

PETITION OF EXTENET SYSTEMS, INC.
TO THE CONNECTICUT SITING COUNCIL
FOR A DECLARATORY RULING OF
NO JURISDICTION OR, IN THE
ALTERNATIVE, THAT NO CERTIFICATE
OF ENVIRONMENTAL COMPATIBILITY
AND PUBLIC NEED IS REQUIRED AS THE
PROPOSED PROJECT WILL NOT HAVE A
SUBSTANTIAL ADVERSE ENVIRONMENTAL
EFFECT

PETITION NO. _____

APRIL 25, 2007

PETITION FOR DECLARATORY RULING
MERRITT PARKWAY DISTRIBUTED ANTENNA SYSTEM PROJECT

I. INTRODUCTION

Extenet Systems, Inc. (formerly known as Clearlinx Network Corporation)¹, referred to herein as "Extenet" or "Petitioner", hereby petitions the Connecticut Siting Council ("Council") for a declaratory ruling that the Council does not have jurisdiction over this project because no part of the project can be considered a "facility" under Connecticut General Statutes ("C.G.S.") § 16-50i(A)(6). Even if the Council could possibly consider any part of the project to be within its jurisdiction, the petitioner is entitled to a declaratory ruling that a Certificate of Environmental Compatibility and Public Need ("Certificate") is not required under the provisions of §16-50k of the Connecticut General Statutes ("C.G.S.") as the project would not have a substantial adverse environmental effect.

II. EXECUTIVE SUMMARY

Extenet proposes to construct a stealth Distributed Antenna System along the Merritt Parkway corridor, originating east of the New York state line and continuing up to

¹ Extenet, f/k/a Clearlinx submitted a declaratory ruling petition to the Council on or about July 26, 2006, Petition No. 782 for a similar proposal. That Petition was subsequently withdrawn

Westport. This system will remedy the lack of continuous wireless service along this section of the Merritt Parkway corridor. The project will include the installation of twenty seven (27) Distributed Antenna "nodes" suspended on cables at select overpass locations and on standard utility pole structures along this twenty (20) mile length of the Merritt Parkway within existing utility and Connecticut Department of Transportation rights of way ("Project"). The project will also include the installation of one (1) new utility pole within the Merritt Parkway right-of-way ("R.O.W.") and six (6) new poles within Connecticut Department of Transportation ("DOT") R.O.W. off the Merritt Parkway at Overpass Crossings. The Extenet system has been designed to be visually unobtrusive, provide all FCC licensed carriers wireless coverage and capacity where it is currently lacking, and accommodate future technologies, capacity and data applications.

III. PETITIONER

Extenet designs, implements and operates Distributed Antenna Systems (DAS) that provide the wireless industry with an economically viable network that improves the quality of voice and data services for their customers and addresses the aesthetic concerns of municipalities and their residents. Extenet typically implements DAS networks in those areas that are too difficult to locate traditional network architectures, or in which the construction of traditional wireless infrastructure is infeasible from an environmental or regulatory perspective.

Extenet is a Delaware corporation with its headquarters at 1901 South Meyers Road, Suite 190 Oakbrook Terrace, Illinois 60181. It is comprised of a seasoned team of wireless industry personnel who have extensive experience designing and

implementing DAS networks. Extenet has a national presence, with active networks (or networks at an advanced stage of development) in California, Illinois, Texas, Florida, Massachusetts, Michigan, New Jersey, and New York. It has received a Certificate of Public Convenience and Necessity (or its equivalent) in California, Connecticut, Florida, Illinois, Maryland, Massachusetts, Michigan, New Jersey, New York, Pennsylvania, Rhode Island and Virginia.

IV. DESCRIPTION OF PROPOSED PROJECT

A. Distributed Antenna System Technology

A Distributed Antenna System consists of the following major elements:

- Optical Conversion Equipment: The Optical Conversion equipment receives the wireless radio frequency ("RF") signal from the equipment of the Wireless Service Provider and converts it to an optical signal. This optical signal is then routed via fiber optic cable to specific Remote Node locations. The Optical Conversion Equipment is located in the Base Station Hub.
- Remote Nodes: Each Remote Node consists of a repeater and a small unobtrusive antenna typically mounted on a utility pole, light post, bus stop or other type of existing municipal or utility infrastructure, and connected by strands of fiber optic cable. It converts the optical signal (received from the Optical Conversion Equipment) back to an RF signal and transmits the signal. A single Remote Node can broadcast the signal for all wireless service provider technologies.

