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December 20, 2022

Sara Hardgrave
Acting Commission Secretary and Manager
Regulatory Support
British Columbia Utilities Commission
Suite 410, 900 Howe Street
Vancouver, BC V6Z 2N3

Dear Sara Hardgrave:

RE: Project No. 1599147
British Columbia Utilities Commission (BCUC or Commission)
British Columbia Hydro and Power Authority (BC Hydro)
2020 Street Lighting Rate Application
Compliance with BCUC Order No. G-312-21 Directive 6
Light Trespass Report No. 1

BC Hydro writes in compliance with BCUC Order No. G-312-21 Directive 6, to provide its Light Trespass Report No. 1.

For further information, please contact Shiau-Ching Chou at 604-623-3699 or by email at bchydroregulatorygroup@bchydro.com.

Yours sincerely,



Chris Sandve
Chief Regulatory Officer

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Enclosure

BC Hydro 2020 Street Light Rates Application

Light Trespass Compliance Report No. 1

December 20, 2022

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1 Background

BC Hydro has prepared this Light Trespass Compliance Report No. 1 in accordance with BCUC Order No. G-312-21 which directed BC Hydro to file two compliance reports regarding customer light trespass and light spill issues during the Streetlight Replacement Program (**Program**). The first report is due on or before December 31, 2022. The second report is due on or before December 31, 2024. This Light Trespass Compliance Report No.1 includes the following items:

- The total number of light trespass and light spill concerns received by customers and the number of impacted lights, respectively;
- A summary of BC Hydro's responses and actions taken to resolve customer light trespass and light spill concerns, including the reason(s) if no action was taken by BC Hydro; and
- The total number of unresolved light trespass and light spill concerns by customer and number of impacted lights, respectively, including BC Hydro's future plans and timeline to address the unresolved concerns.

While this report focusses on complaints, BC Hydro notes that it has also received much positive feedback about the new lights. In particular, residents have expressed that they feel safer in their communities because of the new light-emitting diode (**LED**) street lights.

2 Replacement Program Update

Further to BC Hydro's Annual Replacement Program Report No. 1 that was filed on March 31, 2022, the Program remains on track to remove the remaining High-Pressure Sodium (**HPS**) street lights served under Rate Schedule (**RS**) 1701, as planned, before the end of Quarter 1 of Fiscal 2024. As of November 30, 2022, approximately 76,800 or 85% of the HPS street lights have been replaced with LED street lights.

In October, BC Hydro commenced the proactive removal of lights served under RS 1755 Private Outdoor Lights (Group 1 and 3). BC Hydro is engaging with customers who are impacted by the termination of this service.

Group 2 lights are mounted on BC Hydro owned poles that are part of BC Hydro's distribution system and are eligible to be converted to LED Street lights as part of the Program. For Customers with Group 2 lights, BC Hydro is reaching out to these customers to confirm whether they want the light (1) to be removed or (2) to be replaced with an LED street light and migrated to Rate Schedule 1701. If a customer elects to receive an LED street light, BC Hydro will also work with them to confirm which type of LED street light should be installed.

3 Light Trespass

3.1 Light Trespass and Light Spill Data

When residents contact BC Hydro's Lighting Support team either by email or phone to register a complaint, the correspondence is reviewed and categorized based on the type of issue.

As of November 30, 2022, BC Hydro has recorded 516 complaints about the brightness of the street lights and/or about light trespass among the approximately 76,800 street lights it has installed across the province.

[Table 1](#) below shows the number of complaints received and how they were categorized.

Table 1 Program Complaints Received

Complaint Type	Number of Complaints
Too Bright	412
Light Trespass ¹	101
Too Dim	3
Total	516

In all cases, a complaint regarding a specific street light was raised by one resident/Customer. BC Hydro has not received multiple complaints regarding a specific street light. Of the 516 complaints recorded, 462 were about a specific LED street light. The remaining complaints were about the LED technology in general or LED street lights in the community.

In addition to these complaints, there may be cases where residents have raised complaints directly to their municipality (or the other entity registered as the BC Hydro Customer). However, if the Customer determined that no action is required, the complaint may not have been forwarded to BC Hydro, and is therefore not included in our report.

3.2 Summary of BC Hydro’s Actions to Resolve Concerns

Complaints are received one of two ways: directly from a resident or from the Customer receiving the RS 1701 service to BC Hydro’s Lighting Support team.

When a complaint is received, the Lighting Support Team reviews the correspondence and often asks for supplementary information – usually photographs that show how the newly installed light is performing in the field. The

¹ Light Trespass includes specific light trespass complaints as well as requests for shields, and adjustment of the angle of the street light.

information is then sent to the Customer asking how they would like to proceed. The Customer is generally provided the following options:

- Replace the street light with a lower wattage option (39 W being the lowest) and/or a warmer colour temperature option (i.e., 4000K down to 3000K);
- Adjust the angle of the street light on the pitch and roll axes;
- Rotate and/or change the length of the support arm on the pole, assuming there is no interference with other infrastructure (telecommunication wires, etc.); and
- Leave the light as is, with no adjustments or modifications.

The first three options are not mutually exclusive, and a combination of them can be performed.

As of November 30, 2022, 507 of the 516 complaints received are considered resolved. The remaining nine complaints are on hold pending responses from the resident or Customer.

Of the resolved complaints, 322 required an alteration order to be issued for the street light to be changed or adjusted. Of the orders that required an alteration, 315 are complete and seven are still in progress. The seven in progress are expected to be complete by around the end of the 2022 calendar year. [Table 2](#) below provides a breakdown of the actions taken in the field to resolve the complaint.

Table 2 Street light Alteration Requests

Type of Alterations Requested	Total
Replaced the street light with a lower wattage option	169
Adjusted the Pitch/angle of the street light	80
Replaced the street light with a lower wattage and warmer (3000K) option	35
Replaced the street light with a lower wattage option and adjusted the pitch/angle of the street light.	31
Field work in progress and expected to be completed around the ended of the 2022 calendar year	7
Total	322

Of the balance of the complaints, 185² were resolved through discussions with the Customer/resident without needing to change or adjust the street light.

Approximately 54 of these complaints were general complaints about the LED street lighting technology rather than complaints regarding a specific street light.

Street light deployment under the Program is progressing as planned and the complaints received are being resolved in a timely manner. BC Hydro remains committed to working with our Customers and residents to address light trespass and other street light related issues.

² 185 = 516 complaints - nine on hold - 322 requiring field alterations.