

**Response of the Greenburgh Environmental Forum LORAX Working Group  
to the New York State Public Service Commission (PSC) Case 10-E-0155  
Draft Recommendations Dated December 31, 2010**

**Final Revision - February 1, 2011**



The GEF LORAX Working Group submits the following response to the PSC's draft recommendations issued on December 31, 2010. Our response is divided into two parts: part 1 contains **general comments** regarding the draft recommendations and/or pertains to Case 10-E-0155 overall, and part 2 contains detailed **comments on specific draft recommendations**.

**Part 1     General Comments**

The LORAX Working Group believes **the seven draft recommendations fall far short of addressing the original nine questions issued as part of Case 10-E-0155 proceedings**. Therefore, LORAX strongly recommends further staff work be undertaken to enhance and augment the scope of these draft recommendations based on a full and thorough review of the submitted case materials, public testimony and comments.

**The proposed recommendations once again fail to discuss the essential issues of TVMP “Best Practices” and the urgent need for environmental review.** The vegetation management guidelines mandated by PSC 04-E-0822 in June 2005 never recognized the significant environmental impacts of the ROW-wide tree removal provisions. The original Negative Declaration under SEQRA specifically stated that there would not be “any significant adverse environmental impacts,” which was not true: DPS staff, based on their knowledge of prior litigation and property owner “sensitivities,” should have had a better idea as to what could happen and the resulting public response.<sup>1</sup>

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<sup>1</sup> In fact, such public reaction was discussed during the case proceedings by both DPS staff and utility representatives. Additionally, O&R's TVMP of November 1, 2007, which was submitted to and approved by DPS staff, specifically stated that there were long standing “sensitivities” on these environmental issues, particularly in the eastern portions of their service territory.

If the Commission believed the proposed actions in 04-E-0822 were absolutely necessary to ensure safe, reliable service (which they arguably were not), this should have been stated as part of a full environmental review (instead of relying on the Short EAF). In performing a standard SEQRA EIA/EIS, including full public disclosure and comment, mitigation where the impacts were likely to be the highest along the high density ROWs would have been mandated from the start. (This would also have provided a better, socially acceptable balance in the planning and execution of each utility's vegetation management program).

**These draft recommendations appear to be tailored to the utility companies' financial and staffing needs, rather than the needs and concerns of all New Yorkers.** This is especially relevant since (due to extended cycle times allocated to NYSEG, for example, in Case 04-E-0822) many upstate New Yorkers have not experienced their first enhanced TVMP treatment to date.

*Specific "global" recommendations by LORAX are as follows:*

A) Absent from these proposed guidelines for future TVMP approvals and activities are any mitigation directives for work previously undertaken. **The PSC urgently needs to redress the problems created by utilities as a result of recently completed (2005-2010) TVMP activities along the ROWs.** (Such issues have been extensively reported and documented – and form a large part of the submissions for this Case.)

In particular, both Con Edison and O&R need to be singled out to ensure the implementation of mandatory mitigation programs along the ROWs due to environmental impacts that have resulted. These adverse impacts include, but are not limited to, increased runoff storm water, flooding and erosion (both surface and sub-surface), loss of the necessary residential vegetation screen, loss of privacy buffer, loss of noise buffer, and decreased wildlife habitat and biodiversity. Other related impacts include loss of aesthetics, property devaluation, increased potential for the introduction of invasive plant species and nuisance wildlife, and increased potential for breaches of security due to unauthorized access and use of the ROW. Such adverse impacts and damage (from prior TVMP actions) for the most part remain unaddressed by the current draft recommendations of DPS staff.

Furthermore, **in consideration of these extensive environmental impacts, the lack of proper training and supervision of contractors, and other improper actions reported (e.g.: repeated trespass on private property, failure to properly notify property owners), a structure for meaningful financial penalties is clearly required.** To serve as actual penalties, such fines should not come out of the general operational budget – i.e., ratepayers should not foot the bill – rather, alternate payment mechanisms should be explored.

B) Pursuant to this discussion of TVMP excesses, **the PSC must undertake an internal review of its handling of consumer and municipal complaints** (including multiple legislative resolutions from towns, cities and counties forwarded to the PSC). Such complaints started as early as 2005 (Westchester/Yorktown), continued in 2007 (Rockland), and became urgent and widespread in the fall of 2009 (esp. Westchester) thru 2010 (Orange). Why did DPS staff allow TVMP work to continue unabated when such serious concerns were being raised? Why was there not an immediate cessation of activities so that a full and proper review could occur?

