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Request IR-1:

Refer to M12861, Exhibit-N1-Nova Scotia Power Inc. 2026 Load Forecast Report (filed May 15, 2026) (the “Report”), Figure 37, and respond to the following:

- (a) Figure 37 shows cumulative industrial electrification of only 14 GWh (Large General), 1 GWh (Small Industrial), 13 GWh (Medium Industrial) and 8 GWh (Large Industrial) by 2036 (approximately 4 MW of coincident peak), yet the Report attributes commercial and industrial growth to the “push to net-zero emissions.” How is this trajectory consistent with the net-zero-by-2050 objective under the Environmental Goals and Climate Change Reduction Act and with the federal Powering Canada Strong strategy (May 14, 2026), which anticipates Canadian electricity demand at least doubling by 2050, substantially from industrial electrification?**
- (b) Does the 2026 Load Forecast account for the federal strategy, and what level of industrial electrification would a net-zero pathway imply over the forecast period?**
- (c) Does any benefit-cost or load analysis of industrial electrification underpin Figure 37, given that the E3 report The Economics of Electrification in Nova Scotia (October 2023) excluded the industrial sector? Please identify what analysis NS Power relies upon.**

Response IR-1:

- (a-b) The electrification items listed in the forecast involve converting heating loads to electricity (mainly from oil), accelerating the uptake of electric cooling technologies, and examining opportunities to power industrial processes through electrification, which is in line with the net-zero-by-2050 objective. There are no specific assumptions around conversion of industrial processes to electricity.**

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- 1 (c) The numbers in Figure 37 are based on either proposed projects or projections based on
2 recent projects. No cost-benefit analysis of electrification of industrial processes has been
3 undertaken.

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Request IR-2:

Refer to M12861, Exhibit N-1, the Report, Section 4.5.2, Hybrid Heating, Section 4.5.4, Electric Vehicles, and respond to the following:

(a) The forecast models hybrid heating at 50% participation (approximately 27,000 customers by 2036, a 48 MW peak reduction) and at-home EV charging at 0.39 kW per-customer coincident peak. Could the existing transmission and distribution system accommodate materially higher penetration of (i) hybrid heat pumps and (ii) managed or off-peak EV charging, and would such flexible, peak-shaping load require less reinforcement than an equivalent amount of unmanaged load — given the E3 finding that best-in-class and dual-fuel heat pumps could reduce coincident peak by approximately 70 percent?

Response IR-2:

(a) Transmission and distribution system upgrades are primarily driven by coincident peak contribution rather than total energy consumption. Accordingly, flexible, peak-shaping load such as hybrid heating and managed EV charging would be expected to require less generation, transmission and distribution reinforcement than an equivalent amount of unmanaged load.

However, even under managed scenarios, localized transmission and distribution constraints will continue to necessitate targeted upgrades to maintain reliability.

Overall, it is expected that the existing transmission and distribution system could accommodate materially higher penetrations of both technologies; however, impacts will remain location-specific and incremental infrastructure investment will be required as areas become constrained.

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Request IR-3:

Refer to M12861, Exhibit N-1, the Report, the 2027–2031 DSM Plan, and respond to the following:

