



August 3, 2007

VIA E-MAIL AND US MAIL

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Re: Petition No. 809

Dear Mr. Phelps:

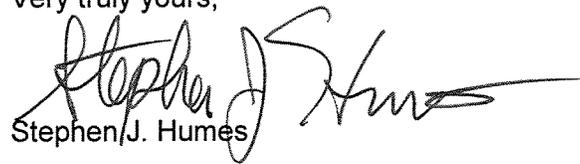
On behalf of Intervenor National Grid Communications, Inc. ("NGC"), enclosed please find an original plus twenty-one (21) copies of the following:

1. NGC Hearing Information
2. NGC-Exhibit A: Pre-Filed Testimony of Chris Fagas
3. NGC-Exhibit B
4. NGC-Exhibit C

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Should you have any questions, please do not hesitate to contact me.

Very truly yours,

  
Stephen J. Humes

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BOSTON

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NEW YORK

NEWARK

PHILADELPHIA

STAMFORD

WILMINGTON

cc: Kenneth Baldwin, Esq.  
Merritt Parkway Conservancy  
Diane Whitney, Esq.  
Julie D. Kohler, Esq.  
Ira W. Bloom, Esq.  
Christopher B. Fisher, Esq.  
Thomas J. Regan, Esq.

**STATE OF CONNECTICUT  
CONNECTICUT SITING COUNCIL**

**Petition No. 809** - Extenet Systems, Inc. :  
petition of a declaratory ruling that the :  
Connecticut Siting Council does not have :  
jurisdiction or, in the alternative, that no :  
Certificate of Environmental :  
Compatibility and Public Need is required :  
for the proposed construction of a :  
Distributed Antenna system along the :  
Merritt Parkway from the New York state :  
line to Westport, Connecticut : August 3, 2007

**HEARING INFORMATION  
FOR NATIONAL GRID COMMUNICATIONS, INC.**

Intervenor National Grid Communications, Inc. (“NGC”) submits the following hearing information to the Connecticut Siting Council for the hearing in this proceeding:

A. List of Witnesses

- Chris Fagas, NGC RF Engineering Manager

B. Exhibits to be Offered

- NGC-Exhibit A: Pre-filed Testimony of Chris Fagas
- NGC-Exhibit B: Comments of National Grid Communications, Inc. dated May 25, 2007 filed with the DPUC in Docket No. 07-02-13.
- NGC-Exhibit C: Pre-Filed Direct Testimony of Michael L. Cooper dated July 27, 2007, filed with the DPUC in Docket No. 07-02-13.

C. Requests for Administrative Notice

- None.

CERTIFICATE OF SERVICE

I hereby certify that on this day, National Grid Communications, Inc.'s Hearing Information and Exhibits were sent via first class mail and via e-mail to the Connecticut Siting Council and the following parties and intervenors:

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Bridgeport, CT 06601-4247

Sprint Nextel Corporation  
c/o Thomas J. Ryan, Esq.  
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Cellco Partnership d/b/a Verizon Wireless  
c/o Kenneth C. Baldwin, Esq.  
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Merritt Parkway Conservancy  
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c/o Diane W. Whitney, Esq.  
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Elizabeth Galt & Clifford Berger  
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Wake, See, Dimes, Bryniczka, Day & Bloom  
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Westport, CT 06880

New Cingular Wireless PCS, LLC  
c/o Christopher B. Fisher, Esq.  
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Dated: August 3, 2007

  
Stephen J. Humes

**STATE OF CONNECTICUT  
CONNECTICUT SITING COUNCIL**

**Petition No. 809 - Extenet Systems, Inc.** :  
petition of a declaratory ruling that the :  
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Certificate of Environmental :  
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Distributed Antenna system along the :  
Merritt Parkway from the New York state :  
line to Westport, Connecticut : August 3, 2007

**PRE-FILED TESTIMONY OF CHRIS FAGAS  
FOR NATIONAL GRID COMMUNICATIONS, INC.**

**Q. Please state your name, title and employer.**

**A.** My name is Chris Fagas. I am the Radio Frequency Engineering Manager for National Grid Communications, Inc. ("NGC"). My office address is: 80 Central Street, Boxborough, Massachusetts, 01719.

