



YUKON ENERGY CORPORATION
Safe Work Planning Program



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A MESSAGE FROM YUKON ENERGY

Yukon Energy recognizes the electric utility industry experiences significantly higher accident severity rate than other industries. This is primarily due to low frequency/high consequence accidents such as electrical contacts and falls that account for most of the serious accidents within the industry.

The work environment in the electric utility industry exposes workers to potentially fatal hazards daily and requires frequent changes in work location, crew complement and work procedures. Similarly, there are many aspects of an electrical utility's activities, services, and products that can have an impact on the environment.

Consequently, electric utilities require an extensive Safe Work Planning Program in which safety and environmental considerations are incorporated into the design and construction phases and job plans are effectively communicated to all team members.

This Program is designed to complement and support other Yukon Energy safety standards.

Your continued commitment to the Yukon Energy safety program will help to ensure both employee safety and the efficient operation of the power system.

1.0 Scope

The purpose of the Yukon Energy **Safe Work Planning Program** is to provide information and guidelines for all workers at YEC facilities so that they are better able to:

- Reduce the risk of serious accidents and incidents;
- Provide an opportunity to identify and control hazards before the work begins;
- Improve communication between workers; and
- Effectively manage changes that occur during a project or job.

2.0 Definitions

2.1 From CSA Z1002-12 (R2017); Occupational health and safety – Hazard identification and elimination and risk assessment and control

Controls¹ — protective or preventive measures that reduce risk.

Hazard — a potential source of harm to a worker.

2.2 Other definitions

Competent Person – a person who possesses the knowledge, skills, training, and experience to enable him or her to perform an assigned duty, within the context of this Program.

JSA/Tailboard – Document used at YEC to record Safe Work Plans.

Operating Authority – The person designated by YEC to make decisions affecting operations of the power system.

Operator-in-Charge (OIC) – The employee designated by the Operating Authority to coordinate control of the power system or a portion thereof, in accordance with the requirements of established safety standards and operating standards and procedures. At YEC, the OIC is typically the SCC System Operator on shift.

Person-In-Charge (PIC) – The worker responsible for all workers in a work group, or groups, working on or around the same related power system facilities. When working alone, the worker is considered the PIC.

Worker – a person employed by or under the day-to-day control of Yukon Energy Corporation.

¹ Also called barrier(s).

3.0 Training Required

- YEC Safe Work Planning Program training sessions;
- Proper use and understanding of YEC JSA/Tailboard forms; and
- Proper use and understanding of other applicable YEC safety programs, policies, practices, and procedures.

4.0 Guidelines

4.1 Complete a JSA/Tailboard:

- At the beginning of, or prior to, each job;
- At the beginning of, or prior to, each day or shift, and
- When the work stops and must be carried out by a different crew.

4.2 Review the JSA/Tailboard:

- When there is a change in the work scope;
- When there is a change in crew members;
- When there is a change in supervision;
- When there has been a significant break in the work (See Note 1);
- When conditions change – site, weather etc.;
- When a crew member requests it;
- When a member of the public enters the work area.

Note - The potential for an incident increases following a break in the work.

For example, if a section of line was energized just prior to the break, there is an increased risk that an employee may be unaware or may have forgotten that this step took place.

Therefore, following shorter breaks in the work such as refreshment breaks and lunch breaks, it is necessary for the PIC to ensure that all crew members are aware of any changes that may affect their safety and review this information with the crew prior to restarting work.

For longer breaks such as several hours, it may be necessary to review the entire JSA/Tailboard. The Operating Authority or OIC may need to be part of the review, especially for changes in supervision, crew members and work scope.

4.3 **Communicate** the safe work plan to all workers on the project.

4.4 **Review** a JSA/Tailboard before 'signing on'.

4.5 Include environmental concerns in the planning process.

4.6 **Avoid** using computer-generated 'pre-printed' or 'pre-completed' JSA/Tailboard forms.

4.7 **Do not** use the words 'use caution' or 'be careful' as barriers unless you qualify the warning.

For example, use caution by walking slowly and taking deliberate steps.

- 4.8** Do not list PPE as your only barrier. Consider other barriers – elimination, engineering controls, administrative controls etc.
- 4.9** Do not sign on to a JSA/Tailboard that does not reflect your tasks. Instead, write a new one for your work.

