



State of New Jersey

THE PINELANDS COMMISSION

PO Box 7

NEW LISBON NJ 08064

(609) 894-7300

JAMES E. MCGREEVEY
Governor

JOHN C. STOKES
Executive Director

**REPORT ON THE PROPOSED AT&T AMENDMENT TO THE COMPREHENSIVE
PLAN FOR PCS COMMUNICATION FACILITIES IN THE PINELANDS**

November 21, 2003

Judith Ann Babinski, Esq., on behalf of AT&T Wireless PCS of Philadelphia, LLC
Pitney, Hardin, Kipp & Szuch
P.O. Box 1945
Morristown, NJ 07962-1945
and
Warren Stilwell, Esq., also on behalf of AT&T Wireless PCS of Philadelphia, LLC
9615 Ventnor Ave., Apt. #3
Margate, NJ 08402-2295

I. INTRODUCTION

a. Background

Since 1981, when the Pinelands Comprehensive Management Plan (CMP) went into effect, the construction of tall structures has been discouraged throughout much of the Pinelands Area. These regulatory limitations, which incorporated a 35-foot height limit in N.J.A.C. 7:50-5.4, were intended to prevent the littering of the Pinelands skyline with structures that significantly detract from the scenic qualities which federal and state Pinelands legislation called upon the Pinelands Commission to protect. There were, of course, exceptions to this requirement: certain structures were allowed to exceed 35 feet in height; and no restrictions were placed on height within the two most development-oriented Pinelands land management areas - Regional Growth Areas and Pinelands Towns.

However, in 1994, as the Pinelands Commission was nearing the end of its second full review of the CMP, representatives of the cellular telephone industry requested that the Commission take note of the growing need for portable telephone communications and the associated need for the placement of antennas higher than 35 feet in all parts of the Pinelands Area. To accommodate what it felt was a legitimate need, the Pinelands Commission in 1995 amended N.J.A.C. 7:50-5.4 to permit local communications facilities to exceed the 35-foot height limit if a comprehensive plan for the entire



<http://www.state.nj.us/pinelands/>

E-mail: Info@njpines.state.nj.gov

The Pinelands—Our Country's First National Reserve and a U.S. Biosphere Reserve

New Jersey Is An Equal Opportunity Employer • Printed on Recycled and Recyclable Paper

Pinelands is first prepared and approved by the Pinelands Commission. The regulations recognized that: local communications systems rely on a network of facilities to receive and transmit radio signals; the location of each cell within this network has an effect on the location of other cells; and a well designed and integrated network can avoid the proliferation of towers throughout the entire Pinelands Area, and, most importantly, in its most conservation-oriented areas. Once a comprehensive plan is approved, the regulations anticipate that site specific siting decisions will be made and that individual development applications will be submitted and evaluated against a series of site specific development standards. Provision was also made for amendments to an approved plan when a need is demonstrated. These regulations were adopted by the Commission in June 1995 and went into effect on August 21, 1995.

The adopted regulations required providers of “the same type of service” to jointly submit a comprehensive plan, primarily to ensure that the least number of facilities is built in the Pinelands overall. Members of the cellular industry (comprising Verizon [formerly Bell Atlantic Mobile], Cingular [formerly Comcast], and Nextel) responded by submitting a regional plan (generally referred to as the Cellular plan) that was approved by the Commission in September, 1998. Almost immediately thereafter, representatives of the PCS industry (including Sprint Spectrum and T-Mobile [formerly Omnipoint]) made inquiries of the Commission regarding the procedures and components involved in an acceptable plan for their service. The Commission staff described the process and the necessary information for a complete plan and indicated that the PCS plan would need to incorporate and expand upon the siting array presented in the approved cellular plan (i.e., the PCS plan would effectively serve to amend the cellular plan). The PCS plan was approved by the Commission in January, 2000.

AT&T contacted the Commission in 2001 concerning an amendment to the PCS plan and submitted an initial draft amendment late that year. With the advice of the Commission staff, the amendment was revised several times and a version was submitted on August 11, 2003 (dated August 5, 2003) that was then deemed complete by the staff. AT&T’s submission constitutes an amendment to both the cellular and the PCS plans because the company’s communications system functions at both the cellular and the PCS frequencies. Subsequent discussions among the staff, the Commission’s radiofrequency consultant and AT&T’s representatives produced the version currently under consideration; this version is dated October 28, 2003.

b. Appendices to this Report

There are several appendices to this report. A list of them follows:

Appendix A - AT&T and its affiliates’ proposed plan amendment (hereinafter referred to as the amendment);

Appendix B - The Commission’s technical consultant’s (Bruce Eisenstein, Ph.D., P.E.) draft report (undated) reviewing the amendment;

Appendix C - A chart outlining the procedures used to examine the AT&T amendment;

Appendix D - Hierarchical policy for siting individual wireless communications facilities, as approved by the Commission on September 11, 1998;

Appendix E - Written comments on the amendment that were received during the public review process and the Commission staff's response to comments dated August 4, 2003 and September 3, 2003;

c. Submission of the Amendment

In November, 2001, AT&T Wireless PCS of Philadelphia, LLC and its affiliates submitted a draft comprehensive amendment to the approved cellular and PCS local communications facility siting plans. AT&T had been apprised several times by the Commission staff in 1999 of its opportunity to participate in the development of the PCS siting plan, but did not become involved at that time. The staff responded to AT&T's submission with detailed comments by letter dated February 13, 2002 and provided advice to AT&T over the following months regarding the composition of subsequent drafts and the method of complying with the joint submission requirement.

After review and discussion of several interim submissions, AT&T and its affiliates submitted a comprehensive amendment on August 11, 2003 entitled, *Amendment to the Comprehensive Plans for Cellular and PCS Communications Service to include AT&T Wireless of Philadelphia, LLC and its affiliates for Wireless Communications Facilities in the Pinelands* (dated August 5, 2003). This amendment was reviewed by the Commission staff for conformance with N.J.A.C. 7:50-5.4 according to specific procedures, which are appended to this report as Appendix C. The amendment satisfactorily responded to the Commission's request for minor additional information necessary to clarify two references in a June 24, 2003 draft submission. The amendment indicates that service is provided in both the cellular and PCS frequency ranges. As such, AT&T's submission serves to amend both of the prior plans.

