

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@po.state.ct.us

Web Site: www.state.ct.us/csc/index.htm

August 16, 2002

Peter W. van Wilgen
Southwestern Bell Mobile Systems, LLC
500 Enterprise Drive
Rocky Hill, CT 06067-3900

RE: **EM-CING-059-061-071-086-105-113-152-020731** - SNET Mobility, LLC notice of intent to modify existing telecommunications facilities located in Groton, Haddam, Lebanon, Montville, Old Lyme, Portland, Waterford, Connecticut.

Dear Mr. van Wilgen:


At a public meeting held on August 15, 2002, the Connecticut Siting Council (Council) acknowledged your notice to modify these existing telecommunications facilities, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies with the condition that the Haddam site tower be reinforced as stated in the report prepared by All-Points Technology Corp., dated June 28, 2002, and that a professional engineer certify to the Council the successful completion of the reinforcement.

The proposed modifications are to be implemented as specified here and in your notice dated July 30, 2002. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility sites that would not increase tower heights, extend the boundaries of the tower site, increase noise levels at the tower site boundaries by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundaries to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. These facilities have also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on these towers.

This decision is under the exclusive jurisdiction of the Council. Any additional change to these facilities will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

Very truly yours,


Mortimer A. Gelston
Chairman

MAG/DM/laf

c: See Attached List.

List Attachment.

- c: Honorable Frank O'Beirne, Jr., Mayor, Town of Groton
- Ronald P. LeBlanc, Town Manager, Groton Town Hall
- James R. Sherrard, Planning Chairman, Town of Groton
- Honorable Tony Bondi, First Selectman, Town of Haddam
- Planning and Zoning Official, Town of Haddam
- Honorable Daniel M. McGuire, First Selectman, Town of Lebanon
- Harold Liebman, Zoning Enforcement Officer, Town of Lebanon
- Honorable Howard R. Beetham, Jr., Mayor, Town of Montville
- Marcia Vlaun, Town Planner, Town of Montville
- Honorable Timothy C. Griswold, First Selectman, Town of Old Lyme
- Harry Smith, Planning Director, Town of Old Lyme
- Honorable Edward L. Kalinowski, First Selectman, Town of Portland
- Susan S. Decina, Town Planner, Town of Portland
- Honorable Paul B. Eccard, First Selectman, Town of Waterford
- Thomas V. Wagner, Planning Director, Town of Waterford



STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Ten Franklin Square
New Britain, Connecticut 06051
Phone: (860) 827-2935
Fax: (860) 827-2950

August 9, 2002

Honorable Howard R. Beetham, Jr.
Mayor
Town of Montville
Town Hall
310 Norwich New London Turnpike
Uncasville, CT 06382

RE: **EM-CING-059-061-071-086-105-113-152-020731** - SNET Mobility, LLC notice of intent to modify existing telecommunications facilities located in Groton, Haddam, Lebanon, Montville, Old Lyme, Portland, Waterford, Connecticut.

Dear Mayor Beetham:

The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

The Council will consider this item at the next meeting scheduled for August 15, 2002, at 1:30 p.m. in Hearing Room One, Ten Franklin Square, New Britain, Connecticut.

Please call me or inform the Council if you have any questions or comments regarding this proposal.

Thank you for your cooperation and consideration.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/laf

Enclosure: Notice of Intent

c: Marcia Vlaun, Town Planner, Town of Montville



SNET Mobility, LLC
500 Enterprise Drive
Rocky Hill, Connecticut 06067-3900
Phone: (860) 513-7730
Fax: (860) 513-7190

Peter W. van Wilgen
Senior Manager – Construction

HAND DELIVERED

July 30, 2002

RECEIVED

JUL 31 2002

**CONNECTICUT
SITING COUNCIL**

Mr. Mortimer A. Gelston, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

Re: SNET Mobility, LLC notice of intent to modify existing telecommunications facilities located in Portland, Haddam, Old Lyme, Waterford, Groton, Montville and Lebanon

Dear Mr. Gelston:

In order to accommodate technological changes, implement E-911 capability and enhance system performance, SNET Mobility, LLC ("SNET" or "Cingular Wireless") plans to modify the antenna configurations at its existing cell sites. Please accept this letter and attachments as notification, pursuant to R.C.S.A. Section 16-50j-73, of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2). In compliance with R.C.S.A. Section 16-50j-73, a copy of this letter and attachments is being sent to the chief elected official of each of the municipalities in which an affected cell site is located.

Attached are summary sheets detailing the planned changes, including power density calculations reflecting the change in the effect of Cingular's operations at each site. Also included is documentation of the structural sufficiency of each tower to accommodate the revised antenna configuration.

The changes to the facilities do not constitute modifications as defined in Connecticut General Statutes ("C.G.S.") Section 16-50i(d) because the general physical characteristics of the facilities will not be significantly changed or altered. Rather, the planned changes to the facilities fall squarely within those activities explicitly provided for in R.C.S.A. Section 16-50j-72(b)(2).

EM-CING-059-061-071-086-105-113-152-020731

Mr. Mortimer A. Gelston

July 30, 2002

Page 2

1. The height of the overall structure will be unaffected. At almost all sites, new panel antennas approximately the same size will replace those previously installed. Tower mount amplifiers, approximately 5" x 9" x 13", will be added to the platform on which the panel antennas are mounted to enhance signal reception at the cell site. In addition, the mandated provision of E-911 capability will require installation of one LMU ("location measurement unit"), approximately nine inches high, on either the tower, the equipment shelter or the ice bridge. One GPS receive-only antenna will be attached to the equipment shelter at each site. None of the modifications will extend the height of the tower.
2. The proposed changes will not extend the site boundaries. There will be no effect on the site compound.
3. The proposed changes will not increase the noise level at the existing facility by six decibels or more.
4. Radio frequency power density will increase due to use of additional channels broadcasting at higher power. However, the changes will not increase the calculated "worst case" power density for the combined operations at the site to a level at or above the applicable standard for uncontrolled environments as calculated for a mixed frequency site.