- Base Station Hub: The Base Station Hub is the central location where the Wireless Service Provider equipment is installed and the Optical Conversion Equipment is located. The Base Station Hub can be located within existing buildings/structures, or at an existing telecommunication facility.

B. Proposed Extenet DAS Merritt Parkway Project

Extenet proposes to install a stealth Distributed Antenna System along twenty (20) miles of the Merritt Parkway corridor beginning east of the New York / Connecticut state line and continuing to Westport, CT. The Project involves the location of twenty seven (27) Remote Node antennas ("Node") on 3/8" braided steel cable suspended over the Merritt Parkway at select overpass locations, and on standard utility poles within existing utility corridors and public rights of way, including Merritt Parkway underpasses and overpasses.

1. Node Installations

Each Node will consist of an antenna and appurtenant radio equipment. These twenty seven (27) Nodes will be installed in one of three ways: 1) across overpass locations co-located on cable that is added to the existing utility cabling ("Mid-Span Installation"), 2) on existing wooden utility poles that will be added to the utility infrastructure already in place ("Existing Pole Installation"), and 3) on wooden utility poles that will be added to the utility infrastructure already in place ("New Pole Installation"). The specific Node Location Detail Summary, including Node dimensions

and detail, USGS location, site photo for each node planned and photosimulations of the proposed installations, is attached in Exhibit A.²

a. Mid-Span Installation

At sixteen (16) overpass locations along the Merritt Parkway and one (1) existing overhead cable location, two (2) sets of nine (9") inch square panel antennas will be placed back to back and attached to a metal strand (that is run parallel to existing utility infrastructure spanning the Parkway). The mounting height of this suspended mid-span Node installation is dependent upon the location of the existing utility infrastructure, but is estimated at between 22 ft. and 30 ft. above the roadway. This type of installation is planned at sixteen (16) overpass locations and one (1) proposed mid-span aerial cable that is not located at an overpass location.

b. Installations on Existing Utility Poles

At seven (7) locations along the Merritt Parkway, seven (7) antenna clusters consisting of two (2) antennas each will be placed near or at the top of existing utility poles and hidden by a PVC shroud. The dimensions of the antenna housing are eighteen (18) inches wide by twenty three (23) inches tall. The height of the existing utility pole structures is typically between twenty-four (24) and fifty (50) feet above ground, depending on

² Of note, since filing technical reports with the various towns through which the DAS system will run, several of the node locations have been removed or changed. Therefore, the numbering of node locations on both Exhibit A and Exhibit E is not sequential.

the individual, existing pole structure. The mounting height of the radio equipment is typically between eight (8) and twelve (12) feet above ground. The dimensions of all radio equipment are eighteen (18) inches wide by twenty (20) inches tall.

c. New Pole Installation

At three (3) locations along the Merritt Parkway, Extenet will install seven (7) new utility poles in the existing utility structure right of ways. The utility poles, which will be forty (40') to fifty (50') feet in height for the off-Parkway locations and twenty-five (25') to thirty (30') feet in height from the Merritt Parkway road bed at the underpass locations, will be placed within the utility infrastructure or right of ways. Specifically:

- i) (5) new poles (and Nodes) will be installed for a mid-span antenna installation at an overpass location;
- ii) One (1) new pole (and two Nodes) will be installed for a mid-span antenna installation at an overpass location; and
- iii) One (1) new pole (and Node) will be installed at an exit ramp.

Approximately thirty seven (37) miles of a single mode fiber optic cable (containing up to 288 fibers) will connect these Nodes. The fiber optic cable will pass over the Merritt Parkway thirteen (13) times - via nine (9) overpass runs and four (4) underpass runs. In all cases, all electrical and radio equipment will be placed on the nearest utility pole to minimize visibility from the Merritt Parkway.