On August 13, 2003, the AT&T amendment was deemed complete for purposes of Commission review. A completeness determination in no way implies that a well documented and approvable amendment has been submitted; rather, it is an acknowledgment that there is sufficient information upon which to begin the formal review process. It is also important to note that signaling information was submitted to the Commission's technical consultant to aid him in his review of the need for the proposed facilities.

The CMP Policy and Implementation Committee and attending members of the public were briefed on the proposed amendment at the Committee's September 26, 2003 meeting.

While the August 11, 2003 submission was judged to be complete, subsequent discussions with the applicant's representatives and with the Commission's radiofrequency consultants resulted in several revisions to the document, the most significant of which was the elimination of a number of proposed facilities and the conversion of one facility in Maurice River Township from a new tower site (referred to as "Raw Land" sites in the amendment) to a collocation at a site previously approved in the Cellular plan. The version of the amendment which is being presented to the Commission for its consideration is dated October 28, 2003.

A public hearing was duly advertised, noticed and held on October 1, 2003. A second public hearing was held on November 10, 2003 to allow the public an opportunity to comment on the revised October version of the amendment. Relevant information obtained through the public review process has contributed to the Executive Director's review of the proposed amendment (see Part III of this report for more details). A summary of the most recent version was presented to the Policy and Implementation Committee on November 21, 2003.

d. Summary of the Amendment's Facility Siting Proposal

The amendment proposes a total of 80 new facilities (a facility being a location where one or more antennas are suspended), which will complement the 17 AT&T facilities that are already in operation. Of the 80 new facilities, 32 are to be located at sites previously approved in the PCS plan (many of which are also in the cellular plan) and 14 at sites in the approved Cellular plan. AT&T will also be using 28 other existing structures as facility platforms. The remaining six new facilities will require the construction of towers. Four of these towers will be located in either a Regional Growth Area or a Pinelands Town where the local communications facilities siting provisions of the CMP do not apply.

Additionally, the amendment has identified one location in Pemberton Township where a facility is required for coverage, but for which there appears to be no site available that meets the standards of N.J.A.C. 7:50-5.4(c), and a site in Egg Harbor Township where AT&T's client commitments may cause a capacity issue (i.e., the sheer volume of wireless calls may overload the existing facilities in the vicinity, thereby necessitating placement of another) in the foreseeable future. The Pemberton site is also referenced, but not authorized, in the approved PCS plan and is identified in the text of AT&T's amendment as Facility #21 (although it does not appear on the siting map). The signatories to the prior plan, Sprint and Omnipoint (T-Mobile), indicated that they may possibly seek a waiver of strict compliance from the Commission, a rezoning from the Township, or an amendment to the CMP which would allow for placement of this facility. Resolution of the matter is still pending.

The PCS plan participants indicated, and the Commission's technical consultants confirmed, that, because of the frequency at which PCS facilities operate, a more restricted siting radius must be employed for the installation of new PCS towers than is the case for cellular towers. Consequently, because AT&T must be able to accommodate both cellular and PCS transmissions, the actual "search area" for the six proposed new towers will probably be confined to an approximately 1/2 mile radius.

II. CONFORMANCE WITH THE COMPREHENSIVE MANAGEMENT PLAN

a. Introduction

N.J.A.C. 7:50-5.4 contains the standards against which this amendment is to be judged. If these standards are met, the Commission must approve the amendment. If the standards are not met, the

Commission cannot approve the amendment, but may conditionally approve or disapprove it, depending on the extent and severity of the amendment's deficiencies.

The Commission interprets the regulations to require that this amendment, as well as any future plans and amendments subject to the provisions of N.J.A.C. 7:50-5.4, will and must incorporate, amend, and expand upon, to the extent technically feasible, the facility array and all other applicable provisions contained in the previously approved comprehensive local communications facility siting plans.

For purposes of review, the standards of N.J.A.C. 7:50-5.4 have been separated into ten criteria. A discussion of each criterion and the amendment's conformance with them follows. To aid in the staff's review of the amendment, Bruce Eisenstein, Ph.D., P.E., was retained for his expertise in communications technology. His review is appended to this report as Appendix B and is reflected, as appropriate, in the findings which follow. Furthermore, information which was elicited through the public review process is also reflected, as appropriate, in these findings.

b. Standards

- 1. The amendment must be agreed to and submitted 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 to minimize the number of new structures in the Pinelands Area. If fewer than all providers of the same type of service submit a plan or amendment, there must be evidence that participation and endorsement was sought from the other providers, along with a clear and reasonable explanation why full participation was not obtained. Furthermore, any plan or amendment submitted in order to comply with this requirement must be based upon any and all previous plans that have been approved by the Commission, i.e., it must incorporate the prior approved siting array and only build elsewhere as technical/propagation needs dictate. The Commission staff made all the PCS providers expressly aware of this requirement, which effectively rendered the PCS plan an amendment to the cellular plan. AT&T's proposed amendment serves as an amendment to both the cellular and the PCS plans.

