

NOVA SCOTIA ENERGY BOARD

IN THE MATTER OF: *The Public Utilities Act*

IN THE MATTER OF: An Application by EfficiencyOne for approval of the 2027-2031 Demand-Side Management (DSM) Purchase Agreement between EfficiencyOne and Nova Scotia Power Incorporated, the establishment of a final agreement between the parties, and approval of a 2027-2031 Demand-Side Management (DSM) Resource Plan

RESPONSES TO INFORMATION REQUESTS

To: The Industrial Group

From: Solar Nova Scotia

Date: July 17, 2026

Response to Request IR-1:

(a) Please identify the person or persons who authored this evidence and provide their qualifications, professional credentials, and relevant experience in DSM program design, benefit-cost analysis, and regulatory proceedings.

The evidence filed as Exhibit E-24 was prepared for Solar Nova Scotia by David Brushett, P.Eng. Mr. Brushett is a mechanical engineer with 18 years of experience in demand-side management and energy programs, including 11 years with EfficiencyOne. In that role, he oversaw energy-management services for approximately 60 of Nova Scotia's largest commercial, industrial, and institutional organizations, as well as the fisheries and agriculture sectors as a whole. Throughout his career, he has gained a broad spectrum of experience relevant to DSM, ranging from technical and engineering work, to project identification and implementation, development of project business cases, coordination of multiple funding sources, project- and program-level benefit-cost assessment, program delivery, and program design, through to regulatory work. This background gives him direct knowledge of the energy efficiency, strategic electrification, demand response, and distributed energy opportunities that exist in Nova Scotia and of what is required to deliver on them. Mr. Brushett is the volunteer Chair of Solar Nova Scotia and, in that capacity, leads the organization's policy advocacy and regulatory participation, including proceedings before this Board.

(b) Please confirm whether Solar Nova Scotia retained any independent expert to prepare, review, or validate the quantitative analysis, figures, and program design recommendations set out in this evidence. If so, please identify that expert and provide their qualifications.

No. Solar Nova Scotia did not retain an external independent expert. The quantitative material in Exhibit E-24 is drawn from the public record of this proceeding, including

EfficiencyOne's 2027-2031 DSM Plan technical tables and responses to information requests, together with publicly available federal tax parameters. Table 2 is expressly illustrative; its results depend on the stated assumptions and should not be read as tax advice or as confirmation that any particular taxpayer or property qualifies.

Response to Request IR-2:

(a) Please confirm how the cost of the four existing DSM-funded Energy Manager positions is currently allocated across rate classes.

Solar Nova Scotia cannot confirm the rate-class allocation because the underlying allocation data are within EfficiencyOne's and Nova Scotia Power's knowledge. In E1 (SNS) IR-09(c), EfficiencyOne stated that the salary costs of the four partially DSM-funded Energy Manager positions are included in total DSM salaries and benefits and that individual compensation is not disclosed. Solar Nova Scotia understands that these costs are recovered through the Board-approved DSM cost-recovery mechanism. The specific rate-class allocation should be confirmed by EfficiencyOne or Nova Scotia Power.

Solar Nova Scotia's evidence addresses the classification of the Energy Manager function, rather than the undisclosed allocation of individual salaries. In this proceeding, EfficiencyOne has described additional Energy Manager capacity as "technical support staff" that competes with the share of DSM investment directed to customer incentives (E1 (SNS) IR-07(d); E1 (SNS) IR-09(a)). Historically, however, customer-facing advisory services were structured as program offerings. The Onsite Energy Manager service was established as a tailored offering within the Custom Incentives program under the 2016-2019 Supply Agreement, alongside Strategic Energy Management, retro-commissioning, and EMIS support, and placed "a trained technical energy manager at a customer's workplace" as a direct customer-facing benefit (Matter M06733, Supply Agreement, Section 3.2). EfficiencyOne also confirmed that the contracted service provider supporting Strategic Energy Management participants "was previously listed under direct incentives" and was recategorized in the 2027-2031 Plan model (E1 (IG) IR-19(b)). Solar Nova Scotia therefore submits that Energy Manager support should be evaluated as customer-facing program delivery that enables participation and savings, rather than treated solely as corporate overhead. That classification matters because treating the function only as administration may bias the Plan toward minimizing a service that directly enables project development.

