

Re: PETITION NO. 763  
Calendar Item 12  
May 17, 2006

May 25, 2006

Ms. Pamela B. Katz, Chairman  
Connecticut Siting Council  
10 Franklin Square  
New Britain, Connecticut 06051

Dear Ms. Katz:

During the Council's meeting on May 17, 2006, the undersigned Counsel for Dr. Carl Bornemann requested an opportunity to be heard on the proposed dismissal of the U.S. Fish and Wildlife Service letter of April 27, 2006. That letter supports petitioner's request for a determination:

(3) directing Nextel Communications Inc. to pay over to the Siting Council the cost of funding adequate independent research and investigation under the Council's supervision into the biological effects of modulated ultra-high frequency radio wave emissions on birds, plants, amphibians, fish and wildlife;

The Chairman authorized Petitioner to file written objections to the action. Those objections are submitted herewith. The objections point out that research into environmental impact on wildlife and habitats is not preempted by the TCA. The objections also note that Connecticut law obligates the Council to require such research in order to minimize the environmental impact of Nextel's proposed tower on Beebe Hill.

The FCC has designated the USFWS as the proper agency to oversee minimizing the impact of cell tower placement on wildlife and habitats. The USFWS letter offering to design and oversee a \$ 400,000 study on the Council's behalf should accordingly be carefully considered on the merits and not dismissed summarily.

Thank you for your consideration.

Gabriel North Seymour  
Attorney for Petitioner  
200 Route 126, Falls Village, CT 06031  
(860) 824-1412

Enclosure

cc. Thomas F. Flynn, III, Esq.  
Nextel Communications, Inc.  
100 Corporate Place  
Rocky Hill, CT 06067

**PETITIONER'S WRITTEN OBJECTIONS TO THE COUNCIL'S REJECTION OF THE RESEARCH STUDY PROPOSED BY THE U.S. FISH AND WILDLIFE SERVICE**

During the course of the Council's meeting on May 17, 2006, the Council voted unanimously to direct Council staff to send a letter to the U.S. Fish and Wildlife Service rejecting its proposal for research into the environmental impact of Nextel's Beebe Hill cell tower on nesting birds and wildlife habitats, as outlined in the Fish and Wildlife Service (USFWS) letter dated April 27, 2006. This summary action with no evidentiary hearing compounds the due process denial in the original Nextel proceeding, which was conducted with no notice to Dr. Bornemann.

The research described in the USFWS letter was designed to implement Petitioner's third request for Council action in Petition No. 763, dated April 18, 2006:

Request for Council Action

Accordingly, for all the reasons set forth above, Petitioner Dr. Carl Bornemann requests a Declaratory Ruling \* \* \*

(3) directing Nextel Communications, Inc. to pay over to the Siting Council the cost of funding adequate independent research and investigation under the Council's supervision into the biological effects of modulated ultra-high frequency radio wave emissions on birds, plants, amphibians, fish and wildlife;

We respectfully remind the Council that it is obligated under the following provision of State law to initiate such research.

Connecticut General Statutes Section 16-50g requires the Siting Council as a State agency "to protect the environment and ecology of the state" and to encourage research to develop methods to transmit telecommunications "with minimum damage to the environment."

Rejection of the USFWS research proposal without discussion and consideration of the relevant evidence and a written decision on the merits would appear to be arbitrary and capricious agency conduct in violation of State law.

**Federal Law Does Not Preempt Research into Environmental Impact of Cell Tower Emission on Nesting Birds and Wildlife**

The preemption provision of the Telecommunications Act of 1996 states:

47 U.S.C. § 332 (c)(7)(B)(iv), provides; (iv) No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission’s regulations concerning such emissions. [Emphasis added.]

The “extent” of the FCC’s regulations concerning emissions is specifically and exclusively limited to human health. See marked description of the FCC regulations on the FCC’s own website, headed “RF SAFETY PROGRAM,” printout attached as Exhibit F. The FCC states that its RF emissions rules “are designed to protect public health” and to constitute “limits for human exposure to RF emissions.”

