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**REPORT ON THE PROPOSED AMENDMENT TO THE COMPREHENSIVE PLANS
FOR CELLULAR AND PERSONAL COMMUNICATIONS SERVICE (PCS)
FACILITIES ON BEHALF OF SPRINT SPECTRUM L.P. AND ITS AFFILIATES
FOR WIRELESS COMMUNICATIONS FACILITIES IN THE PINELANDS**

October 23, 2013

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I. INTRODUCTION

a. Background

Since 1981, when the Pinelands Comprehensive Management Plan (CMP) went into effect, a 35-foot height limit has prevented the construction of tall structures throughout much of the Pinelands Area. The CMP's height restrictions are intended to prevent the proliferation of structures that significantly detract from the scenic qualities of the Pinelands Area, which federal and state legislation have directed the Pinelands Commission to protect. Of course, there have always been exceptions to the CMP's 35-foot height limit. Within Regional Growth Areas, Pinelands Towns, and portions of Military and Federal Installation Areas, there are no height restrictions at all; and, within the remainder of the Pinelands Area, certain structures are permitted to exceed 35 feet in height.

In 1995, the Pinelands Commission amended the CMP's height restrictions in recognition of what had, at that time, already become a legitimate need: the provision of wireless communications services throughout the United States and within the Pinelands Area. Accordingly, local communications facilities, which provide wireless communication services, were permitted to exceed the 35-foot height limit where a comprehensive plan for the installation of such facilities throughout the entire Pinelands Area has been approved by the Pinelands Commission. The CMP's amended restrictions recognize that well designed and integrated wireless communications networks can greatly reduce the unnecessary proliferation of wireless

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communications structures throughout the Pinelands Area, and, most importantly, in its most conservation-oriented areas.

The Commission approved the Comprehensive Plan for Cellular Telephone Facilities (the Cell Plan) in September 1998. The first amendment to the Cell Plan, entitled the Comprehensive Plan for PCS Communications Facilities in the Pinelands (the PCS Plan), was approved by the Commission in January 2000. In December 2003, the second amendment to the Cell Plan, entitled the Amendment to the Comprehensive Plans for Cellular and Personal Communications Service to include AT&T Wireless PCS of Philadelphia, LLC and its affiliates for Wireless Communications Facilities in the Pinelands (the AT&T Plan), was approved by the Commission.

In 2006, the CMP's height restrictions were again amended, in part, to recognize that altering certain aspects of wireless communications structures themselves can reduce their visual impact upon the scenic resources of the Pinelands Area. The third amendment to the Cell Plan, entitled the Amendment to the Comprehensive Plan for PCS Communications Facilities in the Pinelands on Behalf of T-Mobile Northeast, LLC (Doing Business as T-Mobile) (the T-Mobile Plan), was approved by the Commission under these amended rules in November 2011. The fourth amendment to the Cell Plan, entitled the Comprehensive Public Safety Tower Plan for Pinelands was submitted by the Office of Information Technology (OIT). It too was approved under the amended rules in May 2012. The proposed Amendment to the Comprehensive Plans for Cellular and Personal Communications Service (PCS) Facilities on behalf of Sprint Spectrum L.P. and its Affiliates for Wireless Communications Facilities in the Pinelands (the Sprint Plan) submitted by Sprint Spectrum L.P. and its affiliates (Sprint) is subject to the Commission's review under these amended height restrictions as well.

b. Appendices to this Report

The following documents are attached hereto:

Appendix A – Amendment to the Comprehensive Plans for Cellular and Personal Communications Service (PCS) Facilities on behalf of Sprint Spectrum L.P. and its Affiliates for Wireless Communications Facilities in the Pinelands

Appendix B – Hierarchical policy for siting individual wireless communications facilities;

c. Submission of this Amendment

In January 2013, Sprint first submitted its proposed amendment for the Commission's review. Sprint's Plan is a cumulative plan that, in addition to incorporating portions of each of the Commission's prior approvals, proposes the construction of one new local communications facility. Sprint's Plan was deemed complete for purposes of Commission review on August 27, 2013.¹ A public hearing to receive testimony concerning the consistency of the Sprint Plan with

