

- 1 **Q. (Reference PUB-NP-016) It is stated “Ongoing rate design and load research**  
 2 **studies will inform the business case for AMI technology when it is developed.”**  
 3 **a) Please explain how these studies will be used to inform the AMI business**  
 4 **case.**  
 5 **b) Has Newfoundland Power considered meter replacement/new meters**  
 6 **programs similar to the approach being used in the LED street lighting**  
 7 **program; i.e., all new and replacement meters would include AMI**  
 8 **technology?**  
 9 **c) Are there other reasons for proceeding with AMI? For example, fairness**  
 10 **in the rate design, giving customers a measure of control over their**  
 11 **electricity bills, etc? Further, the response to NLH-NP-021 states “As the**  
 12 **Company does not currently utilize Advanced Metering Infrastructure,**  
 13 **loading on individual sections of distribution line can only be**  
 14 **approximated by the modeling software, and must be verified in the**  
 15 **field’.**  
 16 **d) Did Dunsky in fact allude to other reasons why AMI might be pursued**  
 17 **earlier than 2030?**
- 18
- 19 **A. a)** AMI technology is required to offer dynamic rates to customers, such as time-of-  
 20 use rates. The rate design review will assess various rate structures including  
 21 time-of-use rates. The load research study will examine the load characteristics  
 22 of Newfoundland Power’s various rate classes. If the rate design review and  
 23 load research study determine that time-of-use rates would be an effective way  
 24 for managing Newfoundland Power’s customer load, the Company would require  
 25 AMI technology. An assessment of all costs and benefits associated with the  
 26 implementation of AMI would follow.  
 27
- 28 **b)** Newfoundland Power’s *LED Street Lighting Replacement* project involves  
 29 replacing an existing high pressure sodium (“HPS”) fixture with an LED fixture  
 30 whenever a maintenance visit is required for a HPS fixture.<sup>1</sup> This, in effect,  
 31 accelerates the deployment of LED fixtures for customers by foregoing  
 32 maintenance on HPS street lights. A net present analysis determined that this  
 33 approach is least cost for customers.  
 34
- 35 Newfoundland Power currently plans to commence replacing its existing  
 36 Automated Meter Reading (“AMR”) meters with meters that are compatible with  
 37 both AMR and AMI meter reading systems in 2027. The new technology would  
 38 be installed when an existing meter must be removed from service. This  
 39 approach aims to mitigate risks of AMR meters becoming stranded if dynamic  
 40 rates, such as time-of-use rates, become cost effective for customers in the  
 41 future.  
 42
- 43 As dynamic rates are not currently cost effective for customers, Newfoundland  
 44 Power has not considered options to accelerate the deployment of AMI  
 45 technology.

<sup>1</sup> A maintenance visit could involve replacing a photocell, an HPS bulb or a damaged fixture creating a safety hazard.

- 1 c) No. While there may be benefits to proceeding with AMI technology beyond  
2 system savings, deploying a technology that would increase overall costs to  
3 customers would be inconsistent with the provincial power policy.  
4
- 5 d) Dunsky stated:  
6  
7 *“AMI may offer some benefits that currently employed Advanced Meter*  
8 *Reading practices do not (such as reduced meter reading costs, two-way*  
9 *communications, and increased benefits from home energy feedback*  
10 *devices), which could help contribute to the business case for installing*  
11 *AMI across the IIC system.”<sup>2</sup>*  
12
- 13 The other benefits identified by Dunsky may contribute to a business case for  
14 deploying AMI technology but, on their own, would not justify the cost of AMI  
15 implementation.<sup>3</sup>

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<sup>2</sup> See the *2021 Electrification, Conservation and Demand Management Application, Volume 2, Schedule E – Potential Study Addendum: Demand Response Assessment*, page 10.

<sup>3</sup> For example, through the deployment of AMR technology, Newfoundland Power has already reduced its meter reading operating costs by over 80%, thereby reducing the potential savings that could be achieved through AMI technology. See the Company’s *2022/2023 General Rate Application, Volume 1, Section 2*, page 2-8.