The Commission staff notified the five participants in the approved Cellular and PCS plans on February 20, 2002, and again on February 5, 2003, when AT&T submitted earlier drafts of its proposed amendment. On August 13, 2003 the staff notified the participants that AT&T had submitted an amendment that was complete pursuant to the requirements of N.J.A.C. 7:50-5.4(c) and included a copy of the amendment for their review. Mr. Alan Zubblatt, Esq., representing Sprint Spectrum (a signatory to the PCS siting plan), submitted written comments on the amendment on August 14, 2003 (Sprint had been provided a copy of the essentially complete amendment by AT&T in June). Sprint expressed reservations to the amendment on the following grounds:

- ! The language in the introduction does not adequately describe the relationship of the amendment to the prior plans, specifically that any conflicts between the amendment and the adopted plans should be resolved in favor of the plans;
- ! The legends employed on the amendment siting map are not consistent with the adopted plans;
- ! Facility #61 in the amendment is improperly described as being within an “unrestricted” area;
- ! The numbering employed on the amendment siting map is not consistent with the adopted plans;
- ! The use of the terms “Typically” and “Generally” are unacceptable qualifiers as used on p. 26 of the amendment, wherein provisions that describe access to collocation sites and installation of utilities are addressed;
- ! The ability of other wireless providers to prepare applications for regulatory approval is hampered by the process described by AT&T on p. 27 of the amendment.

In further correspondence dated September 3, 2003, Sprint indicated that AT&T’s final proposed amendment, which the Commission staff had determined to be complete, did not satisfy its objections and that the company would not join in its submission.

By letter dated September 22, 2002, the Commission staff acknowledged Sprint’s objections, but indicated that they were not felt to be of sufficient weight as to prevent consideration of the amendment by the Commission. Moreover, the staff does not believe that concurrence on the AT&T amendment by the other providers is necessary for it to be determined complete. The objections submitted on behalf of Sprint were addressed individually in the staff response. Sprint’s comments and the staff response are appended to this Report as Appendix E. Subsequent to this exchange of correspondence, several of Sprint’s objections were rendered moot by AT&T’s agreement to delete the use of the terms “typically” and “generally” on p. 25 of the amendment and to amend the process for submitting applications for local approval to allow each provider to do so.

The Commission notified all the wireless providers who are signatories to an approved siting plan on August 13, 2003 and this notification included a copy of the amendment. Based on the fact that Sprint’s concerns have been noted in the record and the fact that none of the other wireless providers expressed an interest in the amendment, **the Executive Director concludes that this standard has been met.**

2. **The plan 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 those other technologies which should at the very least be considered as the pending plan is reviewed.

During the course of the review of several successive drafts of the AT&T amendment, the Commission staff became aware of the existence of a specific technology that may prove useful in reducing the need for intrusive new towers in select areas of visual sensitivity. The

staff was contacted by representatives of a company engaged in this technology, referred to as Distributed Antenna Systems (DAS), and obtained some materials describing its potential applicability. The system employs a series of low-mounted antennas, generally attached to telephone poles and connected by fiber-optic cable, in lieu of a single tall tower. While still uncertain as to the technical and economic feasibility of this technology, the staff felt it held out some promise of mitigating the impact of facilities upon such areas as the Pine Plains and requested that AT&T address DAS specifically in the text of its amendment.

AT&T responded by alluding in a general way to its own "third generation wireless" and then only briefly taking up the question of the usefulness of DAS. The feasibility analysis dismisses the use of DAS with a short, summary argument. AT&T has, however, included a statement agreeing to evaluate stealth technology as a solution on a case-by-case basis and affirming its willingness to work with the Commission toward remedies.

AT&T argues that DAS requires multiple antennas having a limited signal distance that really would only cover the roadway near the antennas (presuming they are mounted on existing poles in the road ROW). AT&T claims that it would therefore be inadequate for local residences, off-road vehicle users and emergency services. While there is some merit to this argument, this system (or some other stealth technology) is only being contemplated by the Commission for use in very limited circumstances, such as in nearly undeveloped, pristine, and visually sensitive areas where there may be a through-road, but few, if any, homes. The need for emergency services beyond the roadway is consequently minimal and it is likely that emergency vehicles could continue to use whatever radio system they already have. Since the staff has been focusing in particular on the Rte. 72 site in the Pine Plains area (Facility #62 in the PCS plan and the AT&T amendment) for the possible application of DAS, the question seems to be whether the limited extra coverage of a more conventional facility (several thousand yards north and south of Rte. 72, at a maximum, rather than perhaps several hundred yards) into an almost entirely uninhabited, wooded area justifies construction of a tower visible for miles in any direction. Furthermore, because AT&T and the other plan participants have shown very little interest in extending coverage to other sparsely populated, remote areas (most of Wharton and Belleplain State Forests, for instance, where the incidence of off-road vehicles and emergency service needs should be at least comparable), this argument appears to be being applied selectively.

Facility #62 also raises an issue with regard to the use of alternative technologies for conformance with the provisions of the CMP. A 200' tall tower in the midst of the Pine Plains does not, by any reasonable interpretation, meet the visual impact minimization standards of N.J.A.C. 7:50-5.4(c)4.iii. While it is questionable whether any alternative communications device would entirely meet these standards, there is also another regulatory impediment to the use of a tall tower. Because there is no available site in the vicinity that satisfies the siting requirements of N.J.A.C. 7:50-5.4(c)4.vi, the location that is eventually chosen to fill the service gap here will require issuance of a waiver of strict compliance in accordance with N.J.A.C. 7:50-4.61 *et seq.* The waiver will have to determine that a compelling public need

has been established (N.J.A.C. 7:50-4.62(a), which in turn requires that only the minimum relief necessary be granted to address the need (N.J.A.C. 7:50-4.62(d) and that no better alternative exists (N.J.A.C. 7:50-4.64(a)1.iv). These provisions leave the Commission, as well as the parties to the siting plans, no choice but to consider alternatives to a single tall tower, including, but not limited to, DAS. Given the industry's oft-stated aversion to DAS, they may seek to present some other, more palatable alternative. However, the company representing DAS maintains that the system has been used by the industry on other occasions and that it appears to be suitable for use in the Pinelands. The feasibility of DAS, or perhaps some other emerging technology of which the staff is not aware at this time, should be a topic of discussion when development applications in visually sensitive areas are received.

