



STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

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

March 10, 1999

Peter J. Tyrrell
Senior Counsel
Springwich Cellular Limited Partnership
500 Enterprise Drive
Rocky Hill, CT 06067-3900

RE: **TS-SCLP-051-990219** - Springwich Cellular Limited Partnership request for an order to approve tower sharing at an existing telecommunications facility located at 3965 Congress Street in Fairfield, Connecticut.

Dear Mr. Tyrrell:

At a public meeting held on March 9, 1999, the Connecticut Siting Council (Council) ruled that the shared use of this existing tower site is technically, legally, environmentally, and economically feasible and meets public safety concerns, and therefore, in compliance with General Statutes § 16-50aa, the Council has ordered the shared use of this facility to avoid the unnecessary proliferation of tower structures.

This facility has been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequency now used on this tower. Any additional change to this facility 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 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.

This decision applies only to this request for tower sharing and is not applicable to any other request or construction.

The proposed shared use is to be implemented as specified in your letter dated February 19, 1999. Please notify the Council when all work is complete.

Very truly yours,

A handwritten signature in black ink, appearing to read "Mortimer A. Gelston".

Mortimer A. Gelston
Chairman

MAG/sg

c: Honorable Kenneth A. Flatto, First Selectman, Town of Fairfield

TS-SCLP-051-990219



RECEIVED

FEB 19 1999

CONNECTICUT
SITING COUNCIL

SNET Mobility, Inc.
500 Enterprise Drive
Rocky Hill, CT 06067-3900
Phone: (860) 513-7755
Fax: (860) 513-7614

Peter J. Tyrrell
General Counsel

February 19, 1999

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

RE: Request by Springwich Cellular Limited Partnership for an Order to Approve Shared Use of a Facility on 3965 Congress Street, Fairfield, Connecticut, Pursuant to Connecticut General Statutes §16-50aa.

Dear Chairman Gelston:

The following package contains a request from Springwich Cellular Limited Partnership (SCLP or applicant) to share an existing facility owned and operated by the Town of Fairfield.

Pursuant to Connecticut General Statute (CGS) §16-50aa, SCLP hereby requests an Order from the Connecticut Siting Council (Council) to approve the proposed shared use by the applicant of an existing facility located at 3965 Congress Street, Fairfield, Connecticut. SCLP proposes to install antennas on the tower and to locate an approximately 12 foot by 26 foot single story equipment shelter at the base of the tower within a fenced compound. The applicant requests the Council to find that the proposed shared use of the tower facility satisfies the criteria stated in CGS §16-50aa and to issue an Order approving the proposed shared use.

Background

SCLP is licensed by the Federal Communications Commission (FCC) to provide cellular telephone service within the State of Connecticut. The applicant and the Town of Fairfield have agreed to the proposed shared use of the tower facility pursuant to mutually acceptable terms and conditions. The Council has previously approved similar tower sharing requests.

The existing tower is a 150 foot AGL monopole type tower. SCLP proposes to install twelve Model ALP-110 antennas (Exhibit A) or their equivalent at a center line (CL) of 125 feet. Nextel (CL 156 feet), Sprint (CL 138 feet), and the Town of Fairfield (3 antennas with CL's of 108 feet) are already located on the tower. Omnipoint (CL 113

feet) was recently approved to go on the tower. The site plan shows the tower elevation with the existing antennas, the approved Omnipoint antennas, and SCLP's proposed antennas. As shown in the site plan, SCLP's radio transmission equipment will be located in an approximately 12 foot by 26 foot equipment shelter to be set on a concrete slab at the base of the tower. Pursuant to the requirements made by the Town during the lease approval process, SCLP will plant evergreens along the south side of the property for additional screening. No additional conditions were placed on SCLP by the Town. Erosion and sediment controls will be used as necessary during construction.

CGS §16-50aa states that, upon written request for approval of a proposed shared use the Council shall issue an Order approving such shared use if it finds that the proposed shared use of the facility is technically, legally, environmentally and economically feasible and meets public safety concerns.

