

APPENDIX C

New York State Electric and Gas Corporation
And
Rochester Gas and Electric Corporation
Transmission Vegetation Management
Quality Assurance Plan

New York State Electric and Gas Corporation and Rochester Gas and Electric Corporation Transmission Vegetation Management Quality Assurance Plan

The purpose of this Quality Assurance Plan (QAP) is to ensure that transmission vegetation management work is completed in accordance with state requirements and the specifications and procedures of New York State Electric and Gas Corporation (NYSEG) and Rochester Electric and Gas Corporation (RG&E). These procedures are detailed in the *Long-Range Right-of-Way Management Plan for the NYSEG Electric Transmission System* and in the *Long-Range Right-of-Way Management Plan for the RG&E Electric Transmission System*. As revised from time to time, these long range plans serve as NYSEG's and RG&E's Transmission Vegetation Management Plans (TVMP) for the purposes of NERC standard FAC-003.

Training

To ensure transmission vegetation management compliance, NYSEG and RG&E rely on professional forestry employees, and as necessary, qualified professional contractors (collectively "foresters"). Members of this forestry group are required to have, at a minimum, either a Bachelor of Science degree in forestry (or a related applied environmental discipline) **or** a two-year degree with a minimum of three years' related work experience.

Foresters utilized for quality assurance and quality control (QA/QC) inspections shall complete an annual review of the TVMP.

All inspectors utilized for vegetation patrols (e.g., foresters and Operations Line Inspectors) shall complete NYSEG's course EVN 500, *TVMP and Vegetation Patrols* or its equivalent.

Quality Assurance of the Annual Plan

As specified in their TVMPs, NYSEG and RG&E perform quality assurance through a variety of methods. The vegetation maintenance work is planned on a site-specific basis, and only a select group of contractors are allowed to bid on the work. The Procurement Department qualifies the contractors prior to awarding the work. After the work is awarded to one or more contractors (hereafter "Contractor"), the division forestry group conducts start-up meetings to review the work procedures. During the course of the work, the Contractor's progress and performance are continually monitored.

Upon completion of the work, the Contractor reviews the job to insure that:

- A. All specified cutting has been completed and all cut vegetation has been disposed of in accordance with the job instructions.
- B. All areas scheduled for herbicide application have been treated and all areas where incomplete application is discernible have been retreated.

After this review, the Contractor invoices the Company for all work performed less any outstanding work required. Receipt of the invoice by the Company serves as notice that the Contractor affirms completion of the work and that items A and B above have been performed. Upon receipt of the invoice, the Company Representative reviews the treatment records and, if in agreement, processes the invoice for payment. If the Company Representative is not in agreement with the invoice or some aspect of the work, invoice approval is withheld and the Contractor is notified so that corrections can be made.

During the next growing season after completion of the work, the Contractor shall review the job and insure that:

- A. All specified cutting has been completed and all cut vegetation has been disposed of in accordance with the job instructions.
- B. The percentage of kill is 100% within the wire zone (seedlings under 3 feet in height are exempted) and at least 95% in the border zone on each site where herbicide treatment was specified.
- C. Living incompatible species greater than six feet in height found within the wire zone during the final review shall be cut. Where applicable, the stumps shall be treated. Living incompatible species less than six feet in height in the wire zone may receive an LVF treatment, where applicable. All formulations shall be approved by the Company Representative.

Upon completion of this review and any necessary correction to the work, the Contractor shall submit a written statement certifying that items A, B, and C above have been completed and that the job is submitted for final acceptance by the Company. The Contractor shall provide the written statement to the Company Representative no later than August 1 during the year following initial treatment. If the review is not completed by August 1, the Company Representative may have the final review performed and any necessary corrective action completed at the expense of the Contractor.

Any contractual quality control issues that can not be readily resolved at the point of concern will be referred to the Procurement Department, who will take corrective action with quality deficient suppliers.