**Q. Please briefly describe your relevant training and experience.**

**A.** I have worked in the field of Cellular and PCS RF Engineering for some 14 years in various senior engineering roles, and have been accepted as an expert witness relative to this field hundreds of times including before the CSC and also before Superior Court in the State of Connecticut.

**Q. What is the purpose of your testimony?**

**A.** NGC is a Massachusetts based telecommunication service provider with a Certificate of Public Convenience and Necessity issued by the Connecticut Department

of Public Utility Control (See Docket No. 06-08-18). NGC provides communications network infrastructure and services to the wireless service provider community including Distributed Antenna Systems (“DAS”). NGC currently has six installed neutral host DAS networks with many more in development. NGC also owns and operates 8 wireless telecommunications tower facilities in the State of Connecticut. The purpose of this testimony is to offer an independent perspective on the siting of DAS networks from the point of view of an experienced telecommunications service provider.

**Q. Are the issues involved in siting DAS networks similar to those involved in siting tower facilities and, if so, how do you think DAS network siting jurisdiction should be handled?**

**A.** Yes. Similar to towers, a DAS network can span multiple jurisdictions providing coverage over a specified geographic region which often does not conform to individual municipal boundaries. Because of this, siting DAS networks requires gaining municipal regulatory approvals in multiple jurisdictions before such networks can be deployed. From a public policy perspective, this approach results in delayed deployments denying consumers of the ability to use their wireless devices and negatively affecting public safety due to the lack of mobile E-911 coverage. Because the Connecticut Siting Council (“CSC”) operates at the state level with jurisdiction that supersedes local zoning jurisdiction in the case of tower facilities, per Section 16-50x of the Connecticut General Statutes, they are the best suited to address the public need for networks traversing multiple jurisdictions. The CSC will be able to weigh the public’s need as a single entity versus multiple local jurisdictions which may have differing opinions on the need or value of improved wireless coverage and, just as in the siting of a new tower facility, having the CSC address these concerns will ensure that appropriate interests are considered.

**Q. Does NGC have any concerns about what would be the outcome of a determination that the CSC does not have jurisdiction over DAS networks?**

**A.** Yes. NGC is concerned that requiring DAS network providers to use the current approach of acquiring municipal approvals in multiple jurisdictions can lead to a long and expensive regulatory process which will deter wireless service providers from making investment in additional DAS networks. Thus, consumers in these areas may be underserved as opposed to other areas. An approach where the CSC governs the process with a well articulated and predictable process would streamline the regulatory process and bring additional investment into wireless services in areas otherwise without these services. Absent a standardized approval process where networks traverse multiple jurisdictions, the regulatory uncertainty will deter additional capital investment for wireless telecommunication services.

**Q. What are some of the public policy benefits that support the CSC's exercise of its discretion in favor of finding that it has jurisdiction over DAS networks?**

**A.** Existing ordinances/by-laws in most communities have not been able to keep pace with the changes occurring in the wireless industry. Many communities lack the expertise to remain current with these changes and keep the ordinances up-to-date. DAS is a perfect example of new technology not contemplated by most ordinances. Most ordinances have language regulating wireless installations however they tend to be written for rooftop and tower installations. Because such familiar wireless infrastructure as rooftops and tower installations are often on private property and have been around for many years, there is ample understanding of how they can be regulated at the municipal level. DAS on the other hand, generally utilizes existing assets, notably utility poles, in the public rights-of-way. It is unclear how wireless attachments made to assets in the public rights-of-way are to be regulated. Further, local ordinances don't contemplate this

kind of installation. Either the community needs to interpret the existing language to be permissive of DAS or go through a long and tedious process to amend the ordinances. Neither of these approaches provide wireless telecommunications providers, and the customers they serve, with a level of comfort that there is a known and predictable process. Connecticut's Public Utility Environmental Standards Act seems best suited to handle such DAS installations, especially on towers or on existing utility infrastructure in the public rights-of-way. We believe that DAS networks qualify as "facilities" within the meaning of Section 16-50i(a)(6) as "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" and that the CSC has discretion to prescribe its placement and determinations as to whether these DAS networks may have a substantial adverse environmental effect.

**Q.** Are there any other public policy considerations with respect to the siting of DAS networks that the CSC should be aware of?