This demonstrates a significant failure in regulatory oversight at the PSC/DPS, which, based on the continued reliance in these recommendations for the utilities to self-regulate and self-report in a timely and factual manner, is of continued concern. In the future, **the PSC must make more proactive efforts to monitor how vegetation management is actually being implemented in the field by each utility** - as part of the core priorities of its DPS regulatory staff. If there is insufficient staff availability, then impartial third-party inspectors or local municipal resources should be contracted to perform such on-going in-field review.

C) **The NYSPSC must work with FERC/NERC in rationalizing fines applied to violations of FAC-003.** Of specific concern are those fines targeted to “*Clearance 1*” incursions (essentially incursion into the “*priority zone*” as defined in 04-E-0822). Vegetative incursions into this zone are not immediate safety hazards and do not result in any possible line contact or flash-over (i.e.; these clearly do not have any of the reliability and safety impacts associated with “*Clearance 2*” violations). Thus, rather than hefty fines imposed from NERC, there should be a notification “warning”, which could then be addressed site-by-site by the responsible utility within a reasonable timeframe.

Although this is not within the scope of PSC regulatory authority, working actively to solve this fine structure at the federal level could help eliminate conditions leading to utilities’ relying upon ROW clear-cutting as a “fine-avoidance” practice.

D) **The PSC should also work with the NERC standards committees to ensure the introduction of an appropriate TVM balance into the current draft FAC-003-2.** Such a balance would clearly reflect the discussions of “best practices” that occurred in the context of 10-E-0155 statewide public hearings and case filings. (For example, the proposed FAC-003-2 border zone height limitation of 25 feet needs to be modified upward or eliminated entirely so as to allow “tiered” vegetation alternatives that reflect reduced risk potentials based upon actual ROW topographic and adjacent demographic conditions.)

E) **Guidelines and operative instructions provided within 04-E-0822 that call**

**for cutting to the ground all incompatible vegetation across the entire width of the ROW should be explicitly rescinded.** Detailed clarifications as to what was actually meant and what “best practices” are to be allowed should be added to reduce the problems that have emerged from too narrow of a reading of these case proceedings<sup>2</sup>.

F) Included in these recommendations should be a **re-emphasis of the requirement to perform proper surveying of, documentation of, and (wherever possible) protection of view shed buffers and sensitive environmental areas** from TVMP actions. Mandatory mitigation requirements for such important buffers and environmentally sensitive areas must also become part of the general guidelines. Tree valuation for carbon reduction, stormwater management and other ecosystem services based upon USDA Forest Service guidelines should serve as a core part of any such analysis.

G) **The term “*priority zone*” (currently left to be arbitrarily self-defined by each utility) should be stricken (replaced by the term “*Clearance 1*” as used and defined in FAC-003-1),** or else a clear, meaningful, scientific and repeatable definition should be provided by the PSC.

H) Although the high population density of the NYC metro area has naturally resulted in a greater number of complaints from Westchester, Rockland and Orange Counties residents, **the scope of these guidelines should be expanded to include all Transmission Operators within the state,** especially considering that landowner reports of similar problems throughout the state have been submitted to the PSC. DPS staff seem to completely ignore the important and valid comments of the Adirondack Park Agency, NYSDEC, Riverkeeper and others by focusing on the NY metro area.

I) **Each utility should have a “user-friendly,” specific and accurate TVMP posted to their website.** Con Edison’s heavily redacted TVMP, available only via a FOIL request, is unacceptable, especially given the level of public interest in the matter. LORAX does not believe that the redacted information would have been truly helpful to terrorists, and much information about the system is already available in the public domain (Google Maps, etc.) or by direct observation on-site (as there is typically limited or non-existent access security along the ROWs).

J) **Each utility’s TVMP should also include a statement reporting the number of trees to be removed during planned maintenance cycles, the**

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<sup>2</sup> More generally, the PSC must undertake “unifying” (or conforming) guidelines issued as part of 04-E-0822 with those that will emerge from these draft recommendations under 10-E-0155. Portions of 04-E-0822 may need to be explicitly rescinded and/or additional clarifications provided. As it stands, there will most likely be contradictions between the two guidelines, creating greater regulatory confusion.

acres impacted, and the cumulative impacts of these removals on carbon sequestration, oxygen generation, and other ecosystem services. Annual reporting should provide similar data for trees actually removed during the current maintenance cycle. (See discussion below concerning mitigation planning and use of USDA Forest Service tree valuation criteria.)

