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January 30, 2019

Mr. Patrick Wruck
Commission Secretary and Manager
Regulatory Support
British Columbia Utilities Commission
Suite 410, 900 Howe Street
Vancouver, BC V6Z 2N3

Dear Mr. Wruck:

**RE: British Columbia Utilities Commission (BCUC or Commission)
British Columbia Hydro and Power Authority (BC Hydro)
Meter / Meter Base Fire or High Temperature Safety Incident Semi-annual
Compliance Report No. 5 – July 1, 2018 to December 31, 2018 (Report)**

BC Hydro writes in compliance with Commission Order No. G-124-16 (the **Order**). The Order directs BC Hydro to provide semi-annual reporting for three years to the Commission 30 days after June 30 and December 31 on all incidents where a meter and/or meter base is reasonably assessed to be the likely or possible source of a high temperature or fire event that results in the meter and/or meter base replacement.

This fifth Semi-annual Compliance Report provides a listing of all incidents with heat or arcing causing heat at the meter and/or meter base recorded in either the Distribution Trouble and Outage Report (**DTOR**) system or the Incident Management System (**IMS**), as well as any additional observations from the meter shop review process, for the six-month period ending December 31, 2018.

Semi-Annual Compliance Report No. 5

The DTOR system is used to record all BC Hydro trouble calls, the IMS is used to record all safety related incidents or near misses, and the field returned meter shop review process documents observations of meters returned during routine operational work orders.

There were a total of 33 incidents with heat or arcing causing heat at or around the meter and/or meter base between July 1, 2018 and December 31, 2018.

The table below categorizes these heat or arcing causing heat incidents based on BC Hydro's detailed review of the relevant records. Attachment A includes a listing of

each incident with the corresponding meter serial number and summaries of Power Line Technician, Meter Technician, Meter Engineer, and/or Meter Shop comments.

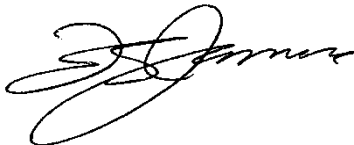
Category	Description	Number of Incidents
Abnormal Voltage	Customer voltage is outside limits (high or low) for the service class. Example is corrosion in the meter base causes high resistance, low voltage.	3
Electrical Overload	Customer load exceeds load rating of the customer's main breaker, creating overheating of customer equipment, including the meter base.	5
Meter Base	Electrical incident caused by mechanical failure of one or more meter base components.	25
Total		33

As per previous reporting, BC Hydro attends structure fires at the request of local fire departments to shut off power, allowing first responders to safely deal with the situation. In this reporting period, the DTOR notation indicates meters were removed by a crew or consumed by the structure fire for 238 incidents. There is no indication any of these meters have been retained by Fire Investigators.

Removal of a meter follows the process where the meter is transported to the meter shop for testing and/or recycling, quarantining, or disposal. Any meters that exhibit heat or arcing causing heat at the meter and/or meter base are assessed as part of the meter shop review process and included in the applicable semi-annual compliance report.

For further information, please contact Geoff Higgins at 604-623-4121 or by email at bchydroregulatorygroup@bchydro.com.

Yours sincerely,



Fred James
Chief Regulatory Officer

cu/rh

Enclosure

**Meter / Meter Base Fire or High Temperature
Safety Incident**

Semi-Annual Compliance Report No. 5

**Attachment A
Incident Listing**

PUBLIC

Incident Listing

No.	Meter Serial Number	Category	BC Hydro Observations / Comments
1	██████	Electrical Overload	Heat - Post Install - Electrical overload on the conductors. Indication of overheating on line side left jaw resulting in loose jaw and subsequent melting of the meter terminal and backplate.
2	██████	Abnormal Voltage	Heat - Post Install - Abnormal voltage incident on the load side of a three-phase delta service caused the protection within the meter to expire. Meter base and meter burnt up due to incident.
3	██████	Meter Base	Heat - Post Install - Discoloration on left side of meter consistent with a loose meter base jaw issue. New meter installed after meter base was repaired.
4	██████	Meter Base	Arcing - Post Install - Discoloration on all terminals and backplate consistent with loose meter base jaws. New meter installed after meter base was repaired.
5	██████	Electrical Overload	Heat - Post Install - Three-phase service delta connected customer-load meter failure due to internal pressure build up from excessive voltage surge and customer protection deficiency. Will refer customer protection equipment to Technical Safety B.C.
6	██████	Meter Base	Heat - Post Install - Discoloration on three terminals and backplate consistent with loose meter base jaws. New meter installed after meter base repairs.
7	██████	Meter Base	Heat - Post Install - Indications of heat on all meter lugs and melting consistent with loose meter base jaws. New meter installed.
8	██████	Meter Base	Heat - Post Install - Meter Exchange. Indications of heat on three terminals and backplate consistent with loose meter base jaws. Signs of heat on the backplate of the meter. Disconnected for customers to make repairs.
9	██████	Meter Base	Heat - Post Install - Indications of heat on all blades and slight melting of molded base consistent with loose meter base jaws. New meter installed.
10	██████	Meter Base	Heat - Post Install - Indications of heat on the line side terminals and backplate consistent with a loose meter base jaw issue. New meter installed. Functioning meter. Crew was able to obtain reading from meter.
11	██████	Meter Base	Heat - Post Install - Indications of heat on the meter lugs consistent with loose meter base jaws. Customer made alterations on load side of meter.

