

July 21, 2008

**BY HAND DELIVERY**

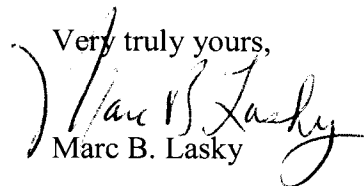
Kristi Izzo, Secretary  
Board of Public Utilities  
Two Gateway Center  
Newark, NJ 07102

ATTN: BPU Docket No. EX03040251

Re: New Jersey Board of Public Utilities  
Amendments to Vegetation Management Rules  
N.J.A.C. 14:5-9.1 et seq.

Dear Secretary Izzo:

This letter is being submitted on behalf of Jersey Central Power & Light Company ("JCP&L"). By separate letter dated today, joint comments ("Joint Comments") in this docket are being filed on behalf of Atlantic City Electric Company, JCP&L, Public Service Electric and Gas Company and Rockland Electric Company (collectively, the "EDCs"). JCP&L desires to supplement the Joint Comments by incorporating by reference the attached letter dated March 3, 2008 that was submitted by the President of JCP&L ("JCP&L March 3 Letter"). The attached JCP&L March 3 Letter, in turn, refers to comments submitted by the EDCs dated March 30, 2007 and November 1, 2007. The March 30, 2007 comments are also attached to this letter, while the November 1, 2007 comments are included with the Joint Comments being submitted today on behalf of the EDCs.

Very truly yours,  
  
Marc B. Lasky

MBL/kl

Enclosure

Cc: Vegetation Management Listserv

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Stephen E. Morgan

March 3, 2008

Kristi Izzo, Secretary  
Board of Public Utilities  
Two Gateway Center  
Newark, NJ 07102

Re: Vegetation Management Standards 14:5-9

Dear Secretary Izzo:

I am responding to your letter dated February 14, 2008 to me, as President of Jersey Central Power & Light Company ("JCP&L"), concerning the expectations of the Board of Public Utilities ("Board") with respect to the recently adopted Vegetation Management rules in N.J.A.C. 14:5-9.

**Background:**

The Federal Energy Regulatory Commission (FERC) identified a set of recommendations aimed at increasing the reliability of the national electric transmission system. Under a set of standards developed through the North American Electric Reliability Corporation (NERC), and authorized by FERC, transmission line owners and operators, such as JCP&L, must now strictly adhere to reliability standards that are mandatory and enforceable. In terms of vegetation management, these standards include minimizing the threat of power outages from vegetation within and immediately adjacent to established rights-of-way.

Effective February 7, 2006, the NERC Standard FAC-003-1 – Transmission Vegetation Management Program was adopted. This standard is intended to improve the reliability of the electric transmission systems across the country by eliminating transmission outages from vegetation located on transmission rights-of-way (ROW), minimizing outages from vegetation located adjacent to the ROW, maintaining safe clearances between transmission lines and vegetation on along transmission ROW, and establishing a system for reporting vegetation-related outages of the transmission systems (+200 kV) to the respective Regional Reliability Councils and NERC.

JCP&L follows the FirstEnergy System's Transmission Vegetation Management Program (FE TVMP), which is attached to this letter. The FE TVMP is designed to adhere to the NERC Vegetation Management Standard FAC-003-1. Under the requirements of Section R1.2.1 of NERC FAC-003-1, JCP&L is required to determine and document specific radial clearances to be maintained between vegetation and conductors at all rated electrical operating conditions. The designation of Clearance 1 under NERC FAC-003-1 is the minimum clearance distance to be achieved at the time of vegetation management work.

The objective of the FE TVMP, which governs JCP&L's vegetation management activities, is to ensure the continued and safe operation of transmission circuits through the management (i.e., the removal with herbicides or by mechanical means) of vegetation that has the potential to interfere with the safe and efficient operation of the transmission system. These vegetation management procedures

are designed to control or remove all incompatible vegetation within the ROW. For these purposes, incompatible vegetation is defined as all vegetation that will grow tall enough to interfere with overhead transmission electric facilities.

The Clearance 1 distances set forth below are the appropriate clearance distances to be achieved at the time of vegetation management on the transmission lines, as established by JCP&L based upon local conditions and the time frame of the next scheduled maintenance cycle. Local conditions include, but are not limited to, techniques carried out during the maintenance cycle, fire risk, anticipated tree and conductor movement, tree species, growth rates, species failure characteristics, local climate, terrain, vegetation within the span, and worker approach distance requirements.

- Transmission lines operating at 115kV – 138kV shall be cleared no less than twenty-five feet (25') from the conductor.
- Transmission lines operating above 138kV shall be cleared no less than thirty feet (30') from the conductor.

