Request IR-1:
Refer to M12780, Exhibit E-23, Evidence of Alice Napoleon, Synapse Energy Economics, Inc., ("Synapse Evidence") Page 23 of 47, Lines 22-25 and Page 24 of 47, Lines 1-2.

a) In this section you state that neither the Board nor the statute is specific about a number of things related to the assessment of "electricity costs", such as the level of assessment, the time period for the assessment, and whether the assessment should look at the perspective of the rates or bills.
   What do you recommend regarding:
   i. the level of assessment (customer, measure, program, resource or portfolio) and why?
   ii. the time period over which the impacts are assessed and why?
   iii. the assessment perspective: rates or bills, and why?

Response IR-1:

I recommend that DSM measures, programs, resources, and portfolios be assessed consistent with historical practices, with some additional considerations pertaining to SE which I discuss below.

Responding directly to the question, the historical practices that I recommend applying are as follows. I move the assessment perspective to the top as it is more conducive to answering the question.

i. assessment perspective: benefit cost analysis and rate and bill impact analysis
ii. level of assessment for benefit cost analysis:
   a. reporting of cost-effectiveness at the measure, program, resource and portfolio level
   b. decision-making regarding cost-effectiveness at the portfolio level
iii. time period for benefit cost analysis: encompassing the life of the measures
   a. level of assessment for rate and bill impact analysis: by rate class
iv. time period for rate and bill impact analysis:
   a. historical: all DSM activities up to and including those of the previous calendar year, as well as any future DSM investments that have been approved by the Energy Board
   b. forward-looking: all DSM activities conducted as part of the proposed DSM Resource Plan

Regarding additional considerations pertaining to SE:
1. In the benefit-cost analysis, electricity costs should be defined as the difference between the present value of the avoided electricity costs to the utility (including the increased revenues from strategic electrification) and the present value of the electricity costs to the

utility which aligns with the modified-PAC. The present value of the avoided costs and costs should be calculated using NS Power's weighted average cost of capital as the discount rate.

2. Regarding the rate and bill impact analysis, E1 should also make a customer-level assessment including all fuels (not just electricity) to confirm if the customer would benefit from the measures being proposed as compared. This assessment should include all measures the customer is implementing and not be limited to SE if the customer is also implementing other energy efficiency measures. This assessment should be forward-looking.

Request IR-2:
Refer to M12780, Exhibit E-23, Synapse Evidence, Page 27 of 47, Lines 11-21, and M12780, Exhibit E-16, E1 (Synapse) RIR 46(b), pages 1-4.

In response to Synapse IR-46(b), E1 states that it has not assumed the funding that had been previously provided by the government for primarily non-electrically heated homes and that the proposed 2027-2031 DSM Plan includes financial support only for customers with 80% or more electric space heating.

a) Do you have any concern with E1 providing financial support for customers that are not primarily heating with electric space heating?
b) You state, at Lines 20-21, "Any solutions that focus on reducing the reliance of customers on oil for home heating will help with affordability." Please explain what are you referring to in terms of "affordability", do you mean the affordability for the individual homeowner, the affordability of the E1 DSM Plan, or something else?
c) Have you assessed the cost-effectiveness of E1 'filling the gap[1]' due to the end of the federal funding?

Response IR-2:

a) When available, other funding sources should be used to provide financial support for strategic electrification of customers that are not primarily heating with electric space heating. In the absence of support from other funding sources or as a supplement to other funding sources, it may be reasonable to allocate electric ratepayer funds to support strategic electrification, to the extent that the portfolio as a whole including strategic electrification is found to be cost effective.
b) In this instance, affordability means the ability of individual homeowners to afford their energy use.
c) I have not assessed the cost-effectiveness of E1 'filling the gap' due to the end of the federal funding. However, I do not expect that this initiative would be cost-effective as many initiatives targeting low-income customers are not cost-effective. Since the funding of this initiative is relatively small as compared to the portfolio as a whole and the portfolio-level cost-effectiveness is well above 1.0, I expect that the portfolio would remain cost-effective if E1 were to fund this initiative.

[1] M12780 – Exhibit E-23, Synapse Evidence, Page 28, Lines 11-12.

Request IR-3:

Refer to M12780, Exhibit E-23, Synapse Evidence, Page 44 of 47, Lines 17-26.

a) In this section you refer to local air-quality and fine particulate matter and recommend additional scrutiny should be given to initiatives (in this case, the BNI Back Up Generator demand response program) that will increase fine particulate concentrations. Please clarify what you mean by 'additional scrutiny' and also how that scrutiny would be assessed by the Board, either through the PAC, modified PAC or another test?

Response IR-3:

a) I recommend that E1 should conduct a high-level analysis of the estimated PM2.5 that would result from the operation of their planned portfolio of Back Up Generators for each year of the plan period, using simplifying assumptions around fuel sources and emissions rates. I recommend that E1 then use Health Canada's Air Quality Benefits Assessment Tool (AQBAT) to estimate the monetary health outcomes associated with the operation of the Back Up Generators and, based on this analysis, reexamine the proposed incentive levels and planned enrolled capacity in the new fossil-fuel BUGs pathway. The Board could also use these results to evaluate E1's planned offering. The AQBAT web tool is available at https://health-infobase.canada.ca/aqbat/.