NJ Pinelands Electric Transmission Right-of-Way Vegetation Management Plan



Policy & Implementation Committee Meeting 9/24/2021

## Background

- The New Jersey Pinelands Electric-Transmission Right-of-Way Vegetation Management Plan (ROW Plan) is incorporated into the CMP as a "Pilot Program."
- The ROW Plan specifies a vegetation management prescription for each of the 3,041 electric transmission line spans. A span is the segment of the utility company right-of-way located between two electric transmission line towers.
- Each year beginning in 2010, the three utility companies report to the Commission the individual spans subject of vegetation management in the prior year.
- The Commission staff site inspects the spans for conformance with the required vegetation management prescriptions.

## **Progress Reports**

- The CMP Pilot Program requires progress reports.
- Each progress report must address three specific items.

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First Progress Report:2010-2012Second Progress Report:2013-2015Third Progress Report:2016-2018
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### Summary of 2016-2018 Progress Report

Item One: The type and extent of vegetation management activities undertaken by the three utility companies

> Atlantic City Electric: Jersey Central Power and Light: Public Service Electric and Gas:

managed 1,163 of its 2,570 spans managed all 215 of its 215 spans managed all 256 of its 256 spans



#### Item Two: Any significant problems

- As would be expected after six years of experience with the ROW Plan, there were no significant problems or issues
- Note that 33 miles of new electric transmission line spans along the Garden State Parkway between Barnegat Township and Egg Harbor Township were not included in the ROW Plan

# Item Three: Need for any amendments to the ROW Plan

 As would be expected after six years of experience with the ROW Plan, no new amendments to the ROW Plan were identified that were not previously identified in prior Progress Reports

## **Vegetation Monitoring**

**Criterion #2:** Determine "whether the vegetation management prescriptions have resulted in relatively **stable** and **sustainable** early successional habitats that are **characteristic** of the Pinelands and which provide habitat for native-Pinelands plants and animals, including threatened and endangered species."

- 1. Are right-of-way plant communities stable?
- 2. How often did vegetation management occur?
- 3. Are plant species in the managed rights-of-way characteristic Pinelands species?

Monitored vegetation annually 2011-2017 24 Spans (6 Types, 2 Prescriptions, Widespread, 3 utilities)

### 1. Are ROW plant communities stable?

- Compared year-to-year dominant species Dominant shrubs and dominant herbaceous plant species were largely consistent over the monitoring period.

- Compared year-to-year gains and losses in all species Few, year-to-year, additions or losses in individual plant species

### **Conclusion:**

Few changes in dominant shrub and herb species and low gains and losses in plants indicated a relatively high degree of stability in the managed ROW vegetation

### **Dominant shrub stability**

Group	Span	Dominant species*	2011	2012	2013	2014	2015	2016	2017
Upland herb	J25	golden heather	0	0	0	0	0	0	0
	J28	highbush blueberry	0	0	0	0	0	•	0
	N103	lowbush blueberry	0	0	0	0	0	0	0
	S423	blackberry	0	0	0	0	0	0	0
Upland scrub	A33	bear oak	0	0	0	0	0	0	0
	A36	bear oak	0	0	0	0	0	0	0
	N102	bear oak	0	0	0	0	0	0	0
	N114	bear oak	0	0	0	0	0	0	0
Upland shrub	A29	lowbush blueberry	0	0	0	0	0	0	ο
	J13	lowbush blueberry	•	•	0	0	0	0	0
	J18	black huckleberry	0	0	•	0	•	0	•
	S384	lowbush blueberry	0	0	0	0	0	0	0
Upland tree	N112	lowbush blueberry	0	0	0	0	•	0	0
	S364	bear oak	0	0	0	0	0	0	0
	S372	black huckleberry	0	0	0	0	•	0	0
	S442	lowbush blueberry	0	0	0	0	0	0	0
Wetland cedar	A16	highbush blueberry	0	0	0	0	0	0	0
	A65	bayberry	0	0	0	0	0	0	0
	J11	leatherleaf	0	0	0	0	0	0	0
	J20	sweet pepperbush	0	0	0	0	0	0	0
Wetland shrub	A147	dangleberry	0	0	0	0	0	0	0
	J27	sheep laurel	0	•	0	0	0	0	0
	N115	sheep laurel	0	0	0	0	0	0	0
	N81	dangleberry	0	0	0	0	0	0	0

# 2. How often did vegetation management occur?

24 study spans: 1 to 3 times (1x = 11 spans, 2x = 9 spans, 3x = 4 spans)

### All Pinelands spans (N = 1745):

3- to 4-year return intervals were typically used to manage vegetation in Pinelands rights-of-way.

### Management return interval



3. Are plant species in managed rights-ofway characteristic Pinelands species?

 Comparison to adjacent forest plants (composition and number of species)
Woody species similar
Herbaceous species differed

Comparison to access road and tower plants
ROW plots higher % of native Pinelands species
Tower and access road plots supported a higher % of introduced species

### **Introduced species**



### **Evaluation of the Pilot Program**

- N.J.A.C. 7:50-10.35(a)
  - The success of the Pilot Program is to be determined based on the following criteria:
    - 1. The vegetation management prescriptions have been implemented in a reliable and predictable way;
    - 2. The vegetation management prescriptions have resulted in relatively stable and sustainable early successional habitats that are characteristic of the Pinelands and which provide habitat for native Pinelands plants and animals, including threatened and endangered species;
    - 3. The vegetation management prescriptions have contributed to the reliability and safety of the electric transmission system in the Pinelands by creating and maintaining low growth vegetation communities; and
    - 4. The notification and inspection system authorized in this pilot program has simplified Pinelands permitting procedures for the utility companies and the Commission's staff.

### Conclusions

- The Pilot Program was successful.
- The vegetation management prescriptions were implemented consistently.
- Through vegetation monitoring, it was determined that implementation of the vegetation management prescriptions resulted in:
  - 1. Species turnover in the managed RsOW was low and equated to a high degree of plant community stability.
  - 2. Vegetation within the managed RsOW consisted of characteristic Pinelands plant species that were similar to adjacent forest areas.
  - 3. To the extent the extent these plant communities provided habitat for T&E species, these species were likely to be found in the managed ROW.
  - 4. A return interval of 3-4 years was required to maintain low growth plant communities using the vegetation management prescription in the RsOW.

### **Conclusions**(cont.)

- Implementation of the vegetation management prescriptions resulted in:
  - 1. Elimination of tall vegetation within the managed RsOW;
  - 2. Maintenance of low growth plant communities; and
  - 3. Contributed to reliability and safety of the electric transmission system in the Pinelands.
- Pilot Program simplified the permitting process for the utilities and the Commission's staff:
  - 1. Provided vegetation management prescriptions per span to utility companies predictability, consistency all vegetation management prescriptions conducted in accordance with prescriptions
  - 2. Reduction in submission and review of individual development applications to conduct vegetation management in RsOW.
  - 3. Annual reporting and inspections confirmed vegetation management prescriptions were being implemented as prescribed.

### Recommendations

- CMP should be amended to:
  - 1. Permanently incorporate the ROW Plan;
  - 2. Repeal ROW Pilot Program rules (N.J.A.C. 7:50-10.31 to -10.35); and
  - 3. Provide that vegetation management of existing RsOW for which prescriptions are included within the ROW Plan do not have to submit individual applications to the Commission; and
  - 4. Include vegetation management standards within N.J.A.C. 7:50-6, Part II (Vegetation) that will be applicable to new or expanded facilities and development within electric transmission line RsOW within the Pinelands Area.