The Federal Courts have squarely held that the FCC’s preemptive rules are limited to “health risks.” Cellular Phone Taskforce, 205 F.3d 82, at 88 (2d Cir. 2000):

The Act preempted state and local governments from regulating the placement, construction or modification of personal wireless service facilities on the basis of the health effects of RF radiation where the facilities would operate within the levels determined by the FCC to be safe. [Emphasis added.]

For a comprehensive discussion of the relevant principles of Federal preemption as they relate to the Telecommunications Act, see the Second Circuit decision in Sprint Spectrum LP v. Mills, 283 F3d 404, 414-416 (2d Cir. 2002). The Court points out that the TCA preserves the authority of state agencies [such as the CSC] over decisions regarding “placement, construction, and modification” of wireless facilities – exactly the issue that is before the CSC in this proceeding.

With respect to wireless telephone communications, the Telecommunications Act, which is part of the FCA, has similarly given the FCC “broad,” albeit “somewhat” more “circumscribed,” preemption authority. Cellular Phone Taskforce v. FCC, 205 F.3d 82, 96 (2d Cir. 2000), cert. denied, 531 U.S. 1070 (2001); see generally City of New York v. FCC, 486 U.S. 57 (1988); Capital Cities Cable, Inc., v. Crisp, 467 U.S. 691, 698-700 (1984). To the extent pertinent here, the TCA section dealing with “[r]egulatory treatment of mobile services,” 47 U.S.C. § 332(c), in its paragraph (7) entitled “Preservation of local zoning authority,” id. § 332(c)(7), provides as follows:

(A) General authority

Except as provided in this paragraph, nothing in this chapter shall limit or affect the authority of a State or local government or instrumentality thereof over decisions regarding the placement, construction, and modification of personal wireless service facilities. Id. at 416. [Emphasis added.]

Research into damage to nesting birds and wildlife habitat from cell tower emissions will provide the basis for the Council to develop procedures to minimize those effects such as shielding, distance, or technical measures developed by the telecommunications industry itself.

### **The Council Has Both the Power and the Duty to Minimize the Impact of Cell Tower Placement on the Environment**

The Second Circuit's decision in Sprint Spectrum v. Willoth, 176 F.3d 630 (2d Cir. 1999) held that a state agency has a duty under state law to minimize the impact of the erection of a proposed cell tower. In that case the issue was the aesthetic impact of the proposed site; in this case it is the impact on bird and wildlife habitats. The facts are different but the legal principle is the same:

A local government may reject an application for construction of a wireless service facility in an under-served area without thereby prohibiting personal wireless services if the service gap can be closed by less intrusive means. See Town of Amherst, 173 F.3d at 14 (“[I]ndividual denial is not automatically a forbidden prohibition,” but disallowing “the only feasible plan...might amount to prohibiting personal wireless service.”). There are numerous ways to limit the aesthetic impact of a cell site. It may be possible to select a less sensitive site, see Geardon & Co. v. Fulton County, 5 F.Supp. 2d 1351, 1355 (N.D. Ga. 1998), to reduce the tower height, see Town of Amherst, 173 F.3d at 14-15, to use a preexisting structure or to camouflage the tower and/or antennae, see, e.g., Cellco Partnership v. Town Plan & Zoning Comm’n of Farmington, 3 F.Supp. 2d 178, 185, 186 (D. Conn. 1998) (describing antennae placed on water tower, and permitting applicant to reconstruct church steeple with six antennae placed inside); Smart SMR of New York, Inc. v. Zoning Comm’n of Stratford, 995 F.Supp. 52, 59 (D. Conn. 1998) (describing an antenna placed on a billboard and current applicant seeking to conceal tower with seven evergreen trees). See also Nancy D. Holt, Developments: It May Be Art, But Can You Hear Me?, Wall St. J., Dec. 10, 1997, at B14 (describing a multitude of camouflaged towers ranging from artful designs to silos, windmills, cactuses and pine trees). A local government may also reject an application that seeks permission to construct more towers than the minimum required to provide wireless telephone services in a given area. A denial of such a request is not a prohibition of personal wireless services as long as fewer towers would provide users in the given area with some ability to reach a cell site.” *Id.* at p. 643.