## **Part 2     Comments on Specific Draft Recommendations**

*(LORAX comments follow the associated quoted recommendation and discussion materials as provided by DPS staff in December 31, 2010 release.)*

1. Consolidated Edison Company of New York, Inc. and Orange and Rockland Utilities, Inc. shall provide individual written notification to all abutting and otherwise affected landowners and local municipal elected officials of cyclic ROW vegetation management work, not more than six months nor less than three weeks prior to the commencement of such work.

*Discussion:* This recommendation is intended to specify who is to be contacted and ensure timely communication with the public. Specifically, this recommendation is intended to provide direct notification to landowners who have a utility easement on their property or to landowners who directly abut a fee owned utility ROW. Flexibility in the time frame is provided to address individual circumstances. For example, where significant land use changes have occurred along the ROW, a utility and landowner may need a longer time period to address issues of concern. In other instances, a shorter notification period may be sufficient to inform landowners of upcoming work. This recommendation is also intended to recognize the importance that local municipal officials play in the chain of communication with their constituents regarding ROW management activities.

**LORAX Comments:** Notification is important, but this proposed recommendation is too vague as to the method(s), content, and time frames of notification, providing an inadequate regulatory framework by which to determine compliance.

There has always been a 'notification' clause in existing TVMPs. However, reported compliance by most utilities has never been adequate. Notification

guidelines should be clearly stated within each TVMP and execution thereof should be monitored by the PSC to ensure full compliance. Failure to properly notify landowners and municipalities should result in immediate cessation of any related TVMP activities, as well as in mandatory fines for the utility.

Excluding emergency work, a threshold of only three weeks prior to the commencement of work does not allow adequate time for adjacent property owners and municipal officials to review and respond to proposed transmission line work including vegetation management work. The minimum notification window should be 60 days.

Notification should be in written form and include a follow up with a written signature by property owner as “proof of contact” (as is common practice with distribution line vegetation management notifications). Records of contact by line forester and landowner signatures must be supplied to the PSC (DPS) and made available for public review to ensure compliance and to resolve disputes.

Timely public notification in a local “newspaper of record” is also recommended.

Municipal notification should include enough advance notice (60-90 days) to accommodate a public information meeting with the utility (if a municipality chooses to do this).

A widely disseminated means for the timely reporting (to both PSC and utility) of issues (such as lack of proper notification) by the public or by a municipal official must be provided. Such exception/complaint submission might be via email, website form, and/or phone; however, some sort of tracking number should be provided to allow ease of follow-up to the incident report. A timely response by DPS staff must also occur.

Every notification letter should include information (who to contact for what) and a clear statement of a basic property owners “Bill of Rights” regarding vegetation management. Proper notification of property owners, adjoining land owners, and municipalities of all non-emergency work should be recognized by the PSC as a fundamental right of all New Yorkers. Additional rights include (but are not limited to) mandatory mitigation and/or restitution for vegetation management related health, environmental and/or property value impacts, as well as a simple (and free) means of grievance reporting and timely arbitration.

Traceable easement rights (as applicable) should be verified before notification and a summary form of said easement grant should be provided as part of notification. Upon further request by the landowner, a relevant copy of full easement rights documentation must be provided by the utility.

2. The notification required in Recommendation 1 shall in detail describe at a minimum the type of work to be performed, including the geographic limits of the work, the type and extent of vegetation management work planned, provisions for cleanup, and expected dates of commencement and completion.

*Discussion:* This recommendation specifies the minimum information deemed necessary to enable a member of the public or public official to understand the nature and extent of the ROW management work to be performed.

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**LORAX Comments:** The notification process by itself is insufficient to give a proper understanding of the possible impacts. At a minimum, site survey and clear marking of the ROW boundaries should be required – and performed before landowner signoff. Additional survey markings of specific trees to be removed, especially along the ROW margins, and/or those to be pruned on private property should also be properly flagged. (*See also additional comments herein about mandatory environmental reviews for each affected line segment.*)

Proper demarcation of sensitive areas such as view buffers, wetlands, riparian buffers, and/or water courses should be marked and reviewed ahead of time. Review of such site features must also be undertaken by the utility manager with any in-field contractors' staff to ensure their knowledge of and compliance with TVMP constraints in these sensitive areas.

The need to ensure full and proper compliance with herbicide application notifications is essential. Current notifications are often reduced to limited and obscured posting of small warning signs along the ROW a day before the application – sometimes on the very same day as herbicide application – something that many landowners are not aware of. A more robust notification (similar to the above discussion) is required to ensure adequate safety and health of homeowners, children, visitors, pets, and farm animals.<sup>3</sup> In addition, utilities should be required to provide written notification to municipal officials, as well as copies of filings with the PSC (DPS) and the NYS DEC or NYC DEP.