2. Base Station Hub

The Network design includes two (2) independent single story fully-enclosed equipment facilities, approximately 7.5 ft x 10 ft. These facilities, referred to as Base Station Hubs are proposed to be located at or near existing cellular tower compound facilities along the Merritt Parkway corridor. The design of the Base Station Hub will be consistent with that of the existing compound equipment. A sample Base Station Hub Plan is attached hereto as Exhibit B.

Extenet has a Network Operations Center ("NOC") that provides continuous monitoring of the fiber optic transport network as well as performance of the associated Node equipment. The NOC operates twenty four (24) hours a day, three hundred sixty five (365) days a year and can respond immediately to any possible issue.

C. Need for the Extenet DAS Merritt Parkway Project

Extenet's DAS network provides support for all current wireless (TDMA, GSM, CDMA, UMTS, etc.) technologies. It also provides support for those wireless carriers who have multiple technologies and/or frequencies. It supports E-911 for wireless carriers who have implemented a TDOA E-911 solution. Finally, the Extenet DAS network can be configured to support certain state and local emergency services communications.

1. Existing Need

The Merritt Parkway is a significant transportation corridor with an abundance of mature trees and topographical challenges which results in inadequate wireless coverage. It is certainly no secret to residents and travelers in southern Connecticut that

the historical, topographical and vegetative qualities of the Merritt Parkway have made it one of the most difficult major Connecticut roadways to provide consistent, high quality wireless coverage.

Extenet performed independent RF drive tests of the Merritt Parkway corridor which demonstrate a comprehensive deficiency of wireless consistency and capacity in this area. The primary wireless coverage complaints in this area are dead spots and lack of capacity.

After confirming the need for such a system, Extenet designed a DAS network that would remedy the existing wireless coverage deficiencies. Its engineers identified and mapped all potential fiber routes and then provided the information to the Extenet RF staff to create a predictive model design. Once all of the local information was received, Extenet refined the Network Design to identify the locations of the Nodes and Base Station Hub(s), obtained Joint Use Agreements and was granted a CPCN by the DPUC.

Extenet performed extensive antenna transmitter testing at each proposed Node location along the Merritt Parkway to obtain actual RF propagation performance. This data is evaluated with specific criteria for the site selection process and provides justification for the final network design. The Merritt Parkway Network Design is attached hereto as Exhibit C. It includes all RF design detail, specifically Node Locations, Fiber Optic Network and Node Locations (Sheet A-2), RF Predictions (Sheets A3) and individual Node Specifications.

The implementation of this system will provide the various wireless carriers with a coverage solution that would meet or exceed -84dBm in at least 90% of this area given a network with four (4) frequency channels.

2. Future Need

The Extenet system has been designed to allow for the accommodation of future technologies, and to manage future capacity and data applications. Wireless coverage advances and expansions, and new technologies can be seamlessly deployed with little, if any, disruption or new construction.

V. LEGAL ANALYSIS

A. The Project Falls within the Jurisdiction of the Department of Public Utility Control

On December 16, 2005 Extenet applied to the Connecticut Department of Public Utility Control ("DPUC") for a Certificate of Public Convenience and Necessity ("CPCN") to operate as a facilities-based provider of non-switched transport telecommunications services to wireless services providers in Connecticut.³ In order to obtain a CPCN, Extenet had to demonstrate that this proposal furthered the goals of the State in the provision of telecommunications services:

1. ensure the universal availability and accessibility of high quality, affordable telecommunications services to all residents and businesses in the state;
2. promote the development of effective competition as a means of providing customers with the widest possible choice of services;
3. utilize forms of regulation commensurate with the level of competition in the relevant telecommunications service market;
4. facilitate the efficient development and deployment of an advanced telecommunications infrastructure, including open networks with maximum interoperability and interconnectivity;

³ "Extenet must obtain a CPCN to offer and provide intrastate telecommunication services." Exhibit D.

5. encourage shared use of existing facilities and cooperative development of new facilities where legally possible, and technically and economically feasible; and
6. ensure that providers of telecommunications services in the state provide high quality customer service and high quality technical service. C.G.S. Section 16-247a(a).

The DPUC concluded that the Extenet proposal furthered these goals and subsequently granted Extenet a Certificate of Public Convenience and Necessity (DPUC Docket No. 05-12-05 March 15, 2006); a copy of the decision is attached hereto as Exhibit D.