**A.** Yes. NGC is advocating in another proceeding before the Connecticut Department of Public Utility Control (See Docket No. 07-02-13: DPUC Review of the State's Public Service Company Utility Pole Make Ready Procedures) that DAS equipment can appropriately be installed on towers, distribution poles, street lights or on roof-tops and that by the DPUC's allowing the placement of DAS equipment on existing utility poles wherever possible, it will be unnecessary in some locations to erect new poles or towers to support such DAS equipment. A copy of the Comments of National Grid Communications, Inc. dated May 25, 2007 and Pre-Filed Direct Testimony of Michael L. Cooper dated July 27, 2007, filed with the DPUC in Docket No. 07-02-13 is attached as NGC-Exhibit B and NGC-Exhibit C, respectively. NGC respectfully submits that by the DPUC's approval of requests in Docket No, 07-02-13 that utility pole owners be required to allow pole-top access for the attachments of DAS facilities, the public

policy intended to avoid the unnecessary proliferation of towers, as set forth in Section 16-50g of the Connecticut General Statutes, will be advanced as well. NGC therefore envisions a regulatory system in Connecticut in which pole owners are encouraged by the DPUC to allow DAS installations on pole-tops, where feasible, to avoid unnecessary proliferations of towers and, where new poles are necessary to support new DAS installations, the CSC will deem such structures to be “towers” within its jurisdiction to promote the efficient installation of such equipment used in a cellular system.

**Q. How does a wireless service provider decide whether to participate in the development of a DAS network?**

A. The wireless service providers’ decision to participate in a DAS network involves a complex technical evaluation process. It involves looking at existing coverage patterns and determining a cost effective approach to filling in coverage gaps or providing additional capacity for busy areas, especially in areas in which traditional locations for wireless antennas are unavailable or would be particularly challenging to site. Since there are many approaches a carrier can take including towers, rooftops, DAS etc., only a knowledgeable regulatory body (e.g., CSC) can fully appreciate the determining factors in this decision making process in an efficient way that would appropriately balance the public need for the wireless facilities against potential adverse environmental effects.

**Q. Does NGC have an opinion on whether or not a DAS network provider should be required to obtain a full Certificate of Environmental Compatibility and Public Need in order to develop such networks and, if so, what is NGC’s view?**

A. Yes, NGC’s view, based on its own experience with telecommunications siting in Connecticut, is that, in most cases, a Petition for a Declaratory Ruling should be

sufficient and that a full certificate proceeding should not be necessary, but the actual determination would need to be made with the support of appropriate environmental and technical documentation. DAS nodes are part of many small installations in a network of facilities that, taken together, cumulatively amount to substantial facilities with similar characters and qualities to those which the CSC typically evaluates by petition or certificate, depending on many factors. The CSC should have the ability to determine that most DAS networks are suitable for permitting by petition, while also being able to decide that other DAS networks require a certificate because of the potential for a substantial adverse environmental effect.

**Q. Does NGC have an opinion on whether the Extenet proposal in this Petition No. 809 proceeding should be considered appropriate for a petition process rather than a certificate?**

**A.** While NGC has reviewed the documents filed in this Petition, it has not yet seen any document to suggest that a substantial adverse environmental effect would be the result of the proposed Extenet DAS network and, therefore, NGC does not believe that there is any need for a certificate process in this matter.

**Q. Does that conclude your testimony?**

**A.** Yes.

HALLORAN  
& SAGE LLP  
ATTORNEYS AT LAW

ALAN P. CURTO Direct 860 297-4694 curto@halloran-sage.com

May 25, 2007

**VIA HAND DELIVERY AND ELECTRONIC TRANSMITTAL**

Ms. Louise Rickard  
Acting Executive Secretary  
State of Connecticut Department of Public Utility Control  
Ten Franklin Square  
New Britain, CT 06051

RE: 07-02-13-DPUC Review of the State's Public Service Company Utility  
Pole Make Ready Procedures

Dear Ms. Rickard:

We enclose the written comments of National Grid Communications, Inc. in the above-captioned proceeding. This letter and the written comments are also being submitted electronically; the electronic filing is complete. Should you have any questions, please contact the undersigned directly.