Inclusion of available, planned and/or negotiated mitigation (e.g.; replanting buffers or other installation/repair of stormwater/erosion control measures) should

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<sup>3</sup> LORAX received one report of an apiary being completely devastated by the use of herbicides along the ROW; better notification practices might have prevented this.

be part of any notification/sign-off process.

This recommendation by DPS staff does not address the need for a clear, simple and independent arbitration process that the landowner or public official can use when agreements about vegetation management and mitigation/replanting can not be reached with the utility. Any such process, once initiated, should protect the property owner from harassment by the utility until arbitration has been finalized. Additionally, TVMP work should not be allowed to go forward until dispute resolution has completed. The utility company should also be subject to fines for refusal to engage in arbitration.

3. Consolidated Edison Company of New York, Inc. and Orange and Rockland Utilities, Inc. shall develop, for Staff review and approval, a section in their Long Range Right of Way Management Plans (Plan) specifically addressing how they will conduct their ROW management work in high density ROW areas.

*Discussion:* Each utility has various demographic areas, including those with high and low density populations, through which its transmission ROW passes. Also, each utility possesses ROW that may differ in numerous other respects, including for example, stage of re-growth, width, topography, and right of use resulting from ownership or easement. For the purposes of this requirement, high density ROW includes any individual span that has multiple abutting residential homes along one or both sides of the ROW. This recommendation would require Consolidated Edison Company of New York, Inc. and Orange and Rockland Utilities, Inc. to create sections in their Plans detailing how they will tailor their ROW management work in high density areas. While not overly prescriptive, this requirement provides the utilities with the flexibility necessary to develop and implement effective ROW management while accounting for and ameliorating, to the extent practical, the issues that have arisen due to ROW management work in the past.

**LORAX Comments:** This should be applied to all Transmission Operators in the state, as appropriate.

In 2008, the PSC allowed just O&R to modify its vegetation management program to offset some of the worse landowner complaints and to prevent further

municipal or state action. However, this modification, targeted for just one utility, did not prevent the disastrous situation in Westchester from occurring in 2009 by O&R sister company, Con Edison of New York, nor did it prevent similar bad practices in Orange County in 2010 by O&R, itself, where company employees arbitrarily decided that a particular large subdivision in Chester, NY should be classified as a “rural” area, not a residential area, despite its appearance and local zoning. Therefore, a clear, inclusive, and unbiased definition of “high density” ROW zones must be developed as part of a public process that also allows local municipalities and landowners the opportunity to challenge specific ROW segment classifications.

Defining more densely populated areas as unique and requiring an alternative (modified) TVMP should be expanded to include other types of “sensitive” areas such as parklands, public view sheds, watersheds, steep slopes, environmentally unique areas, endangered, protected or special habitat areas, etc. These sensitive areas may require their own different / alternate TVMPs, as well.

Extra protections (alternative TVMPs) and flexibilities must be afforded transmission corridors through or adjacent to local/state/federal identified nature preserves, parklands and corridors (e.g.; Adirondack Park, Rockefeller State Park Preserve, Delaware Water Gap). Ecological assessment should occur before each management cycle for these critical natural resources to ensure adequate protection. Existing permits and/or SEQR EIA/EIS statements should be re-evaluated in light of the significant public comment received for this Case.

All replanting mitigation should make use of appropriate plant materials (selected from a recommended plant list) and consist of native species. A third-party review by professional horticulturalists, biologist, and/or ecologists of any recommended plant lists should be undertaken, and all such lists must be posted for public access on the utility’s web site. Additionally, reasonable plans to ensure survival of mitigation plantings need to be outlined (e.g.; on-going watering or other post-installation care).

Replanting mitigation on the ROW should be mandatory. Utilities should not be allowed to say that they have a policy of not replanting on ROW property, especially in cases of significant ROW border zone vegetation loss that widely impacts the surrounding community. Mitigation should occur at the location where the vegetation was lost – not elsewhere along the ROW. Note that mitigation planning should focus on the ROW lands (i.e.; border zone), as it can not be assumed that replanting can be done on adjacent private, municipal or state properties.

