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July 31, 2018

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. 4 – January 1, 2018 to June 30, 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 fourth 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 June 30, 2018.

Semi-annual Compliance Report No. 4 includes an additional eight incidents with signs of heat or arcing causing heat at the meter and/or meter base not considered in previous semi-annual reporting periods. Attachment B includes six incidents from July 1, 2017 to December 31, 2017, and Attachments C and D includes an incident each from January 1, 2017 to July 31, 2017 and July 1, 2016 to December 31, 2016, respectively.

Semi-Annual Compliance Report No. 4

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 review process documents observations of meters returned during routine operational work orders.

There were a total of 30 incidents with heat or arcing causing heat at or around the meter and/or meter base between January 1, 2018 and June 30, 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.

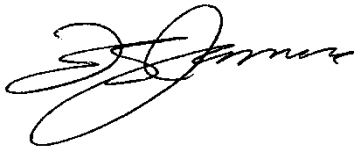
Category	Description	Number of Incidents
Abnormal Voltage	Customer voltage is outside limits (high or low) for the service class. Example is corrosion in the meter base causes high resistance, low voltage	1
Meter Base	Electrical incident caused by mechanical failure of one or more meter base components	29
Total		30

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 156 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. 4

**Attachment A
Incident Listing**

PUBLIC

Incident Listing

No.	Meter Serial Number	Category	BC Hydro Observations / Comments
1	[REDACTED]	Meter Base	Heat - Post Install - Fluctuating voltage call. Small burn damage to the back of the meter. Functioning meter. Crew was able to obtain reading from meter. Meter replaced.
2	[REDACTED]	Meter Base	Heat - Post Install - Meter base jaws are showing heating effect. Bad connectors found at the weather head and pole. Made new connections.
3	[REDACTED]	Meter Base	Heat - Post Install - Meter lug broken in the base and melted the plastic on the back of the meter. Functioning meter. Crew was able to obtain reading from the meter. Meter replaced.
4	[REDACTED]	Meter Base	Heat - Post Install - Demolition request. Melted lugs in the meter base discovered during removal of previously disconnected meter. Functioning meter. Crew was able to obtain reading from the meter.
5	[REDACTED]	Meter Base	Heat - Post Install - Burnt meter base. Customer was disconnected to allow for repairs to meter base before being re-energized.
6	[REDACTED]	Meter Base	Heat - Post Install - Burnt meter lug connection in meter base. Functioning meter. Crew was able to obtain reading from meter. Customer was disconnected to allow for repairs to meter base before being re-energized.
7	[REDACTED]	Meter Base	Heat - Post Install - Damaged meter base and meter found melted. Service disconnected to allow the customer to make repairs.
8	[REDACTED]	Meter Base	Heat - Post Install - Burnt connection at the pole also burnt up the meter base. Customer was disconnected to allow for repairs to meter base.
9	[REDACTED]	Meter Base	Arcing – Post Install – Meter exchange. Arcing at meter base jaws causing slight melting around the meter terminal. Service disconnected to allow the customer to make repairs.
10	[REDACTED]	Meter Base	Heat – Post Install – Meter exchange. Meter burnt at the lugs. Service disconnected to allow the customer to make repairs.
11	[REDACTED]	Meter Base	Arcing – Post Install – Fluctuating voltage call. Signs of arcing at meter base jaws. Customer contracted electrician attended and changed meter jaws and main breaker, and new meter installed.

No.	Meter Serial Number	Category	BC Hydro Observations / Comments
12	██████	Meter Base	Arcing - Post Install - Customer meter base shorting out behind meter. Service disconnected to allow the customer to make repairs.
13	██████	Meter Base	Heat - Post Install - Damaged meter base and meter found melted into meter base. Service disconnected to allow the customer to make repairs.
14	██████	Meter Base	Heat - Post Install - Fluctuating voltage call. Burnt jaw inside meter base. Service disconnected to allow the customer to make repairs.
15	██████	Meter Base	Heat - Post Install - Meter base lugs burnt, damaging meter. Service disconnected to allow the customer to make repairs.
16	██████	Meter Base	Heat - Post Install - Meter base and meter burnt from an electrical short. Repairs completed to meter base jaws and meter replaced.
17	██████	Meter base	Heat - Post Install - Hot lug in meter base on load side. Melted meter back plate. Functioning meter. Crew was able to obtain reading from meter. Customer completed repairs and new meter installed.
18	██████	Meter Base	Heat - Post Install – Loose jaw and back of meter with burn marks. Service disconnected for customer to complete repairs.
19	██████	Meter Base	Heat - Post Install – Loose jaw and meter showing signs of melting on the back plate. Service disconnected for customer to complete repairs.
20	██████	Meter Base	Heat - Post Install - Meter found seated incorrectly with no ring or seal. Customer indicated prior repairs on meter base had taken place. Crew observed new meter base left side jaws appeared too large for base causing meter to melt.
21	██████	Meter Base	Heat - Post Install - Burnt meter base jaw causing melting on the back cover of the meter. Functioning meter. Crew was able to get reading from meter.
22	██████	Meter Base	Heat - Post Install - Meter Replacement. Incompatible meter base for three-phase P967 meter. Indications of heat and melting on meter back plate consistent with hot socket.
23	██████	Meter Base	Heat - Post Install - Meter Replacement. Traces of smoke and melting on the back plate of meter consistent with hot socket.
24	██████	Meter Base	Heat - Post Install - Meter Replacement. Discoloration on left side of meter consistent with a loose meter base jaw issue. Functioning meter. Crew was able to get reading from meter.

