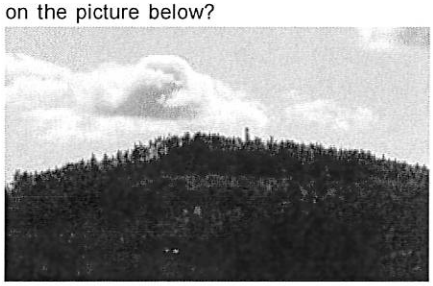
OFFICE OF
Energy and Planning

Deploying the Technology

Deploying the technology of wireless telecommunications.

This "stealth tree" facility is located in New Hampton, NH and is quite difficult to identify from afar. Can you tell where it is on the picture below?



The Industry

The role of the wireless industry in the deployment of this technology is simple. They want rapid system development and tall facilities that are capable of providing reliable service in the coverage phase of establishing their networks. The coverage phase is the first phase of deployment and most carriers prefer to build taller facilities at this time because the objective is to achieve the most coverage from the fewest sites. These facilities are generally located within five miles of each other to provide the necessary coverage.

During the second stage of development, the provider is trying to meet an increase in demand for service. At this point in the deployment, capacity sites will be created between the coverage sites. Since these two types of facilities will now share service areas, the provider must reduce the heights of all mounts so that the antennas are at a similar (lower) elevation, or adjust the power and direction of the coverage sites to serve a smaller area.

Different regions of New Hampshire are experiencing different stages of deployment. Some rural areas have not experienced the coverage stage yet, while some of the more urban areas are already into the second stage of deployment.

The FCC and the Telecommunications Act of 1996

The role of the FCC is related to the auctioning of wireless spectrum and regulating the wireless industry. The Telecommunications Act (TCA) required the FCC to prepare new regulations for radio frequency radiation (RFR) emissions from personal wireless service facilities and provide guidelines for the deployment of this wireless technology.

Section 704 of the TCA, which is entitled the "Preservation of Local Zoning Authority" (47 U.S.C. §353(c)(7), governs federal, state and local government oversight of wireless facility siting. Section 704 preserves local zoning authority over the placement, construction and modification of PWSFs with some limitations. This section states that local government:

- Shall not unreasonably discriminate among providers of functionally equivalent services;
- Shall not prohibit or have the effect of prohibiting the provision of personal wireless services;
- Shall act on any request for authorization to place, construct, or modify PWSFs within a reasonable period of time after the request is filed, taking into account the nature and scope of the request;
- Shall put any decision to deny a request for a PWSF into writing and support such decision by substantial evidence contained in a written record; and
- Shall not regulate PWSFs on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the FCC regulations concerning such emissions.

"Shot Clock" Order

The TCA requires that any local land use board act on applications for cell towers within "a reasonable period after the request is duly filed." 47 U.S.C. §332(c)(7)(B)(ii). On November 18, 2009, the FCC issued a Declaratory Ruling or Order (FCC 09-99) (hereinafter "FCC Order"), in a docket initiated by the CTIA. [footnote 5] The Order creates a presumption for a reasonable period within which boards must act on applications. In essence, it creates a "shot clock" for decisions: 90 days for an application for a new antenna on an existing facility (known as "collocation"), and 150 days for construction of a new wireless tower and all other applications. If those deadlines are not met, applicants may sue in federal or state courts, and the court will presume the delay is unreasonable, unless the municipality can demonstrate otherwise. The FCC Order sets up a number of other timing requirements discussed more fully below. Boards should be aware that "collocation," generally attaching a new antenna to an existing structure, is very broadly defined in the FCC Order to include significant increases in the height of structures (up to 10% of the height of the original structure, or 20 feet, whichever is greater [footnote 6]), and may exceed what is defined as "collocation" under local ordinances.

In addition, the order imposes a deadline for local land use boards to request additional information on cell tower applications: 30 days from receipt of application. The 30 days are subsumed within the 90 or 150 days; the 30 days are not additional time for review. If the application has insufficient information to allow the Planning Board to make an informed decision on issues unique to cell towers, then the municipal board must notify the applicant of this fact within 30 days from the date of filing. The time from the date of the notification to the date that the applicant provides the requested information is not counted toward the 90 or 150 days. After the 30 days from filing have elapsed, the application is presumptively complete. If the municipal board notifies the applicant that the application is incomplete after the first 30 days from the date of filing, the applicant may provide additional information, but the 90- or 150-day clock will continue to run.

For example, if an application is delivered and the municipal board requests additional information on day 28, the 90 or 150-day clock will stop for as long as the applicant takes to provide the information. If, however, the application is delivered and the board waits until day 32 to request additional information, then the 90- or 150-day clock will continue to run. [footnote 7] In its denial of a Motion for Reconsideration of its Order, the FCC clarified that a municipal board may request additional information after 30 days from the date of submission, but the clock does not stop while the request is pending. (FCC 10-144) Thus, every effort should be made to review applications and to request additional information promptly.

