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Environmental Management System

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1.0 Purpose:

To ensure any specific requirements are followed for forest operations (harvest and renewal/tending) working on or adjacent to utility right-of-ways (e.g. hydro & pipelines) in accordance with the Utility Company's specifications and associated regulations.

2.0 Scope:

This procedure applies to employees and contractors who work adjacent to utility right-of-ways (e.g. hydro & pipelines) at forestry operations.

3.0 Responsibilities:

- 3.1 ORC Operations Forester or Designates
- 3.2 All Contractors and Sub-Contractors for ORC and OLLs
- 3.3 Overlapping Licensee Holder or Designates (OLL)

4.0 Procedure

4.1 Prior to the start of operations, licensees or designates/contractors must acquire highway entrance permits from the Ministry of Transportation (MTO) and written approval from utility companies to operate across or within 30 metres of Right-of-Ways (ROWs) in accordance with the following:

- The **ORC Operations Forester or Designate** is responsible to review and ensure field personnel follow the specific utility's requirements and to acquire necessary permits and approvals for all contractor operations.
- **Overlapping Licensee Operations (OLL) Forester** is responsible to review and ensure field personnel follow the specific utility's requirements and for acquiring necessary permits and approvals and locates for forest operations conducted under their own Forest Resource License, and to notify the **ORC Operations Forester** of the utility line work being undertaken.

4.2 **ORC and Overlapping Licensee Operations (OLL) Forester** will notify the utility company or MTO for at least one month prior to anticipated start of operations to cross or work within 30 metres of a utility's or MTO's right-of-way and their associated facilities in order to ensure necessary permits and approvals are in place prior to operations .

4.3 Listed below are the typical utility companies and their contact phone numbers to acquire any necessary permits or approvals:

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4.5 The **ORC Operations Forester or Designate and Overlapping License Holder (OLL) or Designate** shall ensure that:

- They review with their personnel any specific direction from the **ORC Operations Forester or designate**, this work instruction and any additional special instructions on the permit/approval received from the utility company;
- Forest operations are conducted in accordance with specifications included in the approval or permit from the utility company;
- Affected areas along the ROW are flagged in accordance with the approval/permit to warn equipment operators of impending safety hazard;
- Warning signs are posted as required by the approval/permit & any regulations;
- Forest operations are conducted during daylight hours when working across or adjacent (within 30m) to utility right-of-ways;
- Forest operations are conducted, such that property bars are identified and protected when operating near highway right-of-ways.

5.6 The **ORC Contractors and Overlapping License Holder (OLL) or Designate** will report immediately to the respective utility company any contact made with utility equipment associated with the right-of-way (e.g. pipeline, buried cables, hydro wires etc) and notify the **ORC Operations Forester or Designate**.

5.7 The **ORC Operations Forester or designate, ORC Contractors, and Overlapping License Holder (OLL)** shall review and ensure field personnel follow the specific utility's requirements in the following (see Section 5.7.1):

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5.7.1 Operating Near Hydro Lines & Right-of-Ways:

1. Warning signs shall be erected prior to crossing underneath hydro lines and ensure warning signs are erected prior to traveling over top of buried cables. As an example:



2. When a piece of equipment is operated close enough to a live power line, and it is possible for any part of the equipment or its load to make contact with the power line the following must be adhered to:
 - a worker shall be stationed within the view of the operator to warn the operator when any part of the equipment is approaching the minimum distance from the live power line; and
 - clearance shall be allowed for any change in boom angle and for any swing of the hoisting cable and load.
3. Remove all standing timber within 30 metres of the Hydro right-of-way (e.g. no residual wildlife trees within 30m of the right-of-way).
4. Fell trees away from the transmission lines, and take precautions to ensure that any part of the tree (top, limbs or bole) does not come into contact with any transmission lines as they are being felled.
5. Section 60 of the Occupational Health and Safety Act (OHSA) states that to prevent heavy equipment or its load to make contact with a live power line, the following minimum distances must be kept between workers or equipment and live power lines.

For 750 to 150,000 volts line: 3 metres (10 feet)

