

**Fred James**

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January 30, 2017

Ms. Laurel Ross  
Acting Commission Secretary  
British Columbia Utilities Commission  
Sixth Floor – 900 Howe Street  
Vancouver, BC V6Z 2N3

Dear Ms. Ross:

**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. 1 – July 2016 to December 2016 (Report)**

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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 the next 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 first Semi-Annual Compliance Report provides a listing of all incidents with heat or arcing at the meter and/or meter base recorded in either the Distribution Trouble and Outage Report (**DTOR**) system or the Incident Management System (**IMS**) for the six month period ending December 31, 2016.

**Semi-Annual Compliance Report No. 1**

The **DTOR** system is used to record all BC Hydro trouble calls and the **IMS** is used to record all safety-related incidents or near misses.

There were a total of 22 incidents with heat or arcing at or around the meter and/or meter base between July 1, 2016 and December 31, 2016.

The table below categorizes these heat or arcing incidents based on BC Hydro's detailed review of the relevant records. Additionally, Attachment A includes a listing of each incident with the corresponding meter serial number and summaries of Power Line Technician, Meter Technician, 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. This create overheating of customer equipment, incl. the meter base	3
Meter Base	Electrical incident caused by mechanical failure of one or more meter base components	15
Unknown	No cause for electrical incident can be identified. Further investigation required.	1
<b>Total</b>		<b>22</b>

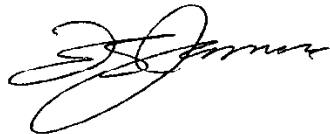
During this same period, BC Hydro attended 152 structure fires at the request of the local fire departments, to shut off power allowing first responders to safely deal with the situation. Three of the meters from these structure fires were initially retained by the Fire Investigator, with no subsequent action requested of BC Hydro. We are following up with the respective fire departments and will provide more information in the July 30, 2017 report.

### Future Reports

In July 2016, BC Hydro implemented a new Fire and Electrical Incident Management process which provides better tracking and reporting of meter related incidents, as well as stronger chain of custody controls. An enhancement to the DTOR system to enable early identification of potential records will be implemented prior to the next report submission date.

For further information, please contact Geoff Higgins at 604-623-4121 or by email at [bchydroregulatorygroup@bchydro.com](mailto:bchydroregulatorygroup@bchydro.com).

Yours sincerely,



Fred James  
Chief Regulatory Officer

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Enclosure

Meter Serial Number	Category	BC Hydro Observations / Comments
██████	Abnormal Voltage	<i>Arcing.</i> Post-Install. Intermittent voltage call. Arcing in the meter base and disconnected the service for the customer to make repairs.
██████	Abnormal Voltage	<i>Heat.</i> Post-Install. Low voltage call. A burnt lug in the meter base and disconnected the service for the customer to make repairs.
██████	Abnormal Voltage	<i>Heat.</i> Post-Install. Low voltage call. Hot meter base and meter. Removed the meter and disconnected the service for the customer to make repairs.
██████	Electrical Overload	<i>Heat.</i> Post-Install. Meter base burnt. Customer electrician and BCH meter tech to test equipment and loading.
██████	Meter Base	<i>Heat.</i> Post-Install. Meter base is corroded; disconnected service for the customer to make repairs.
██████	Meter Base	<i>Arcing.</i> Post-Install. Found arcing in the meter base and disconnected the service for the customer to make repairs
██████	Electrical Overload	<i>Arcing.</i> At Replacement. During replacement of P967 meter with K967 meter, on a 480V Delta service, found burnt meter base.
██████	Meter Base	<i>Heat.</i> Post-Install. Short in meter base.in a 3-meter cabinet. Removed meter and de-energized individual meter socket for customer to make repairs.
██████	Meter Base	<i>Heat.</i> Post-Install. Meter base burnt and meter damaged from heat. Removed meter and disconnected customer to make repairs.
██████	Meter Base	<i>Heat.</i> Post-Install. Noted cause is corrosion in the meter base; pre-emptive steps taken, de-energized the meter base so repairs can be made.
██████	Meter Base	<i>Heat.</i> Post-Install. Customer noted burnt meter based, asked for BCH disconnection so meter base could be replaced by customer's electrician.
██████	Meter Base	<i>Heat.</i> Post-Install. Burned lug in meter base; disconnected to allow customer to make repairs and install new meter.
██████	Meter Base	<i>Arcing.</i> Post-Install. Arcing in the meter base; disconnected the service for the customer to make repairs.
██████	Electrical Overload	<i>Heat.</i> Post-Install. Overvoltage on one phase of a 480V Delta service (industrial) exceeded 480V meter rating, causing it to fail and eject from meter base.

<b>Meter Serial Number</b>	<b>Category</b>	<b>BC Hydro Observations / Comments</b>
[REDACTED]	Meter Base	<i>Heat.</i> Post-Install. Damaged / overheated lug in meter base; disconnected the service for the customer to make repairs.
[REDACTED]	Unknown	<i>Heat.</i> Post-Install. Meter cover smoked. No damage found to the meter itself or meter base. Meter pulled and tested by Meter Shop – no issues found so far, possible external heat source. Sent to manufacturer for further investigation.
[REDACTED]	Meter Base	<i>Arcing.</i> Post-Install. Meter base needs to be fixed; meter coming off meter base and causing arcing issues.
[REDACTED]	Meter Base	<i>Heat.</i> Post-Install. Meter base lug burnt; disconnected the service for the customer to make repairs
[REDACTED]	Meter Base	<i>Heat.</i> Post-Install. Burned meter base and part of meter; disconnected to allow customer to make repairs and install new meter.
[REDACTED]	Meter Base	<i>Heat.</i> Post-Install. Meter and meter base burnt possibly due to lug in meter base; disconnected the service for the customer to make repairs and replace meter.
[REDACTED]	Meter Base	<i>Heat.</i> Post-Install. Lug in meter base is corroded and overheated; disconnected service for the customer to make repairs.
[REDACTED]	Meter Base	<i>Heat.</i> Post-Install. Meter base burnt up; disconnected service for the customer to make repairs.