

# NEW JERSEY BOARD OF PUBLIC UTILITIES

## Proposed Amendments to the Electric Service Rules – Electric Utility Line Vegetation Management

N.J.A.C. 14:5-9.2 and 9.6  
BPU Docket # EX0804235

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### BOARD OF PUBLIC UTILITIES

#### Electric Service

Proposed Amendments:	N.J.A.C. 14:5-9.2 and 9.6
Authorized By:	Board of Public Utilities, Jeanne M. Fox, President; Frederick F. Butler, Joseph L. Fiordaliso, Nicholas Asselta, and Elizabeth Randall, Commissioners.
Authority:	N.J.S.A. 48:2-12 and 13.
Calendar Reference:	See Summary below for an explanation of exception to calendar requirement.
BPU Docket Number:	EX0804235.
Proposal Number:	PRN 2009-

Comments may be submitted through July 17, 2009 through either of the following methods:

- Electronically, in Microsoft WORD format, or in a **format that can be easily converted to WORD**, by e-mailing them to the following e-mail address: [rule.comments@bpu.state.nj.us](mailto:rule.comments@bpu.state.nj.us); **or**

- On paper to:  
Kristi Izzo, Secretary  
New Jersey Board of Public Utilities  
**ATTN: BPU Docket Number: EX0804235**  
Two Gateway Center  
Newark, New Jersey 07102

The agency proposal follows:

### **Summary**

The New Jersey Board of Public Utilities is herein proposing amendments to its rules for vegetation management for electric utility lines at N.J.A.C. 14:5-9. The vegetation management rules were readopted on February 14, 2008 as part of the readoption of the Board's electric service rules. However, based on comments received on the vegetation management subchapter of the electric service rules, the Board directed staff to conduct a stakeholder process and consider amending the vegetation management subchapter, and in particular the provisions for transmission line vegetation maintenance. This proposal is the outcome of that stakeholder process.

After a major multi-state power failure in 2003, the United States Department of Energy (USDOE) issued a report instructing states to begin working on vegetation management rules. The Board immediately directed staff to draft vegetation maintenance standards for electric line rights of way, in order to prevent power outages due to trees or tree limbs that had not been properly maintained. The Board proceeded with a stakeholder proceeding that included a public hearing and a thorough review of the adequacy of its existing rules. These stakeholders included electric utilities, municipal shade tree officials, Rutgers University forestry professionals, property owners, and environmental and arboricultural interests. This thorough stakeholder process spanned more than two years and the vegetation management rules were finally adopted in December of 2006 of the Board's Electric Service rules (N.J.A.C. 14:5-8).

In a separate proceeding that was also triggered by the 2003 power outage, the USDOE, through the National Electric Reliability Council (NERC), adopted updated transmission line vegetation management regulations for electric transmission lines rated above 200kV. These regulations included requirements for ROW inspections, required distances between transmission lines and surrounding vegetation, annual plans for managing vegetation, and fines.

In February 2008, the Electric Service Rules, including the vegetation management subchapter, had to be readopted to prevent their expiration. During the readoption process, the Board received many comments on the transmission line provisions in the rules, both from the public and the regulated utilities. Commenters stated a variety of concerns, including that the rules required excessive cutting around transmission lines, did not require the utilities to provide sufficient supervision of work crews, did not allow for certain agricultural activities, and did not require enough advance notice to property owners before planned trimming. Based on the large number of comment and the is-

sues raised, the Board directed staff to conduct additional stakeholder meetings and determine whether amendments to the transmission line portions of the rules were in order. undertake a review of the vegetation management by Electric Distribution Companies (EDCs).

In 2008, the Board held two large stakeholder meetings. Staff and Commissioners conducted numerous visits to electric transmission lines around the state, both those where vegetation management had not been conducted (in order to observe threats to the lines) and those where the vegetation had been removed in accordance with the rules. Staff conducted extensive research, consulting with utility regulators in other states and the federal government, with farmers, property owners, utility representatives, and professional arborists. During this time, federal officials at NERC released a draft of revisions to the fed vegetation management standards for transmission lines. The amendments proposed herein are the result of careful staff review of this extensive pool of information.