¹ A completeness determination simply acknowledges that Sprint has provided sufficient information upon which to begin the formal review process. It does not *per se* imply that Sprint's Plan is consistent with the CMP.

the standards and provisions of the CMP was duly advertised, noticed and held on September 10, 2013.

d. Summary of this Amendment's Facility Siting Proposal

Sprint's Plan includes a total of 74 local communications facilities within the Pinelands Area. A local communications facility consists of an antenna or antennas and a support structure together with accessory facilities. For example, a local communications facility might consist of an antenna installed on a lattice tower (its support structure) together with its ground station (typically, small shed-sized buildings or cabinets); an antenna installed on a monopole (its support structure) together with its ground station; or, an antenna installed on a water tower (its support structure) together with its ground station. Of the 74 facilities included within the Sprint Plan, 73 are to be located at sites previously approved by the Commission. Only one of the facilities included in Sprint's Plan is an entirely new site and, if approved, it will require the construction of a new support structure (a tower). This new facility is proposed to be located in a very sparsely populated area along Pasadena Road between Buckingham and Mount Misery Roads. The proposed facility will be in Manchester Township within the Preservation Area District.

To demonstrate whether this new facility could likely be sited consistent with the standards of N.J.A.C. 7:50-5.4(c), Sprint analyzed a one-and-one-half-mile-radius area surrounding the coordinates for the proposed facility. Based on Sprint's analysis and staff's own independent analysis, it does not appear likely that Sprint's proposed new facility can, in fact, be sited consistent with the standards of N.J.A.C. 7:50-5.4(c)4. As a result, at the time an application for development is submitted for the new facility, it will be subject to a second level of review, pursuant to N.J.A.C. 7:50-5.4(c)6, to ensure that the potential visual impacts of the new facility are reduced as greatly as possible. The Commission's staff has attempted to estimate the anticipated visual impact of Sprint's new facility using a GIS-based methodology. Staff's viewshed analysis indicates that the potential visual impact of Sprint's proposed new facility will likely be rather modest. While staff anticipates that the new facility's visual impacts will be relatively minor, Sprint's new facility will, nevertheless, still be subject to an alternatives analysis, the purpose of which will be to demonstrate how the potential visual impacts of this new facility can be avoided or minimized (whether it be through the use of multiple shorter towers, "stealthing," or another method) as greatly as possible.

II. CONFORMANCE WITH THE COMPREHENSIVE MANAGEMENT PLAN

a. Introduction

N.J.A.C. 7:50-5.4 sets forth the standards by which the Sprint Plan must be reviewed. If these standards are met, the Commission must approve Sprint's proposed amendment. If the standards are not met, the Commission may conditionally approve or disapprove Sprint's Plan, depending on the extent and severity of the amendment's deficiencies. The Commission has historically interpreted its regulations to require that, wherever technically feasible, the Sprint Plan incorporate, amend, and expand upon the facility array and all other applicable provisions

contained in the previously approved comprehensive local communications facility siting plan as well as the amendments thereto. Sprint's Plan does just that by expressly incorporating portions of each of the Commission's prior approvals in its proposal to install or construct its own local communications facilities.

For purposes of this report, N.J.A.C. 7:50-5.4's standards have been separated into ten criteria. A discussion of each criterion and the amendment's conformance therewith follows.

b. Standards

1. The amendment must be agreed to and submitted jointly by all providers of the same type of service, where feasible. N.J.A.C. 7:50-5.4(c)6.

This requirement is intended to ensure that the greatest possible degree of coordinated planning occurs so as to minimize the number of new structures within the Pinelands Area. Sprint notified all known providers of wireless communication services of its proposed amendment by way of certified mailing. Moreover, the September 10, 2013 public hearing to receive testimony concerning the consistency of the Sprint Plan with the CMP was duly advertised and noticed by the Commission. Thus, other providers of wireless communication services were given adequate notice of the Sprint Plan. Yet, no other providers of wireless communication services expressed a desire to become a participant in the Sprint Plan. Nor, did any other providers of wireless communication services submit any comments or objections. To deny the proposed amendment based on a lack of greater participation by other wireless communication providers would be inappropriate.