(b) Please provide Solar Nova Scotia's estimate of the incremental cost of adding Energy Manager-type capacity for the small business segment as recommended, and the proposed rate class allocation of those additional costs.

Solar Nova Scotia has not prepared a bottom-up staffing cost estimate because EfficiencyOne holds the relevant compensation and delivery-cost data. Extending the existing Roving Energy Manager model to the small business segment would require a small number of dedicated full-time-equivalent positions or equivalent contracted capacity.

It could be implemented through redeployment, contracting, or additional positions, but Solar Nova Scotia does not propose an increase to the total DSM budget. EfficiencyOne's analysis shows average SBES costs of \$5.45 million per year over 2027-2031, or approximately \$27 million over the Plan period (E1 (IG) RIRs, Exhibit E-9). The precise cost should be developed by EfficiencyOne through its staffing and procurement data.

Solar Nova Scotia proposes that the capacity be funded within the existing SBES budget, including through reduced per-project incentives where cost-sharing can maintain participation. Consistent with the historical treatment described in response to part (a), the expenditure would be categorized as customer-facing service delivery. Any resulting unit-cost improvement could be used either to reduce total SBES spending for a given savings level or to serve more participants and acquire more savings within the approved budget. Solar Nova Scotia proposes no change to the existing Board-approved rate-class allocation methodology.

(c) What is the specific unit-cost target (expressed in \$/kWh) that Solar Nova Scotia recommends for SBES, the benchmark or methodology it proposes for establishing that baseline, and the evidence or analysis supporting that target as achievable within the 2027-2031 Plan period?

Solar Nova Scotia has not developed a precise numeric target. The record nevertheless provides clear benchmarks. EfficiencyOne's analysis shows a proposed 2027-2031 SBES first-year unit cost of \$1.26/kWh (E1 (IG) RIRs, Exhibit E-9), compared with a BNI sector average of \$0.36/kWh (Exhibit E-24, Table 1). In the approved 2023-2025 Plan settlement, the Direct Installation (Small Business Energy Solutions) component was forecast to deliver 36.7 GWh of first-year savings on \$19.8 million of investment, or approximately \$0.54/kWh (Matter M10473, 2023-2025 Plan settlement, Table 9). Solar Nova Scotia therefore recommends that the Board direct EfficiencyOne to file an annual first-year unit-cost target, supported by measure-level assumptions and sensitivity analysis, that moves SBES materially toward its historical performance.

The reduction could be pursued through incentive design as well as through coordination with external funding. The proposed SBES measure mix is dominated by lighting and heat pumps, with heat pumps predominating by the end of the Plan period. Incentives should be calibrated to the participant's incremental cost, expected bill savings, and demonstrated adoption barrier rather than defaulting to 100 percent of installed cost. Where equipment is at end of life, payback should be assessed on the incremental cost of the efficient option relative to a like-for-like replacement. A very short customer payback can indicate material free-ridership risk, but it does not establish free ridership by definition; incentive levels should be informed by market research, evaluation, and participant decision-making. Cost-sharing that closes the adoption gap, while allowing eligible customers to retain available external support, may lower program unit cost without materially reducing participation.

Table 2 of Exhibit E-24 illustrates potential participant cash-flow effects; it does not represent a guaranteed subsidy or tax outcome. For a \$50,000 commercial heat-pump installation, the Clean Technology ITC may provide a refundable credit of up to 30 percent of eligible capital cost, subject to the taxpayer, property, timing, labour, and other statutory requirements. Accelerated CCA may permit earlier deductions, but its economic value depends on the taxpayer's taxable income, marginal tax rate, applicable CCA class, timing, and interaction with the ITC and other assistance. The \$18,675 figure in Table 2 is therefore an illustrative first-year tax calculation based on the stated assumptions, not a valuation of the total incremental economic benefit of CCA. Subject to those caveats, customer cost-sharing and external tax support can reduce the DSM contribution required for a given project and thereby lower first-year program unit cost, all else equal. EfficiencyOne already helps customers identify non-DSM funding (E1 (SNS) IR-09(a)); the recommendation is to formalize that information and referral function without providing tax advice.