The proposal includes the following amendments:

The proposal replaces references to the National Electric Safety Code (NESC) with a reference to NERC FAC-003, a standard published by the North American Electric Reliability Corporation (NERC). This change was suggested by several commenters on the readoption proposal, and based on recent updates to the NERC standards, the Board has determined that NERC, and not NESC, should be the standard to which the Board refers. This cross-reference replacement is found in proposed amendments to the definition of “wire zone” at N.J.A.C. 14:5-9.2; in the requirements for transmission line vegetation management at N.J.A.C. 14:5-9.6(b); and in the proposed deletion of N.J.A.C. 14:5-9.6(c). Existing N.J.A.C. 14:5-9.6(d) is proposed for deletion because the NERC standards are federally mandated and the Board cannot exempt an EDC from them.

Proposed new N.J.A.C. 14:5-9.6(c) sets forth simplified requirements for vegetation management in the wire zone, the area directly under a transmission line. These requirements are relocated from existing N.J.A.C. 14:5-9.6(e)3 and 5, and consolidated in a single subsection addressing the wire zone.

Proposed new N.J.A.C. 14:5-9.6(d) sets forth simplified requirements for vegetation management in the border zone, the area on either side of the wire zone. These requirements, which require a system of integrated vegetation management, replace the existing border zone requirements found at N.J.A.C. 14:5-9.6(e)2 and 4. The proposed new requirements are very similar to those used by New York State, and comport with best practices that are widely used in the utility industry. They provide the EDCs with more flexibility to tailor vegetation management at each site to meet the goals of safety, reliability, and utility line access.

Existing N.J.A.C. 14:5-9.6(e)2 through 5 are proposed for deletion because they are being consolidated or relocated as discussed above. Existing N.J.A.C. 14:5-9.6(e)6

through 9 are recodified, and a prohibition on planting invasive species in transmission rights of way is added to existing provisions addressing invasive plants at proposed (e)5 (existing (e)8).

Existing N.J.A.C. 14:5-9.6(g) is clarified, and a requirement that the EDC post acceptable agricultural crops on its website is added.

A deadline is changed from “before June 1” to “by May 31” in existing N.J.A.C. 14:5-9.6(h) in order to be consistent with the description of the same deadline at N.J.A.C. 14:9.7(d). In addition, a requirement to give the transmission line vegetation management schedule to municipalities is deleted because it is relocated at proposed new N.J.A.C. 14:5-9.6(i), and a new specification is added, requiring the EDC to include in its schedule the year in which each municipality will be affected by planned vegetation management.

Proposed new N.J.A.C. 14:5-9.6(i) includes a new requirement that the EDC post its transmission line vegetation management schedule on its website. This subsection also includes a requirement, relocated from existing N.J.A.C. 14:5-9.6(h), that the EDC provide a copy of the transmission line vegetation management schedule to municipalities. Both of these requirements will help ensure public awareness of the EDC’s vegetation management plans.

As the Board has provided a 60-day comment period on this notice of proposal, this notice is exempted from rulemaking calendar requirements pursuant to N.J.A.C. 1:30-3.3(a)5.

### **Social Impact**

The proposed amendments will have a positive social impact in that they will clarify and simplify the Board’s requirements for EDCs conducting vegetation management on transmission lines, providing more flexibility to EDCs and enabling the public to more easily understand the requirements.

### **Economic Impact**

The proposed amendments will have a moderate positive economic impact, in that they will provide additional flexibility to EDCs conducting vegetation management on transmission lines. This flexibility will enable EDCs to choose among a wider range of vegetation management practices for a given site, thus increasing efficiency of vegetation management activities.

### **Federal Standards Statement**

Executive Order No. 27 (1994) and N.J.S.A. 52:14B-1 et seq. require State agencies that adopt, readopt or amend State regulations that exceed any Federal standards or requirements to include in the rulemaking document a Federal Standards Analysis. This proposal amends N.J.A.C. 14:5-9, which governs vegetation management under

electric transmission lines. The Federal analogue to this is FAC-003, published by the North American Electric Reliability Corporation (NERC). These proposed amendments do not exceed the NERC standard, and in fact they incorporate the NERC standard by reference. In addition, the proposed requirement that the EDCs apply integrated vegetation management (IVM) in the border zone is consistent with the NERC standard, which also requires IVM. Although the NERC FAC-003-2 does not have a specific agriculture exemption, it states that "Where the line is less than 50 feet off the ground, managers could apply a full wire-border zone prescription." This requirement, when applied, will have results that are consistent with the special provisions for agriculture in the proposed amendments. Similarly, the Board's wire zone requirement that plants be no more than three feet tall at maturity is also consistent with the NERC FAC-003-2. Therefore, the proposed amendments do not exceed the NERC standard and no Federal Standards Analysis is required.