AT&T has addressed the use of alternative technologies in its submission. While the discussion may not necessarily be particularly thorough or to the Commission's liking, it appears that the criterion requiring an examination of emerging technology has been at least minimally addressed. The Commission acknowledges AT&T's position, but asserts its right to condition approvals in certain cases on the use of less obtrusive facilities wherever preservation of a viewshed is paramount.

The Executive Director concludes that this standard has been met.

3. **The plan must show the approximate location of all proposed facilities. N.J.A.C. 7:50-5.4(c)6.** In order to evaluate how well the plan meets other standards (such as those presented in subsections 5, 6 and 7 below), which are intended to minimize the number of new structures (e.g., towers) in the Pinelands Area, it is essential that there be a clear and unambiguous identification of all proposed facilities, including those which will utilize existing structures and those which will require new ones.

The amendment graphically presents the approximate location of all facilities on a map titled, "AT&T Wireless Final Pinelands Plan Site Classifications 2003-10-28," and provides geographic coordinates (latitude/longitude) for each of them. The amendment also describes each proposed facility in narrative form (indicating those already existing; those previously authorized in the cellular and PCS plans; existing structures on which AT&T proposes to locate; and new tower sites), the municipality in which it is to be located, and whether it will be located within what the companies refer to as "unrestricted," "height restricted," or "height and least number of structures restricted" areas.

The Executive Director concludes that this standard has been met.

4. **The plan must include five and ten year horizons. N.J.A.C. 7:50-5.4(c)6.** This standard is important insofar as the Commission, local governments, and the public can rely on the plan as a blueprint of industry needs beyond the immediate future. This is not to imply that the plan cannot be amended if needs change - the CMP expressly recognizes this - but the network of facilities should be planned to meet anticipated needs over a ten year period.

AT&T intends to build out all its sites as quickly as possible, with the majority anticipated to be constructed within five years. However, in correspondence only received by the Commission on October 3, 2003, AT&T indicated that Facility #324 (Folsom Borough) and #374 (Monroe Township) may only be needed within a ten year horizon.

The Executive Director concludes that this standard has been met.

- 5. The plan must demonstrate that every facility proposed in the Pinelands Area is needed to provide adequate service. N.J.A.C. 7:50-5.4(c)1.** There are two important elements to this standard - the first is the purpose for the plan, which is to provide “adequate” service, and the second is that every proposed facility must be judged against that test.

a. Adequate Service

The term “adequate service” is used in N.J.A.C. 7:50-5.4(c) three times. The simple reason was to leave no doubt that the goal for wireless service in the Pinelands Area was to provide “adequate” service, not necessarily to offer optimal service to all current and potential customers. Specifically at N.J.A.C. 7:50-5.4(c)1, adequate service is described as that which “serves the local communication needs of the Pinelands, including those related to public health and safety.” It was recognized at the outset that this distinction could play an important role in determining both the number and location of wireless facilities in the Pinelands Area because the height and proximity of the antennas exert a tremendous influence on the quality of service.

To judge, as is required by this CMP standard, whether every facility proposed in the Pinelands is needed, an objective definition of adequate service is necessary. Without it, one cannot impartially evaluate need and justify a decision to include or exclude a proposed facility.

AT&T addresses this issue in its amendment in a manner essentially identical to that in the cellular and PCS plans. They describe what are called “three widely recognized parameters” that are used in the industry to define service levels. These three parameters are (1) signal to interference ratio at audio, (2) dropped call rate and (3) blocked call rate. In presenting this information, the providers describe, but do not quantify, these parameters and note their belief that the technical need for service is dictated by the federal Telecommunications Act of 1996.

Although this lack of quantification does not in itself yield an objective measure for defining service levels, the Executive Director does not consider this to be a fatal flaw in the amendment for two reasons. First, the Commission’s technical consultant quantified service levels in previous plans (see Appendix B) and reviewed the proposed facilities on that basis. Second, AT&T acknowledges that it must again demonstrate need if further amendments are proposed in the future.

b. Need for every facility in the Pinelands Area

The amendment indicates that all 80 proposed facilities are necessary for coverage. Need is demonstrated primarily in two ways: by documentation of ANET radiofrequency plots, which show where signal strength drops; and by expert determination of the legitimacy of the amendment's assertions, as provided by the Commission's consultant. The consultant, Dr. Eisenstein, and the Commission staff also took account of AT&T's existing array of 17 facilities in the Pinelands in order to identify areas with likely coverage gaps. For instance, given the limited broadcast range of PCS phones, the approximately nine mile section of Rte. 72 where there are no facilities appeared to be a fairly obvious gap.

Dr. Eisenstein evaluated the need for every proposed facility identified in the August, 2003 amendment. In a draft summary report submitted to the Commission staff on September 26, 2003, Dr. Eisenstein questioned the need for one new tower (#317, to be located in a Military and Federal Area in Egg Harbor Township) and for five facilities to be attached to existing structures (#304 in Egg Harbor Township; #319 in Hammonton; #324 and #373 in Folsom; and #374 in Monroe). In all cases, he indicated that adequate coverage may already exist based on existing and/or proposed facilities in the vicinity.

AT&T responded to Dr. Eisenstein's concerns in a letter faxed to the Commission on October 3, 2003 and at a meeting held at the Commission offices on October 20, 2003, which was attended by Dr. Eisenstein, Dr. Barry Brady of the Commission staff and two AT&T representatives. As a result of the meeting, AT&T agreed to eliminate proposed Facilities #317 (Egg Harbor Township) and #319 (Hammonton). With the deletion of these facilities, Dr. Eisenstein determined that the need for other facilities nearby (including #304, which was to be in the vicinity of #317, and #324 and #373, which were close to #319) was justified. However, AT&T noted, and Dr. Eisenstein agreed, that, given the volume of wireless traffic (both federal and private) in the eastern portion of Egg Harbor Township, the need for a facility in the vicinity of the former Facility #317 may have to be reassessed in the future. Facility #318 was also deleted when it was determined that PCS Facility #7, as built, would satisfy AT&T's needs in that area. Also as a result of the meeting, Dr. Eisenstein concluded that Facility #374 was in fact necessary for coverage.