(d) *Please identify the qualification criteria Solar Nova Scotia proposes for those providers and explain how E1 would oversee quality, consistency, and cost-effectiveness of privately delivered advisory services in a way that is reviewable by the Board.*

Solar Nova Scotia does not take a position on whether Energy Manager-type support for the small business segment should be delivered by employees or external providers. Either model may be appropriate, and EfficiencyOne should select the model that best meets cost, capability, accountability, and delivery requirements. Solar Nova Scotia recommends only that qualified private-sector delivery be considered rather than excluded by default.

EfficiencyOne already uses external providers in program delivery, including the service provider supporting Strategic Energy Management participants (E1 (IG) IR-19(b)), trade partners (Matter M06733, Supply Agreement), and independent evaluators. If private-sector delivery is selected, the procurement should specify minimum qualifications, deliverables, service standards, pricing, data requirements, quality assurance, and conflict-of-interest rules. Appropriate qualifications could include a P.Eng., certified engineering technologist, Certified Energy Manager designation, or equivalent demonstrated competency; commercial energy-auditing and project-development experience; appropriate insurance; and rules preventing undisclosed self-referral of installation work. Oversight should include competitive procurement, standardized work products, file review or sampling, participant feedback, performance metrics such as cost per participant and verified savings, annual DSM reporting, and independent evaluation. These mechanisms could be implemented within EfficiencyOne's existing reporting and evaluation framework and would remain reviewable by the Board.

Response to Request IR-3:

(a) Please confirm whether medium and large industrial customers undertaking eligible projects through the Custom Program are also eligible for the Clean Technology ITC and accelerated CCA, and if so, whether Solar Nova Scotia recommends that E1 leverage those federal supports in the Custom Program in the same way it recommends for SBES. If Solar Nova Scotia does not recommend this, please explain why.

Eligibility for the Clean Technology ITC and accelerated CCA is a matter of federal tax law and depends on the taxpayer and the property. Subject to that caveat, taxable corporations, including medium and large industrial customers, undertaking eligible clean technology investments through the Custom Program may also qualify.

Yes. Solar Nova Scotia recommends that EfficiencyOne provide structured funding-navigation support across its business programs, including the Custom Program. Exhibit E-24 focused on SBES because a delivery model that pays the full installed cost may leave the participant with little or no net capital cost on which to claim tax support, whereas a cost-shared project may preserve an eligible participant-funded amount, subject to the tax rules governing government assistance. The Custom Program already operates on a cost-shared basis. EfficiencyOne confirmed that Energy Manager-supported projects accounted for 94 percent of Custom Program savings under the Existing Buildings stream in 2024 and 90 percent in 2025 (E1 (SNS) IR-08(e)), and that its Energy Managers help customers access non-DSM funding (E1 (SNS) IR-09(a)). Those Energy Managers are therefore well positioned to identify potentially applicable programs and refer customers to qualified advisors. EfficiencyOne should not determine or guarantee tax eligibility.

(b) Please confirm whether this reduction in program unit cost would be reflected in the DSM budget (reducing total DSM spending and the costs allocated to all rate classes) or whether it would simply reduce the cost to the individual participant while leaving the DSM budget unchanged.

Either result is possible. A lower DSM contribution per project could be used to: (i) reduce SBES spending for a given savings level, thereby reducing DSM costs recovered from ratepayers; or (ii) acquire more participants and savings within an unchanged budget, thereby lowering the program's unit cost of saved energy. The selected approach should be stated in the technical tables and reflected in annual reporting.

Solar Nova Scotia's primary recommendation is the second: use the approved budget to reach more of the more than 30,000 eligible small business customers identified by EfficiencyOne (E1 (SNS) IR-07(a); Exhibit E-24, Section 3.2). This approach would not increase the approved DSM budget. Any system-level benefit to individual rate classes should be demonstrated through portfolio cost-effectiveness, realized savings, and cost-allocation reporting rather than assumed.