Historically, the DPS has conducted little or no on-site monitoring while TVMP work was being done, and has responded only after damage has occurred and

problems have been reported by the public or municipalities. LORAX recommends that a fully independent auditor be utilized to monitor a utility's compliance with its approved TVMP. Failure to comply should result in immediate work cessation with day-by-day recurring penalties. In particular, there should be heavy fines where the utility has violated the terms of ROW agreements with property owners.

Significant fines levied against TO's by the PSC for ROW violations – especially when caused by repeated failure to adequately review and adhere to restrictive ROW easement agreements - will help “motivate” utilities to prevent these types of problems from occurring in the future and protect the rights of all New Yorkers.

The development of TVMPs for work in high density ROW areas is an important area where public input must be included before sign-off of the TVMP can occur<sup>4</sup>. There should be provision for a full environmental review process and a plan for mitigation, as well as restitution, to adjacent property owners if indicated. Any such mitigation plan acceptable to the adjacent property owner should be in place prior to the commencement of work.

4. All companies shall submit, for Staff review and approval, updates to their websites and any printed materials detailing the rationale and practices governing their ROW management programs.

*Discussion:* This recommendation is intended to ensure that the public is adequately informed of the details and reasons for the companies' transmission ROW management programs.

**LORAX Comments:** The PSC/DPS need to develop detailed requirements and criteria for public information. This includes information for both websites and printed materials that are to be distributed by utilities.

Updates to TVMPs (including alternate “low impact” management practices for populated and other sensitive areas) must be undertaken and approved by PCS in a timely manner. The approval process should allow for public review and comment. (*See also previous comment on TVMP redaction.*)

Vegetation management schedules should be made public on a utility's website –

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<sup>4</sup> TVMPs must be made easily available to the public via each utilities' website. Note that Con Edison's insistence on only providing an extensively redacted version of their TVMP should not be allowed. Other utilities inside and outside of NYS (including Con Edison's sister company O&R) are able to provide un-redacted versions of TVMPs for public review.

providing maps, the ability to sign up for e-mail alerts, etc. Everything in the world has a website - why rely solely on door hangers, fliers and/or snail mail? The email sign-up notification system should cover any work being done in local neighborhoods including, but not limited to, vegetation management on both transmission ROW and distribution lines, equipment upgrades, etc. Ratepayers should receive notifications about the sign-up programs at least once a year on their bill/e-bill and monthly newsletter. The program should be initiated by a mailed letter informing all consumers of this program and ads/press releases in local newspapers.

5. All companies shall establish a direct line of communication between the public and the companies' vegetation management personnel for questions regarding ROW vegetation management work. Information advising of the opportunity for such communication and how such communication can be accessed shall be made available on the companies' website, on all required notifications, and provided by field personnel and contractors upon request.

*Discussion:* This recommendation addresses commenters' frequently expressed concern that they were unable to reach and speak with a responsible party while the ROW management activities were going on.

**LORAX Comments:** This recommendation should include a requirement that the name and contact information for the (utility) employees supervising the work, as well as the name and contact information of the sub-contractors and their field supervisor(s) always be provided. All personnel, whether utility supervisors or contracted field workers must be required to carry and present proper IDs at all times when on-site. Logo uniforms or vehicles are insufficient identification.

Prior experience has indicated that it is not unusual for Con Edison to perform its vegetation management work at times outside of the regular work week (such as weekends and around major holidays, including Thanksgiving and Christmas). This practice should never obstruct the public and municipal officials from voicing concerns and initiating a grievance, if required.

Contact and/or complaint handling would best be provided via direct cell phone to the project field supervisor or manager. If a 1-800 contact number is provided on the website, it should not be relegated to the 1-800 gas leak emergency phone line (as was done by Con Edison during 2009-2010 TVMP cycle). All contact numbers should be effective 7 days a week - including holidays - during the

hours of 7am thru 5pm (i.e.; nominal field crew work hours) at a minimum.

The contact lines should reach responsible field management personnel, not be routed to a message bank for eventual handling, and may require an escalation chain to be defined internal to the utility. This is especially critical due to reported concerns of possible violations that require immediate response by utility managers. Since time may be of the essence when vegetation management work is in progress, there should be an established response time limit (i.e., within 15 minutes during normal business/crew working hours and within one hour on weekends or holidays).

Any dispute resolution process should be immediately (automatically) implemented, as necessary. At the most basic, once a significant dispute is raised, related TVMP work in-field should be halted until the dispute is responded to (and hopefully, resolved) by the proper supervisor or manager.

What enhanced problem reporting or escalation procedures will be defined to escalate problems to the PSC/DPS level so as to ensure that regulators can get to the site in a timely and consistent fashion?