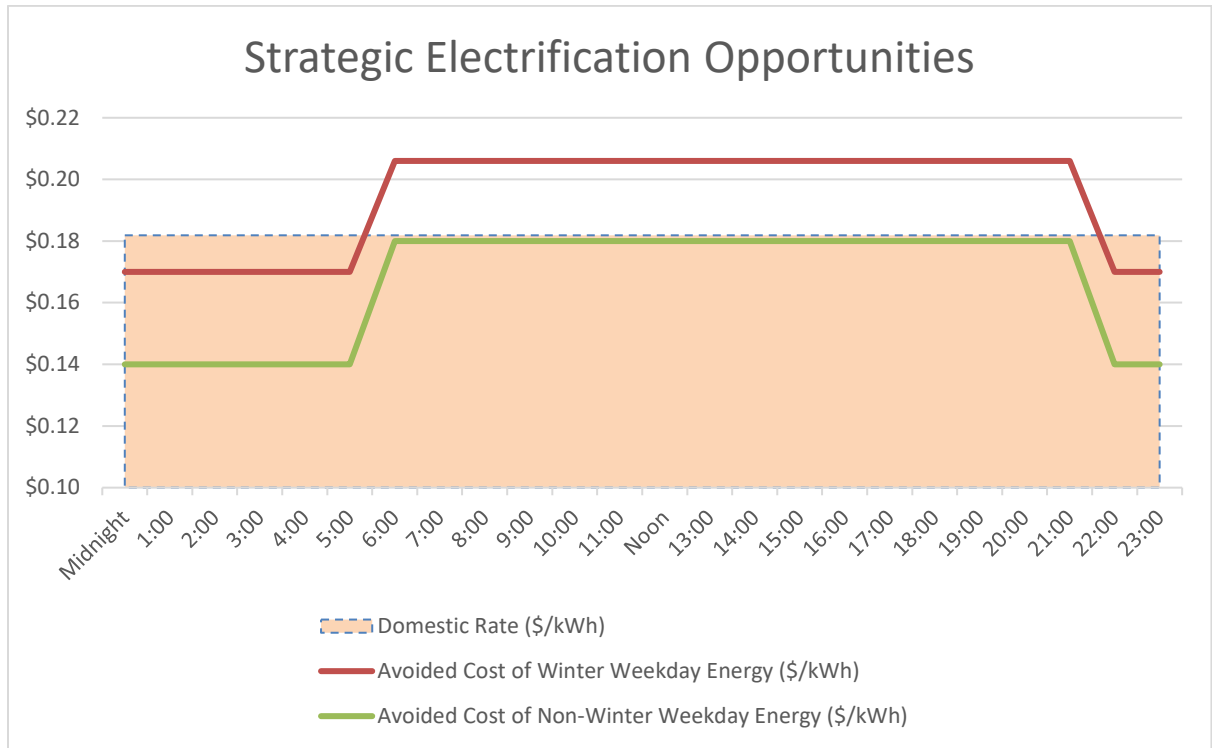
- (a) The Report states that strategic electrification now falls within the DSM definition, but no strategic electrification initiatives are included in the proposed 2027–2031 DSM Plan. Please identify the analyses and data, including avoided-cost inputs, load shapes, marginal emissions, grid-constraint information and customer segmentation, that NS Power has provided or could provide to EfficiencyOne to enable strategic electrification initiatives to be included in the 2027–2031 DSM Plan.**

Response IR-3:

- (a) Please refer to E1’s responses to Synapse IR-2 and SBA IR-3 in M12780 for additional detail on E1’s proposals for Strategic Electrification (SE).**

Prior to E1’s filing of its 2027-2031 DSM Plan, NS Power provided E1 with the following figure which illustrates the relative value of SE through the Domestic standard offer rate compared with the cost of energy, using the avoided-cost of energy efficiency (EE) series (as was used by E1 in their SE modeling). The purpose of the diagram is to demonstrate that SE could be enabled by targeting times when system energy cost is below the standard offer rate. Targeting electrification measures to those hours is expected to provide a benefit, assuming program costs and demand impacts can be minimized. NS Power also noted that material spreads exist in the EE avoided cost series during off-peak hours and on weekends, especially during the non-winter (April to October) period.

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NS Power recommended examining additional cases that electrify these off-peak, non-winter hours. Historical hourly usage patterns indicate there are opportunities in heat pump heating, resistive electric water heating, and EV charging, provided peak demand mitigation is maximized, and program costs minimized. For example, cooling from heat pumps supports SE as it does not contribute to peak demand. NS Power also noted that electrification of transportation loads is highly flexible and generally higher in the non-winter period and suggested it would be beneficial for E1 examine transportation electrification measures in its SE modelling.

NS Power provided a refreshed avoided cost of energy efficiency (EE) and demand response (DR) series to E1, which was prepared by IESO Nova Scotia in December 2025. However, NS Power's position is that this avoided cost series should not be "inverted" to value the incremental cost of energy and peak demand created by SE as the DSM load profile of EE measures is not likely to be symmetrical or equal in timing, shape, and materiality to a SE load profile comprised of fossil fuel heating conversions and electric

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1 transportation. Accordingly, NS Power's view is that the avoided cost series of DSM is not
2 fully representative of the value SE brings to the system or where it drives costs.

3
4 As an initial step to support the evaluation of the cost effectiveness of SE, NS Power
5 suggested that E1 consider the development of a cost series which reflects the increase to
6 electricity grid costs required to serve the additional load. In accordance with s. 2(a)(iii) of
7 the *More Access to Energy Act*, IESO Nova Scotia will now work with the E1 to develop
8 avoided cost calculations for demand side management activities.