Discussion

The shared use of the Congress Street tower satisfies the criteria stated in CGS §16-50aa as follows:

A. Technical Feasibility. The site will allow SCLP to provide improved coverage to Route 15 (the Merritt Parkway) and will help in alleviating call traffic from SCLP's existing sites at Bayberry Lane in Westport and Woodhouse Road in Fairfield. In addition, SCLP engineers have determined that the proposed antenna installations present minimal potential for interference to or from existing radio transmissions from this location. The proposed shared use therefore is technically feasible.

B. Legal Feasibility. Under CGS §16-50aa, the Council has been authorized to issue an Order approving the proposed shared use of a tower facility such as the Congress Street facility. This authority complements the Council's prior-existing authority under CGS §16-50p to issue Orders approving the construction of new towers that are subject to the Council's jurisdiction. This request is similar to past Tower Sharing Requests that the Council has approved.

C. Environmental Feasibility. The proposed shared use will have a minimal environmental effect for the following reasons:

- The proposed antenna and shelter installations will not cause any significant change or alteration in the physical and environmental characteristics of the existing site.
- The site has already been substantially cleared to construct the existing facility; therefore, the proposed installations will require minimal site preparation work. Additionally, as mentioned above, SCLP will be required to plant additional vegetation on the south side of the project area.

- The proposed equipment shelter will be located at the base of the tower. The proposed installations will not increase the noise levels at the existing facility by six decibels or more and will not emit any noise other than from air conditioning equipment when in use.
- Operation of the additional antennas will not increase the total radio frequency electromagnetic radiation power density, measured at the tower base, to a level at or above applicable ANSI standards. Worst-case general population/uncontrolled exposure calculations for a point at the base of the tower in relation to operation of each of SCLP's and the other tower tenants antenna arrays are as follows:

	<u>Freq.</u> <u>(MHz)</u>	<u>Power</u> <u>(Watts)</u>	<u>Channels</u>	<u>Applicable</u> <u>ANSI Std.</u>	<u>Calculated</u> <u>Worst-case</u>	<u>Percentage</u> <u>of MPE</u>
SCLP (CL at 125 ft. AGL)	880-894	100	19	0.5867 mW/cm ²	0.0486 mW/cm ²	8.30
Nextel (CL at 156 ft. AGL)	851-869	100	18	0.5673 mW/cm ²	0.0290 mW/cm ²	5.11
Sprint (CL at 138 ft. AGL)	1930-1945	122	11	1.000 mW/cm ²	0.0279 mW/cm ²	2.79
Omnipoint (CL at 113 ft. AGL)	1930-1945	100	8	1.000 mW/cm ²	0.0254 mW/cm ²	2.54
Fairfield (CL at 108 ft. AGL)	470.46	40	1	0.3136 mW/cm ²	0.0014 mW/cm ²	0.45
Fairfield (CL at 108 ft. AGL)	470.47	40	1	0.3136 mW/cm ²	0.0014 mW/cm ²	0.45
Fairfield (CL at 108 ft. AGL)	470.48	40	1	0.3136 mW/cm ²	0.0014 mW/cm ²	0.45

The collective worst-case general population/uncontrolled exposure would be 20.09 percent of the ANSI standard, as calculated for mixed frequency sites. Power density levels from shared use of the tower facility would thus be below applicable ANSI standards.

- The proposed installations will not require any water or sanitary facilities and will not produce air emissions from any combustion source. After construction is complete (approximately four weeks), the proposed installations will not generate any traffic other than periodic maintenance visits.

Based upon the above information, SCLP believes that if approved, the proposed shared use will have a minimal environmental effect and is therefore environmentally feasible.

D. Economic Feasibility. As previously mentioned, the tower owner and the applicant have entered into a mutual agreement to share use of the existing tower facility on terms agreeable to the parties and is thus economically feasible.

E. Public Safety Concerns. The provision of new or improved cellular phone service in the Fairfield area through shared use of the existing facility is expected to enhance the safety and welfare of area residents.

Conclusion

For the reasons discussed above, the proposed shared use of the Congress Street facility satisfies the criteria stated in CGS §16-50aa and advances the State's and the Siting Council's long-time goal of preventing the unnecessary proliferation of towers. The applicant therefore requests that the Siting Council issue an Order approving the proposed shared use. Thank you for your consideration of this matter.