With the changes to the facility array cited above, Dr. Eisenstein has decided that each of the remaining proposed facilities is justified on the basis of service levels as AT&T has quantified them. In response to several questions about this data, it was offered for public review after the public hearing. At least one member of the public, a representative of the Pinelands Preservation Alliance, questioned whether need has indeed been demonstrated. However, in no case did any member of the public provide any technical evidence that a specific facility was not necessary. Without a demonstration to the contrary, the Commission staff relied upon its impartial consulting telecommunications expert - whose prior experience and opinions regarding propagation plots as they relate to adequate service and the limitations of

the current technology carried weight with the staff - and the prima facie evidence of coverage gaps in the current array.

Since the Commission's consultant has determined that all of the facilities proposed in the Pinelands are needed to provide adequate service, **the Executive Director concludes that this standard has been met.**

6. The plan 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.

One of the key CMP provisions, the purpose of this standard is to very closely scrutinize new facilities proposed in these conservation-oriented land management areas of the Pinelands and to do so considering the location of facilities outside of these areas. Since the AT&T system represents a network of facilities, each of which affects the location of other facilities in the system, the location of facilities outside these conservation-oriented land management areas is important in evaluating the need for new facilities within the areas.

The amendment refers to these conservation oriented management areas as the "height and least number of structures restricted" area. The Commission staff and the Commission's technical consultants not only reviewed the need generally for the proposed facilities within these areas, they also evaluated the possibility of relocating those that are needed to other, less sensitive parts of the Pinelands. In the end, the proposed network of 80 new facilities within the Pinelands includes 28 in these most conservation oriented land management areas. Nine of these represent antennas which will be located on existing structures and 18 are at proposed locations approved in the PCS and/or Cellular plans. This leaves one proposed facility which will be in the most conservation-oriented areas and will require the construction of a new tower (#358 in Berkeley Township). The Commission staff and the Commission's consultant are now convinced that, when taking the need for each facility into account, there is effectively no opportunity for eliminating this tower. Facility #358 will be located in an industrial zone in the Forest Area near the Miller Airpark; AT&T has indicated that the tower will be approximately 60' tall so as not to pose a hazard to air traffic.

The Executive Director concludes that this standard has been met.

7. The plan must demonstrate that the antenna utilizes an existing communications or other structure, to the extent practicable. N.J.A.C. 7:50-5.4(c)3. One of the key CMP provisions, this standard is intended to ensure that the fewest possible number of new towers are constructed throughout the Pinelands Area.

Because siting plan amendments must incorporate and utilize previously approved sites to the extent possible, the AT&T amendment relies in part upon the inventory information compiled by the cellular industry in 1998. The cellular industry assembled and analyzed new

information on existing structures (including inventories from the three electric utility companies which service the Pinelands and the Federal Aviation Administration [FAA]), described the results of visual surveys of potential sites in the most conservation oriented parts of the Pinelands, and cited the results of the Pinelands Commission staff visual surveys of potential sites in the remainder of the Pinelands. Additional mapping and windshield surveys were completed for this plan. The amendment also specifically states that AT&T “has utilized existing structures or sought to site at locations approved under the PCS and CP Plans where CPs (ed. note - “cellular providers”) and PCS carriers will likely be constructing structures in the future.” Unlike the cellular and PCS plans, however, AT&T did not categorize sites according to the degree of likelihood that a structure will be used, choosing instead simply to list “existing structures on which AT&T proposes to locate.”

Two cautionary notes are in order. First, it is possible that some of the existing structures which AT&T indicates are suitable for its facilities may be ultimately found to be unsuitable due to technical or other considerations. Second, it is possible that disputes may periodically arise when one or another provider who intends to collocate at a site argues that the structure selected, although suitable from an availability and construction standpoint, is not situated so as to service its need. In such instances, it is unrealistic to expect that detailed technical analyses of all potentially usable structures be completed as part of this amendment for facilities at which the companies may not attempt to locate for several years and that lease agreements for them be executed prior to the Commission’s approval of this amendment, particularly when one considers that the CMP regulations themselves contemplate that individual development applications must still be evaluated against this standard. That said, the existence of at least one suitable structure in the vicinity was an important consideration in the review of the amendment.

While AT&T plans to use a total of 28 existing structures as facility platforms, a majority of these will be located in either a Regional Growth Area or a Pinelands Town, where the siting requirements of N.J.A.C. 7:50-5.4(c)4 do not apply. Twelve of the sites, however, are in management areas where the siting requirements are in effect. The Commission staff examined all of these sites to determine whether there appeared to be a qualifying structure available within the prescribed search area. Although such structures were apparent at most of the sites visited, the staff could not initially verify the existence of an appropriate structure at two locations:

- ! Facility #311: This facility appears to be centered along the White Horse Pike in Mullica Township east of Elwood; there appeared to be only modest, 1-2 story residential and commercial structures in the area. AT&T responded to the staff’s inquiry about this location by indicating that there is a qualifying Conectiv electrical pole in the vicinity; and
- ! Facility #375: This facility is proposed in a remote, wooded area of central Lacey Township; access was very difficult and there may be qualifying structures at resource extraction sites in this area. AT&T subsequently stated that there was a mining operation with qualifying structures within the search area for this facility.

Additionally, AT&T indicated its intention to collocate with other cellular and PCS providers on an existing fire tower at Mizpah in Hamilton Township (PCS and AT&T Facility #11; cellular Facility #34). After the plan amendment was submitted, however, the Commission concluded an agreement with Sprint Spectrum permitting the reconstruction of a nearby, privately owned radio tower in place of the fire tower, which had not become available. Assuming that the radio tower site proves viable, AT&T will be required to seek to collocate its Facility #11 on the reconstructed tower.

