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July 30, 2020

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. 8 – January 1, 2020 to June 30, 2020 (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 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 eighth 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, 2020.

Semi-annual Compliance Report No. 8 includes an additional seven incidents with signs of heat or arcing causing heat at the meter and/or meter base not considered in previous reporting periods. Attachment B includes seven incidents that occurred from July 1, 2019 to December 31, 2019 not received and / or reviewed by the Meter Shop in time for inclusion in Semi-annual Compliance Report No. 7.

Semi-Annual Compliance Report No. 8

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 27 incidents with heat or arcing causing heat at or around the meter and/or meter base recorded or identified between January 1, 2020 and June 30, 2020.

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	0
Electrical Overload	Customer load exceeds load rating of the customer's main breaker. This create overheating of customer equipment, incl. the meter base	0
Meter Base	Electrical incident caused by mechanical failure of one or more meter base components	27
Unknown	No cause for electrical incident can be identified. Further investigation may be required.	0
Total		**27**

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 215 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.

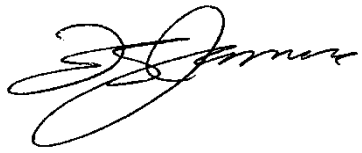
Update on Incidents Requiring Further Investigation

In Semi Annual Compliance Report No. 7, BC Hydro reported on four incidents requiring further investigation. For three of the four incidents, the meters are with Itron for further analysis and investigation as per our evaluation procedures. BC Hydro is unable to include an update in this report due to delays in Itron receiving the meters and in conducting the investigation due to precautions taken in response to the COVID-19 pandemic. BC Hydro will provide the results of the investigation into those three incidents once it is available. The investigation for one of the incidents is complete and the update is provided in the table below.

Meter Serial Number	BC Hydro Observations / Comments in Report No. 7	Investigation Update
[redacted]	Unknown - Post Install – Trouble call. Call comments note customer observed sparks around the meter. Crew did not find any evidence of arcing. Functioning meter. Crew was able to obtain reading. Meter replaced for added precaution. Further investigation required. Will provide an update on the investigation in a future report.	BC Hydro has examined the meter and has found no signs of heat on the meter. The incident has been categorized as non-meter related.

For further information, please contact Chris Sandve at 604-974-4641 or by email at bchydroregulatorygroup@bchydro.com.

Yours sincerely,



Fred James
Chief Regulatory Officer

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Enclosure

BC Hydro
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Meter / Meter Base Fire or High Temperature Safety Incident

Semi-Annual Compliance Report No. 8

Attachment A

Incident Listing

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Incident Listing

No.	Meter Serial Number	Category	BC Hydro Observations / Comments
1	[redacted]	Meter Base	Heat – Post Install – Intermittent outage call. Crew observed indications of heat on meter base. Disconnected for customer to make repairs.
2	[redacted]	Meter Base	Arcing – Post Install – Trouble call. Crew noted damage on the meter base. Disconnected and advised customer to call electrician to make repairs.
3	[redacted]	Meter Base	Heat – Post Install – Trouble call. Crew observed signs of heat and discoloration on the meter base lugs. Meter functioning. Crew was able to obtain reading from meter. Customer advised to seek qualified electrician to examine heat pump and electric panel.
4	[redacted]	Meter Base	Heat – Post Install – Trouble call. Crew indicated that the meter and meter base was burnt. Disconnected for customer to make repairs.
5	[redacted]	Meter Base	Heat – Post Install – Trouble call. Crew observed indications of heat on the meter base and meter. Disconnected for customer to make repairs.
6	[redacted]	Meter Base	Heat – Post Install – Trouble call. Crew observed indications of heat on the meter base lugs and the meter. Meter functioning. Crew was able to obtain reading from meter. Disconnected for customer to make repairs.
7	[redacted]	Meter Base	Arcing – Post Install – Trouble call. Customer observed sparks coming from the back of the meter base. Disconnected service at customer's request and removed meter for customer to make repairs to the meter base. Meter functioning. Crew was able to obtain reading from meter.
8	[redacted]	Meter Base	Heat – Post Install – Non-functioning meter exchange. Discoloration on and melting around meter lugs consistent with loose meter base jaws. Smoke trace inside front cover of the meter. Disconnected for customer to make repairs. New meter installed.
9	[redacted]	Meter Base	Heat – Post Install – Trouble call. Crew observed burnt meter base. Disconnected service to allow customer's electrician to make repairs.