Vegetation Patrols

Pursuant to the TVMPs, scheduled aerial and ground patrols are performed to monitor vegetation/conductor clearances and to detect danger trees. The results of the patrol and any corrective actions taken will be recorded either electronically or in paper format using standard inspection forms. Any required corrective action will be identified on the inspection form and the completed corrective action will be recorded. The inspection forms for bulk transmission are reviewed and certified by the Manager of Vegetation Management/Transmission. The Manager of Vegetation Management/Transmission will arrange for an annual field audit of bulk transmission aerial and ground patrols to evaluate the accuracy of the reports submitted. Following these annual inspections, the Manager of Vegetation Management/Transmission will submit a report (i.e., the “Annual Inspection Report”) to the Manager Vegetation Management Operations providing a summary of the results and any recommendations. The Manger Vegetation Management Operations will review and acknowledges receipt of the bulk patrol inspection forms and the Annual Inspection Report annually.

For lines operating at voltages of 69 kV and above, emergency patrols are performed whenever an unexplained outage occurs on a transmission line. If it is determined that the problem causing the outage is tree-related, the forester will investigate the outage and prepare a Tree-Caused Transmission Outage Report. These outages are reported in accordance with State and Federal regulations.

System Audits

In order to ensure compliance with the respective TVMPs and all State and Federal regulations, the Manger of Vegetation Management/Transmission will arrange for annual random QA/QC inspections of NYSEG and RG&E transmission lines operating at voltages of 69 kV and above.

Summary of Quality Assurance Measures

Purpose	Frequency	Nature of Documentation	See Page #
Train forestry staff	Annual training	TVMP and QAP Review Statement	6
Train patrollers	Initial training	Training form	7
Work procedure review	Annually prior to start of annual plan	Start-Up Meeting form	8
Monitor work progress to ensure timely completion of annual plan	Monthly	Sample Transmission Progress Report	9
Notification that work was completed according to specifications	As work is completed	Invoices	NA
Verification of treatment	Annually	Sample Treatment Records	10
Ensure work guarantee was met	Annually, no late than August 1 st of the year following initial treatment	Transmission Contractor Work Guarantee	11
Monitor clearances, danger trees, and remedial work	Scheduled Vegetation Patrols	Various paper and electronic forms are used	12-13
Investigate tree-caused outages on 69kV-345kV	Following identification of tree-caused outage	Tree-Caused Transmission Outage form	14
Management review of bulk vegetation patrol records	Annually	Scheduled Bulk Vegetation Patrol Review	15
Ensure TVMP compliance	Annually	VM Audit form	16
Ensure patrol accuracy and completion of corrective actions	Annually	Bulk Transmission Vegetation Patrol Audit	17

TVMP and QAP Review Statement

Your signature affirms the following statement.

I have reviewed and understand the *Long-Range Right-of-Way Management Plan* for the *NYSEG Electric Transmission System*, including all appendices, dated_____. I understand that this plan serves as NYSEG's Transmission Vegetation Management Plan (TVMP) for the purposes of NERC standard FAC-003 and State requirements. I recognize the importance of compliance with the plan since it impacts the reliable operation of NYSEG's electric transmission system, and I understand that I am required to comply with the TVMP.

I have reviewed and understand the *Long-Range Right-of-Way Management Plan* for the *RG&E Electric Transmission System*, including all appendices, dated_____. I understand that this plan serves as RG&E's Transmission Vegetation Management Plan (TVMP) for the purposes of NERC standard FAC-003 and State requirements. I recognize the importance of compliance with the plan since it impacts the reliable operation of RG&E's electric transmission system, and I understand that I am required to comply with the TVMP.

I have also reviewed and understand the latest version of the *New York State Electric and Gas Corporation and Rochester Electric and Gas Corporation Transmission Vegetation Management Quality Assurance Plan*, dated_____.

Name (print) _____

Signature _____

Company_____

Date_____

NYSEG/RG&E Transmission Vegetation Maintenance Contract Start-Up Meeting Work Procedure Review

Division _____ Treatment Year _____

Contractor _____ General Foreman _____

Check off items that were discussed

	Herbicide label precautions
	Sensitive areas
	Equipment inspection and operation
	Application procedures
	Spill prevention and clean-up procedures
	Species identification
	Protection of infrastructure
	Other-

State Certified Pesticide Applicators

Name _____

ID # _____ Expires _____

Name _____

ID # _____ Expires _____

Name _____

ID # _____ Expires _____

Comments:

NYSEG representative's name _____

If contract forester, specify your company _____

Date _____

Sample Transmission Progress Report

Division _____

Month _____

Transmission Circuit	Target Acres	% Complete

This information is included in a monthly transmission progress report that is submitted to corporate forestry staff.