There must be established procedures for adjacent property owners who have objections and/or experience damage to their property as a result of a utility's transmission line work.<sup>5</sup> A fully independent panel should be set up to arbitrate such grievances. The adjacent property owners and community as well as the municipalities should not be expected to bear the costs of adverse impacts and damage caused by the utility. Nor should they bear the costs of grievance arbitration. There should also be significant punitive fines for damages inflicted after a stop-work order has been issued in the context of the dispute resolution process.

6. All companies shall develop sections in their Plans to address the circumstances and criteria pursuant to which replanting would be warranted.

*Discussion:* This recommendation requires companies to specify the circumstances where replanting of compatible vegetation is appropriate as part of their routine ROW management activities. It is intended to inform the public of applicable criteria, outlining in a general

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<sup>5</sup> This recommendation addresses the need for arbitration, mitigation, and restitution "going forward." However, the PSC must also ensure that damage incurred by TVMP actions of Con Edison and O&R in previous years (circa 2005-2010) are properly addressed in a similar manner.

manner, instances in which a company may or may not replant. This also affords municipalities, who may wish to partner with the utility, the chance to assist with the planning and funding of planting compatible vegetation on a ROW. This recommendation will require each company to formalize its replanting program and how it will determine required funding levels. This requirement is not intended to be a one to one replacement program for vegetation appropriately removed from the ROW, but instead, an acknowledgement that appropriate replanting is a reasonable and necessary part of a utility vegetation management program for electric transmission ROW.

**LORAX Comments:** Replanting and other forms of mitigation should result from a formal environmental review process that includes public input, including a public hearing process and a dispute resolution/arbitration process when necessary.

Mitigation work should include a minimum 2 year warranty for plant materials and 3 year warranty for mechanical mitigation/hardscape construction. This requirement should include a posted bond for duration of warranty.

Also required should be a complaint, review, and corrective action mechanism for mitigation work that subsequently fails. Repair of any such reported problems must occur in a timely fashion - with 6 months.

The cost burden for replanting or any other necessary mitigation should not be passed onto the affected adjacent property owners and municipalities. The goal should be for TO's to develop vegetation management plans that utilize "low impact" practices and techniques to maximize results (in terms of achieving safe, reliable electric service), while minimizing both environmental damage and costs to everyone, not just the utilities.

In many areas of the state, restoration of the ROW should be achieved using appropriate vegetation that is both native (wherever possible), ecologically appropriate to the site, and deer proof.<sup>6</sup> Each utility should publish (and post on their website) lists of compatible species for the wire zone/border zone (wz/bz) as well as various types of buffer areas.

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<sup>6</sup> For example, native Sedge grasses may be a reasonable selection for reseeding a denuded wire zone, as this offers needed erosion control, helps block re-growth of invasives, and minimizes or eliminates deer related browsing.

Exceptions to the specification and use of native species should be clearly documented and justified.

The elimination of introduced or opportunistic invasive plants is of utmost concern along the disturbed ROW lands, however reliance on herbicides is not a sound long-term practice. Again, selective replanting and reseeding of natives or other “recommended plants” is necessary, as well as a program of maintenance and care which ensures that the desired restoration actually occurs.

Deer population control programs should be made part of the overall TVMP restoration practices as these animals are the single greatest detriment to proper ROW recovery.

The key is to focus on minimizing vegetation removals and other environmental damage through a controlled, careful selection of vegetation targeted for removal, rather than relying on clear-cut of the entire ROW. View shed buffers, noise buffers and riparian buffers (as examples) are typically expensive and difficult to replace in a timely and effective manner. It is better served to not remove these and thus to avoid the need for mitigation to begin with. Additionally, reliance on use of herbicides as a “best practice” to maintain the ROW must be minimized. *(See comments below concerning issues with the Integrated Vegetation Management “best practice” as outlined by ANSI A300 Part 7.)*

Several alternatives exist to better manage vegetation, including system-wide use of LIDAR mapping and ROW modeling systems that can pin-point required TVM needs segment-by-segment, tree-by-tree (in a selective and timely manner). Response times are minimized and thus excessive vegetation removal is also minimized or eliminated.

GIS-based ROW vegetation mapping data sets used by the utilities, including those produced by LIDAR and other techniques, should be submitted to the PSC regularly, as well as made public via the web. Study of these data sets will inform regulators, industry, interest groups, and the public about vegetation management in practice. Why is the PSC relying on less effective annual paper reports alone to determine whether the transmission lines are being managed as they should be when the actual impacts can be visualized based on field data collected via modern remote sensing technologies and imaging software?