The proposed DAS installation primarily utilizes existing utility infrastructure to locate its node antenna, fiber optic cable and appurtenant equipment. This aspect of the installation is unquestionably exclusively within the jurisdiction of the DPUC.

The department shall authorize any certified telecommunications provider to install, maintain, operate, manage or control poles, wires, conduits or other fixtures under or over any public highway or street for the provision of telecommunications service authorized by section 16-247c if such installation, maintenance, operation, management or control is in the public interest, which includes but is not limited to, facilitating the efficient development and deployment of an advanced telecommunications infrastructure, facilitating maximum network interoperability and interconnectivity, and encouraging shared use of existing facilities and cooperative development of new facilities where legally possible and technically and economically feasible.

C.G.S. Section 16-247h

Extenet is required to submit its construction plans to the DPUC for approval, which ensures project suitability and provides oversight. "No certificate granted herein shall be deemed to grant approval to install, maintain, operate, manage, or control facilities which occupy any public right of way. Approval to utilize the public right of way

shall be obtained pursuant to Section 16-247c-5 of the Regulations of Connecticut State Agencies. Extenet will file for DPUC approval of its construction design and implementation plans.

Based on the foregoing, it is clear that the proposed DAS installation is within the exclusive jurisdiction of the DPUC.

B. The Council Does Not Have Jurisdiction Over This Project Because The Installation proposed By Extenet is Not A “Facility” Within The Meaning Of Connecticut General Statutes Section 16-50i(A)(6)

The only aspect of the DAS installation that could possibly be considered as within the Council’s jurisdiction is the location of new utility poles, and only then if the utility poles fit the definition of “telecommunications towers” so as to qualify as a “facility” pursuant to C.G.S. Section 16-50i(a)(6). If that were true the Council would have exclusive jurisdiction over only the aspect of the installation that fit the definition of “facility.”

Pursuant to C.G.S. Section 16-50x, the Siting Council has exclusive jurisdiction over “the location and type of facilities and over the location and type of modifications of facilities . . .”

With respect to wireless telecommunications, “facility” is defined as:

such telecommunication towers, including associated telecommunications equipment, owned or operated by the state, a public service company or a certified telecommunications provider or used in a cellular system, as defined in the Code of Federal Regulations Title 47, Part 22, as amended, which may have a substantial adverse environmental effect, as said council shall, by regulation, prescribe . . .

C.G.S. Section 16-50i(a)(6).

The Council's exclusive jurisdiction extends to only those facilities set forth in C.G.S. Section 16-50i(a)(6). The system proposed by Extenet is not a "facility" within the meaning of the statute for two (2) reasons: 1) it does not propose a "tower", and 2) will not have a substantial adverse environmental effect.

1. The DAS Installation Does Not Propose a "Tower"

State regulations define "tower" as:

a structure, whether free standing or attached to a building or another structure, that has a height greater than its diameter and that is high relative to its surroundings . . . which is to be: (1) used principally to support one or more antennas for receiving or sending radio frequency signals and (2) . . . used for public cellular radio communications service as defined in section 16-50i of the General Statutes of Connecticut.

Reg. Conn. State Agencies Section 16-50j-2a.

The Project includes the installation of seven (7) new utility poles, all of which will be of comparable height to the other wooden utility poles in the nearby existing utility infrastructure. These poles will be sited near two overpasses (one of which requires three poles to extend power to the Remote Node and two poles to span the overpass for antenna placement) and one exit ramp, but these structures will be no larger than the standard utility pole and certainly not extend above the tree canopy along the Merritt Parkway (the "surroundings").

Since none of these new utility poles can be considered "high relative to its surroundings" the second criteria in the regulatory definition of a tower has not been satisfied. Because these utility poles do not fall within the definition of a tower, then they necessarily cannot be considered or treated as a facility within the meaning of Section 16-50i(a)(6).

