



Ministry of Forests, Lands &
Natural Resource Operations



MEMO

December 2011

TO: All Instructors and Assessors

RE: Working Close to Energized High Voltage Equipment and Conductors

It has come to the attention of the Wildlife Tree Committee of BC (WTC) that uncertainty surrounds one’s perspective of working near to high voltage lines. Therefore, the WTC is providing clarification to the process required for you to be safe and to be compliant with the regulations protecting workers and the high voltage equipment and conductors.

The guidance for working near energized high voltage equipment and conductors is found within the Occupational Health and Safety Regulations, specifically OHS Regulation 19.24.1 which reads as follows:

19.24.1 Minimum approach distance when working close to exposed electrical equipment and conductors

Subject to section 19.24.2, or unless otherwise permitted by this Part, if exposed electrical equipment or conductors at a workplace have a voltage within a range set out in Column 1 of Table 19-1A, the following must remain at least the distance from the exposed electrical equipment and conductors that is set out in Column 2 opposite that range of voltage:

- (a) a person working at the workplace;
- (b) a tool, a machine, material or equipment at the workplace.

Table 19-1A		
Column 1 Voltage	Column 2 Minimum approach distance	
	Metres	Feet
Phase to phase		
Over 750 V to 75 kV	3	10
Over 75 kV to 250 kV	4.5	15
Over 250 kV to 550 kV	6	20

[Enacted by B.C. Reg. 312/2010, effective February 1, 2011.]

Where there is a possibility of a work activity being undertaken within the limits of approach (column 2, Table 10-1A) there must first be a safety plan prepared in consultation with the Power Authority. This will often require you to engage the services of a Certified Utility Arborist (CUA). During the planning phase of your project, obtain and complete the “Logging Near Powerlines” form and submit this to the Power Authority for their review and approval.

Remember if, for example, someone is felling a tree or operating equipment that may come within reach of the limits of approach, then the above process must have been followed before commencing work. It is not a matter of “what if my activity strikes the lines” but whether the activity comes within the above listed distances of the lines or equipment.

In the normal course of operations, if a branch falls onto an energized line, the high voltage conductor system automatically attempts to re-energize the lines following a delay. The CUA has the authority to issue an "Assurance of no Re-Close" to the section of high voltage lines adjacent to a workplace during the time when activities are being undertaken. This means that in the event there is contact with the lines, the lines are not automatically re-energized unless authorized by the attending CUA. This permits the safe clearing of a line should a tree being felled accidentally got caught in the lines. Someone could safely remove the hang-up under the direction of the CUA and be able to do such without the risk of the lines being re-energized.

Therefore, planners and supervisors must recognize the need to plan for the safety of workers when a work place is near to high voltage power lines. If there is a need to assess the perimeter areas for dangerous trees, then perform your dangerous tree assessment as required. Where there are activities occurring within 1 ½ tree lengths of the high voltage power lines, then this area will need to be evaluated by a CUA. For efficiency, attempt to have both types of assessments conducted simultaneously. Remember that the CUA is primarily concerned with trees which may jeopardize the power line, and not necessarily catch trees which pose a risk to workers in the workplace.

For further clarification on this topic please contact your nearest Power Authority or your local WorkSafe BC office.