The designation of Clearance 2 under the requirements of NERC Vegetation Management Standard FAC-003-1 (Section R1.2.1) is derived from Table 5, Institute of Electrical and Electronics Engineers (IEEE) 516-2003, which is attached to this letter. The minimum specific Clearance 2 radial clearance distances to be maintained between vegetation and conductors under all rated electrical conditions are:

**IEEE 516-2003 Table 5—Example of detailed calculations for MAID 60 Hz. energized work, without tools in the air gap, when the transient overvoltage factor is not known, in feet.**

<u>Voltage (Phase to Phase)</u>	<u>Distance</u>
115 kV	2.45'
138 kV	2.94'
230 kV	5.14'
345 kV	9.44'
500 kV	14.68'

**IEEE 516-2003 Table 7—MAID phase to ground, 60Hz. energized work, using the transient overvoltage factor, without tools in the air gap, in meters,** is also attached to this letter.

JCP&L must strictly adhere to the NERC FAC-003-1 – Transmission Vegetation Management Program reliability standard. Compliance is mandatory and enforceable through the NERC, and FERC has authorized that monetary penalties be assessed if a transmission owner is found to be in non-compliance. As a result, the FE TVMP followed by JCP&L reflects the regulations of NERC and IEEE, which allow consideration of local conditions.

### **Specific Comments:**

In light of this Background, JCP&L respectfully refers the Board to the prior joint comments submitted by the New Jersey electric distribution companies (EDCs) on March 30 and November 1, 2007 and

submits the following additional comments for the Board's consideration to further refine the Vegetation Management Standards 14:5-9.

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

**14:5-9.6 (b), (c) (f)2, and (f)3** – It is recommended that the minimum requirements be adopted as specified in NERC Standard FAC-003-1. The use of the National Electric Safety Code (NESC) presents the EDCs with the potential for conflicting regulations by state and federal regulatory authorities. As such, JCP&L strongly recommends that the Board adopt the NERC Standard FAC-003-1 and remove all references to NESC in the rule.

**14:5-9.6 (e)2 (e)3 (e)4** – The requirements set forth in these two sections are unduly stringent and restrictive. Attempts to enforce such a standard already have and likely will continue to cause severe customer and municipal backlash. This requirement exceeds the NERC Standard FAC-003-1 and the IEEE clearance requirement. While non-compatible vegetation must be removed from the ROW to ensure safe and reliable transmission service, setting a requirement based on height criteria alone is inherently arbitrary, counter-productive and contrary to utility integrated vegetation management principles. There is vegetation that is compatible that can co-exist with the transmission facilities and continue to provide positive aesthetic and environmental benefits. The EDC arborists, through their expertise and sound judgment, can assess the compatibility of vegetation along with determining what vegetation is required to be removed from the ROWs. It is necessary to take into consideration local conditions and the time frame of the next scheduled maintenance cycle. Local conditions include, but are not limited to, techniques carried out during the maintenance cycle, fire risk, anticipated tree and conductor movement, tree species, growth rates, species failure characteristics, local climate, terrain, vegetation within the span, and worker approach distance requirements.

JCP&L strongly recommends that these sections be combined and be revised to read as follows:

**“EDC shall use vegetation management procedures that are designed to control or remove all incompatible vegetation within the right-of-way. Incompatible vegetation is defined as all vegetation that will grow tall enough to interfere with overhead transmission electric facilities. The removal of incompatible vegetation shall take into consideration local conditions and time frame of the next scheduled maintenance cycle. Local conditions include but are not limited to techniques carried out during the maintenance cycle, fire risk, anticipated tree and conductor movement, tree species, growth rates, species failure characteristics, local climate, terrain, vegetation within the span, and worker approach distance requirements. The EDC arborists shall utilize their expertise and sound judgment in assessing the compatibility of vegetation along transmission rights-of-way, removing incompatible vegetation and allowing compatible vegetation to remain within sound reasoning and benefit.”**

**14:5-9.6 (e)5** – This rule currently reads as follows:

**Non-woody agricultural crops, not exceeding 12 feet in height at maturity, may be grown anywhere in the right-of-way.**

However, there has been much consternation regarding the impact of the vegetation management rule to commercial property on which trees, or crops resulting from trees, are grown for sale. In fact, there is legislation currently being written to address this situation.

