

## OSH Standard 201

### Worker Qualifications for Limits of Approach Authorization

#### 1. Scope

This standard applies to the process of authorization for workers intending to work for BC Hydro in proximity to exposed energized conductors or equipment of BC Hydro's power system in accordance with Safety Practice Regulation (SPR) Section 400, Limits of Approach (LOA).

#### 2. Purpose

The purpose of the standard is to:

- Identify the workers who can be authorized for LOA
- Establish worker qualifications for Qualified electrical workers (QEW) and Unqualified workers (Unqualified) in relation to LOA authorizations:
  - QEW LOA = qualified electrical workers permitted to work to the qualified electrical worker distance as defined in SPR section 400 Table 401 and Table 403.
  - Unqualified LOA = unqualified worker permitted to work to the unqualified distance as defined in the SPR section 400 Table 401.
  - CUA LOA = Certified utility arborist permitted to work to the WorkSafeBC table 19.3.
- Assist managers accountable for authorization in carrying out their responsibility for assigning LOA authorization to workers based on worker qualification, experience and competence.

#### 3. LOA Authorization Requirements

- 3.1 Each worker must be authorized by their manager as QEW LOA or Unqualified LOA. To determine if a worker qualifies for LOA authorization, Managers will determine each worker's understanding of the electrical hazards to which he or she will be exposed and the appropriate LOA authorization. To determine appropriate LOA authorization managers can use results of the SAFE-401a assessment, if available.
- 3.2 The authorization must be recorded in PSSP/WPP Manager as QEW, Unqualified or CUA.
- 3.3 When workers transfer, their LOA authorization must be reviewed by their new manager and be confirmed or changed as required in PSSP/WPP Manager.

## 4. Specific Worker Qualification Requirements

The specific requirements below (by category) apply to workers that may be seeking LOA authorization.

### 4.1 Qualified Electrical Workers

**4.1.1 Only experienced electrical utility trades or technical workers who have achieved and maintained their qualifications may be designated as Qualified Electrical Workers.** Recognized trades or technical classifications consist of Power Line Technicians, Electricians, Cable Splicers, Winders, CPC Technologists, P&C Technologists (Engineering), Instrumentation & Controls Technologists, Meter Technicians, Project Equipment Specialists, Electrical Engineers, Power Electrical Equipment Technologists (electrical diploma only), Diesel Station Attendants, Generation and Thermal Plant Operators, Electrical Engineering Technologists (Site Engineering and Acceptance) and Field Technicians 2 (Site Engineering and Acceptance, electrical diploma only).

**4.1.2 Only the following qualified electrical workers are permitted to provide Safety Watch for unqualified workers and their equipment in relation to high voltage electrical hazards (as referenced in SPR Table 401 and uninsulated equipment distance and SPR 805):** Power Line Technicians, Cable Splicers, Electricians and Winders.

**4.1.3 Worker's must meet the minimum requirements for QEW LOA Authorization as follows:**

1. Meet the requirements of a qualified electrical worker as outlined in 4.1.1.
2. Successful completion of SAFE-401 or equivalent training received through a BC Hydro Apprenticeship and authorized to at least PSSP Category 5 or WPP Category C.
3. BC Hydro Manager Authorization

The Safe 401 assessment is to be initiated by the manager when they deem the individual is ready which can typically take up to 6 months from their start of employment or contract. Prior to the assessment and/or where gaps have been identified after completion of the Safe 401 assessment, qualified electrical workers may work up to qualified electrical worker LOA distances specified in the SPR section 400 Table 401 and Table 403 if they are working under the direct and continuous supervision of a qualified electrical worker authorized to QEW LOA.

## 4.2 Certified Utility Arborists

4.2.1 Certified utility arborists (CUA) may be authorized to CUA LOA and work up to the distances specified in WorkSafeBC 19.3, if all of the following are met:

1. Authorized to at least PSSP Category 4.
2. BC Provincial Trade Certificate as a Certified Utility Arborist.
3. BC Hydro Manager Authorization, as CUA LOA, restricted to WorkSafeBC 19.3 distances.

4.2.2 Certified Utility Arborist Apprentices shall be authorized as Unqualified LOA, but may work up to the distances specific in WorkSafeBC 19.3 if they are working under the direct and continuous supervision of a Certified Utility Arborist authorized to CUA LOA.

## 4.3 Electrical workers in Training

4.3.1 Electrical workers in training (ie, apprentices, Graduate Technologists in Training) must be from one of the recognized trades or technical worker classifications in 4.1.1 and shall be authorized to Unqualified LOA and to at least PSSP Category 3 or WPP Category B.

4.3.2 These workers may work up to QEW LOA distances specified in SPR Table 401 if all of the following are met:

1. They are working under the direct and continuous supervision of a Qualified Electrical Worker authorized to QEW LOA.
2. They are working in accordance with the Level Requirements, established by the A&TTC or the Engineering GTT Subcommittee.

4.3.3 These workers may work up to the restricted work distances specified in SPR Table 403 if all of the following are met:

1. They are apprentice Power Line Technicians working on the Transmission System at voltages of 138 kV and above and they are working in accordance with the Level Requirements of their apprenticeship.
2. They are working under the direct and continuous supervision of a qualified electrical worker (Power Line Technician) authorized to QEW LOA.
3. They are performing work in accordance with an Approved work procedure.
4. For training of this nature, the Apprentice shall not be considered a Qualified Electrical Journeyman for the

interpretation of Safety Practice Regulation crew complement requirements.

4.3.4 These workers may participate in high voltage rubber glove field training if all of the following are met:

1. They are apprentice Power Line Technicians working in accordance with the Level Requirements of their apprenticeship.
2. They are working under the direct and continuous supervision of a Qualified Electrical Worker (Power Line Technician) authorized to QEW LOA and certified in rubber glove work procedures.
3. They have received formal classroom rubber glove training by a Trades Training Instructor, and have demonstrated technical competence at an approved training facility.
4. For training of this nature, the Apprentice shall not be considered a Qualified Electrical Journeyman for the interpretation of Safety Practice Regulation crew complement requirements.

#### 4.4 Unqualified Workers

4.4.1 Workers that do not meet the requirements stated in sections 4.1 to 4.3 are considered unqualified. These workers must maintain Unqualified LOA distances.

Note: Unqualified workers and their equipment may work up to the uninsulated equipment distance specified in SPR Table 401 when continuously directed by a qualified electrical worker as defined in 4.1.2.

## 5. References

- 5.1 BC Hydro Safety Practice Regulations Rule 401, 402 and 403 Limits of Approach to Exposed Energized Conductors and Equipment.
- 5.2 WorkSafeBC Occupational Health and Safety Regulation Part 19 “Electrical Safety”.

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### Revision Rationale:

February 3, 2020 major edit:

- a) Update the wording to reflect new Limits of Approach rules.

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