Very truly yours:



Alan P. Curto

APC/pab

CC: Service List

995060v.1

**STATE OF CONNECTICUT**

**DEPARTMENT OF PUBLIC UTILITY CONTROL**

**DPUC REVIEW OF THE STATE'S : DOCKET NO. 07-02-13**  
**PUBLIC SERVICE COMPANY :**  
**UTILITY POLE :**  
**MAKE READY PROCEDURES : MAY 25, 2007**

**COMMENTS OF NATIONAL GRID COMMUNICATIONS, INC.**

**INTRODUCTION**

National Grid Communications, Inc. ("National Grid") is a participant in this proceeding, which the Department of Public Utility Control (the "Department") has instituted for the purpose of reviewing utility pole make-ready and attachment procedures. At a technical meeting on May 10, 2007, the Department invited participants to submit written comments in response to: (1) the Motion for Interim Department Order dated May 8, 2007, by Fiber Technologies Networks, L.L.C. ("Fiber"), (2) the minimum scope of this proceeding, (3) any additional issues outside the minimum scope to be addressed by the Department, and (4) a time frame for final action in this proceeding. National Grid hereby submits its written comments in response to the Department's request; National Grid reserves the right to file additional comments and testimony as appropriate.

**COMMENTS**

**FIBER MOTION FOR INTERIM DEPARTMENT ORDER**

The relief sought by Fiber in its Motion should be granted by the Department at such time that the record supports the factual allegations of the Motion.

## MINIMUM SCOPE OF THIS PROCEEDING

The Department must examine issues related to wireless pole-top attachments in this proceeding, so as to provide guidance as to the scope and breadth of the requirements of Connecticut's pole attachment statutes and regulations with respect to such attachments: Connecticut General Statutes (Conn. Gen. Stat.) Section 16-247h and Regulations of Connecticut State Agencies (R.C.S.A.) Section 16-247c-5. Specifically, National Grid requests that the Department interpret Conn. Gen. Stat. § 16-247h and R.C.S.A. § 16-247c-5 in accordance with the Federal Pole Attachment Act,<sup>1</sup> and the FCC's and The U.S. Supreme Court's interpretation of the Federal Pole Attachment Act<sup>2</sup>, so as to encourage wireless competition and wireless telecommunication investment within Connecticut, by requiring utility pole owners to grant access on utility poles for wireless pole-top attachments. National Grid also requests a ruling from the Department that the fees charged by utility pole owners to entities seeking to install wireless pole-top attachments be just, reasonable, and calculated in accordance with the cost-based formula enumerated in the Federal Pole Attachment Act. Such a formula would require the Department to assure the utility pole owner recovery of not less than the additional costs of making provision for the attachments or more than the proportional capital and operating expenses of the utility pole owner attributable to that portion of the pole occupied

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<sup>1</sup> 47 U.S.C. § 224 (requiring utility pole owners to extend reasonable and non-discriminatory access to their utility poles).

<sup>2</sup> See FCC Public Notice DA 04-4046 dated December 23, 2004 (stating that utility pole owners have an obligation to provide wireless access to utility poles) and *FCC v. Gulf Power*, 534 U.S. 327 (2002) ("Gulf Power"; holding that wireless telecommunication pole attachments have equal access to utility poles as wireline attachments).

by the attachment. Such recovery would be computed by determining the total usable space on a pole that is occupied by the attachment. Formulating such a rule would not only track the language of the Federal Pole Attachment Act, but would also follow the language of the pole attachment statutes in many states, and effectuate the public policy of encouraging wireless telecommunication development, while also affording equitable relief to owners of utility poles.

Additionally, National Grid requests a determination from the Department that wireless pole-top attachments installed in compliance with the requirements of the National Electric Safety Code ("NESC"), as required by R.C.S.A. § 16-247c-5, do not pose a safety or reliability risk and thus should be afforded equal treatment with wireline attachments. The NESC provides for safe clearances for pole top attachments, and associated cabling and other equipment. Such a ruling has support in R.C.S.A. § 16-247c-5, and would encourage increased competition and wireless telecommunication investment within Connecticut.