In this light, JCP&L strongly recommends revising the rule to read as follows:

**“Agricultural crops not exceeding 12 feet in height may be grown anywhere in the right-of-way. In some cases, local conditions such as conductor movement, tree species, growth rates, and terrain may deem that the agricultural crop is incompatible. The EDC arborists shall utilize their expertise and sound judgment in assessing the compatibility of vegetation along transmission rights-of-way, removing incompatible vegetation and allowing compatible vegetation to remain within sound reasoning and benefit.”**

In connection with this revision to 14:9.6(e)5, the following definitions should be added to Section 14:5-9.2:

**Definitions:**

**“Agricultural Crop” means:**

**(a) A cash crop used for food and sold for profit. [Note: This change would specifically address orchard growers.]**

**(b) Landscape nursery stock that is cultivated or rotated and sold for profit. [Note: This change would allow nursery stock growers and landscape companies who may use EDC’s easements for temporary stock rotation.]**

**(c) Christmas tree plantation stock that is cultivated and sold for profit. [Note: This change would specifically address Christmas tree growers.]**

**14:5-9.6 (e)8** – This section of the rule is overly burdensome. The EDCs implement vegetation management programs to ensure continued safe and reliable transmission power, not to rid the environment of invasive plant species. There are state departments and agencies that specialize in environmental issues and it would be more appropriate that an initiative to eradicate invasive species be directed and funded by the state. The utility customers should not bear the burden of this cost. The current rule requires the EDCs to eradicate all invasive and non-indigenous species on the ROW, which would not necessarily be a benefit to the safe and reliable delivery of transmission electric service and is therefore beyond the scope of the EDCs’ responsibility.

JCP&L strongly recommends that this section be revised to read as follows:

**“To the extent that any plant species identified as invasive to New Jersey poses a threat to the maintenance of the right-of-way or a hazard to electrical transmission conductors, the EDC shall make a reasonable effort to eliminate only those plants that represent a reliability hazard.”**

**Closing Comments:**

JCP&L believes that if the Board accepts and adopts the recommended revisions above, the majority of situations where there have been customer and municipal concerns will cease. While JCP&L will honor the Board’s request for a one-time 90-day moratorium on vegetation management activities, it is imperative, however, in moving forward that the Board supports the EDCs in the implementation of Vegetation Management Standards 14:5-9. The EDCs cannot be required periodically to stand down and curtail or stop transmission vegetation management activities. It is extremely challenging and unnecessarily costly for the EDCs to meet these reliability requirements if the Board continues to periodically alter the EDCs’ trimming schedules. Among other things, work stoppages adversely affect the EDCs’ schedules and their ability to get work completed. While it is the intent of JCP&L, as previously stated, to work with individual customers to best meet the needs and concerns of both parties, the EDCs must be allowed to utilize both their vegetation management and community relations expertise to meet the required regulations.

Moreover, as noted at the outset of this letter, all EDCs are now required to follow the NERC Standard FAC-003-1 that is in effect. Work stoppages interfere with the ability of the EDCs to comply with the Standard and could possibly impact the reliability of the transmission system. Outages that occur from vegetation on the right-of-way open the way for fines and penalties that can be imposed by NERC for non-compliance.

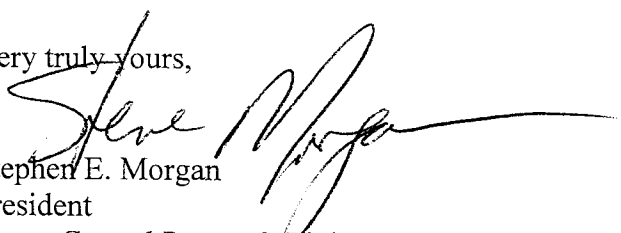
Other impacts of work stoppages are that the pricing submitted by the contractors that perform the tree removals and vegetation management are negatively impacted by not being permitted to complete work as planned. Stoppages may require crews to be shut down or moved to other states to be able to maintain the work force. This places a financial hardship on the contractors, especially the smaller contractors, which perform work. The stoppages may lead the contractors to approach the EDC for an increase in pricing for work negotiated or bid prior to the Board’s stoppage mandate. Work stoppages also negatively influences the ability of the EDCs to complete work as planned and scheduled, including during 2008, and may cause the maintenance cycle to be extended.

The EDCs have on their staff professional and knowledgeable utility arborists. The EDCs should be able to use the knowledge and training of their Forestry Staff to utilize their expertise and sound judgment in assessing the compatibility of vegetation along transmission rights-of-way, removing incompatible vegetation and allowing compatible vegetation to remain within sound reasoning and benefit. This is necessary to maintain the reliability of the transmission system and comply with the

NERC Standard. It is critical that the Board understand that because of terrain, land use, construction type of the transmission lines, voltage, etc., there must be flexibility in applying the Standard based on the actual field situations. This approach will ensure the continued delivery of safe and reliable transmission electric service in the state of New Jersey and to the national grid.

Thank you for this opportunity to provide our thoughts with respect to the vegetation management rules.