No.	Meter Serial Number	Category	BC Hydro Observations / Comments
25	[REDACTED]	Meter Base	Arcing - Post Install - Meter Replacement. Right meter base jaw is arcing causing signs of heat in meter base, and damage to wires and meter. Functioning meter. Crew was able obtain reading from meter.
26	[REDACTED]	Abnormal Voltage	Heat - Post Install - Three Phase service. Phase C Metal Oxide Varistor (MOV) damage causing smoke buildup on the inner cover. Further investigation is pending.
27	[REDACTED]	Meter Base	Heat - Post Install - Meter Replacement. Top left meter base jaw is burnt up causing the back of the meter to melt.
28	[REDACTED]	Meter Base	Heat - Post Install - Meter Replacement. Meter base jaw on load side opening up causing back of the meter to melt. Customer completed repairs and new meter installed.
29	[REDACTED]	Meter Base	Heat - Post Install - Indication of heat on meter back plate consistent with hot socket issue. Functioning meter. Crew was able obtain reading from meter.
30	[REDACTED]	Meter Base	Heat - Post Install - Burnt right meter base jaw causing melting on the back cover of the meter. Service disconnected for customer to complete repairs.

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

Semi-Annual Compliance Report No. 4

Attachment B

**Incident Listing
July 1, 2017 to December 31, 2017**

PUBLIC

Incidents for the period from July 1, 2017 to December 31, 2017 (Not Previously Reported)

No.	Meter Serial Number	Category	BC Hydro Observations / Comments
1	[REDACTED]	Meter Base	Heat – Post Install – Meter Replacement. Indication of heat at the back plate of the meter, near all four blades. Consistent with hot socket. Customer was disconnected to make repairs to meter base. Meter replaced.
2	[REDACTED]	Meter Base	Heat - Post Install - Meter Replacement. Burnt terminals in the meter base, damaging meter. Service disconnected to allow the customer to make repairs. Meter replaced.
3	[REDACTED]	Meter Base	Heat - Post Install - Meter Exchange. Observed burn marks on the back of the meter consistent with loose meter base jaws. Service disconnected to allow the customer to make repairs. Meter exchanged.
4	[REDACTED]	Meter Base	Heat - Post Install - Meter Replacement. Burnt meter base with damaged wires and damaged meter. Observed burn mark on the left side the meter. Service disconnected to allow the customer to make repairs. Meter replaced.
5	[REDACTED]	Meter Base	Heat - Post Install - Burnt meter base. Service disconnected to allow the customer to make repairs to meter base. Observed melting around the meter terminals and discoloration on the left side of the meter.
6	[REDACTED]	Meter Base	Heat - Post Install - Crew investigated and found burnt meter base lugs. Customer's electrician replaced lugs and the meter was re-installed.

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

Semi-Annual Compliance Report No. 4

Attachment C

**Incident Listing
January 1, 2017 to June 30, 2017**

PUBLIC

Incidents for the Period from January 1, 2017 to June 30, 2017 (Not Previously Reported)

No.	Meter Serial Number	Category	BC Hydro Observations / Comments
1	[REDACTED]	Meter Base	Heat - Post Install - Burnt meter lug connection in meter base. Functioning meter. Crew was able to obtain reading from meter. Service disconnected to allow the customer to make repairs. Meter replaced.

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

Semi-Annual Compliance Report No. 4

Attachment D

**Incident Listing
July 1, 2016 to December 31, 2016**

PUBLIC

Incidents for the period from July 1, 2016 to December 31, 2016 (Not Previously Reported)

No.	Meter Serial Number	Category	BC Hydro Observations / Comments
1	[REDACTED]	Meter Base	Heat – Post Install – Meter Replacement. Smoke trace on front cover and inner cover of meter. No apparent damage on all baldes and terminals. Meter replaced.