#### **ADDITIONAL ISSUES TO BE ADDRESSED**

In addition to the issues discussed above, National Grid requests that the Department solicit comments for a Department-mandated and -approved standardized pole attachment agreement for utility pole owners, containing terms and conditions which would encourage capital investment in Connecticut by providers of wireless services. The aforesaid agreement must have a term sufficient to provide incentives for investment (with extensions at the option of the attacher), must contain reciprocal indemnification language, and should reasonably limit the potential liability of utility pole owner.

National Grid also requests that the Department articulate clear and reasonable standards regarding the time period in which a utility pole owner must respond to pole attachment requests and complete make-ready work. The articulation of such standards will avoid unnecessary disputes which serve only to delay investment in wireless telecommunication services within Connecticut.

**TIME FRAME FOR FINAL ACTION IN THE ABOVE REFERENCED DOCKET**

The Department should conduct this proceeding as expeditiously as possible, for the reason that National Grid is currently seeking wireless pole-top access in Connecticut.

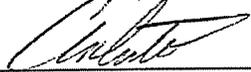
**CONCLUSION**

In conclusion, National Grid re-emphasizes the following points: First, per Gulf Power, wireless attachments are entitled to access on utility poles equal to wireline attachments. Second, the NESC provides for safe clearances for pole-top wireless attachments and related equipment; the Department should therefore interpret its pole attachment regulations as stating that such wireless attachments and equipment which comply with the NESC do not pose safety or reliability concerns. Third, pole attachment and make-ready fees should be cost based. Fourth, the Department should require each utility pole owner to draft a Department-approved standard pole attachment agreement containing equitable terms and conditions (including the provisions discussed herein) which will justify capital investment in Connecticut by providers of wireless telecommunication services.

National Grid appreciates the Department's efforts in addressing these important issues and believes that this proceeding presents an opportunity to clarify Connecticut's pole-attachment requirements in a manner equitable to all interested parties and which implements the public policy of the Federal Pole Attachment Act, through the encouragement of investment in wireless telecommunications services in Connecticut. The Department should seize this opportunity to do so, in order to both spur such investment and to prevent needless disputes, which serve only to delay the development of a more competitive telecommunications market in Connecticut. Conversely, allocating the issues articulated by National Grid herein to a separate proceeding would only delay new wireless telecommunications investment in Connecticut. National Grid looks forward to developing these issues in more detail during the course of this proceeding.

Respectfully submitted,

NATIONAL GRID  
COMMUNICATIONS, INC.

By: 

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**CERTIFICATION OF SERVICE**

This is to certify that on this 25<sup>th</sup> day of May, 2007, a copy of the foregoing was either mailed, postage prepaid, or hand-delivered to the Department of Public Utility Control, the Office of Consumer Counsel and the following parties, intervenors and/or participants.

By:   
Alan P. Curto

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July 27, 2007

**VIA HAND DELIVERY AND ELECTRONIC TRANSMITTAL**

Ms. Louise Rickard  
Acting Executive Secretary  
State of Connecticut Department of Public Utility Control  
Ten Franklin Square  
New Britain, CT 06051

**RE: 07-02-13-DPUC Review of the State's Public Service Company Utility  
Pole Make Ready Procedures**

Dear Ms. Rickard:

On behalf of National Grid Communications, Inc., we enclose the testimony of Michael L. Cooper in the above-captioned proceeding. This letter and the enclosed testimony are also being submitted electronically; the electronic filing is complete. Should you have any questions, please contact the undersigned directly.

Very truly yours:



Alan P. Curto

APC/pab  
Encl.

CC: Service List

1019910v.1

**BEFORE THE STATE OF CONNECTICUT  
CONNECTICUT DEPARTMENT OF PUBLIC UTILITY CONTROL**

**DOCKET NO. 07-02-13**

**DPUC REVIEW OF THE STATE'S PUBLIC SERVICE COMPANY  
UTILITY POLE MAKE READY PROCEDURES**

**DIRECT TESTIMONY**

**OF**

**MICHAEL L. COOPER**

**ON BEHALF OF**

**NATIONAL GRID COMMUNICATIONS, INC.**

**New Britain, Connecticut  
July 27, 2007**

1 **Q. WHAT IS YOUR NAME AND BUSINESS ADDRESS?**

2 **A.** My name is Michael L. Cooper, and my business address is 80 Central Street,  
3 Boxborough, Massachusetts, 01719.