While we realize that it will take time for utilities to implement LIDAR surveys and to implement smart-grid technologies, both of which could have prevented or significantly limited the type of blackout experienced in August 2003, LORAX believes that the PSC should make a clear statement in 10-E-0155 that utilities must undertake development of long-term planning to better manage vegetation and prevent widespread outages through the use of newer technologies, systems

and methodologies.

Another alternative to manage ROW vegetation is through training in and implementation of a tiered wire zone/border zone (wz/bz) management approach. [See diagram under comments on Guideline #7 – below.] In this practice, tree removals are limited based upon distance from the centerline of the wires – with taller trees allowed in the border zone the farther one gets from the edge of the wire zone. Trees 50 to 75 feet in height are ultimately “safe” when located more than “x” distance from the wire clearance zones (due to the geometric impossibility of these interfering with the wires if a tree fall should occur).

There are a number of species that can grow tall over time, but that are slow in their growth rates. With a wz/bz approach, it may be appropriate for TO’s to allow such trees to remain in the ROWs to minimize the rapid spread of invasives and other rapidly-growing species that can pose hazards to transmission lines. (Eliminating removal of smaller trees and woody shrubs also helps in this goal.)

Finally, use of appropriate NYS DEC-compliant stormwater, sediment and erosion controls, when indicated, should be required during and after TVMP activities. This includes full inspection and reporting requirements. (Existing NYS DEC or NYC DEP permits should be reviewed and updated, as appropriate.)

Note: From an environmental perspective, effective mitigation planning must often occur across a wide range of properties, not just one landowner at a time. Utilities should be required to take this larger view when determining and defining proposed mitigation, stormwater management, and erosion control.

7. Each company shall develop, if one does not exist, a section in its Plan detailing when and where otherwise undesirable vegetation would be allowed to remain on a ROW.

*Discussion:* A number of commenters from downstate questioned why undesirable vegetation (usually trees) would need to be removed from a ROW if the wire elevation above the ground is such that a mature tree could never grow tall enough to reach it. As a practical matter, undesirable vegetation is defined by utility companies as vegetation growing on a ROW that at mature height can reach, either by growing into or if it were to fall, the wire security zone which is also referred to as the priority zone. The rationale for removing only undesirable vegetation is set forth by the

utility companies in their respective Plans. However, Staff believes it is important to reemphasize the basic vegetation management principle that vegetation, which will never endanger an overhead electric transmission line even at its mature height, should be retained throughout a ROW. Typically only deep valleys and severe side slopes below the conductors would be places where this vegetation could exist. Each utility will utilize its own expertise to determine when, where, and under what conditions this management practice will be employed.

**LORAX Comments:** The core problem with this recommendation is found in the final sentence: "Each utility will utilize its own expertise to determine when, where, and under what conditions this management practice will be employed." In our region, both Con Edison and O&R have already demonstrated repeatedly that they have no concern for actual vegetation risk and have instead relied upon a strict adherence to a "one size fits all" clear-cutting methodology. So, in actual practice, over and over again, this "self-regulation" has been shown not to work. Perhaps in the case of the worst offending TOs, a third party analysis, review, and on-site supervision of TVMPs is required. Such oversight and audit services would best be provided by fully independent firms who have qualified environmental science resources available.