The 90- and 150-day time frames are the standard times that the FCC ruled are presumptively reasonable pursuant to the Telecommunications Act of 1996. The FCC also ruled that the time frames may be adjusted by mutual consent of the applicant and the local government. Thus, if the parties agree, the municipality may obtain longer than 30 days to request more information while tolling the clock, or it may obtain longer than 90 or 150 days to rule on an application. An agreement of this kind should be made on the record.

****December 2012****

Municipalities must approve any changes to an eligible facility that does not substantially change the physical dimensions.

PUBLIC LAW 112-96-FEB. 22, 2012

MIDDLE CLASS TAX RELIEF AND JOB CREATION ACT OF 2012

TITLE VI-PUBLIC SAFETY COMMUNICATIONS AND ELECTROMAGNETIC SPECTRUM AUCTIONS

Subtitle D-Spectrum Auction Authority

SEC. 6409. WIRELESS FACILITIES DEPLOYMENT.

(a) FACILITY MODIFICATIONS.-

(1) IN GENERAL.- Notwithstanding section 704 of the Telecommunications Act of 1996 (Public Law 104–104) or any other provision of law, a State or local government may not deny, and shall approve, any eligible facilities request

for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station.

(2) ELIGIBLE FACILITIES REQUEST.- For purposes of this subsection, the term "eligible facilities request" means any request for modification of an existing wireless tower or base station that involves--

(A) collocation of new transmission equipment;
(B) removal of transmission equipment; or
(C) replacement of transmission equipment.

(3) APPLICABILITY OF ENVIRONMENTAL LAWS.-Nothing in paragraph (1) shall be construed to relieve the Commission from the requirements of the National Historic Preservation Act or the National Environmental Policy Act of 1969.

For a further understanding of this new provision, see the handout from Best, Best & Krieger, Attorneys at Law distributed at the New Hampshire Municipal Lawyers Association 2012 Local Government Seminar #2: Telecommunications Update, Cell Tower Siting, Cable Television & Right-of–Way Management & NH Local Government, on April 5, 2012.

This "chimney mount" located in Exeter, NH is practically impossible to detect.

The Local Level

The role of local government is to be proactive and remain within the guidelines of the TCA. A PWSF ordinance and a plan are crucial components of a proactive approach to the telecommunications issue. The key is having a process that is flexible enough to allow the local boards to negotiate acceptable solutions. Considering the evolving nature of the telecommunications industry, communities are best served by an ongoing planning process led by a local or regional telecommunications committee.

The Master Plan should include a telecommunications section and the community could even identify locations where facilities should or should not be located, using the help of an engineer or an industry representative. There are many ways to engineer facilities and networks in a given area. A community may determine that two small facilities outside of a sensitive area would be more desirable than one very tall tower in the center of the area.

With these items in place, a community can clearly identify the type of facilities desired and the locations that would be most appropriate for future facilities. This can lead to a "path of least resistance" approach to approval. If an applicant submits a proposal that satisfies all of the criteria identified in an ordinance, the approval process could be handled quickly. The opposite would be true for an applicant who submits a proposal that does not satisfy the criteria. This may encourage applicants to design their proposed projects according to the community's identified guidelines.

Municipal officials do not need engineering degrees but they should be aware of the effects that height, power levels and screening have on RF signals and the ability of a facility to perform as part of the network. One size does not fit all! When looking to use other ordinances as models, communities should be sure that they have similar priorities, constraints, and desired outcomes. With appropriate regulations, knowledge of the industry, and a clear community vision, local boards can have a great deal of influence over proposed wireless facilities.

Communities Without Zoning

In the view of OEP, a zoning ordinance is the only useful vehicle for regulating the placement, design and construction of PWSFs. Some communities have tried to use the "police power" authority, but in our view this limits the elements that may be controlled to those related to health and public safety: clear fall zones, preventing ice build up and blow off, and related items. Zoning appears to be the only regulatory vehicle that deals with a community's full range of issues.

For communities without zoning, a recommended first step is to use this as the occasion to seriously consider adopting a zoning ordinance. Remember that this step requires a master plan on which to base the zoning ordinance. Some communities have asked if they could adopt a single purpose zoning ordinance that only deals with PWSFs. A zoning ordinance that deals exclusively with PWSFs and is enacted under the Zoning subdivision of Chapter 674 (674:16-23) is likely permissible but our advice is that you should consult with your municipal attorney. Legislation was introduced in 2001 to clarify this approach but the issue still remains unresolved.