Very truly yours,



Stephen E. Morgan  
President

Jersey Central Power & Light Company

configuration lies approximately midway between withstand curves for the rod-rod and rod-plane gaps for positive polarity transient voltages in Figure 3.

- g) Air insulation distances determined by means of the formulas should not be applied without considering other relevant factors, such as inadvertent movement, conducting portions of tools, size, shapes, and position of conducting objects in the air gap.
- h) The air insulation distance determined by means of the formulas should be used only at elevations below 900 m.<sup>16</sup> Higher elevations require applicable correction factors, as indicated in Table 1.
- i) In determining dc pole air insulation distances, equivalents to ac line-to-ground peak voltages are used.
- j) The minimum air insulation distance, as given in the tables, should be maintained between an energized part and a person at ground potential, or vice versa, with an appropriate distance added for inadvertent movement. (See 7.2 for inadvertent movement distance.)

**Table 5—Example of detailed calculations for MAID 60 Hz. Energized work, without tools in the air gap, when the transient overvoltage factors (T) is not known in meters**

Voltage in kilovolts phase to phase	Distance in meters	
	Phase to ground	Phase to phase
72.6–121	0.75	1.09
138–145	0.90	1.31
161–169	1.05	1.52
230–242	1.57	2.28
345–362	2.88	4.18
500–550	4.48	6.90
765–800	6.24	10.22

**NOTES**

1—These distances take into consideration the highest transient overvoltage an employee will be exposed to on any system with air as the insulating medium and the maximum voltages shown.

2—Values are based on altitudes below 900 m. See Table 1 for correction factors for higher altitudes. It is not necessary to correct for atmospheric conditions.

3—Table distances do not include a factor for inadvertent movement. See 7.2 for inadvertent movement considerations. These factors must be added to the values to obtain the total MAD.

4—The clear live tool length should be equal to or exceed these values for the indicated voltage ranges.

5—The data used to formulate this table was obtained from test data taken with standard atmospheric conditions. Standard atmospheric conditions are defined as temperatures above freezing, wind less than 24 kilometer per hour, unsaturated air, normal barometer, uncontaminated air, and clean and dry insulators. If standard atmospheric conditions do not exist, extra care must be taken.

6—Data for this table was obtained from Table 7 and Table 11.

7—For values in feet, see Table D.3.

<sup>16</sup>900 m = 3000 feet.



**Table D.3—Example of detailed calculations for MAID 60 Hz. Energized work, without tools in the air gap, when the transient overvoltage factors (T) is not known in feet**

Voltage in kilovolts phase to phase	Distance in feet	
	Phase to ground	Phase to phase
72.6–121	2.45	3.56
138–145	2.94	4.27
161–169	3.42	4.96
230–242	5.14	7.46
345–362	9.44	13.69
500–550	14.68	22.61
765–800	20.44	33.53
<p><b>NOTES</b></p> <p>1—These distances take into consideration the highest transient overvoltage an employee will be exposed to on any system with air as the insulating medium and the maximum voltages shown.</p> <p>2—Values are based on altitudes below 3000 feet. See Table D.1 for correction factors for higher altitudes. It is not necessary to correct for atmospheric conditions.</p> <p>3—Table distances include a factor for inadvertent movement. See 7.2 for inadvertent movement considerations. These factors must be added to the values to obtain the total MAD.</p> <p>4—The clear live tool length should be equal to or exceed these values for the indicated voltage ranges.</p> <p>5—The data used to formulate this table was obtained from test data taken with standard atmospheric conditions. Standard atmospheric conditions are defined as temperatures above freezing, wind less than 15 mph, unsaturated air, normal barometer, uncontaminated air, and clean and dry insulators. If standard atmospheric conditions do not exist, extra care must be taken.</p> <p>6—Data for this table was obtained from Table D.5 and Table D.8.</p> <p>7—For metric values, see Table 5.</p>		

**Table 7—MAID phase to ground, 60Hz. energized work, using the transient overvoltage factor, without tools in the air gap in meters**