Following this decision, the Third Circuit stated in APT Pittsburgh Limited Partnership v. Penn Township, 196 F.3d 449 (3d Cir. 1999):

In order to show a violation of subsection 332 (c)(7)(B)(i)(II) under Willoth, an unsuccessful provider applicant must show two things. First, the provider must show that its facility will fill an existing significant gap in the ability of remote users to access the national telephone network. In this context, the relevant gap, if any, is a gap in the service available to remote users. Not all gaps in a particular provider's service will involve a gap in the service available to remote users. The provider's showing on this issue will thus have to include evidence that the area the new facility will serve is not already served by another provider. [Fn omitted.]

Second, the provider applicant must also show that the manner in which it proposes to fill the significant gap in service is the least intrusive on the values that the denial sought to serve. This will require a showing that a good faith effort has been made to identify and evaluate less intrusive alternatives, e.g., that the provider has considered less sensitive sites, alternative system designs, alternative tower designs, placement of antennae on existing structures, etc. Id. at 480. [Emphasis added.]

Nextel failed to make any such showing in its Petition 701 and therefore it is reasonable and proper for the Council to direct Nextel to underwrite research to determine the extent of environmental harm to wildlife and habitats that would be caused by Nextel's proposed tower, in order to determine what steps should be taken to minimize that harm.

**The FCC Itself Recognizes the USFWS as the Agency With Expertise and Jurisdiction to Guide the Placement of Telecommunications Facilities Affecting Wildlife**

In the section of the FCC website headed "Environmental and Historic Preservation" (marked copy attached as Exhibit G) the FCC expressly identifies the U.S. Fish and Wildlife Service as the agency with jurisdiction over tower placement considerations involving migratory birds as well as critical habitats.

This official recognition by the FCC itself that USFWS research is not preempted by FCC regulations is one more reason why the Council should not reject the USFWS letter of April 27, 2006. It also demonstrates why USFWS should design the proposed research study in this case to be conducted under the Council's supervision, to insure compliance with Federal standards and legal requirements as well as proper professional scientific standards and criteria.

### **Why Nextel Should Bear the Research Cost**

Nextel is the party that has affirmatively asserted the absence of environmental harm without providing supporting facts and data as required under the Council's regulations (see below). It would be unfair to compel taxpayers or other telecommunications companies to bear the \$ 400,000 projected research cost to make up for Nextel's omissions of facts and data. If Nextel wishes to seek contributions from companies that will co-locate on its tower, it is, of course, free to do so. It is entirely proper for the Council to order Nextel to pay the full cost of the study.

### **The Council's Regulations Require that a Petitioner Must Supply All Relevant Facts and Data When Requesting a Declaratory Ruling**

Ordinarily, the Siting Council has an affirmative duty under General Statutes Section 16-50k to require telecommunications companies such as Nextel to obtain a "certificate of environmental compatibility and public need" with full notice and public hearing (in compliance with Section 16-50l) for any proposed tower construction or modification. The only exception to this requirement is when the Council makes an express finding that the construction or modification will not "have a substantial adverse environmental effect in the state." Any such finding by the Council must be based on "substantial evidence," in order to comply with Federal law. See 47 U.S.C. Section 332(c)(7); Cellular Telephone Co. v. Town of Oyster Bay, 166 F.3d 490 (2d Cir. 1999).

Where a telecommunications company desires to follow the "declaratory ruling" procedure, Section 16-50j-39 of the Siting Council's regulations requires the company to accompany its Petition with "a statement of any supporting data, facts, and arguments" to substantiate its position. [Emphasis added.]

In its Petition 701 to erect a cell tower extension on top of the electric transmission tower on Beebe Hill, Nextel's sole submission of supporting data and facts consisted of the following two paragraphs:

#### **ENVIRONMENTAL EFFECTS**

Although the proposed modification would extend above the height of the existing tower structure, this height increase would not cause significant adverse environmental effect. The tower extension would still be in proportion with the existing tower structure and the proposed use is consistent with the existing utility and telecommunications use of the tower and surrounding property. Moreover, if approved, the tower extension on the existing tower structure would eliminate the need to construct a new tower in the area to provide the same or similar coverage.

