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**IMO Reliability Compliance Program -  
Certification Form  
Draft Standard  
Vegetation Management Program**

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Submit this form to:

Attention:  
IMO Reliability Compliance Program  
Market Operations and Forecasts, IMO  
Station A Box 4474 Toronto ON M5W 4E5  
E-mail: [IRCP@theIMO.com](mailto:IRCP@theIMO.com)  
Fax No.: (905) 855-6372

All information submitted in this process will be used by the *IMO* solely in support of its obligations under the “*Electricity Act, 1998*”, the “*Ontario Energy Board Act, 1998*”, the “*Market Rules*” and associated policies, standards and procedures and its licence. All submitted information will be assigned the appropriate confidentiality level upon receipt.

Terms and acronyms used in this Form that are italicized have the meanings ascribed thereto in Chapter 11 of the “*Market Rules*”.

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*This form, in combination with supporting documentation as appropriate, facilitates certification of compliance in accordance with the requirements and measures of the subject standard authority reliability compliance Template.*

**PART 1 – GENERAL INFORMATION**

<b>Market Participant Name:</b> _____ <b>Market Participant ID:</b> _____
<b>Reliability Compliance Contact:</b> <b>Name:</b> _____ <b>Telephone No.:</b> _____ <b>Fax No.:</b> _____ <b>E-mail Address:</b> _____
<b>Reporting Period: (Previous year)</b> From: <u>January 1</u> To: <u>December 31</u>

**PART 2 – STANDARD**

**Standard:**

S1: *Transmission system* owners shall have a vegetation management program for transmission lines, 100 kV and above, to prevent tall woody species from growing into or falling onto them. The vegetation management program shall include, but is not limited to, the following elements:

- inspection requirements;
- vegetation clearances in conformance with those listed below; and
- an annual work plan.

S2: The vegetation management program shall ensure that the minimum clearances for both undergrowth and side vegetation listed in Table 1 below, measured between the line conductor and the vegetation under maximum conductor sag, is maintained at all times as follows:

- when possible, any tree under or to the side of the conductor that could interfere at mature height shall be removed<sup>1</sup>;
- all overhanging limbs, where applicable, eliminated;
- side vegetation that threatens to encroach on the line shall be pruned back to the right-of-way (ROW) boundary edge (see Figure 2); and
- danger trees<sup>2</sup> (outside of the ROW) shall be trimmed or cut in accordance with transmitters business practices to eliminate any potential hazard.

<b>Normal Operating Voltage<sup>3</sup></b>	<b>Minimum radial clearance between any conductor of the line and vegetation<sup>4</sup></b>
115 kV	1.0 meters plus trimming cycle growth
230 kV	1.5 meters plus trimming cycle growth
345 kV	2.0 meters plus trimming cycle growth
500 kV	3 meters plus trimming cycle growth

**Table 1: MINIMUM RADIAL VEGETATION CLEARANCES**

S3: *Transmission system* owners shall promptly initiate corrective action to obtain the conductor to vegetation clearance specified above whenever it has knowledge of lines in non-compliance with this standard.

S4: Patrol, within the next five business days, lines which trip from unknown causes where it is judged that trees may have been responsible for the trip (e.g. repeated reclosures under windy conditions). Lines that have tripped and cannot be re-energized shall be patrolled promptly.

<sup>1</sup> Good utility practices shall utilize contemporary forestry and arboricultural practices to mitigate the risk from any vegetation.

<sup>2</sup> Danger trees are defined as unhealthy (dead, diseased, leaning or otherwise structurally damaged) sidelines trees that due to their height and location pose a significant risk to a conductor or structure if they fail structurally and fall within the ROW.

<sup>3</sup> The clearances shall be increased by 0.1 meter per 10 kV in excess of nominal system voltage.

<sup>4</sup> Measured between the line conductor and vegetation under maximum conductor sag. Transmitters are accountable to maintain additional clearances as needed for safety considerations.

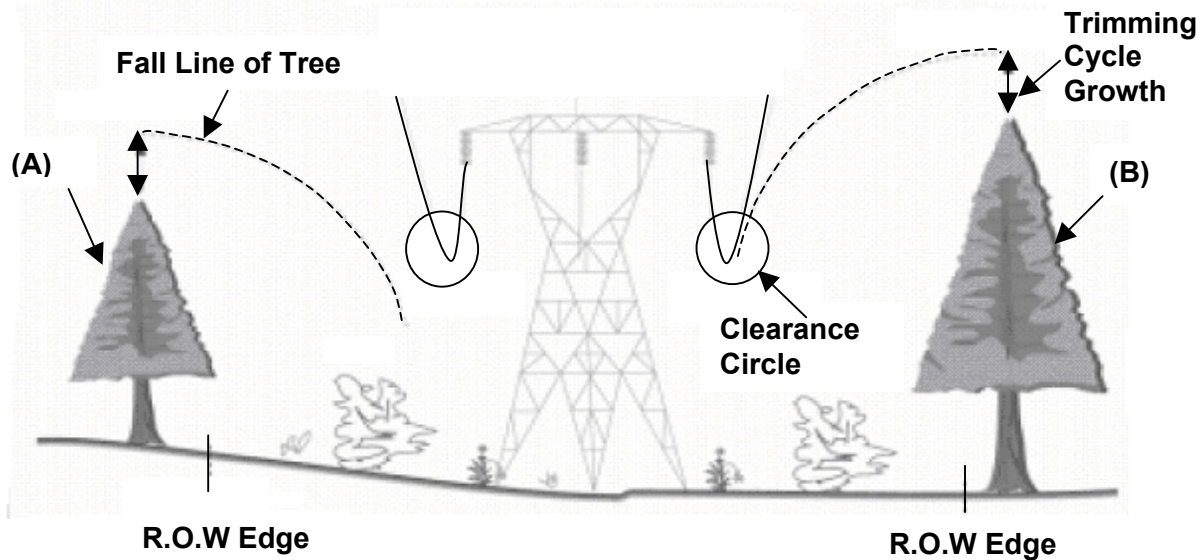


Figure 1 – RADIAL CLEARANCE

A – Danger Tree<sup>2</sup> that does not have the potential to pose a risk to the conductors