$V_{P-P}$ $V_{P-G}$	121 69.9	145 83.7	169 97.6	242 140	362 209	550 318	800 462
T	m	m	m	m	m	m	m
1.5	0.33	0.39	0.45	0.65	0.96	1.52	2.65
1.6	0.35	0.41	0.48	0.69	1.03	1.66	2.93
1.7	0.37	0.44	0.51	0.73	1.09	1.82	3.24
1.8	0.39	0.476	0.54	0.77	1.15	1.97	3.55
1.9	0.41	0.49	0.57	0.82	1.22	2.14	3.89
2.0	0.43	0.52	0.60	0.86	1.28	2.33	4.26
2.1	0.45	0.54	0.63	0.90	1.34	2.51	4.62
2.2	0.47	0.57	0.66	0.94	1.44	2.69	4.99
2.3	0.50	0.59	0.69	0.99	1.53	2.88	5.38
2.4	0.52	0.62	0.72	1.03	1.63	3.07	5.82
2.5	0.54	0.65	0.75	1.07	1.73	3.30	6.24
2.6	0.56	0.67	0.78	1.11	1.83	3.50	
2.7	0.58	0.70	0.81	1.16	1.93	3.74	
2.8	0.60	0.72	0.84	1.20	2.06	3.99	
2.9	0.62	0.75	0.87	1.24	2.17	4.22	
3.0	0.65	0.77	0.90	1.29	2.28	4.48	
3.1	0.67	0.80	0.93	1.33	2.40		
3.2	0.69	0.82	0.96	1.38	2.51		
3.3	0.71	0.85	0.99	1.44	2.64		
3.4	0.73	0.87	1.02	1.50	2.76		

**Title: FirstEnergy Transmission Vegetation Management Program (TVMP)****Purpose**

*This document contains FirstEnergy's vegetation management program for the bulk power transmission system. The bulk power transmission system consists of transmission lines operating 200 kV and above, lower voltage lines designated by ReliabilityFirst as critical to the reliability of the electric system, or as designated by State regulatory requirements.*

**TVMP Program Objective**

The objective of the TVMP is to ensure the continued and safe operation of transmission circuits through the management (the removal of vegetation with herbicides or by mechanical means) of vegetation that has the potential to interfere with the safe and efficient operation of the transmission system.

**TVMP Practices, Procedures, Work Specifications and Inspection Requirements**

The removal and or control of vegetation is performed by contractors on transmission corridors in accordance with pre-established schedules, or as required to maintain line reliability and access, make repairs, or restore service. All planned vegetation clearing work is performed in compliance with ANSI Z133.1 and A-300 Standards, and according to OSHA requirements and the National Electric Safety Code.

**Periodicity**

The frequency of vegetation control activities on a particular corridor depends on several factors, such as:

- Growth Conditions
- Control Method Previously Used
- Results of Aerial or Ground Inspections
- Line Parameters (Height, Sag, Terrain, etc.)
- Line Performance (Reliability) History
- State Regulatory Requirements

A periodicity of five years has proven adequate for most transmission corridors, based on those factors. A periodicity of four years is in effect for New Jersey per Board of Public Utilities mandate. Some locations require more-frequent spot-control, such as urban areas or where conditions limit tree to conductor clearances. Other factors that may require flexibility to the TVMP are anticipated growth and environmental conditions.

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Locations requiring mitigating measures are documented and the required action to insure sufficient operational clearances.

### **Vegetation Management Specification**

The procedures to implement FirstEnergy's TVMP are set forth in FirstEnergy's Vegetation Management Specifications.

### **Transmission Inspections**

Aerial inspections and associated foot patrols are scheduled during the April through June time frame on an **annual basis** and **cover all transmission facilities system-wide**. Patrols consist of a forestry specialist that accompanies the pilot in order to identify effectiveness of prior year(s) herbicide application and identification of any conditions warranting further inspection from the ground and potential action. Sections of line that cannot be patrolled from the air for various reasons (army bases, prison property, air space restrictions) are identified, patrolled on foot and documented as complete.

**The Helicopter patrol schedule is based upon the anticipated growth of vegetation and shall be periodically reviewed and adjusted for changing environmental conditions or operational factors that could impact the transmission system.**

The field inspection of the transmission facilities provides an overview of the effectiveness of various vegetation management techniques used to control undesirable vegetation on the right of way. Techniques or materials that do not provide the desired control of vegetation or that are not cost effective shall be altered or eliminated from the program.

### **Clearing Zone Corridor**

FirstEnergy's vegetation management procedures are designed to control or remove all incompatible vegetation within the "Clearing Zone Corridor." "Clearing Zone Corridor" refers to the clearing width to be achieved at the time of routine vegetation management. The transmission "Clearing Zone Corridor" width is given by a FirstEnergy Forestry Services representative to the Contractor prior to commencement of corridor maintenance activities.

All incompatible vegetation overhanging the Clearing Zone Corridor shall be removed (if legal rights permit removal), pruned back to the main stem, or controlled using herbicides. Various herbicide application techniques are available to control unwanted tree species on the Clearing Zone Corridor, including selective basal herbicide applications, stem foliage applications and cut stubble applications.