For the foregoing reasons, Cingular Wireless respectfully submits that the proposed changes at the referenced sites constitute exempt modifications under R.C.S.A. Section 16-50j-72(b)(2).

Please feel free to call me at (860) 513-7730 with questions concerning this matter. Thank you for your consideration.

Sincerely,



Peter W. van Wilgen
Senior Manager - Construction

Enclosures

**CINGULAR WIRELESS
Antenna Modification**

Site Address: 57 Cook Street, Uncasville
tower share

Tower Owner/Manager: Wireless Solutions, Inc.

Antenna configuration Antenna center line – 177'

Current and/or approved: 12 ALP 110 11 or comparable

Planned: 9 CSS DUO4-8670 or comparable DB (dual band)
6 tower mount amplifiers

Power Density:

Calculations for Cingular's current operations at the site indicate a radio frequency electromagnetic radiation power density, measured at the tower base, of approximately 3.7% of the standard adopted by the FCC. As depicted in the second table below, the total radio frequency electromagnetic radiation power density for Cingular's planned operations would be approximately 5.3%, or an additional 1.6% of the standard.

Cingular Current

Company	Centerline Ht (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm ²)	Standard Limits (mW/cm ²)	Percent of Limit
SNET	177	880 - 894	19	100	0.0218	0.5867	3.7

Cingular Planned

Company	Centerline Ht (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm ²)	Standard Limits (mW/cm ²)	Percent of Limit
SNET TDMA	177	880 - 894	16	100	0.0184	0.5867	3.1
SNET GSM	177	880 - 894	2	296	0.0068	0.5867	1.2
SNET GSM	177	1930 - 1935	2	427	0.0098	1.0000	1.0
Total							5.3%

Structural information: Please see attached.

INTRODUCTION

This report summarizes the results of the structural analysis performed on the 180' Rohn guy tower at the Uncasville site in New London County, Connecticut. The tower analysis was performed using 1999 GuyMast/Mast program.

ANALYSIS CRITERIA

The tower was analyzed for the specified loads in accordance with the current EIA-222-F publication, "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures." This analysis derives its applied forces from EIA minimum 85 MPH basic wind speed with no ice accumulation and 74 MPH wind speed with 1/2" ice.

TOWER LOADING INFORMATION

Bechtel Corporation requested o2wireless Solutions analyze the tower to verify its structural integrity under the following antenna and transmission line loading:

ELEVATION	STATUS	DESCRIPTION	LINE
177'	PROPOSED	9- DB PANEL ANTENNAS *	9- 1 1/4" COAX
160'	EXISTING	9- ALP 9011	9- 1 5/8" COAX
150'	EXISTING	6- ALP 9011	6- 1 5/8" COAX
140'	EXISTING	6- ALP 9011	6- 1 5/8" COAX

* 6 DDD TMA 1900 to accompany DB antennas at level 177'.

AVAILABLE DOCUMENTS

- All the structural information for the Uncasville tower was obtained from Rohn drawing number B971656 provided by Bechtel Corporation. And, the existing antenna types and locations were obtained from the tower owner, Wireless Solutions. o2wireless Solutions can not be held responsible for it's accuracy.
- RF sheet.

RESULTS

The graphs enclosed summarize the results of the tower study and itemize the structural components, specifying member function, elevation, and size. Values for allowable and actual member loads are reported along with the corresponding allowable wind conditions. The graphs summarize the existing structural components and their corresponding applied loads.

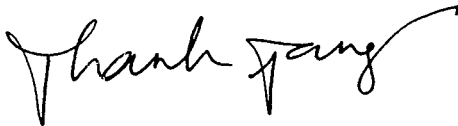
CONCLUSIONS AND RECOMMENDATIONS:

The Uncasville tower will support the proposed loading and meet the requirements of the EIA Standard without any modifications required. The analysis is reflected in run GM103-3637-14 and shown in the drawing pages.

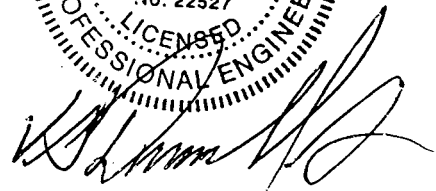
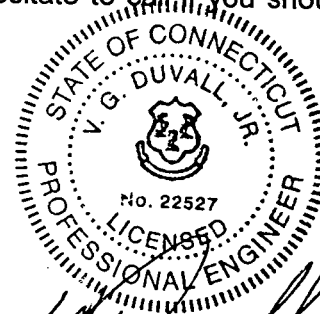
Information on the foundations was provided but geotechnical information was not provided. However, a comparison of our reactions at the tower base and the anchor to the original design reactions shows the new loads are less than the design loads. Thus, by observation, the foundations are adequate for the proposed loading scenario.

Thank you for this opportunity to work with you and do not hesitate to call, if you should have any questions.

Respectfully submitted:



Thanh Tang, EIT
Project Designer



VG Duvall, Jr., PE
Connecticut Professional Engineer

SNET MOBILITY LLC

EM-CING-059-061-071-086-105-113-152-
020731

*(75 Roberts Road, Groton;
213 High Street, Portland; 139 Morris Hubbard
Rd. and 525 Plains Rd., Haddam;
38 Hatchetts Hill Rd., Old Lyme; 75 Fargo Rd.,
Waterford; 376 Butlertown Rd., and 57 Cook
St., Montville; and
244 Gates Rd., Lebanon)*

***See Complete file under
Groton***