The staff has been provided information by AT&T of the existence of appropriate structures in the few instances where such a structure was not otherwise identified. **Therefore, the Executive Director concludes that this standard, insofar as it applies to this amendment, has been met.**

8. **The plan must demonstrate or note the need to demonstrate when the actual siting of facilities is proposed that, if a new supporting structure (tower) with antennae is to be constructed, it can *probably* be sited according to 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 non-residential zones, non-conservation public lands, mines, first aid or fire stations, and landfills.** It is the Executive Director's opinion that, while it is acceptable for a plan amendment to note the need to demonstrate adherence to these siting criteria when individual facilities are proposed, there must also be a reasonable expectation when the amendment is approved that the proposed facilities can, in fact, be sited. Without this expectation, the amendment is meaningless because there can be no confidence that the proposed facility network is realistic. This does not require the same type of comprehensive analysis required at the time a specific development application is filed; rather, it is a planning review to ensure that there is a reasonable probability that qualifying sites exist.

This standard applies most directly to the two towers which will be built in the more conservation oriented areas of the Pinelands. These are Facilities #358 (Forest Area - Berkeley Township), which is discussed above, and #322 (Rural Development Area - Hamilton). The Commission staff, after carefully reviewing both sites, has concluded that they should be able to be sited in conformance with the criteria of N.J.A.C. 7:50-5.4(c)4.vi.

Since a reasonable expectation now exists that the proposed facilities can be sited in accordance with CMP standards, **the Executive Director finds that this standard has been met.**

9. **The plan must demonstrate or note the need to demonstrate when the actual siting of facilities is proposed that supporting structures (towers) 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 supporting 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 supporting structures (towers).** For purposes of this report, these three standards, which are intended to facilitate collocation of cellular and PCS local communications facilities, will be reviewed together.

The amendment addresses these collocation requirements in several ways. First, it identifies joint use of proposed facilities by the other providers that are parties to an approved plan. Second, it commits the companies to design and construct all new structures such that they can be increased in height to 200 feet if necessary to accommodate other communications providers. And third, it includes a policy describing how collocation arrangements will be handled for all licensed wireless providers in the Pinelands.

AT&T has made a reasonable effort to propose facilities in locations where more than one company can utilize them. Thirty-two of the 80 new facilities in the amendment will be at locations previously identified in the PCS plan and 14 others will be at sites in the Cellular plan. To ensure that these facility sharing opportunities are not adversely affected by virtue of inappropriate site selection, the Commission's staff will ensure that each plan participant, who is a signatory to either the PCS or the Cellular plan and is shown as a collocater, agrees with the site selected and proposed in a formal development application.

AT&T has also made a serious attempt to affirmatively address collocation issues affecting other wireless providers. The collocation policy included in the amendment duplicates that in the approved plans. The amendment sets forth a five-part approach, addressing equal access, market value pricing, design of the towers, access and utilities, and the procedures for making co-location arrangements. The Commission's technical consultant reviewed the policy as presented in the prior plans and concluded that it will provide an effective framework to facilitate collocation, thereby reducing the need for additional tower construction in the Pinelands to satisfy other providers. However, the consultant also stressed that this is a policy; it is not intended to describe detailed arrangements that are appropriate to include in specific contracts and agreements between wireless companies. Moreover, the Executive Director notes several CMP related provisions and technical limitations that affect collocation opportunities:

- a. The collocation policy does not allow companies who are not parties to this amendment or the earlier plans to construct new towers in the restricted areas of the

Pinelands unless they are authorized to act as the agent of the appropriate wireless service company or have incorporated the site into their own approved local communications facilities plan.

b. At sites identified in either this amendment or the earlier plans where collocation is proposed, any of the plan participants can take the lead (presuming the needs of all the collocators are served). In other words, being designated as the “lead” participant in either of the plans does not guarantee to a company the exclusive rights to build a tower according to its own schedule (although, if in fact a “lead” is making progress, the co-locators have indicated their willingness to defer to that provider).

c. To the extent that the search radiuses of the PCS participants are much smaller than those of the cellular plan participants, the latter will have to site fairly close to their approximate locations or the new structures might not technically meet PCS needs.

d. As this is an amendment of the earlier cellular and PCS plans and proposes to use many of the yet-to-be-built structures, access by all six of the plan participants to each structure is required. A site will only be approved if it meets all needs of each provider identified in either plan or this amendment as utilizing that site unless it is demonstrated that a single site is not feasible. To ensure that this position is understood, there is an agreement (Appendix G, which appears as an attachment to the approved PCS plan and which has been ratified by AT&T) among all six to site new facilities in accordance with the technical requirements of each carrier proposing to utilize a site. Development of a joint site will be done in accordance with Appendix G of the PCS plan.

The above provisions are clearly necessary for the plans to meet the letter and intent of the CMP regarding collocation.

Undoubtedly, the collocation policy will not resolve all potential issues or disagreements among the wireless companies. Indeed, it would be naive to think there will not be periodic disputes about the meaning of one of the policies or about a company’s actions in honoring the policy. In fact, there may be occasions where the Commission gets drawn into a dispute because the outcome could determine if an additional tower is or is not permitted in the Pinelands. In those instances, the Commission’s decision on allowing or not allowing a new tower will be based, in large part, on whether joint use of the existing structure is feasible.

Collocation for providers who are signatories to either of the approved plans is also an important issue. The Commission will require notification to all plan participants in either the PCS or the Cellular plan to ensure that joint use sites are appropriately planned. The Commission has no obligation to notify non-participants of such siting opportunities. The collocation policy requires that non-plan participants be accommodated at new sites, provided that the needs of the plan participants have been met. The non-plan participants should contact the “leads” for any new structure being built to register their desire to collocate

directly. In accordance with the provisions of N.J.A.C. 7:50-5.4(c)6.v., non-participants also have the right to seek an amendment to an approved plan to accommodate their needs.

The collocation policy proposed by the companies represents a workable framework to facilitate joint use of communication towers. **Therefore, 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.** This standard was intended to encourage companies to consider single server coverage.