The Executive Director concludes that this standard has been met.

2. The amendment must review alternative technologies that may become available for use in the near future. N.J.A.C. 7:50-5.4(c)6.

The purpose of this standard is to identify other technologies that should, at the very least, be considered as the amendment is reviewed. The Sprint Plan essentially incorporates the treatment of alternate technologies as set forth in the Cell Plan and the amendments thereto and also expressly addresses, at length, a technology known as Distributed Antenna Systems (DAS). DAS employs a series of low-mounted antennas, generally attached to telephone poles and connected by fiber-optic cable, in lieu of tall towers. The proposed amendment concludes that: (1) DAS is not a reliable, responsible, or feasible alternative to the use of antennas mounted on tall structures; and (2) no other viable, and commercially available, alternative technologies exist that could be used instead of antennas mounted on tall structures. Sprint argues further that the Commission lacks the authority to require it to use any particular technology, including DAS. The Commission's staff concurs with Sprint's legal analysis of its ability to require the use of DAS or any other specific technology. However, the Commission reaffirms its right to require plan participants to meet the CMP's height requirements, visual impact requirements, and siting requirements. While it is not the Commission's intent to require the use of any specific technology, the Commission does note that in order to meet the CMP's height requirements,

visual impact requirements, or siting requirements, a plan participant may need to use a technology other than its preferred or customary technology.

The Executive Director concludes that this standard has been met.

3. The amendment must show the approximate location of all proposed facilities. N.J.A.C. 7:50-5.4(c)6.

In order to evaluate the consistency of the Sprint Plan with various CMP standards, the proposed amendment must identify the approximate locations of all facilities identified therein, including those which will utilize existing structures and those which will require new ones. Sprint's proposed amendment provides a narrative for each facility included therein that identifies the county in which each facility will be located; the municipality in which each facility will be located; the management area in which each facility will be located, and whether each facility has been previously approved by the Commission. In addition, the proposed amendment provides precise geographic coordinates (i.e., latitude and longitude coordinates) for each facility included therein as well as maps that depict their locations. Sprint intends to locate each of the facilities in its proposed amendment within a one-mile-radius area surrounding these coordinates.

The Executive Director concludes that this standard has been met.

4. The amendment must include five- and ten-year horizons. N.J.A.C. 7:50-5.4(c)6.

Sprint's Plan states that it intends its coverage within the Pinelands area over time, with the majority of the sites being built in accordance with customer demand.

The Executive Director concludes that this standard has been met.

5. The amendment must demonstrate that it is likely that every facility proposed in the Pinelands Area is necessary to provide adequate service within the Pinelands Area and that it is likely that all such facilities must be located within the Pinelands Area in order to provide adequate service. N.J.A.C. 7:50-5.4(c)1.

To demonstrate the necessity for every local communications facility proposed in the Sprint Plan, Sprint provided signal propagation maps depicting both the existing coverage within the area of its proposed new facility as well as the expected level of coverage post-installation. These signal propagation maps were then reviewed by staff. Staff's review of Sprint's proposed amendment indicates that the single new facility is necessary to provide adequate and reliable wireless communication service to the Pinelands Area. It also does not seem possible to eliminate, combine, or relocate any existing or proposed facilities with Sprint's proposed new facility without negatively affecting coverage.

The Executive Director chose not to retain a radio frequency engineer to examine the signal propagation maps included in Sprint's proposed amendment. The Commission departed from its past practice because the Sprint Plan is atypical. First, as opposed to all prior plans, Sprint's Plan proposes only one new facility location as opposed to a network of new locations. Second, the

