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Request IR-01:

Reference: Appendix A, 2020-2022 DSM Plan and E1 Response to E1 (NS Power) IR-34.

(a) Please complete the following table for all New Construction Projects funded by E1 under the Customs Incentive Program during 2016 – 2018:

Year	Number of Projects	Total Cost of all E1 Incentives (\$)	Total First-Year Energy Usage of Projects Absent Incentives – E1 Baseline (GWh)	Total First-Year Energy Savings Estimated by E1 (GWh)	Total First-Year Energy Savings Verified by Econoler (GWh)	Total Lifetime Energy Usage of Projects Absent Incentives – E1 Baseline (GWh)	Total Lifetime Energy Savings Estimated by E1 (GWh)	Total Lifetime Energy Savings Verified by Econoler (GWh)	Total Peak Demand of Projects Absent Incentives – E1 Baseline (MW)	Total Peak Demand Savings Estimated by E1 (MW)	Total Peak Demand Savings Verified by Econoler (MW)
2016											
2017											
2018											

Note: In response to E1 (NS Power) IR-34, E1 asserted that the IR: “...which is requesting individual, customer-specific information, engages issues of relevance and confidentiality.” Heritage Gas assumes that its requests above, which ask for information on an aggregated basis by year, do not engage these issues. If E1 is of a different view, Heritage Gas asks that E1 make its position known prior to the filing deadline for responses so that the issues can be addressed by the Nova Scotia Utility and Review Board in a timely fashion.

(b) Please explain in detail how E1 determined the baseline assumptions for the total first-year savings, the total lifetime energy savings, and the total peak demand savings for New Construction Projects under the Customs Incentive Program during 2016-2018. If E1 used more than one type of methodology to calculate estimated savings, please

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explain all methodologies and identify the circumstances in which E1 used each methodology.

(c) For each of the 3 years, please indicate how many of the projects included incentives for Variable Refrigerant Flow (“VRF”) technology.

(d) For each of the 3 years, please indicate how many of the projects are located in communities served by natural gas.

(e) How did E1 account for project proponents having access to natural gas as a fuel supply option in determining the baseline assumptions? Please provide copies of any studies or analyses prepared by or for E1 in this regard.

(f) Please provide a complete list of all the different types of installed measures that qualified for funding for New Construction Projects under the Customs Incentive Program during 2016 – 2018. For each installed measure, identify the total cost absent the incentive, the amount of the incentive offered by E1, and the savings associated with the incentive.

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Response IR-01:

a) Please refer to Table 1 for all New Construction Projects funded by EfficiencyOne under the Customs Incentive Program during 2016 – 2018

Table 1: New Construction Projects funded by EfficiencyOne under the Customs Incentive Program during 2016 – 2018

Year	Number of Projects	Total Cost of all E1 Incentives (\$)	Total First-Year Energy Usage of Projects Absent Incentives – E1 Baseline (GWh)	Total First-Year Energy Savings Estimated by E1 (GWh)	Total First-Year Energy Savings Verified by Econoler (GWh)	Total Lifetime Energy Usage of Projects Absent Incentives – E1 Baseline (GWh)	Total Lifetime Energy Savings Estimated by E1 (GWh)	Total Lifetime Energy Savings Verified by Econoler (GWh)	Total Peak Demand of Projects Absent Incentives – E1 Baseline (MW)	Total Peak Demand Savings Estimated by E1 (MW)	Total Peak Demand Savings Verified by Econoler (MW)
2016	5	\$199,715.10	3.283	1.243	1.217	64.6751	24.4871	Information Not Available	Information Not Available	0.514	0.514
2017	6	\$467,631.76	10.101	4.666	3.04	198.9897	91.9202	63.7	Information Not Available	0.41	1.423
2018	5	\$297,299.45	4.823	2.575	1.180	89.2255	47.6375	21.83	Information Not Available	0.61	0.735

b) In 2016 and the beginning of 2017, EfficiencyOne defined the baseline for each project as the original design requirements for the building, as defined by the project developer.

Commencing in April 2017, in order to address a recommendation from the third-party Evaluation Consultant and to align with National Energy Code of Canada for Buildings (NECB) 2015, EfficiencyOne began to define the project baseline as the energy efficiency

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requirements laid out in the Nova Scotia Building Code (the building code includes the requirements of NECB).