The cellular and PCS providers had previously stated their belief to Commission staff that federal regulations are intended to create competition among the providers and, therefore, do not, and should not, provide for the sharing of service. In its amendment, AT&T is moot on the regulatory issue but indicates that it “does not currently plan to have the Pinelands covered by another carrier’s frequency.” AT&T further states that it will revisit the question if there is a change in its policy.

At a meeting held in 1997, FCC staff verbally indicated to Commission staff that shared service may be inconsistent with FCC rules but that a petition could be made for such service on an individual site if it would make a critical difference in the total number of towers. A review of the amendment indicates that shared service would seem to make no difference in the number of proposed new towers, only perhaps in the number of antennas. It may make a difference in the future if a tower cannot accommodate any additional antennas. Thus, it is possible that this issue may be of concern to the Commission in the future, particularly as other providers seek to locate on the same structures. **Although shared service may become an issue in the future, the Executive Director concludes that this standard has been met.**

III. PUBLIC HEARING AND REVIEW PROCESS

The public review period formally began on September 16, 2003 when the proposed amendment was distributed to the mayors of all Pinelands municipalities and the other plan participants and notice of the public hearing was sent to the clerks of all Pinelands municipalities and to interested parties. Shortly thereafter, the amendment was publicized on the Commission’s WEB page. Written comments from interested parties and the general public continued to be accepted by the Commission until November 10, 2003 (NOTE: the comment period was extended from an October 3, 2003 deadline after the staff determined that a second public hearing was warranted because of several changes to the amendment).

A public hearing on the proposed amendment was duly advertised, noticed, and held on Wednesday, October 3, 2003, beginning at 7:00 PM., in the Richard J. Sullivan Center (Pinelands Commission

offices), 15 Springfield Rd., New Lisbon, New Jersey. It was attended by approximately 15 people. Following is a summary of testimony aired at the hearing. Sprint produced a transcript of the proceedings which was submitted to the Commission on October 28, 2003.

Executive Director John C. Stokes called the hearing to order at 7:00 PM. Larry Liggett and Barry Brady of the Commission staff were also present. Mr. Stokes began by summarizing the public notice that had previously been circulated and then presented the tentative schedule for Commission consideration of the amendment. He indicated that, unless AT&T requested a delay, the public comment period would close on October 3, 2003; the Policy and Implementation Committee would review the staff recommendation on the amendment on October 24; and the full Commission would take up the matter at its meeting of November 7. After Mr. Liggett presented a brief, initial explanation of the major points of the amendment, Mr. Stokes invited the public to comment on the amendment. He allowed AT&T's representatives to address the matter first.

Ms. Judith Babinski, attorney for AT&T, stated that she would be submitting two minor changes to wording in the text in response to concerns expressed by Sprint. The changes involved the collocation agreement and would clarify that access to facilities for utility placement and maintenance would be unrestricted and that carriers would be able to submit applications for collocation at AT&T facilities to local permitting agencies themselves, rather than AT&T submitting the applications on their behalf.

Ms. Diane Constantine, attorney for Sprint, asked when Dr. Eisenstein's report would be made available to the public and whether the Commission would be extending the public comment period to allow for submission of comments on the report. Mr. Stokes responded that the report would be made public as soon as possible, but that, since it is a part of the staff's internal review documentation and not part of AT&T's application, the comment period would not be extended to allow for public reaction to it.

Ms. Victoria Famon, attorney for Nextel, requested a copy of the Executive Director's Report on the amendment when it is available and indicated that Nextel has no objection to AT&T's submission.

Mr. Theodore Korth, representing the Pinelands Preservation Alliance, expressed concerns about the length of time that AT&T foresees its proposed facility array will be current and, more generally, about the long-term impact on the Pinelands of successive approvals of siting plans for existing and future wireless services. He also inquired as to whether the proposed array has been determined by radiofrequency data to be necessary for coverage or if it also includes facilities for projected increases in capacity. Ms. Babinski responded that AT&T's plan covers a ten-year build-out program and that all facilities are needed for adequate signal coverage in the Pinelands.

There being no other public comment, Mr. Stokes adjourned the hearing at 7:17 PM.

A second public hearing was duly advertised, noticed and held at 4:00 PM on Monday, November 10, 2003 in order to accept comments on the revised version of the amendment which was submitted

on October 28, 2003. The revisions included a reduction in the number of proposed facilities from 83 to 80 and a change in the status of one facility in Maurice River Township from a “new tower” site to a collocation at a previously approved cellular site. The revised amendment was distributed to the mayors of all Pinelands municipalities and the other plan participants and notice of the public hearing was sent to the clerks of all Pinelands municipalities and to interested parties. Shortly thereafter, the amendment was publicized on the Commission’s WEB page. Written comments from interested parties and the general public continued to be accepted by the Commission until November 10, 2003. The hearing was again held in the Terrence D. Moore Room of the Richard J. Sullivan Center. Following is a summary of what transpired.

Dr. Barry J. Brady of the Commission staff called the hearing to order at 4:00 PM and summarized the notice procedure followed for the hearing and the schedule for Commission consideration of the amendment. Ms. Judith Babinski, Esq., representing AT&T, indicated that her client had no additional comment beyond that submitted in the earlier hearing. Mayor Robert DePetris of Woodland Township stated that his municipality had an interest in building the wireless facility corresponding to Facility #62 in the PCS plan and the AT&T amendment. He said that the Township’s main concern in promoting this facility was the safety and security of residents and visitors, given the spotty reception that wireless users there currently endure, but that the revenues that such a facility would provide was also an important consideration. There being no other comments, Dr. Brady adjourned the hearing at 4:10 PM.

In addition to the correspondence submitted by Alan Zublatt, Esq., on behalf of Sprint Spectrum, which is discussed in Section II.B.1. of this report, a total of five written comments was received from the public via mail, email and fax prior to the closing date for public comment. These comments are appended to this report as Appendix E.