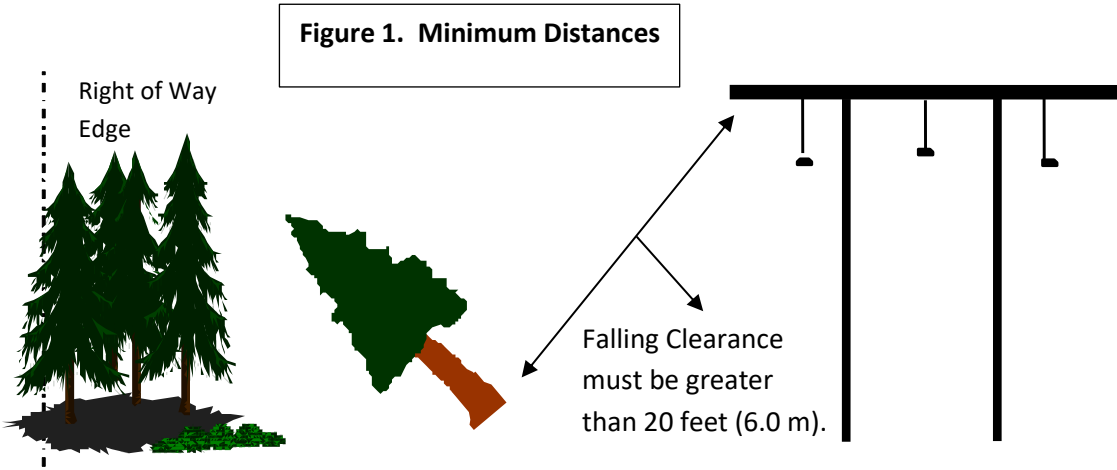
For 150,000 to 250,000 volts: allow 4.5 metres (15 feet)

For voltages over 250,000 volts: allow 6 metres (20 feet)

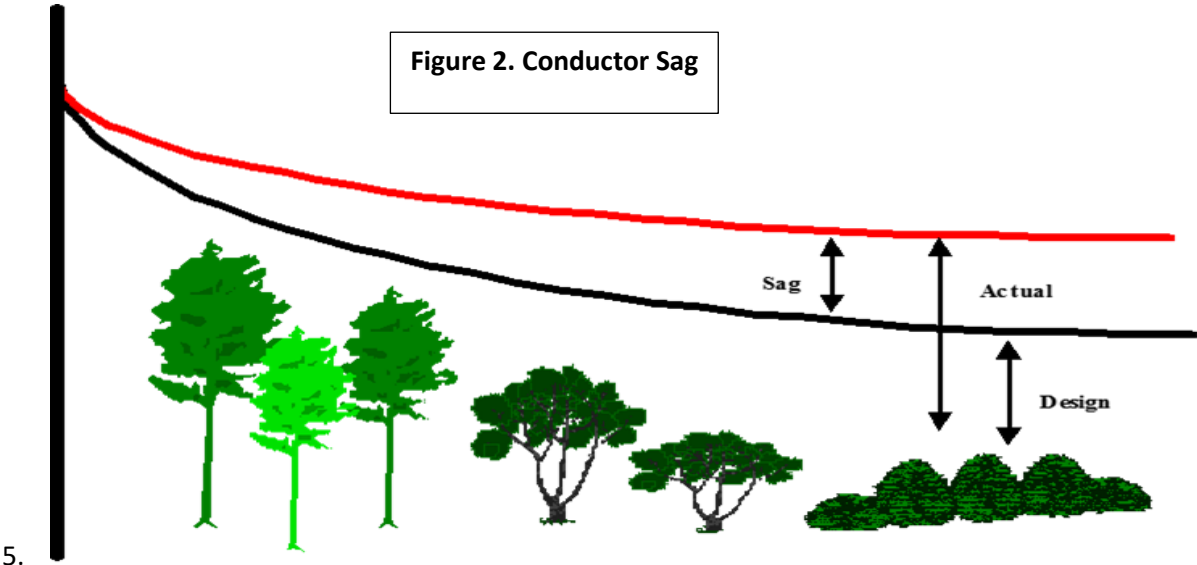
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* However, since most operators will not know the voltage in the line, the largest distance must be observed to always be on the safe side.

All Equipment Operators and machinery must remain a minimum of 20 feet (6.0 m) away from transmission lines and poles at all times as per the OHS Act. Where possible, extend boom to full extent to "reach" and grab trees directly adjacent to the transmission line right-of-way (see Figure 1).



4. Ensure conductor sag is considered during operation. This sag can change from hour to hour based on electricity load and differences up to 25 feet at mid-span have been noted in certain circumstances (see Figure 2).



5.

6. Landings will not be located within 30 m of the Hydro right-of-way, unless Hydro staff have provided written consent.
7. In the event that contact is made with a transmission line, the **Equipment Operator** will contact a supervisor immediately and follow safe work practices. Treat any and all power lines as live. If a line is broken as a result of felling activities, stay in the cab of the machine until Hydro Crews arrive, unless it is unsafe to do so.
8. If the **Equipment Operator** must exit the machine, do not touch the equipment and the ground at the same time. Jump clear of the equipment, land with both feet together and hop or shuffle your feet close together until you are a significant distance from the equipment, tree or downed line.

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References

Document / Form	I.D.#

Revisions

#	Purpose	Prepared by	Approved by	Date
N/A	Original version	EMS Team	Chantal Alkins Certification Coordinator	November 23, 2016
A				
B				
C				
D				
E				