### **Jobs Impact**

The Board does not expect the proposed amendments to have any effect on jobs in New Jersey, including the generation or loss of jobs. The amendments do not reduce or increase the amount of vegetation management required or the number of people required to do it, but merely change the standard from a maximum footage to a more flexible compatibility requirement.

### **Agriculture Industry Impact**

The Board does not expect the proposed amendments to have any effect on agriculture in New Jersey. The existing rules include a special provision for agricultural vegetation, which is retained in the rule as amended.

### **Regulatory Flexibility Analysis**

A small business, as defined in the New Jersey Regulatory Flexibility Act, N.J.S.A. 52:14B-16 et seq., is a business that has fewer than 100 employees. As these rules apply only to electric distribution companies (EDCs) that are regulated by the Board, and none of these EDCs is a small business, the proposed amendments will not impose reporting, recordkeeping or other compliance requirements on small businesses.

### **Smart Growth Impact**

The Board anticipates that the proposed amendments will have no impact on either the achievement of smart growth or the implementation of the State Development and Redevelopment Plan. The State Plan is intended to "provide a coordinated, integrated and comprehensive plan for the growth, development, renewal and conservation of the State and its regions" and to "identify areas for growth, agriculture, open space conservation and other appropriate designations." N.J.S.A. 52:18A-199a. Smart growth is based on the concepts of focusing new growth into redevelopment of older urban and suburban areas, protecting existing open space, conserving natural resources, increasing transportation options and transit availability, reducing automobile traffic and dependency,

stabilizing property taxes, and providing affordable housing." These rules apply uniformly Statewide and the Board does not expect that they will affect the location of future development. Therefore, the proposed amendments will not impact smart growth or the State Plan.

### **Housing Affordability Impact**

The proposed amendments will have an insignificant impact on affordable housing in New Jersey because the scope of the proposal is limited solely to the management of vegetation underneath electric transmission lines. In addition, there is an extreme unlikelihood that the proposed rule amendments would evoke a change in the average costs associated with housing, because the methods used in transmission line vegetation management do not affect housing prices or the housing market.

### **Smart Growth Development Impact**

The amendments proposed herein will have an insignificant impact on smart growth in New Jersey because the scope of the proposal is limited solely to the means by which EDCs manage vegetation underneath electric transmission lines. In addition, there is an extreme unlikelihood that the proposed rule amendments would evoke a change in housing production within Planning areas 1 or 2, or within designated centers, under the State Development and Redevelopment Plan, because the means by which transmission line vegetation management is conducted is not expected to affect housing construction or the housing market.

**Full text** of the proposed amendments follows (additions indicated in boldface thus; deletions indicated in brackets [thus]):

## **CHAPTER 5. ELECTRIC SERVICE**

### **SUBCHAPTER 9. ELECTRIC UTILITY LINE VEGETATION MANAGEMENT**

#### **14:5-9.2 Definitions**

The following words and terms, when used in this subchapter, shall have the following meaning unless the context clearly indicates otherwise. Additional definitions that apply to this chapter can be found at N.J.A.C. 14:3-1.1:

"Agricultural crop" means a [non-woody cash crop, which can be used as a food and is sold for money] a plant that is grown in significant quantities to be harvested as food, livestock fodder, or for another economic purpose. This term includes, but is not limited to, landscape nursery stock and Christmas tree plantation stock.

...

"NERC" means the North American Electric Reliability Corporation.

...

"Wire zone" means the land located directly under the widest portion of a transmission line. For a horizontal transmission line, the wire zone is bounded on each side by a location on the ground that is directly under the outermost transmission wire or the transmission tower, whichever is wider. For a vertical transmission array, the width of the wire zone shall be determined using the minimum safe distance specified in the [2007 National Electric Safety Code, § 232 to § 235] North American Electric Reliability Corporation (NERC) FAC-003, which is incorporated herein by reference and available at [<http://standards.ieee.org/nesc/>] [www.nerc.com](http://www.nerc.com) [, that will allow maintenance on the wires].

...

#### **14:5-9.6 Transmission line vegetation management**

(a) (No change.)

(b) [An] At a minimum, each EDC shall meet the requirements [of the National Electric Safety Code (C2-2007)] for minimum clearances between any transmission line and the closest vegetation [beneath it] which are set forth in the North American Electric Reliability Corporation (NERC) FAC-003, which is incorporated herein by reference and is available at [www.nerc.com](http://www.nerc.com).

[(c) If a transmission line is upgraded or newly constructed after December 18, 2006, the width of the clearing under the transmission line shall meet the minimum requirements of the National Electrical Safety Code (C2-2007).