For buildings not meeting the prescriptive requirements of the NECB, the Code includes a performance path process to determine if the proposed building meets the energy performance requirements of the Code (please see NECB 2015 Division B, Part 8: Building Energy Performance Compliance Path). Projects participating in the New Construction service, through the Custom Incentives program, are required to follow this compliance path to quantify the energy savings embodied in the design of a new building. EfficiencyOne incentivizes the reduction in electrical energy used by the proposed building versus a Code compliant building.

- c) Please refer to Table 2 for projects that included incentives for Variable Refrigerant Flow (“VRF”) technology.

Table 2: Variable Refrigerant Flow (VRF) Projects

Year	Variable Refrigerant Flow (VRF) Projects
2016	1
2017	0
2018	0

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d) Please refer to Table 3 for projects in areas served by natural gas.

Table 3: Projects in Areas Served by Natural Gas

Year	Projects in Areas Served by Natural Gas
2016	5
2017	3
2018	3

e) EfficiencyOne follows NECB when determining the baseline building equipment and fuel sources. There is no consideration given for access to natural gas. EfficiencyOne provides an energy modeling incentive, which can be used to assist in an owner deciding what fuel sources to use and what energy efficiency measures to employ. After the project fuel sources are determined, EfficiencyOne makes incentive offers based upon the electrical savings estimated by the energy modeling process.

f) EfficiencyOne does not incentivize specific measures under the Custom program component, which includes the New Construction service. Under the New Construction service, incentives are offered based upon a performance path analysis using energy modeling software that analyzes the building and accounts for interactive effects inherent in a suite of energy efficiency measures. Due to the impact of interactive effects on energy savings, incentives cannot be awarded on a measure basis within the New Construction program. Typical efficiency measures that are analyzed in an energy model can include:

- Improved building envelope performance;
- Improved window performance;
- Improved lighting efficiency, daylighting and control strategies;
- High efficiency heating and cooling equipment;
- Energy efficient air and water distribution equipment;

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- Advanced controls for reducing energy requirements; and
- Recovery of energy from exhaust air streams.

Implementation incentive levels are determined by calculating the difference in electrical energy consumption in both a baseline and proposed energy model. If a project performs 40 percent better than NECB requirements, the incentive is set at \$0.12/kWh saved. For projects that achieve savings of 15 to 40 per cent better than NECB, the incentive is set at \$0.10/kWh saved. EfficiencyOne will incent projects up to 50 per cent of the incremental costs up to a maximum incentive of \$500,000.

Prior to the implementation incentive, EfficiencyOne will also provide an energy modelling incentive at 50 percent of eligible costs, up to \$10,000. Eligible costs consist of engineering costs directly related to building design and energy modeling.

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Request IR-02:

Reference: Appendix A, 2020-2022 DSM Plan and E1 Response to E1 (NS Power) IR-24, where E1 states:

“Customer engagement is a continuous process. While certain Custom projects known at the date of preparing the 2020-2022 DSM Resource Plan may close in the 2020-2022 period, EfficiencyOne does not have a full listing of all anticipated Custom projects for the 2020-2022 period. The 2020-2022 DSM Resource Plan individual program targets are designed based on EfficiencyOne’s experience as DSM administrator in Nova Scotia, and not based on specific projects.”

(a) Please complete the following table with the New Construction project target assumptions used by E1 in developing its proposed Customs Incentive Program for the 2020 – 2022 DSM Resource Plan:

Year	Number of Estimated New Construction Projects	Total Estimated Cost of all E1 Incentives for New Construction Projects (\$)	Total Estimated First-Year Energy Usage of Projects Absent Incentives – E1 Baseline (GWh)	Total First-Year Energy Savings Estimated by E1 (GWh)	Total Estimated Lifetime Energy Usage of Projects Absent Incentives – E1 Baseline (GWh)	Total Lifetime Energy Savings Estimated by E1 (GWh)	Total Estimated Peak Demand of Projects Absent Incentives – E1 Baseline (MW)	Total Peak Savings Estimated by E1 (MW)
2020								
2021								
2022								

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(b) Please complete the following table with the New Construction project target assumptions used by E1 in developing its proposed Customs Incentive Program for the Alternative Scenario for 2020 – 2022 as referenced in Section 8 of the Application:

Year	Number of Estimated New Construction Projects	Total Estimated Cost of all E1 Incentives for New Construction Projects (\$)	Total Estimated First-Year Energy Usage of Projects Absent Incentives – E1 Baseline (GWh)	Total First-Year Energy Savings Estimated by E1 (GWh)	Total Estimated Lifetime Energy Usage of Projects Absent Incentives – E1 Baseline (GWh)	Total Estimated Lifetime Energy Savings Estimated by E1 (GWh)	Total Estimated Peak Demand of Projects Absent Incentives – E1 Baseline (MW)	Total Peak Demand Savings Estimated by E1 (MW)
2020								
2021								
2022								

Note: In response to E1 (NS Power) IR-24, E1 asserted that: “With regard to those known Custom projects, EfficiencyOne asserts this IR, which is requesting individual, customer-specific information, engages issues of relevance and confidentiality.” Heritage Gas assumes that its requests above, which ask for information on an aggregated basis by year, do not engage these issues. If E1 is of a different view, Heritage Gas asks that E1 make its position known prior to the filing deadline for responses so that the issues can be addressed by the Nova Scotia Utility and Review Board in a timely fashion.

(c) Please explain in detail how E1 determined the baseline assumptions for the total first-year savings, the total lifetime energy savings, and the total peak demand savings for New Construction Projects under the Customs Incentive Program proposed in the 2020 – 2022 DSM Resource Plan and the Alternative Scenario. If E1 proposes to use more than one type of methodology to calculate estimated savings, please explain all

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methodologies and identify the circumstances in which E1 proposes to use each methodology.

(d) For each of the 3 years in both the 2020 – 2022 DSM Resource Plan and the Alternative Scenario, please indicate how many of the projects are expected to include incentives for Variable Refrigerant Flow (“VRF”) technology.

(e) For each of the 3 years in both the 2020 – 2022 DSM Resource Plan and the Alternative Scenario, please indicate how many of the projects are expected to be located in communities served by natural gas.

(f) How does E1 propose to account for project proponents having access to natural gas as a fuel supply option in determining the baseline assumptions under the 2020 – 2022 DSM Resource Plan and the Alternative Scenario?

(g) Please provide a complete list of all the different types of installed measures that E1 proposes will be eligible for funding for New Construction Projects under the Customs Incentive Program proposed in the 2020 – 2022 DSM Resource Plan. For each installed measure, identify the total cost absent the incentive, the amount of the incentive to be offered by E1, and the savings associated with the incentive.

Response IR-02:

a-e) EfficiencyOne did not rely on forecasting of Custom New Construction projects to establish the characterization for the Custom Incentives Program, as present in the technical data provided as part of the 2020-2022 DSM Resource Plan.

Rather, targeted energy savings, coincident peak demand savings, lifetime energy savings and investment were developed using a single characterization developed by

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EfficiencyOne. This characterization is based on the 2017 evaluated results for the Custom Incentives program and was then modified to include support for new initiatives not present within the Program in 2017. Quantitative detail regarding the development of the 2020-2022 Custom Incentives measure characterization can be found in EfficiencyOne's response to SBA IR-45, Attachment 1, Worksheet "Custom-Preferred".

Once this Custom Incentives characterization was developed, which is common for both the Preferred Plan and Alternate Scenario, the overall level of Program Activity was scaled in each of the Preferred Plan and Alternate Scenario, to reflect future market conditions and internal expectations regarding program performance, as part of the DSM Plan vetting process.

In this way, no specific forecast of potential Custom New Construction projects was relied upon in modelling the Custom Incentives program, for either the Preferred Plan and Alternate Scenario.

- f) EfficiencyOne does not factor proponents having access to natural gas as a fuel supply option in determining the baseline assumptions.

The characteristics of space heating and domestic hot water systems are determined based on National Energy Code of Canada for Buildings (NECB) requirements. NECB does not directly specify the fuel source for a baseline building but does specify the system type that should be used in the reference. As an example, multi-unit residential buildings that use a heat pump for heating in their proposed design must use a heat pump as their baseline heating source. Therefore, the baseline fuel in this example is electricity. Requiring a heat pump baseline limits the amount of electrical savings that can be claimed for such a project. Savings are then attributed to the increase in performance between the proposed and baseline heat pumps.

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- 1 g) Please refer to EfficiencyOne's response to Heritage Gas IR-01-part h).