single facility proposed in the Sprint Plan is rather remote from all nearby facilities (the nearest existing facility is more than five miles away and the nearest proposed facility is more than three miles away). Third, as a result of the foregoing, the sometimes complex interplay of signal propagation data from existing facilities, approved but un-built facilities, and the proposed facility itself did not play a significant role in the Commission's review of Sprint's signal propagation maps. Finally, after nearly 20 years of experience regulating cellular communications facilities, for the first time, the Commission evaluated the various parameters used by the experts to analyze the signal propagation data included in the five prior plans. The Commission's evaluation revealed remarkably stable ranges for what previously constitutes acceptable coverage under given circumstances. Nevertheless, Sprint's parameters for the range of what constitutes acceptable coverage are broader than any of the prior plans. In other words, the signal strengths Sprint considers acceptable are considerably lower (and, less stringent) than what would have been acceptable under any other prior plan. Thus, it follows that the coverage gaps identified by Sprint would have been far larger using the parameters established under other plans. For all of the foregoing reasons that easily make the "needs" assessment case, the Executive Director determined it was appropriate to forego engaging a signal propagation expert to review Sprint's proposed amendment.

The Executive Director concludes that this standard has been met.

6. The amendment must demonstrate that the facilities to be located in the Preservation Area District, the Forest Area, the Special Agricultural Production Area and 17 specific Pinelands Villages are the least number necessary to provide adequate service, taking into consideration the location of facilities outside the Pinelands. N.J.A.C. 7:50-5.4(c)6.

The purpose of this standard is to provide a heightened level of scrutiny for facilities proposed in conservation-oriented management areas. As was the case with the Commission's previous approvals, Sprint's system of local communications facilities represents a network of facilities, each of which may affect the locations of other facilities in the system. Thus, the location of facilities outside conservation-oriented management areas may be relevant when evaluating the need for new facilities within conservation-oriented management areas. Sprint's Plan notes that it employed a from-the-outside-in approach to designing its network within the Pinelands. In other words, Sprint's design process attempts to provide as much coverage as possible within the Pinelands by using facilities located outside of the Pinelands first. For those areas where it is not possible for Sprint to provide coverage in this manner, it then looks to locations approved under prior plans. Where the locations of already approved sites prove inadequate as well, Sprint next looks at non-conservation-oriented management areas to locate any new facilities. After first reviewing all of these other options, only then does Sprint look to sites in conservation-oriented management areas to provide coverage where there are gaps. Sprint's design process together with Sprint's signal propagation maps adequately demonstrates consistency with this standard. In addition, it seems unlikely that combining or relocating already approved facilities, whether located outside of conservation-oriented management areas or elsewhere, would reduce the overall number of facilities within conservation-oriented management areas.

The Executive Director concludes that this standard has been met.

7. The amendment must demonstrate that it is likely that, to the extent practicable, existing communications or other structures have been used. N.J.A.C. 7:50-5.4(c)3.

The purpose of this standard is to ensure that the fewest possible number of new towers are constructed throughout the Pinelands Area. In this regard, the Sprint Plan notes that it “conducted extensive field research in the vicinity of each proposed location and reviewed the location of [already approved sites] along with lists of existing structures in the Pinelands.” Where suitable structures were found, Sprint designed its network to incorporate such structures. The Sprint Plan explicitly acknowledges that if, and when, an application for development is submitted for any of the facilities proposed in its Plan, Sprint will again have to further address this issue.

The Executive Director concludes that this standard has been met.

8. The amendment must demonstrate, or note the need to demonstrate when the actual siting of facilities is proposed, that, if a new support structure is to be constructed, it can likely be sited consistent with the six criteria in N.J.A.C. 7:50-5.4(c)4. These criteria deal with satisfying technical operating requirements; minimizing visual impacts from public areas, wild and scenic rivers and special scenic corridors, the Pine Plains, the Forked River Mountains and residential areas; and, if proposed in the Preservation Area District, Forest Area, Special Agricultural Area, or Rural Development Area, locating the facility in nonresidential zones, unpreserved public lands, mines, first aid or fire stations, and landfills.