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10 NS Power is committed to continued collaboration with E1 to enable strategic
11 electrification initiatives.

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Request IR-4:

Refer to M12861, Exhibit N-1, the Report, the treatment of DSM adjustments in the forecast methodology, and respond to the following:

(a) How would NS Power's methodology treat DSM-funded strategic electrification that increases electricity sales while reducing total customer costs and emissions? Can the existing DSM adjustment accommodate load-increasing resources, or would a separate strategic electrification adjustment be required, and how would double counting be avoided across load growth, DSM plans, end-use intensities, surveys and post-regression adjustments?

Response IR-4:

(a) Electrification would be treated separately from savings, but a process would be required to ensure there is no double counting. The actual mechanism would depend on the nature of the electrification initiatives, the information provided by E1, and how it relates to existing data sets.

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Request IR-5:

Refer to M12861, Exhibit N-1, the Report, the treatment of behind-the-meter solar and distributed storage, and respond to the following:

(a) The Report assumes no significant distributed storage and treats behind-the-meter solar primarily as a load reduction. Could flexible loads — daytime or managed EV charging, heat pump water heaters, thermal storage and interruptible electric boilers — shift demand toward periods of high solar output, and has NS Power assessed their potential to improve solar utilization, including any reduction in curtailment risk?

Response IR-5:

(a) Flexible loads do offer opportunities to optimize energy use overall. Demand response (DR) programs, including time-variable pricing and direct load control are being evaluated with respect to their impact on overall peak savings. E1's proposed 2027-2031 DSM Plan (M12780) also includes funding for DR initiatives, primarily in the commercial sector. Programs to evaluate demand response with respect to improving solar utilization specifically are not currently being conducted.

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Request IR-6:

Refer to M12861, Exhibit N-1, the Report, Figure 31, and respond to the following:

(a) Figure 31 assigns 0 MW of peak reduction to solar across all years, on the basis that the system peak occurs after sunset. Was this assumption carried forward from the 2025 Load Forecast for want of updated 2025 production data, and does NS Power intend to revisit it using updated AMI and production data, including any contribution from solar paired with storage?

Response IR-6:

(a) Yes, this assumption was carried forward from the 2025 Load Forecast. NS Power intends to evaluate the solar coincidence factors in the 2027 load forecast pending the availability of hourly data. Please refer to Synapse IR-6 for additional information on solar paired with storage.

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Request IR-7:

Refer to M12861, Exhibit N-1, the Report, Sections 4.5.1, 4.5.5 and 4.5.6, and respond to the following:

The forecast assumes no change to the incentive landscape and, for heat pumps, reduces projected installations on the closure of residential grant programs. Several federal incentives bearing on this assumption were in force or newly announced at the time of filing:

(a) Commercial heat pumps. Section 4.5.5 credits commercial incentives “including investment tax credits and accelerated capital cost allowance” for continued commercial solar strength, while Section 4.5.1 reduces the heat pump forecast solely on residential grant closures. Does the heat pump forecast account for the federal Clean Technology Investment Tax Credit (up to 30% for eligible commercial air-source and ground-source heat pumps, available through 2034)? If not, why was the ITC applied to the solar forecast but not to commercial heat pumps?

(b) Residential retrofit relaunch. Section 4.5.1 assumes no reintroduction of grants. On May 14, 2026 — one day before filing — the federal government announced expanded retrofit support targeting approximately one million homes, prioritizing the transition of oil-heated homes to electric heat pumps. Does the forecast account for this announcement, and what is the directional effect on the residential heat pump forecast were such support to materialize, given Nova Scotia’s high concentration of oil-heated homes?

(c) Commercial and industrial storage. Section 4.5.6 evaluates battery storage on a residential basis only and assumes no significant deployment. Did NS Power consider commercial and industrial storage, eligible for the federal Clean Technology Investment Tax Credit (up to 30% for stationary, non-fossil storage), and assess such

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1 **storage — including solar-paired storage — for its potential to shift load, shave peak**
2 **or absorb daytime solar?**

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4 Response IR-7:

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6 (a) No, tax credits are not factored into the commercial heat pump forecast. Unlike solar or
7 residential heat pumps, heat pump technology is not forecast explicitly in the commercial
8 sector, a more general electric heating end use is used in the model, which would include
9 all sources of electric heating.

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11 (b) No, the forecast does not account for this announcement.

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13 (c) No. For additional information on storage please refer to Synapse IR-6.