The limits of the disturbance of all construction activities will be confined to every extent possible. Erosion and sedimentation control measures shall be installed, when necessary, and in accordance with the Connecticut Guidelines for

Soil Erosion and Sediment Control (Revised 1988) and Amendments, as published by the Connecticut Council on Soil and Water Conservation.

Nextel's Petition 701 then concludes with arguments that the tower proposal "minimizes potential environmental effects" by avoiding the construction of a new tower in the area and because "clearing and site preparation" will be minimized.

Nowhere does Nextel mention the existence of such major environmental factors as bird nesting areas and wildlife habitats, a significant inland fresh water wetland, or state-listed amphibia and rare plants -- all of which are located within its proposed coverage area for the Beebe Hill tower planned to cover Route 7, Routes 126 and 63 and the surrounding residential area. Nor does the Siting Council's order approving Nextel's petition refer to any of these significant environmental and ecological factors. One assumes that increased distance from the tower may reduce the impact of Nextel's transmissions on nesting birds, but as the white stork study mentioned below shows, this is not necessarily so. That is why a well-funded study of these issues is so important.

### **The Council's Statutory Obligation to Protect Inland Wetlands**

It is the public policy of the State of Connecticut to protect inland wetlands and watercourses and "prevent loss of fish and other beneficial aquatic organisms, wildlife and vegetation and the natural habitats thereof." General Statutes Section 22a-36. Robbins Swamp and the Hollenbeck River constitute Connecticut's largest inland wetland, located directly in the coverage area proposed by Nextel in Petition 701, but nowhere mentioned either by Nextel or by the Connecticut Siting Council in its findings.

### **The Council's Statutory Obligation to Protect Natural Areas**

State law also provides for protection of Natural Area Preserves "of outstanding scientific, educational, biological, geological, paleontological or scenic value." General Statutes Section 23-5a et seq. Neither Nextel nor the Siting Council mention the existence of state-owned natural areas in the coverage area, nor any notice to, or consultation with, the Commission of Environmental Conservation.

### **The Council's Statutory Obligation to Protect Endangered Species**

General Statutes Section 26-310 requires state agencies to protect endangered or threatened species or species of special concern and their essential habitats:

**Sec. 26-310. Actions by state agencies which affect endangered or threatened species or species of special concern or essential habitats of such species.** (a) Each state agency, in consultation with the commissioner, shall conserve endangered and threatened species and their essential habitats, and shall ensure

that any action authorized, funded or performed by such agency does not threaten the continued existence of any endangered or threatened species or result in the destruction or adverse modification of habitat designated as essential to such species, unless such agency has been granted an exemption as provided in subsection (c) of this section. In fulfilling the requirements of this section, each agency shall use the best scientific data available. [Emphasis added.]

There is no mention of any investigation into the presence of any state-listed species in the affected area in either the Nextel Petition 701 or the Connecticut Siting Council's decision.

According to the Connecticut Chapter of the Nature Conservancy, among the state-listed species in the Robbins Swamp-Hollenbeck River area are:

Blue Spotted Salamander (*Ambystoma laterale*)

Red-bellied Snake (*Storeria occipitomaculata*)

Northern Leopard Frog (*Rana pipiens*)

Cerulean Warbler

Bobolink

Meadowlark

Raven

Burbot (*Lota lota*), a rare fish.

In our main Petition we listed on pages 3-4 the more unusual bird species with confirmed nesting sites in the Beebe Hill – Falls Village area. Attached hereto as Exhibit H are the relevant pages from the State Geological and Natural History Survey of Connecticut Bulletin 113 describing these species in detail.

Also attached as Exhibit I is a current Checklist of Birds compiled by the Sharon Audubon Center, listing a total of 179 species that have been identified in the area.

No mention of birds of any kind, or their habitats, appears in the Nextel petition 701 or in the Connecticut Siting Council's order approving the proposed Beebe Hill cell tower installation. The omission of any reference of any kind to these environmental factors shows the Nextel petition to be significantly inadequate and misleading, and demonstrates the absence of any factual basis for the Connecticut Siting Council's finding of no substantial adverse environmental impact.