2. The DAS Installation Will Not Result In a Substantial Adverse Environmental Effect

The foregoing interpretation of Section 16-50i(a)(6) is consistent with the purpose behind the Public Utility Environmental Standards Act ("PUESA"). The legislature adopted PUESA because of the legislature's expressed concern that:

power generating plants and transmission lines for electricity and fuels, community antenna television towers and telecommunication towers have had a significant impact on the environment and ecology of the state of Connecticut; and that continued operation and development of such power plants, lines and towers, if not properly planned and controlled, could adversely affect the quality of the environment and the ecological, scenic, historic and recreational values of the state.

C.G.S. Section 16-50g.

Standard utility poles, such as the ones that Extenet proposes to use in its DAS installation, simply do not impact the ecological, scenic, historic and recreational values of the state. This is certainly the reason standard utility poles in the provision of electric and landline telephone service are not defined as facilities under Section 16-50i(a)(6). Accordingly, there is no logical reason that the new utility poles involved in the DAS installation should be considered a facility within the meaning of the statute either.

Furthermore, from a practical standpoint, it does not make sense for this DAS installation to be considered a facility within the meaning of the statute. Pursuant to C.G.S. Section 16-247h, the DPUC authorized Extenet's proposal as a provider of intrastate telecommunications services that will "install, maintain, operate, manage or control poles, wires, conduits or other fixtures under or over any public highway" C.G.S. Section 16-247h. This statute very specifically provides DPUC jurisdiction and oversight for such providers of intrastate telecommunications service. If the legislature

had intended for the Council to have exclusive jurisdiction over such an installation it would not have created specific, concurrent DPUC statutory and regulatory authority.

Further, if the Section 16-50i(a)(6) definition of "facility" is extended to include such utility poles, then the Council would have jurisdiction over the installation, operation and modification of any utility pole structure it approved. Entities like the Connecticut Light & Power Company, United Illuminating, and Cablevision could not even make routine upgrades to the utility pole structure without notice to the Council. The legislature clearly did not intend such a result when it adopted PUESA.

Because the DAS installation proposed by Extenet is not a facility as defined by Section 16-50i(a)(6), the Council has no jurisdiction over this matter.

C. Even If The Council Did Have Jurisdiction, No Certificate Is Required Because The Installation Will Not Have An Adverse Environmental Impact

Even if the Council concludes that it does have jurisdiction, the Project does not require a Certificate because it will not result in an adverse environmental impact.

A Certificate is required only if a proposed facility may have a substantial adverse environmental effect in the state. C.G.S. §16-50k. Specifically, "no person shall . . . commence the preparation of the site for, or commence the construction or supplying of a facility, or commence any modification of a facility, that may, as determined by the council, have a substantial adverse environmental effect in the state without having first obtained a certificate of environmental compatibility and public need . . ." Id. If a proposed facility or installation will not have a substantial adverse environmental effect, no certificate is required for the construction of that facility or installation.

The proposed installation will not have an adverse environmental impact. This southernmost section of the Merritt Parkway is bordered by residentially zoned property and mixed commercial services. Standard aerial utility pole structures providing electric, telephone and cable TV services are continuously located throughout the neighborhoods along the Parkway and at overpass locations. The proposed installation will result in little difference in impact or appearance from that which currently exists.

1. Visibility and Aesthetics

Extenet designed this stealth DAS network to be visually unobtrusive and consistent with the existing utility service structures and features present along the Merritt Parkway corridor. Even though the proposal is unlikely to be noticed once installed, Extenet took additional steps to ensure that it would be camouflaged and blend with the surrounding area, precluding visibility from any residences within a radius of 500 feet of the Parkway. These additional steps include installing a PVC shroud over the pole-installed antennas, locating the tiny mid-span antennas wherever possible and placing the new utility poles so as to make the most of the existing utility infrastructure. Photosimulations of every installation location are attached hereto as Exhibit E.

2. Cultural and Recreational Resources

The Project is not expected to have any impact on cultural or recreational resources. It will have no aesthetic impacts and utilizes, in terms of size, co-location and use, the existing electric, phone and cable utility infrastructure along the Merritt Parkway corridor. Review under the National Environmental Policy Act, including the Connecticut Department of Environmental Protection Natural Diversity Data Base and the State Historic Preservation Officer, is pending.