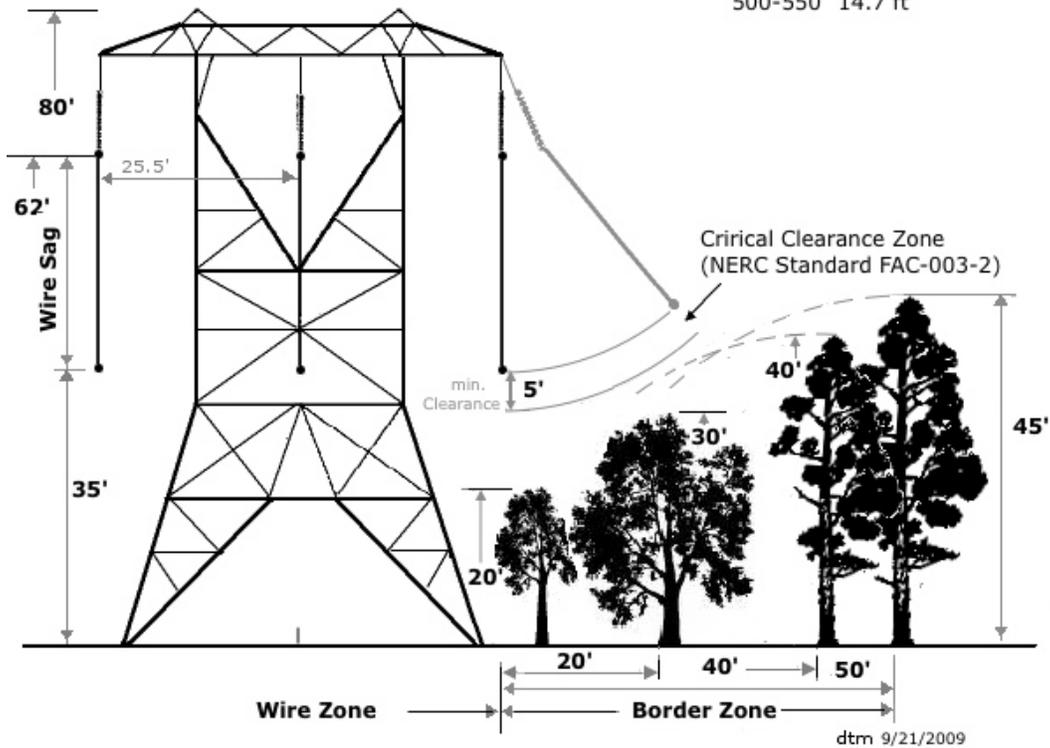
Utility assertions about envisioned "ecologically sound," "natural" restoration after clear-cutting (or any other extreme management practices which cause widespread ecosystem disruption and soil disturbances) must be accompanied by detailed analysis of the actual ecological conditions (e.g.: a full spectrum bio survey) at specific/representative locations along the ROW pre- and post-vegetation management. Impact analysis should also utilize USDA Forest Service tree valuation criteria which allows calculation of lost ecosystem services such as carbon sequestration, oxygen generation, stormwater and erosion control, etc. This will help provide a numeric basis for evaluating mitigation requirements. Post-management plans should be based on current scientific research and updated "best practices" - *see note below about ANSI IVM issues.*

Comments elsewhere in this LORAX response mention "Tiered" Vegetation Management practices in general terms. The PSC should develop specific representative diagrams detailing safety clearance heights based upon line voltage and the distance from the centerline (or by FERC FAC-003 wire zone safety clearances). [*See for example this diagram below from the Raritan, NJ Sierra Club:*]

**Tree heights conforming to distance requirement to avoid arcing for 242 kV lines.**

(IEEE) Standard 516-2003  
(Guide for Maintenance Methods on Energized Power Lines)

Voltage	Clearance
230-242	5 ft
345-362	9.4 ft
500-550	14.7 ft



Codification of species by growth rate could help codify height limits, as well. However, the utilities have previously based such decisions on the desire to maximize vegetation management cycles beyond 4 years, where possible. Such “cost savings” criteria result in the determination that almost no species can co-exist in the near border zone areas. The concept of “creating a meadow” across the entire width of the right of way property should be explicitly negated in updated PSC guidelines. Ultimately, without using modern technology and systems such as LIDAR mapping to supplement scheduled maintenance with a reliable “on demand” vegetation treatment, TVM procedures will not be able to go beyond the “brute force” process which has resulted in the widespread damage and complaints to date.

**A further note on IVM as a “best practice”:** ANSI A300 Part 7 Integrated Vegetation Management (IVM) is a core feature of long term ROW management after clear-cutting has occurred. However, in forest test plots throughout New York State and Pennsylvania, it has been shown that natural re-growth of native seed stock does not, nor cannot, occur because of the extreme levels of deer

herbivory. (Deer populations along many ROW areas are above sustainable levels and the vegetation destruction of seedlings is significant, if not total.) Thus, IVM should be considered a “best practice” only if and when it is updated to address the regional reality of issues such as deer population overload and the resulting explosion of invasive plant populations along the ROWs.

In this context, the reliance upon herbicides to keep undesirable species in check must also be seen as an environmentally unsustainable and ultimately dangerous practice. Native species selection for replanting or reseeding and intelligently planned post-clearing “aftercare” should be emphasized as the preferred “best practice” alternative.

**The PSC should work with industry groups such as ANSI and research organization such as The Cary Institute of Ecosystem Studies (Millbrook, NY) and the USDA Forest Service to undertake new field studies of IVM so as to update/correct the recommended “best practices” relied upon by our regional utilities.**

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