No.	Meter Serial Number	Category	BC Hydro Observations / Comments
12	██████	Meter Base	Heat - Post Install - Meter Exchange. Indications of heat on all four meter lugs. Meter base found burned. New meter was installed after customer completed repairs.
13	██████	Meter Base	Heat - Post Install - Meter Exchange. Indications of heat on the left side of the meter base jaws and discoloration on cable conductor. New meter installed.
14	██████	Electrical Overload	Heat - Post Install - Meter Exchange - No indications of heat on meter. Upon removing meter, a jumper was discovered from line to load on one side of the socket. Load side cables show signs of heat. New meter installed after customer repairs.
15	██████	Electrical Overload	Heat - Post Install – Heat indication on the meter lugs and the rear internal parts consistent with overload. The service conductor was melted between the transformer and service entrance due to overload. Service was disconnected service at pole.
16	██████	Meter Base	Heat - Post Install - Meter Exchange. Discoloration and pitting on the meter lugs consistent with loose meter base jaws. Service disconnected for customer to complete repairs.
17	██████	Electrical Overload	Heat - Post Install - Meter partially damaged due to internal pressure build up from line fault or voltage surge. Meter sent to Itron for further investigation.
18	██████	Abnormal Voltage	Heat - Post Install - Three-phase 240V delta service and connected load meter failure. Customer's electrician to make repairs.
19	██████	Meter Base	Arcing - Post Install - Signs of arcing in the meter base indicate cause of failure to meter and meter base damage. New meter installed after customer made repairs.
20	██████	Meter Base	Heat - Post Install - Found meter jaw burnt off inside meter base. Advised customer to call electrician to make repairs.
21	██████	Meter Base	Heat - Post Install - Damaged meter due to burnt meter base. Service disconnected and meter removed for customer to make repairs.
22	██████	Meter Base	Heat - Post Install - Found broken jaw in meter base. Disconnected at pole for safety.
23	██████	Meter Base	Arcing - Post Install - Found meter base jaws in poor condition showing evidence of overload. Customer to replace meter base before being reconnected. Service disconnected at the pole.
24	██████	Meter Base	Heat - Post Install - Found burnt lug at the back of the meter due to incorrect installation. Functioning meter. Meter replaced.

No.	Meter Serial Number	Category	BC Hydro Observations / Comments
25	[REDACTED]	Meter Base	Heat - Post Install - Burnt jaw in meter base. Disconnected for repairs.
26	[REDACTED]	Meter Base	Heat - Post Install - Neutral lug found burnt. Disconnected service for customer to make repairs.
27	[REDACTED]	Meter Base	Heat - Post Install - Small burn marks found on meter lugs.
28	[REDACTED]	Meter Base	Heat - Post Install - Indications of heat on meter base. Disconnected meter for customer to make repairs.
29	[REDACTED]	Meter Base	Arcing - Post Install - Signs of arcing on the left jaw of the meter. Found loose jaw on meter base. Tested meter and its functioning. Replaced meter after repairs to meter base.
30	[REDACTED]	Meter Base	Heat - Post Install - Found burnt jaws in meter base. Functioning meter. Customer completed repairs and new meter installed on site.
31	[REDACTED]	Meter Base	Heat - Post Install - Found one burnt jaw in meter base. Meter to be installed after customer completed repairs.
32	[REDACTED]	Meter Base	Heat - Post Install - Meter base showing signs of overheating. Advised customer to make repairs.
33	[REDACTED]	Abnormal Voltage	Heat - Post Install - Damaged meter base socket and melted meter. Electrician noted voltage issues. Disconnected at the pole for repairs.