4 **Q. WHAT IS YOUR OCCUPATION?**

5 **A.** I am the Manager of Infrastructure Rights & Permitting for National Grid  
6 Communications, Inc. ("NGC"). My responsibilities include acquiring pole attachment  
7 rights from pole owners and/or custodians.

8 **Q. DESCRIBE YOUR WORK EXPERIENCE.**

9 **A.** I have 10 years' utility and telecom company experience. I have been with NGC  
10 since 2005. Prior to my affiliation with NGC, from 1987 until 2005, I was employed by a  
11 Massachusetts electric utility in the Transmission & Distribution, Information Systems  
12 and Engineering Departments, as well as directing the day-to-day operations of their  
13 unregulated telecommunications subsidiary.

14 **Q. WHAT IS THE NATURE OF NGC'S BUSINESS?**

15 **A.** NGC is a Massachusetts-based telecommunication service provider which  
16 provides communications network infrastructure and services to wireless service  
17 providers ("WSP's"). That infrastructure includes Distributed Antenna Systems  
18 ("DAS"). NGC currently has six installed neutral host DAS networks, with additional  
19 networks under development. NGC also owns and operates 8 wireless  
20 telecommunications tower facilities in the State of Connecticut. NGC holds a Certificate  
21 of Public Convenience and Necessity granted by the DPUC in its Decision dated October  
22 18, 2006 in Docket No. 06-08-18.

23 **Q. WHAT IS DAS?**

24 A. DAS is a shared outdoor network solution that addresses the challenge faced by  
25 WSP's of how best to provide excellent wireless coverage, while meeting the community  
26 goal of minimizing the proliferation of wireless facilities. DAS utilizes repeater  
27 technology which has been deployed for decades in subway systems, hotels, hospitals,  
28 and stadiums. Our DAS builds on this technology, deploying it outdoors in a shared  
29 fashion, thus satisfying FCC-licensed WSP's requirements (while minimizing the WSP's  
30 costs), and reducing antenna proliferation. Multiple WSP's can place their base station  
31 radio equipment (BTS) in one of our Telco facilities. Each individual RF signal is  
32 distributed via fiber to specific remote unit locations. A remote unit location can be a  
33 tower, distribution pole, street light, or a roof-top.

34 NGC's DAS has been characterized to date by the use of existing utility distribution poles  
35 for fiber and remote unit locations. At a remote unit location, a control box with battery  
36 backup is attached low on a utility pole, and a low-powered shared antenna is located at  
37 the pole top. The antenna and associated equipment are placed on utility poles so as to  
38 utilize existing asset locations wherever possible.

39 In general, as guided by the WSP's coverage objective, a DAS may be an appropriate  
40 solution where three market characteristics exist in the targeted area: (1) a high density  
41 of wireless points of presence; (2) limited traditional siting opportunities; and (3) a high  
42 availability of suitable DAS elements (utility poles, fiber, hub location).

43 **Q. WHAT IS THE PURPOSE FOR YOUR TESTIMONY?**

44 A. My testimony has two purposes. The first purpose of my testimony is to request  
45 that the DPUC reconsider its announced scope of this proceeding to include wireless pole  
46 top attachments; and to set out the facts underlying that request. The second purpose of

47 my testimony is to illustrate the challenges in acquiring a pole attachment agreement for  
48 wireless facilities from certain pole owners in Connecticut.

49 **Q. WHY SHOULD THE SCOPE OF THIS PROCEEDING BE EXPANDED**  
50 **TO INCLUDE WIRELESS POLE TOP ATTACHMENTS?**

51 **A.** The scope of this proceeding should include wireless attachments, because these  
52 facilities have the potential to address Connecticut communities' aesthetic concerns,  
53 while addressing their residents' coverage needs. Safety is also an important factor,  
54 because a DAS network, constructed in areas where traditional cell towers are not a  
55 viable option, can offer E-911 service as well as a reliable network for public officials'  
56 emergency calls. The aesthetics of a DAS network are vastly superior to those of a cell  
57 tower. In addition, a neutral host system such as NGC's DAS can offer multiple WSP's  
58 the same ability to offer their services over a single infrastructure, thus mitigating the  
59 proliferation of antennas which would otherwise occur.