No.	Meter Serial Number	Category	BC Hydro Observations / Comments
10	[redacted]	Meter Base	Heat – Post Install – Intermittent outage call. Crew observed burnt meter base and indicated meter base needs to be replaced.
11	[redacted]	Meter Base	Heat – Post Install – Trouble call. Crew noted the meter base had been tampered with. Observed burnt jaw on one side of meter base. Crew disconnected for customer to make repairs. Meter functioning and left on site for repairs.
12	[redacted]	Meter Base	Arcing – Post Install – Intermittent outage call. Arcing seen by customer at the meter base. Crew disconnected for customer to make repairs. Meter functioning and left on site to be reinstalled after repairs.
13	[redacted]	Meter Base	Heat – Post Install – Intermittent outage call. Crew observed signs of heat on the back of the meter. Disconnected to allow customer's electrician to make repairs to the meter base.
14	[redacted]	Meter Base	Arcing – Post Install – Trouble call. Crew noted arcing on the meter base lugs. Crew disconnected for customer's electrician on-site to make repairs. Service re-connected.
15	[redacted]	Meter Base	Heat – Post Install – Intermittent outage call. Crew observed melting at the meter terminals and corrosion and damage to the meter base. Disconnected to allow customer's electrician to make repairs. New meter to be installed after repairs.
16	[redacted]	Meter Base	Arcing – Post Install – Trouble call. Arcing seen by customer at the meter base, causing damage to the meter. Crew disconnected for customer to make repairs. Meter functioning. Crew was able to obtain reading from meter and new meter installed after repairs.
17	[redacted]	Meter Base	Heat – Post Install – Low voltage outage call. Crew observed burnt meter base. Meter functioning. Crew was able to obtain reading from meter. Disconnected for customer to make repairs.
18	[redacted]	Meter Base	Heat – Post Install – Trouble call. Crew noted meter base lugs were overheating due to load. Disconnected for customer to make repairs to the meter base.
19	[redacted]	Meter Base	Heat – Post Install – Fluctuating voltage call. Crew observed burnt meter base. Disconnected for customer to make repairs.
20	[redacted]	Meter Base	Arcing – Post Install – Trouble call. Arcing seen by customer at the meter base. Crew disconnected for customer to make repairs.

No.	Meter Serial Number	Category	BC Hydro Observations / Comments
21	[redacted]	Meter Base	Heat – Post Install – Non-functioning meter exchange. Discoloration on and melting around the meter lugs consistent with loose meter base jaws. Disconnected for customer to make repairs. New meter installed.
22	[redacted]	Meter Base	Heat – Post Install – Non-functioning meter exchange. Discoloration on and melting around meter lugs consistent with loose meter base jaws. Smoke trace on front cover of meter. Disconnected for customer to make repairs. New meter installed.
23	[redacted]	Meter Base	Heat – Post Install – Non-functioning meter exchange. Discoloration on and melting around meter lugs consistent with loose meter base jaws. Damage to meter's internal component. Disconnected for customer to make repairs. New meter installed.
24	[redacted]	Meter Base	Heat – Post Install – Non-functioning meter exchange. Discoloration on and melting around one meter lug consistent with loose meter base jaw. Smoke trace on front cover and backplate of meter. Disconnected for customer to make repairs. New meter installed.
25	[redacted]	Meter Base	Heat – Post Install – Trouble call. Discoloration on and melting around one meter lug consistent with loose meter base jaw. Smoke trace on front cover of meter. Disconnected for customer to make repairs. New meter installed.
26	[redacted]	Meter Base	Heat – Post Install – Non-functioning meter exchange. Discoloration on and melting around one meter lug consistent with loose meter base jaw. Disconnected for customer to make repairs. New meter installed.
27	[redacted]	Meter Base	Heat – Post Install – Trouble call. Crew noted the meter base had been tampered with. The tamper on the meter base is used to eliminate or minimize consumption registration on the meter. Meter base and meter burnt. Discoloration on and melting around all meter lugs consistent with loose meter base jaw. Disconnected for customer to make repairs. New meter installed.

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Meter / Meter Base Fire or High Temperature Safety Incident

Semi-Annual Compliance Report No. 8

Attachment B

Incident Listing
July 1, 2019 to December 31, 2019

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Incident Listing

No.	Meter Serial Number	Category	BC Hydro Observations / Comments
1	[redacted]	Meter Base	Heat – Post Install – Non-functioning meter exchange. Discoloration on and melting around the meter lug consistent with loose meter base jaw. Disconnected for customer to make repairs. New meter installed.
2	[redacted]	Meter Base	Heat – Post Install – Trouble call. Discoloration on and melting around the meter lug consistent with loose meter base jaw. Disconnected for customer to make repairs. New meter installed.
3	[redacted]	Meter Base	Heat – Post Install – Trouble call. Discoloration on and melting around the meter lug consistent with loose meter base jaw. Disconnected for customer to make repairs. New meter installed.
4	[redacted]	Meter Base	Heat – Post Install – Non-functioning meter exchange. Discoloration on and melting around the meter lug consistent with loose meter base jaw. Disconnected for customer to make repairs. New meter installed.
5	[redacted]	Electrical Overload	Heat – Post Install – Trouble call. Overvoltage condition may have caused damage on the primary metering kit. Damage also observed on the meter phase A load terminal. Disconnected for customer to make repairs. New meter installed.
6	[redacted]	Meter Base	Heat – Post Install – Trouble call. Discoloration on and melting around the meter lug consistent with loose meter base jaw. Disconnected for customer to make repairs. New meter installed.
7	[redacted]	Meter Base	Heat – Post Install – Non-functioning meter exchange. Discoloration on and melting around the meter lug consistent with loose meter base jaw. Disconnected for customer to make repairs. New meter installed.