## Minimum Clearance Requirements (Clearance 1)<sup>1</sup>

Clearance 1 distance are the appropriate clearance distances to be achieved at the time of vegetation management on the transmission lines based upon local conditions and time frame of the next scheduled maintenance cycle. Local conditions include but are not limited to techniques carried out during the maintenance cycle, fire risk, anticipated tree and conductor movement, tree species, growth rates, species failure characteristics, local climate, terrain, vegetation within the span, and worker approach distance requirements.

- Transmission lines operating at 23kV – 69kV shall be cleared no less than fifteen feet (15') from the conductor.
- Transmission lines operating at 115kV – 138kV shall be cleared no less than twenty-five feet (25') from the conductor.
- Transmission lines operating above 138kV shall be cleared no less than thirty feet (30') from the conductor.

## Minimum Radial Vegetation to Conductor Clearances (Clearance 2)<sup>2</sup>

The minimum specific radial clearance distances to be maintained between vegetation and conductors under all rated electrical conditions are:

**Table 5—Example of detailed calculations for MAID 60 Hz. Energized work, without tools in the air gap, when the transient overvoltage factors (T) is not known in Feet.**

<u>Voltage (Phase to Phase)</u>	<u>Distance<sup>3</sup></u>
115 kV	2.45'
138 kV	2.94'
230 kV	5.14'
345 kV	9.44'
500 kV	14.68'

**Table 7—MAID phase to ground, 60Hz. energized work, using the transient overvoltage factor, without tools in the air gap in meters is attached to this document.**

<sup>1</sup> Under the requirements of the NERC Vegetation Management Standard FAC-003-01, Section R1.2.1, these clearances are FirstEnergy's designation of Clearance 1 (minimum clearance distance to be achieved at the time of vegetation management work).

<sup>2</sup> Under the requirements of the NERC Vegetation Management Standard FAC-003-01, Section R1.2.2, these are FirstEnergy's designation of Clearance 2.

<sup>3</sup> Derived from Table 5, IEEE 516-2003, Table D.3. Converts meters to feet

<sup>4</sup> Attached Table 7, IEEE 516-2003.

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Sag and sway charts are utilized by FirstEnergy forestry staff to ensure the continued safe and reliable operation of the transmission system.

**Priority Trees**

All "Priority Trees" are expected to be removed. "Priority trees" are trees that are located adjacent to the clearing zone that are either dead, diseased, declining, severely leaning or significantly encroaching the clearing zone.

**Systems & Procedures for Tracking VM Work**

Scheduling, inspecting, and monitoring of vegetation control activities are the responsibility of FirstEnergy's Transmission Forestry Department. Work is documented on the weekly vegetation management timesheets by the contractors and is entered into the Internet Vegetation Management System (IVMS). In addition, aerial or foot patrol inspection findings and their resolution are recorded in the Vegetation Management Database.

**Work Completion Verification**

FirstEnergy personnel inspect and approve all work performed by contracted vegetation management contractors to ensure compliance with FirstEnergy's Vegetation Management Specifications. In addition to the initial inspection process, a field inspection is carried out one year after herbicide application to assess the effectiveness of the application. Incomplete control of the target species requires the contractor to return and re-treat the area identified during the inspection at the contractor's expense.

**Work Plan Adjustments**

Results of aerial or foot patrols are used to identify spans requiring vegetation maintenance in order to ensure adequate conductor to vegetation clearances. Depending on the volume of findings on a line, the normal maintenance cycle may be advanced and will be documented.

**TVMP Personnel Qualifications**

FirstEnergy personnel involved in the design and implementation of the TVMP have the following qualifications or their equivalent.

Director, Vegetation Management: A four year degree and significant work management and regulatory compliance experience.

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Manager, Forestry Services: A degree in Forestry or related education; is ISA or SAF Certified or is a Certified Tree Expert; and preferable holds a pesticide license.

Manager, Transmission Forestry: A degree in Forestry or related education; is ISA or SAF Certified or is a Certified Tree Expert; and preferable holds a pesticide license.






Supervisor-Regional Operations (Transmission Forestry): A degree in Forestry or related education, ISA Certification and a pesticide license (or ability to obtain a license). If working in NJ, obtains Certified Tree Expert designation within one year.

Distribution Associate or Distribution Specialist (Transmission Forestry): An associate degree in Forestry or related field experience, ISA Certification, and a pesticide license (or ability to obtain a license).

In addition, FirstEnergy's forestry personnel attend industry trade conferences and maintain memberships in industry trade organizations, such as Utility Arborist Association and International Society of Arboriculture.

FirstEnergy engages qualified vegetation management contractors to perform vegetation management activities. The contractors are qualified line clearance tree professionals trained in OSHA safety standards and in proper pruning techniques. All contractor personnel are required to carry photo identification, which includes the employee name, company name and office telephone number. Contractors that apply herbicides to the vegetation on the corridor are required to have a pesticide applicators certification administered by the State where they are working. Ongoing approved training is required to maintain the certification.

