

WORKING NEAR POWERLINES

Assume they are live. MAD is a wall. Table 19-1A.

Rev 01 Effective 2026-09-01 Review 2027-09-01 Printed copy uncontrolled

PURPOSE

Keep boom, load, tag lines and people outside the minimum approach distance BC Hydro and WorkSafeBC Table 19-1A name for this voltage.

SCOPE

Any lift under this program where overhead or buried electrical lines exist, or might exist. BC Hydro system or any other utility - the same table. Buried: look down, locate, do not assume the pad is empty.

This document is the method - the steps. Hazards and residual risk for the same work are in the JHA library. A procedure is not a hazard analysis.

TABLE 19-1A - LIMITS OF APPROACH. INTACT LINES. PHASE TO PHASE.

VOLTAGE	METRES	FEET
Under 750 V - service / secondary (BC Hydro)	1	4
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

VOLTAGE NOT VERIFIED - UNTIL BC HYDRO NAMES IT.

LINE	METRES	FEET
Distribution	3	10
Transmission	6	20

DOWNED, DAMAGED, OR CONTACT. STAY BACK. CALL 911.

CONDITION	METRES	FEET
Fallen line or equipment contact - BC Hydro 3 keys	10	33
Downed transmission or manhole - BC Hydro overhead-system	33	108

PROCEDURE

01 FIND THE LINES

Look up. Look down. Ask the site. Do not trust a single drawing. Service drops, distribution, transmission - all of them.

02 VOLTAGE AND MAD

Voltage from BC Hydro or the owner - Express Connect 1 877 520 1355. Table 19-1A is the wall: 1 m under 750 V, 3 m to 75 kV, 4.5 m to 250 kV, 6 m to 550 kV. Unknown: 3 m off distribution, 6 m off transmission, until they verify. If you cannot keep MAD, it is not a crane job until 30M33 is signed.

03 SPOTTER

When the boom, load or tag line can encroach, a dedicated spotter whose only job is the line. STOP means stop.

04 LIMIT THE CRANE

Plan, chart, and any zone-limiting device. Tower crane: 19.24.1(2) - fit and use a limiter if practicable. Do not "be careful" as the control.

05 CONTACT

Stay on the crane unless fire or shock forces you off. Nobody approaches - 10 m, 911. Downed transmission or manhole: 33 m. If you must get off: jump clear, feet together, shuffle away. Briefed before the lift, not during the contact.

RESPONSIBILITIES

THIS PROGRAM

The published method for the work. Stop-work is named in it. It does not own the site.

SUPERVISOR

Confirms the plan, the crew, the zone and the stop criteria. Owns whether the hook moves.

CRANE OPERATOR

Runs only the machine they are competent on, to the chart, after inspection. Stops on an unclear signal or a broken plan.

RIGGER

Selects, inspects and applies the hitch. Does not guess weight, centre of gravity or angle.

SIGNALPERSON

One set of hands on the crane. Holds the zone. STOP means stop.

WORKER

Works to this program and to site rules - whichever is stricter. Uses the three rights. Reports damaged gear.

REQUIRED COMPETENCY

Operator and supervisor who can name the MAD for this voltage
Spotter when the boom or load can encroach

EQUIPMENT

Spotter
Range / zone limiting if fitted and used
PROVEN-FRM-037
Coded 30M33 if MAD cannot be held

PPE

Hard hat
CSA-grade footwear
High-visibility clothing
Eye protection
Task-rated gloves
Hearing protection where required
Fall protection where the work exposes a fall

PROHIBITED PRACTICES

Guessing voltage
Treating unknown as 3 m when it might be transmission
Using a two-by-four to hold the line
Tag lines that can blow into a line
Entering MAD without a signed 30M33

EMERGENCY RESPONSE

Do not touch the crane or the load. People back 10 m - 33 m if it is transmission or a manhole. Call 911 and BC Hydro. Operator stays on unless fire or shock. The supervisor and the employer at the workplace are notified immediately.

DOCUMENTATION

FLHA
PROVEN-FRM-037
Coded 30M33 if issued
This SWP number and revision

REFERENCES

Workers Compensation Act s. 21 - known or reasonably foreseeable hazards; instruction and supervision
OHS Regulation (B.C. Reg. 296/97, in force 15 Apr 1998) Part 3 - OHS program, instruction, inspections
OHS Regulation Part 4 s. 4.13 - risk assessment where rescue or evacuation may arise
OHS Regulation Part 8 - PPE; headwear CSA Z94.1-05 or Z94.1-15
OHS Regulation Part 11 - fall protection
OHS Regulation Part 14 - Cranes and Hoists
14.2(5) - CSA Z150-1998, or ASME B30.5-2004, or ASME B30.22-2005 (articulating boom)
14.2(6) - CSA Z248-2004 for tower, hammerhead and self-erecting tower cranes
14.35 pre-use inspection 14.36 load weight 14.42.1 critical lift 14.44 loads over work areas 14.45 unattended loads
14.47-14.49 signals
OHS Regulation Part 15 - Rigging
Manufacturer load chart, manual and configuration limits
Site lift plan, FLHA and site rules where stricter
OHS Regulation Part 19 s. 19.24.1 and Table 19-1A - minimum approach distance for persons, tools, machines, material and equipment
19.24.1(2) - tower crane zone-limiting device if practicable
Form 30M33 - assurance in writing if MAD cannot be maintained. Only the coded WorkSafeBC form. Part 19.
14.52.1 - high voltage electrical equipment and cranes
BC Hydro Working near power lines - same Table 19-1A. Express Connect 1 877 520 1355.
BC Hydro: unknown voltage - 3 m distribution, 6 m transmission, until they verify.
BC Hydro: fallen line or contact - 10 m, call 911. Downed transmission or manhole - 33 m.

LINKS

JHA - WORKING NEAR POWERLINES - PROVEN-JHA-013 -> </safety/jha/working-near-powerlines>
POWERLINE RECORD - PROVEN-FRM-037 -> </safety/form/powerline-30m33>
BC HYDRO - WORKING NEAR POWER LINES ->
<https://www.bchydro.com/safety-outages/electrical-safety/worker-training.html>
WORKSAFEBC - PLAN FOR 10 ->
<https://www.worksafebc.com/en/about-us/news-events/campaigns/planning-work-around-high-voltage-equipment>
WORKSAFEBC FORM 30M33 ->
<https://www.worksafebc.com/en/resources/health-safety/forms/assurance-of-compliance-with-occupational-health-and-safety-regulation-part-19-form-30m33?lang=en>