

- 1 **Q. (Reference CA-NP-013 (e))**  
2 **In regard to the LED Street Lighting Replacement project, it is stated “*There***  
3 ***is an energy efficiency improvement associated with this project of***  
4 ***approximately 60% for each fixture replaced over the legacy HPS lighting.***  
5 ***This will reduce the amount of energy required from Newfoundland and***  
6 ***Labrador Hydro’s (“Hydro”) Holyrood Thermal Generating Station.”***  
7 **Considering the manner by which Hydro is operating the Holyrood station,**  
8 **how does the LED Street Lighting Replacement project lead to a reduction of**  
9 **energy generation at Holyrood?**
- 10  
11 A. Hydro primarily operates the Holyrood Thermal Generating Station (“Holyrood”) as a  
12 baseload source of capacity during the fall and winter months and into the spring.<sup>1</sup> LED  
13 street lights provide capacity benefits of between 52% and 66% when compared to HPS  
14 street lights.<sup>2</sup> The *LED Street Lighting Replacement* project, which replaces HPS street  
15 lights with LED street lights, reduces capacity requirements on the Island  
16 Interconnected System which are currently supported by Holyrood.

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<sup>1</sup> From January 1, 2024 to August 31, 2024, Holyrood produced 401.8 GWh of energy on the Island Interconnected System. See Hydro’s *Monthly Energy Supply Report for the Island Interconnected System for August 2024*, September 17, 2024, Appendix B, Page B-1.

<sup>2</sup> See Newfoundland Power’s *2021 Capital Budget Application, LED Street Lighting Replacement Plan, June 2020, Appendix B, Table B-1: Electricity Demand (W) and Consumption (kWh/month)*, page B-1.