NH State Law RSA 12-K

RSA 12-K became effective on August 7, 2000. The purpose of the law is to provide for the deployment of necessary PWSFs under the Federal Telecommunications Act of 1996, while minimizing the visual effects of tall facilities. Varying in height from 35 to over 250 feet, wireless facilities have a powerful impact on the visual character of a community.

RSA 12-K states that carriers wishing to build PWSFs in New Hampshire should consider commercially available alternatives to tall cellular towers which may include the use of the following:

- lower antenna mounts that do not protrude as far above the surrounding tree canopies;
- disguised PWSFs such as flagpoles, artificial tree poles, light poles and traffic lights that blend in with their surroundings;
- camouflaged PWSFs mounted on existing structures and buildings;
- custom designed PWSFs to minimize the visual impact of a PWSF on its surroundings; and
- other available technology.

It is important to note that these types of alternatives exist and are in operation in many New Hampshire communities.

PWSF applicants must provide local land use boards with a copy of their federal license from the FCC proving that they, or their contracted client, are eligible to deploy their systems under the TCA. Part of this law requires regional notification of a proposed PWSF to every municipality within a 20-mile radius and the opportunity to comment at a public hearing. The applicant should be responsible for providing the list of municipal boards within the 20-mile radius of the proposed facility and the regional notification process should occur at the applicant's expense.

Chapter 267 of the laws of 2013 (SB101) significantly revised RSA 12-K to facilitate a streamlined application process for the collocation or modification of personal wireless service facilities ("PWSF") such that carriers may, in many instances, side-step the local land use board approval process. The changes added two new sections - 12-K:10 and 12-K:11 that pertain to collocation and modification of PWSFs. Review of collocation and modification applications are limited to a review "for conformance with applicable building permit requirements and shall not otherwise be subject to zoning or land use requirements, including design or placement requirements, or public hearing review" and not through the traditional Planning Board site review process.

Within 45 days of receiving a collocation or modification application, the municipality must: 1) review the same in light of its conformity with applicable building permit requirements and consistency with RSA 12-K; 2) make a final decision to approve or disapprove the application; and 3) advise the applicant in writing of its final decision. A collocation or modification application is deemed to be complete unless the municipality notifies the applicant, in writing, within 15 calendar days of submission, of the deficiencies in the collocation or modification application which, if cured, would make the it complete. If the municipality fails to act on a collocation or modification application within 45 calendar days, the application is deemed approved.

Additionally, no reviewing authority may require an applicant to submit information about, or evaluate an applicant's business decisions with respect to, its designed service, customer demand for service, or quality of its service to or from a particular area or site; evaluate a collocation or modification application based on the availability of other potential locations; decide which type of personal wireless services, infrastructure, or technology will be used by the applicant; require the removal of existing mounts, towers, or PWSFs, as a condition to approval; impose environmental testing, sampling, or monitoring requirements; reject an application based on perceived or alleged environmental effects of radio frequency emissions; charge an application fee, consulting fee or other fee associated with submission, review, processing, and approval of collocation or modification application that is not required for similar types of commercial development within the authority's jurisdiction; impose any type of financial surety to ensure that abandoned or unused facilities can be removed unless the reviewing authority imposes similar requirements on other permits for other types of commercial development or land uses; or limit the duration of the approval of a collocation or modification application.

For more information about these changes see Upgrades to Wireless Infrastructure, by Paul Sanderson, New Hampshire Town and City, January/February 2014 and Streamlined Application Process for the Collocation and Modification of Personal Wireless Service Facilities in NH, by Justin L. Pasay, Esq. DTC Lawyers, November 12, 2014.

OEP, in cooperation with the UNH Complex Systems Research Center, has created a digital map of all PWSFs in the state that includes all externally visible tower facilities, both active and inactive, for all carriers. The map also includes site descriptions for each of these facilities. This map will be updated regularly and is available on the Personal Wireless Services Facilities page on OEP website.

[footnote 5] See the November 18, 2009, press release from the FCC included at the end of this technical bulletin.
[footnote 6] This definition is from an agreement published in the Code of Federal Regulations, 47 C.F.R. Part 1, App. B - Nationwide Programmatic Agreement for the Co-location of Wireless Antenna, Definition, Subsection C, and incorporated into FCC Order at ¶ 46, FN 146.

[footnote 7] LGC Law Lecture #1, Fall 2010, Cell Towers: Managing the Approval Process to Protect Municipal Interests and Comply with Federal Law by Attorney Sharon Cuddy Somers and Attorney Katherine B. Miller, Donahue, Tucker & Ciandella, PLLC.

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NH Office of Energy and Planning
Governor Hugh J. Gallen State Office Park
Johnson Hall, 3rd Floor | 107 Pleasant Street | Concord, NH 03301
(603) 271-2155 | fax: (603) 271-2615