## Attachments

-     
 U:\Grp\Transmission Vegetation ManagemRRCI SCORE\_Team\<RRCI SCORE\_Team\<  
**A1 - Table 5 IEEE Std 516-2003**  
**A2- Table 7 IEEE Std 516-2003**
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**A3- Personnel Qualifications**

## Prerequisites

None

Note: This document supersedes all previous copies

## Related Documents

Procedure	Procedure Name
	FirstEnergy Vegetation Management Specification
	NERC Vegetation Management Standard FAC-003-01
	Work Completion Inspection Process – Form 1051
	SCC Notification for Emergency Tree Conditions

## Revision History

Rev. No.	Date	Name	Comments/Change Description	Special Training Required?

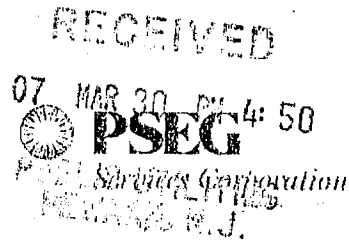
## Sign Off

Role	Name	Reviewed Date
Director – Vegetation Management	S Lowry	1-27-07
Manager - Forestry Services	C Olenik	1-26-07
Manager -Transmission Forestry	R Spach	1-26-07
FirstEnergy Legal	C Dacoros	1-26-07
Director-Transmission Engineering	R. O'Callaghan	1-31-07



Sherree L. Kelly  
Assistant General Solicitor  
Regulatory Department

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March 30, 2007

**VIA HAND DELIVERY**

Ms. Kristi Izzo, Secretary  
Board of Public Utilities  
Two Gateway Center  
Newark, NJ 07102  
Attn: BPU Docket No. EX03040251

**RE: New Jersey Board of Public Utilities  
Amendments to Vegetation Management Rules  
N.J.A.C. 14:5-8.1 et seq.**

Dear Secretary Izzo:

Please accept these comments submitted on behalf of Public Service Electric and Gas Company ("PSE&G"), Jersey Central Power & Light Company ("JCP&L"), Atlantic City Electric Company ("ACE") and Rockland Electric Company ("Rockland") (collectively, referred to as "Electric Utilities") to the New Jersey Board of Public Utilities (the "Board") Vegetation Management rules located at *N.J.A.C. 14-5-8.1 et seq.* as revised by the Board on February 21, 2007 ("Proposed Rules"). Please note that these comments supplement the prior general comments submitted to the Board Staff on this subject dated September 15, 2004 and January 20, 2006 and the Electric Utilities incorporate those comments herein by reference.

The Electric Utilities set forth below their specific comments on the Proposed Rules. For the sake of convenience, the Electric Utilities address the specific provisions of the Proposed Rules in the same order as they appeared in the New Jersey Register

**14:5-8.1 Purpose and Scope**

No comments.

**14:5-8.2 Definitions**

No comments.

**14:5-8.3 General Provisions**

No comments.

**14:5-8.4 Maintenance Cycle**

No comments.

**14:5-8.5 Technical Standards for Vegetation Management**

No comments.

**14:5-8.6 Transmission Line Vegetation Management**

(a) No comments.

(b) The Electric Utilities recommend the following change: *An electric public utility shall meet the requirements of the North American Electric Reliability Council ("NERC") (FAC-001) for minimum clearances between any transmission line and the closest vegetation beneath it.*

(c) The Electric Utilities recommend the following change: *If a transmission line is upgraded or newly constructed after December 18, 2006, the width of clearing under the transmission line shall meet the minimum requirements of NERC (FAC-001).*

(d) No comments.

(e) The Electric Utilities recommend the following change: *In addition to meeting the other requirements in this section, each electric public utility shall ensure that the following requirements for transmission lines are met, except for those instances set forth in section (h).*

1. The Electric Utilities seek clarification as to the Board's definition of "within the utility right of way".

2. The Electric Utilities recommend the following change: *An electric public utility shall not allow vegetation that approaches at maturity closer than 150% of the minimum NERC standard.*

3. The Electric Utilities recommend the following change: *The preferred growth in a wire zone shall be grasses or a low growing compatible shrub scrub plant community to obtain meadow effect where possible. An*

*electric public utility shall not allow woody plants that naturally mature above fifteen (15) feet tall to grow in the wire zone.*

4. The Electric Utilities recommend the following change: *The electric public utility shall not allow any woody plant species that naturally matures to closer than 150% of the minimum NERC standard to grow in the border zone.*

5-9. No comments.