### **Substantial Evidence of Harm to Nesting Birds**

The Council has in the record of this case substantial evidence that major harm is done to nesting birds in habitats close to cell towers (Exhibit E to Petition 763). The highlights of that evidence are:

The numeric tendency of the populations of birds is of particular interest in the conservation of nature...Animals are very sensitive electrochemical complexes that communicate with their environment through electrical impulses. Ionic currents and electric potential differences exist through the cellular membranes and corporal fluids. The intrinsic electromagnetic fields from the biological structures are characterized by certain specific frequencies that can be interfered with by the electromagnetic radiation, through induction and causing modification in their biological responses...The low intensity pulsed microwave radiation from cellsites produces subtle athermal influences in the living organisms...Some effects are manifested exclusively with a certain power density, while others are manifested after a certain duration of the irradiation, which indicates long-term cumulative effects...Research has shown such effects on the living organisms at molecular and cellular levels on immune processes, in DNA, on the nervous, cardiac, endocrine, immune and reproductive systems, modification of sleep and alteration of the cerebral electric response, increase of the arterial pressure and changes in the heart rhythm, and an increase in the permeability of the blood brain barrier. [Exhibit E, page 110.] [Footnotes Omitted. Emphasis added.]

The monitoring of the nesting white storks in the study attached as Exhibit E showed that birds nesting within 200 meters of antennae had a reproduction rate close to half that of birds nesting further than 300 meters from the antennae. [Id. at 111] Such effects on a population of listed species of birds in Connecticut has the potential of devastating a population.

The results of the study cited reflect the potential harm to the reproductive viability of birds nesting near cell towers. In the study,

Twelve nests (40%) located within 200m of the antennae never had any chicks, while only one (3.3%), located further than 300m never had chicks....behavioral observations of the white stork nesting sites located within 100m of one or several cellsite antennae and on those that the main beam impacted directly (EFI>2V/m) included young that died from unknown causes. Also within that distance, couples frequently fought over the nest construction sticks and failed to advance the construction of the nests. (Sticks fell to the ground while the couple tried to build the nest.) Some nests were never completed and the storks remained passively in front of cellsite antennae. [Id. at 113.] [Emphasis added.]  
...Birds are especially sensitive to the magnetic fields. Ibid.

Because of their thinner skull, their greater mobility and the fact that they use areas with high levels of microwave electromagnetic radiation, birds are very good biological indicators. [Id. 114-115.]...In the United Kingdom, where the allowed radiation levels are 20 times higher than those of Spain, a decline of several species of urban birds has recently taken place, coinciding with the increasing installations of cellsites...the biological mechanisms of the effects of these waves are still ignored, although the athermal effects on organisms have been sufficiently documented...For this reason the reports related to animals are of special value, since in this case it can never be alleged that the effects are psychosomatic. [Id. at 115]

It would be a dereliction of the Council's statutory duty and would constitute arbitrary and capricious action for the Connecticut Siting Council to ignore this substantial evidence before it that the potential for major environmental impacts exists in this proposed tower site. It would also be a violation of state law and arbitrary and capricious action were the agency to affirm the omission from Nextel's original Petition No. 701 of any acknowledgment of evidence of environmental impacts, especially in light of Nextel's assertion that a "Certificate of Environmental Compatibility and Public Need" was not required. In the face of substantial evidence to the contrary, the Connecticut Siting Council has an obligation to reverse and vacate its summary action taken on the original Petition 701 and subsequently on Calendar Item 12 at the meeting on May 17, 2006.

### **Conclusion**

Nextel's disregard for the major environmental concerns of the State of Connecticut requires affirmative corrective steps by the Siting Council. This can be achieved by requiring Nextel to compile and submit all relevant environmental data and to pay the cost for an independent USFWS-approved study on the environmental impact of Nextel's proposed transmission facility at Beebe Hill, particularly on bird nesting areas and wildlife habitat.

Any summary rejection of the USFWS letter of April 27, 2006 by the Connecticut Siting Council without a full hearing and written decision based on substantial evidence would constitute an abdication of responsibility on the Council's part.

Respectfully submitted,

Gabriel North Seymour  
Attorney for Petitioner Carl Bornemann  
200 Route 126  
Falls Village, CT 06031  
(860) 824-1412

May 25, 2006