(c) Please confirm whether Solar Nova Scotia's federal leverage recommendation would require E1 to assess or verify individual customers' tax eligibility, and how Solar Nova Scotia proposes this would be managed without creating legal, privacy, or liability exposure for E1.

No. Solar Nova Scotia does not propose that EfficiencyOne assess, verify, or warrant a customer's tax eligibility. EfficiencyOne's role should be limited to providing general information about potentially applicable programs, identifying questions for the customer to discuss with its advisor, and referring the customer to qualified tax professionals. EfficiencyOne should not collect tax returns or other unnecessary tax information, and program materials should clearly state that eligibility, claims, and tax treatment are the customer's responsibility. EfficiencyOne already helps customers identify non-DSM funding (E1 (SNS) IR-09(a)). With appropriate disclaimers, data-minimization practices, and legal review, the recommendation can be implemented without material new privacy or liability exposure.

Response to Request IR-4:

(a) Please confirm whether the hybrid heat pump DR recommendation is intended to also apply to medium and large industrial customers. If not, why not? If it does apply to industrial facilities, please explain how hybrid heating integrates with industrial process loads that may not be interruptible during winter peak events.

The recommendation concerns controllable building space-heating loads, principally in commercial, institutional, and new-construction applications; it does not propose interruption of industrial process loads. An industrial customer could participate voluntarily where a facility has separable building-heating load, standby generation, or another technically suitable resource. Participation should be subject to site-specific screening, customer consent, event limits, and override protections as described in Section 4.5 of Exhibit E-24. Process loads that cannot be interrupted safely or economically would not be enrolled.

(b) Please provide Solar Nova Scotia's estimate of the scale of available back-up generator and hybrid heating capacity from new commercial construction over the 2027-2031 period, and the incremental DSM cost, and allocation of those costs, required to enroll that capacity.

Solar Nova Scotia does not advance a specific capacity estimate for back-up generator and hybrid heating demand response from new commercial construction. Its evidence is directed at the scale of the opportunity, which is demonstrated by three indicators: (i) EfficiencyOne's forecast that the 2027 BNI Back-Up Generator program will deliver 6.6 MW from 11 participants (Exhibit E-23, Synapse evidence), or approximately 0.6 MW per participant; (ii) market information provided by Toromont Cat concerning generator sales and quoted capacity; and (iii) examples of large institutional projects, most notably the QE2 Health Sciences Centre, which is installing three 2,500 kW prime-rated Tier 4

generators in 2026, or 7.5 MW at a single new-construction site, exceeding the entire plan-period back-up generator target on its own. Because these units are prime-rated Tier 4 machines, they are capable of non-emergency operation, making them technically well suited to demand response duty. These indicators demonstrate a material pool of candidate resources relative to the approximately 6 MW plan-period target, but they do not establish that every unit is technically, economically, environmentally, or legally eligible for demand response. Quantifying the achievable capacity is work that EfficiencyOne, which holds the program and customer data, should undertake.

A second, bottom-up screen starts with new commercial and institutional floor area and estimated winter heating intensity. Using illustrative assumptions of 200,000 to 300,000 square metres of new commercial and institutional floor area per year, design heating loads of 40 to 60 W per square metre typical of new code-compliant commercial buildings, and a heat-pump coefficient of performance of approximately 2 at winter design conditions, this screen produces an estimated 4 to 9 MW of gross electric heating load added per year, or 20 to 45 MW over 2027-2031 if the new floor area were fully electrified. EfficiencyOne's illustrative hybrid-heated building in the Custom New Construction Program delivers 230 kW of peak demand savings on 250,000 kWh of annual electricity savings (E1 (EE) RIRs, Exhibit E-8, IR-03). These calculations describe gross theoretical load, not achievable DR capacity. A potential study would need to account for the share of new floor area actually electrified, load coincidence, backup-fuel availability, controls, customer adoption, event duration, rebound, emissions and permitting requirements, and operating constraints.