60 **Q. WHY IS AN EXPANDED DPUC SCOPE OF REVIEW TO INCLUDE**  
61 **WIRELESS POLE ATTACHMENTS NECESSARY AT THIS TIME?**

62 **A.** NGC has experienced a complete failure thus far to reach agreement with  
63 Northeast Utilities ("NU"), with respect to a suitable configuration for NGC's wireless  
64 facilities on utility poles in Connecticut. Immediate DPUC action on this issue is  
65 therefore needed to avoid delay in providing the benefits of DAS facilities to Connecticut  
66 communities

67 **Q. WHAT HAS BEEN NGC'S EXPERIENCE THUS FAR IN ATTEMPTING**  
68 **TO OBTAIN POLE TOP ACCESS IN CONNECTICUT?**

69 A. NGC (then known as "Gridcom") first made a request to NU in 2005, for a pole  
70 attachment agreement for DAS facilities. Over the succeeding two years, NGC has  
71 repeatedly renewed that request. As of the date of this testimony, NGC has not reached  
72 agreement with NU on this issue. Myself and other NGC representatives have discussed  
73 this issue with NU on multiple occasions, both at meetings and via conference calls.  
74 NGC has provided NU copies of the construction drawings from a DAS attachment  
75 agreement with another utility, National Grid USA, in an attempt to reach a suitable  
76 agreement with NU. NGC Engineers have met with NU's engineers to revise the  
77 construction drawings in an attempt to address NU's safety concerns, as well as the  
78 requirements of the NESC.  
79 NGC ultimately provided two versions of the construction drawings for NU's review and  
80 approval. The first was for utility poles without primary wires and the second for the  
81 same poles with primary wires. NU has stated that they will not allow antenna  
82 attachments to poles with primary wires, ostensibly for safety and operational reasons. In  
83 response to that statement by NU, NGC has made repeated requests for the specific basis  
84 for NU's concerns, and for an explanation as to why NU believes that its concerns cannot  
85 be addressed by NGC. NU has not provided that information, notwithstanding the fact  
86 that NU engineers have conceded that our drawings meet the requirements of the NESC.

87 **Q. ARE POLE-TOP ATTACHMENTS SAFE?**

88 A. Yes, pole-top attachments are safe. Other utilities permit pole-top attachments,  
89 including pole-top pins for supporting primary wires, pole-top extensions to gain  
90 additional clearances where necessary and pole-top antennas (often for their own  
91 purposes such as remote equipment monitoring but also for third parties). Pole-top

92 installations, including antennas, are generally governed by the National Electric Safety  
93 Code<sup>1</sup> to ensure proper safe clearances from energized conductors. Such installations can  
94 be made by utility crews or the same contractors that the utilities themselves hire to work  
95 in the primary power space on the pole.

96 **Q. WHY IS INSTALLATION OF DAS NECESSARY ON POLE TOPS?**

97 A. Due to the low powered nature of the equipment, pole-top height is required to  
98 effectively provide the necessary coverage. Placing an antenna lower on a pole, as some  
99 pole owners have suggested, would require many more installations to cover the same  
100 geographic area, driving up the cost to a point where a DAS solution is not feasible.  
101 Additionally, more nodes which are lower on a pole makes DAS a less appealing solution  
102 to the community, as the antennas will be more clearly visible than if they were on the  
103 pole top. Not allowing pole-top antenna attachments has the effect of creating a barrier  
104 of entry for this technology, necessitating the construction of additional cell towers.

105 **Q. ARE YOU AWARE OF ANY JURISDICTIONS WHICH PERMIT THE**  
106 **USE OF POLE-TOP ANTENNAS?**

107 A. Yes. The New York State Public Service Commission, in Case 03-E-1578, issued  
108 an Order dated April 7, 2004, approving pole top attachments on utility distribution poles.

109 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

110 A. Yes.

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<sup>1</sup> 2007 National Electric Safety Code, sections 235I & 420Q

**CERTIFICATION OF SERVICE**

This is to certify that on this 27<sup>th</sup> day of July, 2007, a copy of the foregoing was either mailed, postage prepaid, or hand-delivered to the Department of Public Utility Control and the following parties, intervenors and/or participants.

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