The CMP requires, at a minimum, that proposed amendments note the need to demonstrate likely consistency with N.J.A.C. 7:50-5.4(c)4’s criteria. Sprint’s single proposed new facility cannot provide the coverage necessary to fill existing gaps in its service while, at the same time, meeting the strict siting criteria for new facilities within the Preservation Area District (see N.J.A.C. 7:50-5.4(c)4vi). As a result, Sprint has submitted a viewshed map² as part of its proposed Amendment. Sprint’s viewshed map is intended to address the CMP’s requirement that if a new facility: (1) cannot meet the siting criteria of N.J.A.C. 7:50-5.4(c)4vi; (2) cannot meet the minimum environmental standards established in Subchapter 6; or (3) would have a significant visual impact on those uses and resources described in N.J.A.C. 7:50-5.4(c)4ii through v; the plan must specify how the use of alternatives could result in reduced visual impacts (see N.J.A.C. 7:50-5.4(c)6). Using a GIS-based methodology, Sprint’s viewshed map adequately demonstrates that, within a one-and-one-half-mile-radius area surrounding its proposed new facility, its visual impact will be quite modest. According to Sprint’s viewshed map, as well as staff’s own viewshed mapping, the new facility will likely be visible only from the parcel on which the tower itself will be located. Although Sprint’s viewshed map fails to address a wider area of potential, staff’s own viewshed mapping indicates that the proposed new facility will likely have a very modest, if any, visual impact in a wider search area as well.

² A viewshed map depicts all of the areas from which a particular object; e.g., Sprint’s proposed new facility, can likely be seen.

Although it seems unlikely that Sprint's proposed facility can be sited consistent with the standards of N.J.A.C. 7:50-5.4(c)4, the CMP does not require that the proposed amendment be denied as a result. Nor, does it even require that the proposed facility be removed from the proposed amendment. Rather, the CMP requires that, at the time Sprint submits an application for development for its new facility, the facility will be subject to a second level of review, pursuant to N.J.A.C. 7:50-5.4(c)6. To wit, Sprint will be required to specify how the use of alternatives could reduce the anticipated visual impact of its new facility. As previously mentioned, the Commission's staff's GIS-based viewshed analysis for Sprint's new facility indicates that the potential visual impact will be rather modest, at worst. Therefore, it is recommended that, while care should be taken during the application process to ensure that Sprint's alternatives analysis for this new facility is as accurate and robust as possible, Sprint's single new facility need only be subject to an ordinary level of scrutiny. Prior to the Commission's final approval of its application for development for the new facility, Sprint will be required to demonstrate how the potential visual impacts of this facility can be avoided or minimized (whether it be through the use of multiple shorter towers, "stealthing," or another method).

The Executive Director concludes that this standard has been met.

9. The amendment must demonstrate, or note the need to demonstrate when the actual siting of facilities is proposed, that support structures are designed to accommodate the needs of any other local communications provider which has identified a need to locate a facility within an overlapping service area. N.J.A.C. 7:50-5.4(c)2. A closely related CMP standard also requires that the plan must demonstrate, or note the need to demonstrate when the actual siting of facilities is proposed, that the support structure, if initially constructed at a height less than 200 feet, can be increased to 200 feet to accommodate other local communications facilities in the future. N.J.A.C. 7:50-5.4(c)5. Another closely related standard in N.J.A.C. 7:50-5.4(c)6 requires that the plan must provide for joint construction and use of the support structures.

Each of these three standards is intended to facilitate, to the greatest extent practicable, collocation amongst wireless communications providers. The Sprint Plan incorporates the shared services and collocation policies incorporated into the Commission's prior approvals. In so doing, Sprint has agreed to joint construction and use of any support structure built pursuant to its proposed amendment; to accommodate the needs of any other local communications provider which has identified a need to locate a facility within an overlapping service area; and, to design the support structure of its proposed facilities such that, if initially constructed at a height less than 200 feet, they can be increased to 200 feet to accommodate other local communications facilities in the future.

The Executive Director concludes that these standards have been met.

10. If it reduces the number of facilities to be developed, shared service shall be part of the plan unless precluded by federal law. N.J.A.C. 7:50-5.4(c)6.