Solar Nova Scotia has not developed a reliable incremental-cost estimate because the record does not disclose the required enablement, administration, measurement and verification, or performance-payment assumptions. The appropriate cost model is: upfront enablement cost, plus annual performance payments per enrolled kW, plus administration and measurement and verification. New construction should generally have lower enablement costs than retrofit because controls, switchgear, and fuel arrangements can be specified during design (Exhibit E-24, Section 4.3). Solar Nova Scotia recommends a two-part incentive - limited upfront support for the incremental cost of making the resource demand-response ready, paired with an ongoing payment tied to verified availability and performance. EfficiencyOne should develop low, medium, and high cost scenarios in its technical tables. Solar Nova Scotia proposes that these costs be treated and allocated in the same manner as the existing BNI Demand Response Program, with no change to the approved allocation methodology.

(c) Please provide the data or analysis supporting that assertion, including an estimate of the total achievable back-up generator and hybrid heating DR capacity in Nova Scotia's commercial and industrial sector, and the source and methodology of that estimate.

EfficiencyOne's program data support further investigation, but the distinction between forecast and actual enrollment is important. EfficiencyOne confirmed that no batteries, gas generators, or diesel generators were enrolled in Smart Synergy in 2025 (E1 (SNS) IR-10(a)). The 2027 BNI Back-Up Generator program is forecast to deliver 6.6 MW from 11 participants (Exhibit E-23), while the technical tables hold the measure at approximately 6 MW through 2031. If the 11 participants represent committed or verified enrollment, that would indicate the plan-period target is effectively reached at launch; if they are forecast participants, the figure does not establish subscription. In either case, holding the target flat through 2031 warrants explanation and sensitivity analysis.

Market information provided by Toromont Cat indicates a substantial installed base of Caterpillar generators in Nova Scotia and continued market activity. Solar Nova Scotia understands that the single-manufacturer installed base is approximately 300 to 400 units with more than 150 MW of aggregate capacity, before accounting for other manufacturers, and that additional units were sold or quoted in 2024-2025. These figures should be filed and verified before being relied on as evidence. They describe a gross equipment pool, not achievable DR potential. Eligibility would depend on unit size, fuel and emissions characteristics, permitting, interconnection and control capability, event duration, operating limits, site needs, customer willingness, and cost. A scenario enrolling 15 to 25 percent of the cited 150 MW base would equal approximately 20 to 40 MW, but the assumed participation rate is illustrative and should not be characterized as an achievable-potential estimate without further study.

Taken together, the record and market information support a conclusion that the resource merits a formal potential assessment; they do not establish a precise province-wide achievable capacity. Solar Nova Scotia therefore recommends that the Board direct EfficiencyOne to quantify the technical and achievable potential for backup generation and hybrid-heating demand response, identify eligibility and emissions constraints, test customer interest and costs, and propose a staged enrollment target. Until that work is completed, Solar Nova Scotia does not advance a specific capacity figure; the evidence above is offered to demonstrate the scale of the opportunity.

Response to Request IR-5:

(a) Please identify the statutory authority under which the Board could direct IESO Nova Scotia to procure longer-term demand response capacity.

Solar Nova Scotia is not providing a legal opinion. Its recommendation is based on the functional division of responsibilities under the reformed electricity framework, under which IESO Nova Scotia is responsible for system planning and resource procurement

(Exhibit E-24, Section 4.4). Solar Nova Scotia has not identified a specific provision that authorizes the Board, in this DSM proceeding, to direct IESO Nova Scotia to enter longer-term demand-response contracts. Accordingly, the requested relief should be framed in the alternative: (i) if the Board has jurisdiction, direct the appropriate entity to develop longer-term procurement; or (ii) otherwise, make findings on the five-year DSM-duration barrier and recommend that IESO Nova Scotia, in coordination with EfficiencyOne, establish a longer-term procurement pathway. This preserves the substance of the recommendation without overstating the Board's jurisdiction.

(b) *Please confirm the cost-recovery mechanism Solar Nova Scotia proposes for those contracts and identify how those costs would be allocated across rate classes.*

Solar Nova Scotia's evidence does not establish a definitive cost-recovery mechanism for contracts that would be procured outside the DSM framework. If IESO Nova Scotia procures demand-response capacity as a system resource, Solar Nova Scotia expects the costs to be recovered and allocated under the Board-approved mechanism applicable to comparable capacity resources, using the applicable capacity-related allocators, rather than through DSM cost recovery. The precise mechanism and rate-class allocation should be proposed by IESO Nova Scotia and Nova Scotia Power and approved by the Board. Any claim of net ratepayer benefit should be demonstrated through the procurement's cost-effectiveness analysis, including avoided capacity and other system costs, rather than assumed.