B – Danger Tree<sup>2</sup> that has the potential to fall into ROW and within the clearance circle

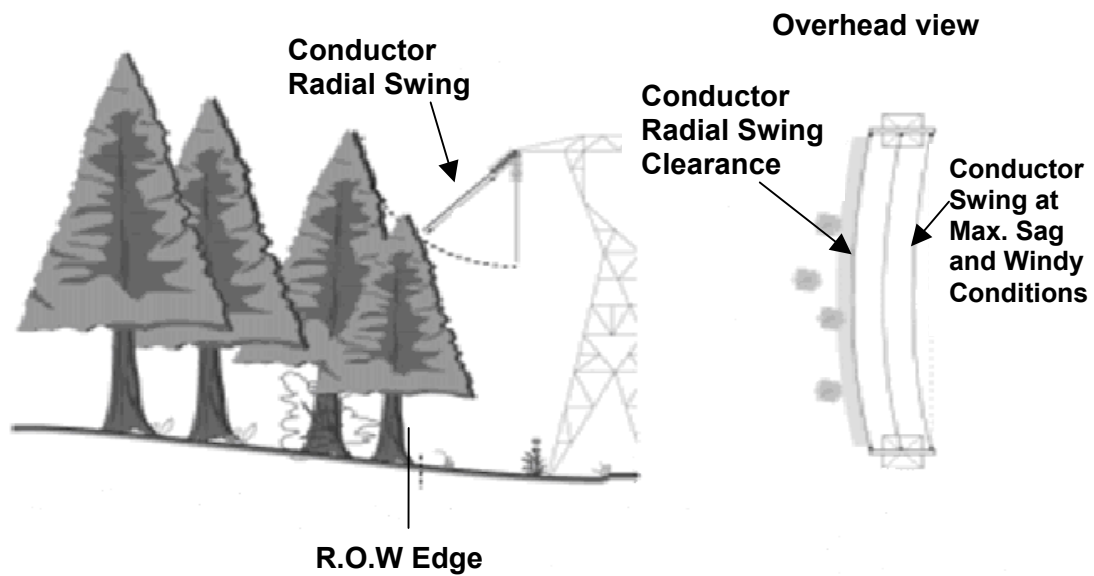


Figure 2 – SIDE LINE VEGETATION

**Measurement:**

The *transmission system* owner or its delegate has implemented a vegetation management program which establishes clearances, inspection and trimming cycles, and best management practices to limit the risk caused by vegetation to the transmission lines that meets or exceeds the above Standard.

### PART 3 – CERTIFICATION OF COMPLIANCE

#### THE REPORTING *MARKET PARTICIPANT* CERTIFIES THAT IT IS IN:

**Full 100% Compliance:**

*The transmission system owner, by January 15 following the reporting period, certifies that it has:*

- a current vegetation management program that meets the above standards;
- performed all scheduled requirements of its vegetation management program during the reporting period, unless it certifies that tree trimming was not required as scheduled by completing Appendix A;
- not had repeated vegetation incidents on the same circuit in consecutive months; and.
- provided a monthly report of vegetation-related incidents that occurred.

**Non-Compliance:** *(The transmission system owner is to indicate it's level of non compliance and provide its' mitigation plan to become compliant).*

**Level 1:**

An annual work plan was developed but was incomplete.

**Level 2:**

Failed to certify its vegetation program was performed as required.

**Level 3:**

- Required maintenance was not performed in accordance with transmission system owner's annual vegetation management work plan; or
- the number of reportable vegetation related incidents during the reporting period was equal to 2:
  - a) for bulk power system (BPS) impactful circuits; or
  - b) for non-BPS impactful circuits affecting the reliability of Local Areas after being designated as “on watch”<sup>5</sup>.

**Level 4:**

- The vegetation management program was inadequate, vegetation-related outages of same transmission line have occurred in consecutive months; or
- the number of reportable vegetation related incidents during the reporting period exceeded 2:
  - a) for BPS impactful circuits; or
  - b) for non-BPS impactful circuits affecting the reliability of Local Areas after being designated as “on watch”.

<sup>5</sup> “on watch” – refers to the performance of a Local Area where the unsupplied energy in a year or less has exceeded 0.5 standard deviation from the long term average.

Mitigation plan: (*Defines the corrective steps that will taken and the timeframe, in which the market participant will meet 100% compliance.*)

Mitigation plan attached.

Comments/Explanations:

Comments/explanations attached.

I have authority to bind the *market participant* named above. I certify that all information set out or referred to above is true and complete as at the date of this certification. I further understand that the foregoing information is being provided in accordance with the requirements of the *IMO reliability* compliance program (IRCP). I understand that this certification is submitted in lieu of a detailed review or “audit” by the *IMO* that may occur in the future. I acknowledge that such a review will require all information set out or referred to on this form be verified by appropriate documentation.

Certified by:

\_\_\_\_\_  
Signature of Authority

Title:

\_\_\_\_\_

Date of Certification:

\_\_\_\_\_