Mr. Jay Perez, counsel for AT&T, proffered an email saying simply that every site counts.

Mr. Zublatt (in subsequent correspondence) and Mr. R. Drew Patterson, representing Cingular Wireless, both expressed an objection to the possible use of Distributed Antenna Systems (DAS) as an alternative to a conventional tower in visually sensitive areas of the Pinelands. Mr. Patterson stated that DAS is an untested system and that it is intended entirely for use in the interior of buildings. Both Mr. Zublatt and Mr. Patterson indicated that the signal range of DAS is very limited and therefore would leave areas uncovered, which would violate the companies’ FCC mandate to provide reasonable service to their license area. Mr Zublatt further states in his correspondence that the Commission intended to require the use of DAS in certain areas as a condition of the plan amendment. He felt that this requirement constitutes agency rulemaking in violation of the notice and adoption procedures in the Administrative Procedure Act (N.J.S.A. 52:14B-1 *et seq.*). He also felt that the alleged Commission requirement to use DAS exclusively in certain areas violates the federal Telecommunications Act, which, he maintains, reserves selection of applicable technologies solely to the FCC.

EXECUTIVE DIRECTOR'S RESPONSE: There is no intent on the part of the Commission whatsoever to make the use of DAS or any other particular technology a prerequisite for adoption of the AT&T amendment. AT&T and its affiliates clearly understand this to be the case. Thus, there is no rulemaking issue.

The Commission staff has been made aware of DAS as a possible alternative to tall monopoles and lattice towers in certain, very specific areas (e.g., the Pine Plains, the Forked River Mountains, special scenic corridors, wild and scenic rivers) and is required by the CMP to explore its potential where individual tower applications may not meet Pinelands regulations. This is discussed in Section II.b.2 of this report. The staff has not been presented with any dispositive evidence one way or the other as to its applicability in outdoor settings in the Pinelands and is merely seeking to research and establish whether it is feasible. While Mr. Patterson maintains that DAS can only be used indoors, the purveyor of the system has represented it to be entirely operational outdoors as well. The staff intends to discuss the matter, not only of DAS but also of other emerging stealth technologies and will, at an appropriate time (either in future rulemaking or during consideration of a required alternatives analysis as part of a waiver application), accept opinions, evidentiary data, and documentation from interested parties as to the most effective and least intrusive means to introduce wireless service into select areas of the Pinelands. For purposes of the review and consideration of AT&T's proposed amendment to the adopted siting plans, however, the point is moot. A plan or a plan amendment is basically required only to present a facility array that provides adequate service; to demonstrate that the array proposes to use as few facilities as possible and that they are mounted on existing structures whenever possible; and to ensure that the array meets the siting requirements specific to certain Management Areas. There is no requirement to commit to a particular signal propagation or facility mounting system as part of a certifiable plan or amendment.

In addition to the written comments from industry attorneys, Mr. Theodore Korth, representing the Pinelands Preservation Alliance, expressed a number of concerns about the adequacy of the AT&T amendment. He felt that the amendment failed to present a ten-year horizon for future facilities and that the unavailability of the Commission consultant's radiofrequency report during the public review period hampered submission of informed commentary. Related to this absence of the radiofrequency data is Mr. Korth's contention that the need for a number of facilities has not been demonstrated through proof of a service gap, specifically Facility #322, #358, and #372. He further felt that, because the need for Facility #358 has not been demonstrated, it cannot be said to avoid to the maximum extent practicable any direct line of sight to the Crossly Preserve, a low intensity recreational area.

COMMISSION RESPONSE: The public hearing affords interested parties an opportunity to critique the proposed plan and offer questions and recommendations that the staff can consider during its review. Dr. Eisenstein's analysis is a part of the staff review of the plan and, as such, would be inappropriate to complete before the public hearing. In fact, three facilities were eliminated as a result of the report and the staff's follow-up actions. Dr. Eisenstein looked at Facility #322 and #358 and found the need to be justified. Facility #372 has been deleted in favor of AT&T's use of the previously approved cellular Facility #21.

In discussions with AT&T's representatives, the staff understood that AT&T planned the build-out of its system within five years, if possible. While this may or may not occur, it was the company's intent. As referenced in Section II.b.4 above, however, AT&T qualified its estimate and indicated that Facility #324 and #374 were more likely to be built within a ten-year period.

IV. CONCLUSION

The amendment draws its approach and many of its specific provisions directly from the approved Cellular and PCS plans. It proposes a total of 80 new facilities and anticipates the construction of six additional towers in the Pinelands, of which four will be in the Regional Growth Area or a Pinelands Town.

As the foregoing analyses indicates, the amendment meets the standards of the CMP and can be recommended for Commission approval. However, such a recommendation does not mean that the AT&T amendment is perfect. New towers will be built in sensitive areas of the Pinelands. More visual clutter will detract from the vistas that characterize the Pinelands. Disagreements between the PCS and cellular providers, municipalities and the Commission regarding the final location of new towers are possible. Disagreements among wireless providers about the co-location policy are possible. Disagreements between the wireless providers and the Commission regarding the need for plan amendments are also possible. Finally, the amendment does not cover all theoretical wireless needs in the Pinelands. Yet, even considering these shortcomings, the amendment does establish a blueprint which, if successfully implemented, will provide for adequate communications service in the Pinelands and will result in less visual pollution than is likely in other parts of the State and the nation.

Even with approval of this amendment, individual facilities will 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 such applications, the Commission will be guided by the hierarchical policy for siting individual wireless communications facilities, which is appended to this report as Appendix D.

Therefore, the Executive Director recommends that the Pinelands Commission approve the "Amendment to the Comprehensive Plans for Cellular and PCS Communications Service to Include AT&T Wireless of Philadelphia, LLC and its affiliates for Wireless Communications Facilities in the Pinelands." The Executive Director also recommends that the Commission expressly affirm that the review of the development applications for individual sites needs to be done in accordance with this Report, including the appendices, in order to be consistent with CMP requirements.