5.0 Completing a JSA/Tailboard

A qualified person should complete the JSA/Tailboard. In most cases, this qualified person is the project PIC.

There are 4 basic steps for completing a JSA/Tailboard:

Step 1 - Write down the job steps

Once you have a clear understanding of the scope of work, you need to break it down into manageable steps. These steps are not only specific to the job, but also specific to the work area. If the work area changes, the work steps may need to change also.

If the steps are too detailed, the JSA/Tailboard will be difficult to follow. If they are not detailed enough, you may miss some hazards.

Step 2 - Identify the hazards

Identify and record the hazards associated with each step. Think about:

- What you are about to do;
- Why you are doing it;
- What is the setting in which you are conducting the work (e.g., near energized equipment, adjacent other workers, indoors, outdoors, near or over water/fish habitat, in permafrost rich soils).
- How can this hurt you or damage property;
- How your activities, accidents, or malfunctions could impact the surrounding environment;
- How to eliminate or reduce personal injury, property damage, or impacts to the environment;
- How people, equipment, materials and the surrounding environment can contribute to a hazard.

Step 3 – Implement effective controls (barriers)

Each hazard identified for the job steps, requires a control. The control explains how you will eliminate or reduce personal injury or property damage, or negative environmental effects.

CONTROLS MUST BE EFFECTIVE

Example 1 - Flagger tape around the edge of an elevated surface may warn somebody that there is a danger of falling; however, will not prevent them from falling. A properly installed railing, combined with appropriate PPE and correct practices/procedures will both warn people and help prevent them from falling.

Example 2 – Awareness that fuel/oil spills can occur and training to respond to spills will do little to address a spill should one occur. Advanced actions that aim to prevent spills in the first place will lessen the likelihood of occurrence and maintaining appropriate spill response equipment at the immediate work site will allow for quick response should such an incident occur.

Step 4 - Communicate the JSA

Communicate the JSA/Tailboard it with all workers involved. The JSA/Tailboard will not be effective if workers don't know it exists or understand it.

Before starting work, review the completed JSA/Tailboard with workers and make sure everyone knows how they are supposed to do the job.

6.0 Changes to work conditions

Work plans often change. When things change, the competent person (PIC) that completed the JSA must reflect any new hazards, and then communicate the amended JSA/Tailboard with all workers.

7.0 Responsibilities

7.1 Competent person (PIC)

- 7.1.1 Completing the JSA/Tailboard prior to commencing work;
- 7.1.2 Reviewing and revising the JSA/Tailboard when work plans change; or there is a significant break in the work;
- 7.1.3 Communicating the JSA/Tailboard to all workers involved.

7.2 Workers

- 7.2.1 Review the completed JSA/Tailboard prior to commencing work;
- 7.2.2 Confirm that they understand the completed JSA/Tailboard and 'sign on';
- 7.2.3 'Sign off' the JSA/Tailboard when they have completed their work on the project.

7.3 Leadhands, Supervisors, Managers, Directors

- 7.3.1 Communicate the Safe Work Planning Program to staff;
- 7.3.2 Ensure that workers are trained to use the JSA/Tailboard process;

- 7.3.3 Ensure that JSA/Tailboards are conducted and documented as required;
- 7.3.4 Review and monitor the quality and effectiveness of the JSA/Tailboard process;
- 7.3.5 Ensure JSA/Tailboards are forwarded to Records Management in a timely manner.

7.4 Health & Safety/Environment Department

- 7.4.1 Provide training as required for Safe Work Planning program;
- 7.4.2 Maintain training records;
- 7.4.3 Conduct periodic audits of completed JSA/Tailboard forms;
- 7.4.4 Communicate audit findings;
- 7.4.5 Update JSA/Tailboard documents as required.

8.0 Document retention

Forward completed JSA/Tailboard forms to Records Management for retention.
File numbers are located at the top, right-hand corner of the JSA/Tailboard form.

9.0 Resources

- CSA Z1002-12 (R2017); Occupational health and safety – Hazard identification and elimination and risk assessment and control
- Yukon Occupational Health and Safety Act; s.3 (1); and, s.9.
- Yukon Occupational Health and Safety Regulations; Part 1 – General; s.1.04.Yukon Energy Power System Work Standards (PSWS).