

- 1 **Q. (page 3 of 7) It is stated “Current analysis indicates that a 1% increase in the price**  
 2 **of electricity will result in a 0.21% decrease in energy sales. It also indicates the**  
 3 **response will vary depending on the timeframe and rate category. In addition,**  
 4 **changes in oil prices can impact the market share of electricity in the competitive**  
 5 **space heating market.”**  
 6 (a) Please provide in the analysis supporting the notion that a 1% increase in the  
 7 price of electricity will result in a 0.21% decrease in energy sales.  
 8 (b) To what range of rate increases does this analysis apply; i.e., changes in  
 9 electricity prices ranging from +/- 5%?  
 10 (c) Has NP analyzed the impact on sales of large rate increases such as those  
 11 expected to be brought on by the Muskrat Falls project? If so, please provide  
 12 the analysis.

- 13  
 14 **A.**  
 15 (a) The elasticity for each rate class is derived from the econometric models used in the  
 16 *Customer, Energy and Demand Forecast, April 2018*. Table 1 provides the  
 17 elasticity impact for a 1% increase in the price of electricity.

**Table 1**  
**Elasticity Impact of a 1% Increase in Electricity Price**

	<b>Impact (%)</b>
<b>Domestic</b>	(0.32)
<b>General Service</b>	
Rate 2.1	(0.13)
Rate 2.3	0.00
Rate 2.4	0.00
<b>Total General Service</b>	(0.04)
<b>Street and Area Lighting</b>	0.00
<b>Total Company</b>	(0.21)

- 18 The analysis indicates that the elasticity impact of a change in the price of  
 19 electricity primarily occurs in the first two years, with smaller residual impacts  
 20 thereafter. Overall, a 1% increase in the price of electricity will result in a 0.21%  
 21 decrease in energy sales.

1 (b) The econometric model for the Domestic category includes the annual historical  
2 weighted marginal price of electricity for the past 40 years.<sup>1</sup> During this period  
3 electricity price changes have ranged from a decrease of 3.3% to an increase of  
4 26.7%. Table 2 provides a summary of the rate changes during this period.

**Table 2**  
**Summary of Historical**  
**Domestic Marginal Price Changes**

<b>Rate Change</b>	<b>Percent</b>
-5.0% to 0.0%	22.5
0.0% to 4.9%	45.0
5.0% to 9.9%	17.5
Over 9.9%	15.0
<b>Total</b>	<b>100.0</b>

5 Overall, 67.5% of the annual rate changes in the Domestic category were between  
6 -5.0% and +5.0%, with 32.5% of the years experiencing rate changes of 5.0% or  
7 higher. Only 15% of annual rate changes over the past 40 years were over 9.9%.

8  
9 (c) Newfoundland Power has not completed an analysis of the impact on energy sales  
10 of rate increases ranging from 50% to 100% that may occur as a result of the  
11 Muskrat Falls Project.<sup>2</sup> Increases of this size are precedent setting and  
12 Newfoundland Power knows of no comparable example on which to base an  
13 analysis. In addition, the wide range of possible rate increases adds to the  
14 complexity of assessing the potential impacts on customers and consequently on  
15 electricity sales.

<sup>1</sup> Domestic prices include the impact of prompt payment discounts and changes in applicable taxes, such as, the Harmonized Sales Tax.

<sup>2</sup> Announced rate projections include:

- 16 – 18 ¢/kWh target for rate mitigation See <https://www.cbc.ca/news/canada/newfoundland-labrador/rates-doubling-nalcor-scrum-coady-1.4627022>
- 22.9 ¢/kWh without rate mitigation See [https://muskratfalls.nalcorenergy.com/wp-content/uploads/2017/06/Muskrat-Falls-Project-Update-Presentation-June-23\\_Final.pdf](https://muskratfalls.nalcorenergy.com/wp-content/uploads/2017/06/Muskrat-Falls-Project-Update-Presentation-June-23_Final.pdf) (page 19)

The comparative rate for service to domestic customers as of July 1, 2017 is 11.5 ¢/kWh (excluding HST).