Very truly yours,



Peter J. Tyrrell, Esq.
Springwich Cellular
Limited Partnership

Attachments

cc: Kenneth A. Flatto, First Selectman
Joseph Devonshuk, Dir. of Planning & Zoning
Eileen K. Wilcox, Town Attorney

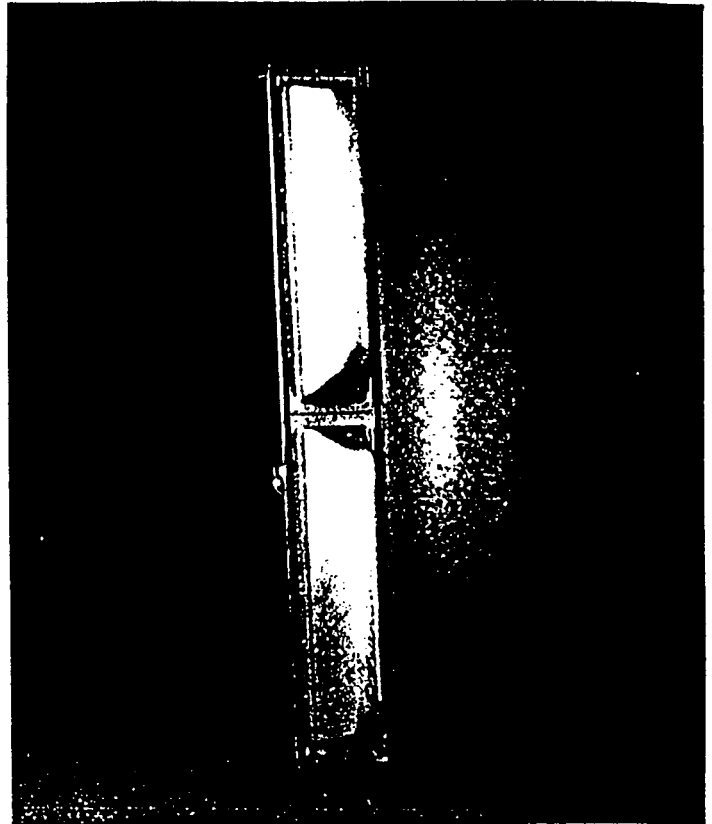
EXHIBIT A

LOG-PREIODIC REFLECTOR ANTENNA
110 Degrees 11 dBd

Features:

- Broadbanded. (800-900 MHz)
- Low backlobe radiation. Front to back ratio better than 25 dB.
- Low intermodulation products.
- Low wind-load.
- Low weight.
- Small size.
- Rugged design.

Please see the following pages including radiation patterns for ALP 11011-N.



Electrical Specifications:

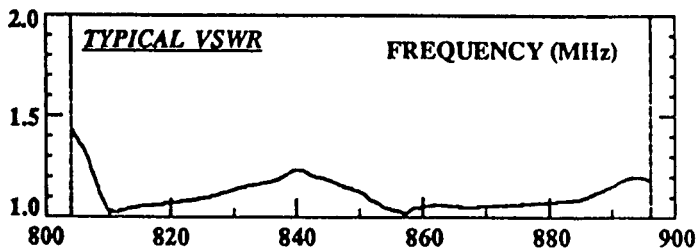
Frequency range:	806-896 MHz
Impedance:	50 Ohm
Connector:	N female
VSWR:	Typ. 1,3:1 max 1,5:1
Polarization:	Vertical
Gain:	11 dBd
Front to back ratio:	>25 dB
Intermodulation: (2 x 25 W)	IM5 - 107 dBm
Power Rating:	500 W
H-Plane: -3 dB	110°
E-Plane: -3 dB	15°
Lightning Protection:	DC Grounded

Mechanical Specifications:

Overall height:	51 in. (1320 mm)
Width:	8.3 in. (210 mm)
Depth:	11.4 in. (290 mm)
Weight incl. mounting items:	24.5 lbs (11 Kg)
Rated wind velocity:	113 mph (180 Km/h)
Wind Area (CxA/Front):	3.7 sq.ft (0.34 sq.m)
Lateral thrust at rated wind:	
Worst case	530 N

Materials:

Radiating elements:	Aluminum
Element housing:	Grey PVC
Reflector:	Aluminum
Mounting Hardware	
clamps:	Hot dip galvanized steel
bolts:	Stainless steel



Manufactured by: Allgon System AB

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