiency comparisons between public safety communications services and commercial radio services."<sup>28</sup> As discussed above with respect to market-oriented allocation decision, "[s]uch comparisons inherently fail to take into account the important non-quantifiable

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<sup>26</sup> See Comments of Cinergy Corp., *In re Improving Public Safety Communications in the 800 MHz Band; Consolidating the 900 MHz Industrial/Land Transportation and Business Pool Channels*, WT Docket No. 02-55 at 10-22 (May 6, 2002).

<sup>27</sup> See also, Comments of BellSouth Corporation at 13 ("BellSouth Comments") ("Private discussions and negotiations often facilitate the more rapid development of solutions to interference issues to the mutual benefit of the parties and the Commission.").

<sup>28</sup> Comments of The Boeing Company at 5-6 ("Boeing Comments").

public interest benefits that public safety services provide."<sup>29</sup> Moreover, because the public interest benefits involved in each of the different radio services classified by the Commission, it is not "possible or desirable" to quantify efficiencies across services as suggested by the Task Force.<sup>30</sup> Rather, spectrum efficiency in the context of radio systems operated by public safety radio services must be viewed from a qualitative standpoint.<sup>31</sup> This approach is necessitated by the need for channel availability, reliability and ubiquitous coverage, the loss of which would otherwise impair the entity's ability to fulfill its public safety and public service responsibilities.<sup>32</sup>

#### **V. SECURE AND RELIABLE UTILITY COMMUNICATIONS MUST BE ASSURED**

Cinergy concurs with the Task Force's observation that "[p]ublic safety and public service agencies at the federal, state and local level, as well as critical infrastructure industries, require highly reliable radio-based communications services."<sup>33</sup> As such, rules and policies that provide adequate interference protection and additional spectrum are essential to ensure the availability of secure and reliable public safety radio services, and Cinergy supports adoption of the same.

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<sup>29</sup> Boeing Comments at 6.

<sup>30</sup> Boeing Comments at 5.

<sup>31</sup> UTC Comments at 10.

<sup>32</sup> UTC Comments at 10.

<sup>33</sup> *Public Notice*, DA 02-1311 at 6; UTC Comments at 11-12.

**A. Additional Mechanisms To Ensure Availability Of Dependable, Interoperable And Cost-Efficient Services**

A critical issue to be considered in any contemplated policy shift is providing sufficient time for any affected party to plan and execute a successful transition. This includes, for example, sufficient lead time to avoid adversely impacting the value of infrastructure investments and business plans that are premised upon current regulatory structures. Particularly given the current climate in the telecommunications industry, large-scale regulatory change that is implemented too quickly may devastate already weak companies, rendering infrastructure and other investments worthless.

Providing sufficient notice and establishing a long-term implementation plan for any policy change is also absolutely crucial to utilities and other entities whose communications may involve the safety of life, health or property. These communications systems cannot tolerate lapses in service. Transitions in policies, methodologies, and technologies, if appropriate, must be phased in with sufficient leeway for affected entities to schedule the necessary adjustments.

**B. Consideration Of Novel Sharing Mechanisms**

Utilities must typically license frequencies to accommodate loading at peak use to ensure that sufficient capacity is available in the event of an emergency or similar situation. This capacity ensures that communications remain reliable when they are needed the most, and is one of the features that differentiates public safety radio services from commercial systems. Because commercial spectrum users have an economic incentive to use all of their capacity all the time, there is no reserve capacity to handle

sharp increases in demand. This is one reason that commercial systems are currently inadequate substitutes for utility private wireless networks.

The "excess" capacity in a utility network, however, is not really "excess" in the typical sense of the word. It is serving the very real and valuable function of ensuring the instant availability of communications capacity when the need arises. The Task Force's statement, therefore, with respect to the "low average traffic level" of public safety radio services is misleading, and should not imply that the capacity licensed by these entities is not absolutely vital to maintaining public safety.

Cinergy recognizes, however, that some sharing mechanisms may be viable *if* the reliability, coverage, integrity and availability of the spectrum for the use of the primary licensee is not impaired. For example, it may be possible that public safety radio service spectrum may provide capacity for "backhaul"-type functions or for "overflow" traffic if or when these uses are technically feasible and otherwise compatible. Other compatible uses may also be found that would not impair use by public safety/public service entities and could effectively utilize this capacity. Such sharing arrangements, however, should be within the control of the primary licensee, and would require that the primary licensee retain the ability to preempt users or reclaim shared channels to maintain channel access in emergency or similar situations.

The inability to preempt users, and the FCC's strict order of priority are two of the primary failings of the current priority access service being slowly implemented by commercial carriers.<sup>34</sup> As such, in its current form, priority access is not an appropriate or

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<sup>34</sup> See, e.g., UTC Comments at 12.

useful way for utilities to meet their need for spectrum capacity. Again, if a utility has licensed a frequency initially, the utility should have control over with whom and under what terms and conditions that frequency is shared. This is the only way to effectively ensure that the utility will have access to communications channels whenever and wherever needed.

**C. Determining The Amount Of Spectrum Dedicated To Public Safety And Related Functions**

Spectrum allocation decisions for services that support public safety and related functions must take into account the new challenges that face traditional public safety entities and critical infrastructure entities since September 11. Utilities face the considerable task of both ensuring the physical integrity of the nation's electric, water, gas and petroleum facilities, and maintaining the integrity of the data systems the control and support these physical assets.<sup>35</sup> Utilities rely on spectrum-dependent technologies to perform these duties. Through its policy assessments and its workshops, therefore, the Task Force should develop policy recommendations that will make certain that utilities may obtain access to the spectrum resources they need.

It bears repeating that there is currently no spectrum that is allocated for the exclusive use of utilities, despite its recognized importance. Allocation policy should ensure that utilities have access to spectrum to fulfill their public service obligations. In addition, it is vital to consider the quality and technical capability of the spectrum that is allocated to public safety/public service entities currently and in the future. NTIA's Report

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<sup>35</sup> Tritak Statement at 2.

on utility spectrum needs is a starting point for the Task Force to assess the amount of spectrum that will likely be required by public safety and critical infrastructure industries in the future.

**VI. CONCLUSION**

**WHEREFORE, THE PREMISES CONSIDERED**, Cinergy urges the Task Force to proceed in a manner consistent with the views expressed herein.

Respectfully submitted,

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