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1. Purpose

This program has been developed with reference to Part 17 of the Alberta Occupational Health and Safety (OH&S) Code to establish guidelines to aid in reducing and eliminating accidental electrical equipment contacts and to assist workers who work in close physical proximity to electrical lines and equipment to work safely.

2. Scope

This Overhead Power Lines (OPL) Program aims to:

- x reduce the number of power outages;
- x reduce the cost of damaged equipment;
- x reduce the number of construction delays; and
- x reduce and eliminate accidental contact with electrical equipment and devices.

3. Responsibilities

4. Training

Overhead power line safety training is essential to ensure safety. The local Electrical Utility can be contacted for overhead power line information and training. The University's Electrical Utilities Division (EUD) can also be contacted for overhead power line and safety information.

5. Hazard Assessment

The HACF should be completed by the supervisor with participation from workers as necessary prior to any work activities. All workers should review the completed HACF. A FLHA should also be completed by workers prior to work activities.

Common hazards associated with overhead power lines include:

- x unsafe equipment or installation;
- x unsafe environment;
- x unsafe work practices;
- x faulty insulation;
- x improper grounding; -0.002 Tc 0.07.9(-4.9(g ( )Tj EM2C /LBody <</MCID 8)-6.643 /C2_)Tj1 Tf -10

allowing the heel of one foot to move beyond the toe of the other, or, hop with both feet together to a minimum distance of 10 metres or 33 feet.

- **Do Not Become a Victim:** Always call your local emergency services when someone is injured in an electrical accident. If they are still in contact with the electrical source and you touch them, you could be seriously injured or killed. Keep everyone back, a minimum distance of 10 metres or 33 feet and have someone call for help immediately.

Safe Limit of Approach Distances

If work is done or equipment operated within 7 metres of an energized overhead power line, the employer must contact the Electrical Utility to determine the voltage. The voltage of the line will then determine the safe approach distance for people and equipment. Once safe limits have been set they must be respected. The following limits must be maintained by both people and equipment:

Operating Voltage Between Conductors of Overhead Power Line	Safe Limit of Approach Distance for People and Equipment
0-750 volts (Insulated or polyethylene covered conductors)[(1)]	300 millimetres
0-750 volts (Bare, uninsulated)	1.0 metre
Above 750 volts (Insulated conductors)[(1)(2)]	1.0 metre

6. Standard Operating Procedure

Electrical utilities must always be considered to be live, with the potential of causing serious injury or death. Contact with electrical equipment such as overhead power lines must be avoided. All University employees must review or complete a SOP prior to any and all activities associated with overhead power lines.

Items to consider in the development of a SOP include:

- x step-by-step instructions for the task;
- x hazards associated with the task;
- x safe work positioning;
- x emergency procedures; and
- x PPE.

Factors to consider in developing a SOP include:

- x scope of work;
- x type of hoisting or other equipment that will be required;
- x height and reach of the equipment;
- x equipment placement;
- x equipment and material loading or unloading;
- x worker competency;
- x soil condition;
- x interruptions to electrical services;
- x hazard to the public;
- x use of ladders, pipe, and other conducting materials;
- x need to notify electric utility owner;
- x need to communicate all hazards to all workers;
- x changing conditions;
- x all other hazards present including gases and chemicals;
- x emergency response;
- x marking the locations of all overhead power lines on drawings and plans;
- x posting warning signs;
- x using a designated signaller;
- x marking the limits of approach on the ground with bright ribbons or ropes.

Emergency Response Plan

8. Related Documents

- Field Level Hazard Assessment (FLHA)