Q. (PUB-NP-2 and PUB-NP-15) The response relates to NP cost management efforts and identifies cost savings in 6 principle areas. Please provide the following:

a) A table summarizing the cost savings in dollars included in the 2019 and 2020 test years for each initiative and in total and show the percentage of the revenue requirement saved in each test year as a result of these cost savings programs.

b) Have there been issues with the use of LED street lighting identified in other jurisdictions? Please identify any such issues and indicate why these issues are not judged important on the Island.

A. a) See response to Request for Information PUB-NP-072 for an explanation of the quantification of cost savings associated with initiatives identified in PUB-NP-002.

b) In June 2016, Newfoundland Power became aware of concerns relating to the colour temperature of light emitted from certain types of LED street lights.[1] The issue was raised in a report of the American Medical Association (the "AMA Report") indicating that LED street lights with a colour temperature of 4,000K or higher raised human and environmental health concerns.[2] The report recommended the use of LED street lights with a colour temperature of 3,000K.

The AMA Report was released while Newfoundland Power was in the process of evaluating LED street lighting technology. Similar to other utilities at the time, Newfoundland Power was primarily testing LED street light fixtures with a colour temperature of 4,000K. Following the AMA Report, Newfoundland Power decided to only install and test LED street light fixtures with a colour temperature of 3,000K.

In 2018, Newfoundland Power conducted a survey to obtain feedback from customers living in close proximity to LED street lights.[3] Overall, the survey results showed a strong preference towards LED street light technology.[4]

[1] The colour of a light source is described in terms of colour temperature and is measured in degrees of Kelvin (K). HPS street lights, the Company's current street lighting standard, produce an orange light that corresponds to a colour temperature of between 1,900K and 2,100K. Daylight is equivalent to a colour temperature of approximately 6,500K. Early models of LED street lights had a lighting temperature of between 4,000K and 5,000K.

[2] In June 2016, the American Medical Association released a Report of the Council on Science and Public Health on the subject of *Human and Environmental Effects of Light Emitting Diode (LED) Community Lighting.*

[3] At the time of the survey, Newfoundland Power had installed approximately 240 LED street lights in its service territory on a trial basis. A total of 266 customers living in close proximity to the LED street lights participated in the survey.

[4] Survey results can be found in *Newfoundland Power's 2019/2020 General Rate Application, Volume 2: Supporting Materials, Report 7, LED Street Lighting, Appendix A: Customer Survey Results*.