- (f) **(Incorrectly lettered as subsection e)** No comments.

- (g) **(Incorrectly lettered as subsection f)** The Electric Utilities recommend the following changes to Section 8.6(g):

1. *List the transmission lines planned for vegetation management for the next year in advance (one of the four-year cycles required at N.J.A.C. 14:5-8.4(b)).*

2-3. No comments.

- (h) The Electric Utilities recommend the following addition: *Notwithstanding the provisions of section (e), an electric public utility shall be permitted to permit trees and other woody vegetation to grow within the transmission right of way, under any of the following conditions:*

1. *where the right-of-way document, easement, indenture, deed or other written land rights signed prior to December 18, 2006 expressly permit vegetation to be located within the transmission right of way;*
2. *where the topography of the transmission right of way is such that a tree or other vegetation at mature height will be more than 150% of the clearance requirements for an electrical path to ground set forth by NERC;*
3. *where trees are located within an inactive Transmission Corridor.*

- (i) The Electric Utilities recommend the following to be added as subsection (i): *The electric public utilities shall not acquire any new right or interest in land for the construction of new transmission lines unless that right or interest permits the electric public utility to meet the minimum requirements set forth herein. This section 8.6(i) shall not be applicable to new transmission facilities constructed along public thoroughfares.*

#### **14:5-8.7 Training, Record Keeping and Reporting**

- (a) The Electric Utilities recommend the following change: *Each electric public utility shall ensure that qualified OSHA and ANSI Z 133.1 line clearance employees or contractors, who perform vegetation management for the utility, whether employees or contractors, are trained in the proper care of trees and other woody plants in order to provide safe, reliable electric service, are knowledgeable regarding safety practices and line clearance techniques.*

(b)-(d) No comments.

#### **14:5-8.8 Public Notice of Planned Vegetation Management**

- (a). The Electric Utilities recommend the following change: *Each electric public utility shall make a diligent attempt to notify all property owners that may be affected by planned vegetation management activity on the utility's distribution system. This requirement will be satisfied if the electric public utility provides written notice to those customers at least seven days in advance, but not more than ninety days, prior to performing any vegetation management. Notice shall be provided by separate and direct mailing, personal contact, door hanger, any other Board-approved method.*

(b)-(e) No comments.

#### **14:5-8.9 Outreach Programs**

(a) No comments.

(b) The Electric Utilities recommend the following change: *The public education program required under this section shall be implemented by direct mail, bill stuffer message or another method approved by the Board.*

(c) No comments.

Ms. Kristi Izzo

Re: Proposed Amendments to N.J.A.C. 14:5-8.1 *et seq.*

March 30, 2007

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**14:5-8.10 Penalties**

The Electric Utilities request that Board Staff provide the statutory authority that would allow the Board for its ability to assess the penalties set forth in this subsection. Alternatively, if the Board finds that it has statutory authority to assess the penalties set forth in this subsection, the grace period of six months proposed by the Board should be extended to December 18, 2010, the date the Electric Utilities are required to achieve full compliance with the requirements of the within Vegetation Management Rules.

The Electric Utilities thank the Board Staff for the opportunity to comment on this draft copy of this rule proposal. The Electric Utilities look forward to working collaboratively with Board Staff to resolve the issues outlined in these comments.

Respectfully submitted by the Electric Utilities listed on the attached signature page:

**Public Service Electric and Gas Company**

By: 

Sheree L. Kelly, Esq.  
Assistant General Solicitor

**Rockland Electric Company**

By: \_\_\_\_\_

John L. Carley, Esq.  
Assistant General Counsel

**Jersey Central Power & Light Company**

By: \_\_\_\_\_

Michael J. Filippone  
Director Rates & Regulatory Affairs - NJ

**Atlantic City Electric Company**

By: \_\_\_\_\_

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Vice President, Asset Management

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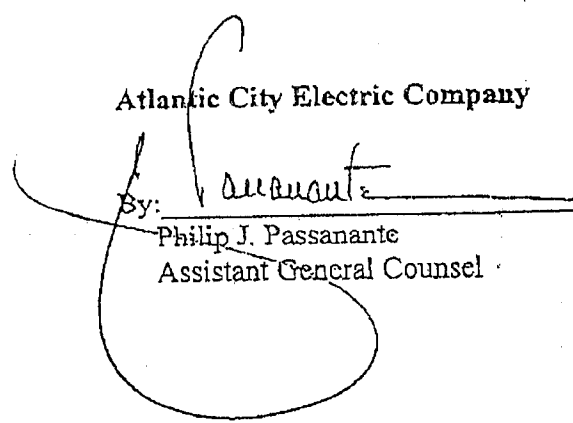
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