3. Scenic, Historic, Architectural or Archaeological Resources

The Merritt Parkway is listed on the National Register of Historic Places, is designated as a State Scenic Road, and has been preserved for its scenic, cultural and historic values. Extenet has designed this stealth DAS network to be visually unobtrusive with the existing utility features present along the Merritt Parkway corridor. Equipment has been designed to appear as a common appurtenance to existing utility service. The landscape along the Merritt Parkway will be preserved in its natural state, insofar as practicable, by minimizing tree trimming and soil removal and shall be in keeping with the general appearance of neighboring developed areas. With respect to Merritt Parkway's national heritage, Extenet does not intend to remove or disrupt any of its historic, traditional or significant uses, structures, or architectural elements, whether these exist on the site or on adjacent properties.

Extenet is working with and has provided the State Historic Preservation Office ("SHPO") a complete package of material regarding the design, visibility and construction of the Project. A copy of correspondence received from SHPO is attached hereto as Exhibit F. Of note, SHPO has acknowledged that the proposed DAS project will have no adverse impact on historic or cultural resources. SHPO has, however, made several recommendations to Extenet to help preserve and maintain this historic character of the Merritt Parkway.

4. Fish and Wildlife

The Project is not expected to have any impact on fish or wildlife as it utilizes, in terms of size, co-location and use, the existing electric, phone and cable utility infrastructure along the Merritt Parkway corridor.

5. Wetlands and Watercourses

No wetlands exist in the Project area, which is comprised of an existing roadway and public utility infrastructure. Site or surface drainage will not be modified in any way thereby adversely affecting wetlands, neighboring properties, surface water run-off, or the public storm drainage system.

6. Water, Noise and Air Quality

Extenet does not propose the use of machinery that will emit heat, vapor, or fumes. No impacts will result on light, air, or water resources or produce undesired noise or temperature levels.

7. Traffic Pattern

There will be no permanent traffic impacts resulting from this installation. Extenet will be coordinating the temporary (construction) impacts with the DOT and relevant municipalities. It is expected that even the most difficult antenna installations will take less than four hours, and performed during low traffic hours and following all safety practices, it is unlikely to have any discernable temporary impact to traffic.

8. Public Health and Safety

Extenet DAS network uses low power remote nodes for providing wireless coverage. These remote nodes have a very low output power. The output power of an Extenet DAS Network remote node is so low that it is categorically excluded from the FCC's requirement for routine environmental compliance testing for RF exposure. The low output power characteristic of an Extenet DAS network is very attractive to communities with citizens who have health concerns with respect to RF emissions. A Radio Frequency Emissions report, prepared by the engineering firm of Hammett &

Edison, Inc. and attached hereto as Exhibit G, concludes that the DAS network/Project proposed by Extenet will comply with the FCC exposure standards and will not result in a significant impact to the environment.

VI. CONSULTATION WITH STATE AND LOCAL AGENCIES

Extenet has had considerable input from the State of Connecticut Department of Transportation on this Project. Extenet will obtain the necessary encroachment permits from the DOT prior to beginning project.

It has also presented initial project design proposals to the State Historic Preservation Office and the Merritt Parkway Advisory Committee.

Although it was not required to do so, Extenet provided a technical report and met with each of the municipalities that this project would involve- including Greenwich, Norwalk, Stamford, New Canaan, and Westport. None of the towns identified a potential negative impact from the Project.

Finally, Extenet has entered into Joint Use Agreements with the existing utility providers, Connecticut Light & Power Company and AT&T to locate on the existing utility infrastructure and use the utility right of way.

VI. CONCLUSION

Extenet respectfully suggests that the Council does not have jurisdiction over the project, as no aspect of the proposed installation qualifies as a "tower" as defined in the Reg. Conn. State Agencies Section 16-50j-2a, nor will it result in an adverse environmental impact, both of which would be required for the new pole installations to constitute a "facility" so as to be within the Council's jurisdiction.

Even if the Council does have jurisdiction, this project does not require a Certificate under C.G.S. §16-50k as the installation will not have an adverse environmental impact. The documentation provided herein supports utter lack of environmental impact this project will have on the environment, even an area such as the Merritt Parkway. This is possible because the Extenet DAS network allows the installation of a system that can support all existing and future users and technologies, and use existing public utility infrastructure to do so.

Respectfully Submitted,

By:  _____

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