(c) *Please confirm whether Solar Nova Scotia has considered that capital-intensive DR resources procured directly by IESO-NS would fall outside EI's DSM Performance Target framework, and explain how the capacity value and cost-effectiveness of those resources would be measured, reported, and accounted for.*

Yes. Resources procured directly by IESO Nova Scotia would sit outside EfficiencyOne's DSM Performance Target framework and should not be counted toward EfficiencyOne's targets. Capacity value, cost-effectiveness, availability, and performance should be defined in the procurement documents and verified under contract-specific measurement and verification protocols, with results reported through IESO Nova Scotia's resource-adequacy and regulatory reporting. Coordination rules should prevent the same asset, capacity, or event performance from being claimed in both frameworks. EfficiencyOne's performance would continue to be assessed solely on resources acquired under the approved DSM Plan.

Response to Request IR-6:

(a) Please explain how Solar Nova Scotia's recommendation that SE be screened using a test that includes "avoided non-electric fuel costs, emissions reductions, and peak and capacity impacts" is consistent with the Board's findings in Matter M12282 (2025 NSEB 18), which declined to adopt such a test and instead directed E1 to use the modified PAC test.

The recommendation is intended to operate within the M12282 framework, not replace it. As summarized by EfficiencyOne (Exhibit E-1, Section 2.2.2, citing the M12282 Decision at pp. 80-81), the Board directed portfolio-level cost-effectiveness assessment; required strategic electrification to be assessed using the PAC test, including increased utility revenues, unless an alternative acceptable methodology is proposed; required strategic electrification to demonstrate reductions in both GHG emissions and electricity costs; and permitted measures that fail the primary test to be included with justification.

Solar Nova Scotia's recommendation should therefore be understood as follows. Peak and capacity impacts are inputs to the avoided costs used in the PAC test and should be captured there without double-counting. Emissions reductions are relevant to the separate GHG-reduction condition and to the justification pathway identified by the Board. Avoided non-electric fuel costs may be reported as participant or societal information, but Solar Nova Scotia is not asking that they be added to the modified PAC test unless EfficiencyOne proposes, and the Board accepts, an alternative methodology. Portfolio-level assessment and the justification pathway remain available, as confirmed in E1 (SNS) IR-12(e).

(b) Is Solar Nova Scotia suggesting that the Board approve a different benefit cost test for SE within this proceeding?

No. Solar Nova Scotia is not asking the Board to approve a new benefit-cost test in this proceeding. It asks the Board to apply the M12282 framework as written, including portfolio-level assessment and the justification pathway, and to direct EfficiencyOne to develop a strategic electrification pathway within the 2027-2031 Plan (Exhibit E-24, Section 5.5). Any alternative screening methodology should be proposed by EfficiencyOne with supporting evidence and approved by the Board before use.

(c) Please confirm what rate class allocation Solar Nova Scotia proposes for the SE pathway it recommends, including specifically the allocation (if any) to medium and large industrial customers, and whether those customers are expected to be net beneficiaries of the proposed SE measures.

Solar Nova Scotia proposes no change to the approved DSM cost-allocation methodology; costs of any approved strategic-electrification pathway would be allocated in the same manner as other DSM costs unless the Board directs otherwise. Solar Nova Scotia expects medium and large industrial customers may benefit at the system level where the pathway passes the Board's required tests and improves system utilization, but it cannot confirm that every class will be a net beneficiary without class-specific cost-allocation and rate-impact

analysis. Potential benefits include lower system costs from improved load factor, managed peak impacts, and additional contribution to fixed costs. Industrial customers may also participate directly where measures such as hybrid building heating, managed charging, or DR-integrated equipment are technically and economically suitable. The expected benefits and any class-specific impacts should be quantified in EfficiencyOne's technical tables and annual reporting.