Sample Treatment Record

Every inventory unit is matched with a treatment record to verify that the site was treated.

OBJECT ID	INVENTORY ID	TREATMENT DATE
42983	48390	8/28/2008
39680	47753	7/30/2008
39686	47762	8/25/2008
39495	49350	8/5/2008
39493	49050	8/5/2008
39682	47765	7/30/2008
39676	47513	7/30/2008
39488	48403	8/4/2008

NYSEG/RG&E Transmission Contractor Work Guarantee

This statement shall be provided to the Company Representative **no later than August 1** during the year following initial treatment.

For the _____ division, for transmission vegetation management work performed in the year _____ under contract number _____

I certify that

- A. All specified cutting has been completed and all cut vegetation has been disposed of in accordance with the job instructions.

- B. The percentage of kill is 100% within the wire zone (seedlings under 3 feet in height are exempted) and at least 95% in the border zone on each site where herbicide treatment was specified.

- C. Living incompatible species greater than six feet in height found within the wire zone during the final review shall be cut. Where applicable, the stumps shall be treated. Living incompatible species less than six feet in height in the wire zone may receive an LVF treatment, where applicable. All formulations shall be approved by the Company Representative.

This job is submitted for final acceptance by the Company.

Name (print) _____
Signature _____
Company _____
Date _____

This section to be completed by NYSEG forestry group

The work has been inspected for items A, B, and C, as stated above.

Name (print) _____
Signature _____
Company _____
Date _____

All remedial work has been completed in accordance with items A, B, and C, as stated above.

Name (print) _____
Signature _____
Company _____
Date _____

AERIAL VEGETATION PATROL FORM

LOCATIONS REQUIRING FURTHER INVESTIGATION or REMEDIAL ACTION

OPERATING DIVISION:

Aerial
patrol _____
date _____

LINE NAME/NUMBER:

VOLTAGE:

COMPLETED BY:

DATE:

STRUCTURE NUMBER	CONDITION TO BE CHECKED	CONDITION OBSERVED ON THE GROUND	DATE OBSERVED	CORRECTIVE ACTION TO BE TAKEN	DATE COMPLETED

Ground Vegetation Patrol Form

Scheduled Bulk Vegetation Patrol Review

Bulk Vegetation Patrol Year _____

Indicate with an X if the item was completed.

Division	Ground patrol	Remedial work completed	Aerial patrol	Remedial work completed
Lancaster				
Lockport				
Hornell				
Elmira				
Binghamton				
Oneonta				
Liberty				
Pennsylvania				

I have reviewed these patrols and found them to be complete.

Signature _____
 Manager- Vegetation Management/Transmission

Date _____

I have reviewed and acknowledge receipt of these Scheduled Bulk Vegetation Patrols.

Signature _____
 Manager- Vegetation Management Operations

Date _____

Vegetation Management Audit Of 69 kV and Above Transmission System

Division _____ Date of Audit _____
Line name and # _____ Operating Voltage _____
Treatment Year _____
Forester responsible for oversight _____
If contract forester, specify company _____

Site or str # _____ Nearest road _____

Conditions observed

Cleared Width _____ Legal Width _____
Residential trees? _____

Assessment of wire zone

Assessment of border zone

Additional Comments

Name (print) _____
Signature _____
Company _____
Date _____

Bulk Transmission Vegetation Patrol Audit

Circle patrol type: Ground Aerial
Division _____ Date of Audit _____
Line name and # _____
Voltage _____
Treatment Year _____
Forester responsible for oversight _____
If contract forester, specify company _____
Site or str # _____ Nearest road _____

Conditions observed

Assessment of wire zone

Assessment of danger trees

If corrective action was required, was it completed?

Additional Comments

Name (print) _____
Signature _____
Company _____
Date _____