The purpose of this standard is to encourage wireless communications providers to consider the possibility of single server coverage. Sprint's proposed amendment and the plans previously approved by the Commission note that this standard may be at odds with federal statutes and regulations. Indeed, the Federal Communications Commission itself has indicated that this standard may be inconsistent with its rules. While Sprint has not agreed to "shared services" as originally contemplated by the Commission, Sprint, like each of the previous plan participants, has agreed to a common collocation policy.

The Executive Director concludes that these standards have been met.

III. PUBLIC HEARING AND REVIEW PROCESS

A public hearing to receive testimony on the Sprint Plan was duly advertised, noticed and held on September 10, 2013 at the Richard J. Sullivan Center, 15C Springfield Road, New Lisbon, New Jersey at 9:30 a.m. Mr. Tyshchenko conducted the hearing at which the following testimony was received:

Gregory D. Meese, Esq. of Price, Meese, Shulman & D'Arminio, P.C. appeared on behalf of Sprint. Mr. Meese stated that he and Glenn Pierson had appeared in order to supplement Sprint's proposed Amendment with their testimony. He then began by noting that one of the important purposes of Sprint's proposed new facility is to provide communications services among JCP&L/First Energy personnel in the field, especially in emergency situations, including power outages. He also noted that Sprint had done extensive field observations when selecting its proposed location. Sprint considered all existing facilities in the area as well as all other locations in the area that had been approved under prior plans but not yet built. Sprint nevertheless concluded that even if all of the un-built but approved locations were constructed, a gap in coverage would still exist in the area in question. Accordingly, a need for the proposed new facility exists.

Glenn Pierson, General Manager and Senior Radio Frequency Engineer of PierCon Solutions LLC, also appeared on behalf of Sprint. Mr. Pierson began by displaying and explaining a series of large maps, which are included within the Sprint Plan as Appendix A. Mr. Pierson noted that the nearest existing facilities are several miles away from the location of Sprint's proposed new facility. He noted that Sprint's proposed facility would offer improved coverage in the area but, even after its construction, some gaps in coverage would still exist. He observed that the proposed new facility would be constructed entirely on already disturbed land at a tree farm. He also noted that the proposed new facility is to be located within a sparsely populated area where most of the immediately adjacent land is used only for recreational purposes, including hiking and hunting. Mr. Pierson also observed that the infrastructure necessary to support the proposed new facility is already in the immediate area.

Written comments were accepted through September 13, 2013; however, none were received.

IV. CONCLUSION

The Sprint Plan proposes only one new facility within the Pinelands Area. Based on the preceding analysis, the proposed amendment is consistent with the goals and standards of the CMP. Though consistent, the Sprint Plan is not entirely without potential issues. The proposed new facility is to be located within the most sensitive portion of the Pinelands Area, i.e., the Preservation Area District, and, it does not seem likely that it can be sited consistent with the CMP's siting criteria. As a result, sensitive Pinelands viewsheds may be negatively impacted, although it seems rather unlikely. However, even with these potential issues, Sprint's amendment establishes a framework that, if successfully implemented, will better allow it to provide seamless, reliable, and ubiquitous wireless communications service within the Pinelands Area. Even with approval of this amendment, Sprint's proposed new facility will still have to be approved by the Commission in accordance with the provisions of N.J.A.C. 7:50-5.4 and other applicable CMP standards. In the review of that application, the Commission will be guided by the hierarchical policy for siting individual wireless communications facilities, which is appended to this report as Appendix B.

Accordingly, the Executive Director has concluded that the "Amendment to the Comprehensive Plans for Cellular and Personal Communications Service (PCS) Facilities on behalf of Sprint Spectrum L.P. and its Affiliates for Wireless Communications Facilities in the Pinelands" is consistent with the goals and standards of the Comprehensive Management Plan. Therefore, the Executive Director recommends that the Pinelands Commission approve the "Amendment to the Comprehensive Plans for Cellular and Personal Communications Service (PCS) Facilities on behalf of Sprint Spectrum L.P. and its Affiliates for Wireless Communications Facilities in the Pinelands." The Executive Director further recommends that the Pinelands Commission expressly affirm that the review of any application for development for any facility included within the Sprint Plan shall be done in accordance with this report, including its appendices.

Attachments