(d) An EDC may request an exemption from (b) and (c) above based upon exigent circumstances.]

(c) Except as provided at (f) below, the following shall apply in the wire zone:

1. An EDC shall not allow woody plants that naturally mature above three feet tall to grow in the wire zone, except for agricultural crops that naturally mature at 12 feet or less;
2. For plants not covered by (c)1 above, the preferred growth shall be grasses or a low-growing, compatible, scrub-shrub plant community to obtain a meadow effect where possible.

(d) Except as provided at (f) below, the EDC shall apply integrated vegetation management (IVM) in the border zone. IVM is a best management practice conveyed in the American National Standard for Tree Care Operations, Part 7 (ANSI 2006) and the International Society of Arboriculture's *Best Management Practices: Integrated Vegetation Management* (Miller 2007).

(e) In addition to meeting the other requirements in this section, each EDC shall ensure that the following requirements for transmission lines are met, except for those instances set forth in (f) below:

1. (No change.)
- [2.] An EDC shall not allow any vegetation taller than 15 feet at maturity to grow anywhere within a transmission line right of way;
3. The preferred growth in a wire zone shall be grasses or a low-growing, compatible, scrub-shrub plant community to obtain a meadow effect where possible. An EDC shall not allow woody plants that naturally mature above three feet tall to grow in the wire zone;
4. The EDC shall not allow any woody plant species that naturally matures above 15 feet to grow in the border zone. Mature height may be determined from a reliable text authorities either listed in, or equivalent to those listed in N.J.A.C. 14:5-9.5(a). Utilities shall provide this information on their web site or in a publication upon request by a ratepayer;
5. Non-woody agricultural crops, not exceeding 12 feet in height at maturity, may be grown anywhere in the right of way;
- 6.] 2. Only grass vegetation not exceeding a height of 18 inches shall be permitted to grow within three feet of any structure;
- [7.] 3. Where an EDC has cleared a right of way of vegetation and bare soil is exposed, the EDC shall comply with the soil erosion requirements of the applicable soil conservation district in order to prevent soil erosion. A list of the soil conservation districts in New Jersey may be found at [www.state.nj.us/agriculture/divisions/anr/nrc/conservdistricts.html](http://www.state.nj.us/agriculture/divisions/anr/nrc/conservdistricts.html);
- [8.] 4. To the extent that any plant species identified as invasive and non-indigenous to New Jersey poses a threat to the maintenance of the right of way or a hazard to electrical transmission conductors, the EDC shall not plant that species in the right of way, and shall make reasonable efforts to actively eliminate from the entire right of way the species identified as invasive and non-indigenous, see Snyder, David and Sylvan R. Kaufman, 2004. An overview of non-indigenous plant species in New Jersey. New Jersey Department of Environmental Protection, Division of Parks and Forestry, Office of Natural Lands Management, Natural Heritage Program, Trenton, NJ (available at <http://www.nj.gov/dep/parksandforests/natural/heritage/InvasiveReport.pdf>, and incorporated by reference herein, including any supplements and amendments thereto). To do so, the EDC shall use the best integrated vegetation management practices available and practical;
- [9.] 5. Each year in the March billing cycle, or two months prior to the commencement of vegetation management work on a particular property, whichever is earlier, each EDC shall advise customers of the requirements in this subsection, through a direct notification.

(f) Notwithstanding (d) and (e) above, an EDC may leave trees and other woody vegetation within the transmission right of way under any of the following conditions:

1. - 3. (No change.)

(g) For the purposes of this section, the mature height of [woody and non-woody] all vegetation, including agricultural crops, shall be determined in accordance with the publications listed in N.J.A.C. 14:5-9.5(a), or equivalent publications. Each EDC shall provide lists of acceptable species on its web site or in a publication provided free of charge upon request by a ratepayer.

(h) Each year, [before June 1] by May 31, the EDC shall develop a schedule for transmission line vegetation management, which shall be included in the EDC's annual system performance report as required by N.J.A.C. 14:5-8. The schedule shall:

1. (No change.)
2. Ensure that vegetation management on transmission lines is performed prior to vegetation becoming a threat to safety or service reliability[; and
3. Be distributed to affected municipalities by the EDC]
3. List the municipalities and the year when vegetation management work is anticipated to be done in each municipality.

(i) The EDC shall post the transmission line vegetation management schedule required under (h) above on its website and distribute it to affected municipalities and public authorities in accordance with N.J.A.C. 14:5-9.8.