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Request IR-03:

Reference: Application, Table 7: BNI barriers to participation and mitigating strategies, page 28:

Program Component	Brief Description of Program Component	Target Market Segment	Barriers Addressed in Preferred Plan and How
Custom	Customized incentives for retrofits and new construction opportunities based on case specific energy and demand savings	Existing and new construction BNI facilities	<u>Upfront Costs, Internal Competition for Capital & Payback Periods:</u> - financial incentives for: - initial scoping and feasibility studies to evaluate energy savings opportunities; and - energy modelling of new building designs. - Rebates and financing for implementing cost-effective efficient projects; and - Greater support for demand reduction-focused projects <u>Time & Capacity Constraints:</u> EfficiencyOne staff, partners and third parties identify, define, assess, and implement energy saving opportunities <u>Lack of Participant Internal Commitment and Technical Expertise:</u> financial and/or technical assistance for improvements to compressed air systems, to optimize building performance, and to assess and implement energy management opportunities

Reference: Appendix A, 2020-2022 DSM Plan, page 65

Program Delivery

“The Custom Incentives program structure is designed to overcome customer barriers associated with large upfront costs, lack of in-house capacity and business case requirements. The program is delivered through a combination of EfficiencyOne staff, contracted partners and third-parties to identify, define, assess, and implement energy saving opportunities. Involved external resources are often consulting engineering firms, efficiency contractors and service providers, and heating, ventilation and air conditioning automation companies.”

Question:

Regarding E1’s customer acquisition efforts related to New Construction projects in the Custom program, please provide specific details on how E1 gives consideration to the customer’s potential access to alternative, non-electricity energy sources, including but not limited to natural gas, for each of the following steps:

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- 1 **(a) Confirmation of the eligibility of a new construction building for incentives related to**
2 **electric space heating and domestic hot water measures;**
3
4 **(b) The identification and targeting of prospective new building developments; and**
5
6 **(c) Marketing and direct engagement of building developers based on development**
7 **location.**
8
9

10 Response IR-03:
11

- 12 a) The following requirements must be met for a project to be eligible for participation in the
13 New Construction service:
14 • Project must be an institutional, charitable, industrial, or multi-unit residential building
15 served (directly or indirectly) by Nova Scotia Power;
16 • Project must be in the pre-construction phase, or a “major renovation” as defined as one
17 of the following:
18 o A new structure;
19 o A new addition to an existing structure;
20 o A building that has been converted for another use; or
21 o The building is unfit for occupancy for a minimum of thirty days and will have a
22 complete replacement of at least two building systems;
23 • Project must implement at least two electrical energy efficiency measures;
24 • Minimum building size of 15,000 sq. ft.; and
25 • Must achieve at least a 15 percent reduction in total building energy consumption.
26

27 Prior to establishing this information, any new construction project in Nova Scotia could be
28 contacted by EfficiencyOne Business Development staff.
29

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The New Construction service, included in the Custom Incentives program, is designed to support developers at the design stage of the building process. As such, EfficiencyOne makes every effort to speak to developers as early in the design process as possible. The New Construction service offers an incentive to help offset the costs of having a professional energy model of the building design created. The energy model will use a baseline, National Energy Code of Canada for Buildings (NECB) 2015. The energy model can create as many iterations of that design as the developer wishes to explore. In this way, EfficiencyOne helps the developer acquire all the information they will require to make decisions on building envelope upgrades, fenestration, and HVAC systems. A well-developed energy model will provide the building developer with information on the energy consumption and operational costs of various design iterations. When analyzed in conjunction with maintenance costs and incremental capital costs of the design iterations, an informed decision can be made on the final building design.

b) Business Development staff identify new building developments primarily through two means:

1) Business Development staff build relationships with the development community. This includes not only being available when discussions regarding the design of a new building are occurring, but equally important to be available to discuss and assist building owners in identifying and acting upon energy issues in their existing portfolios.

2) Business Development activities include using resources, such as municipal planning notifications and various media outlets, to help identify new projects where EfficiencyOne had not yet had the opportunity to develop an ongoing relationship. Business Development staff then reaches out to those businesses, making them aware of Efficiency Nova Scotia's full suite of programs.

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- 1 c) Marketing and engagement of building developers is province-wide, and not focused or
2 limited to specific geographies in Nova Scotia. Efficiency Nova Scotia marketing for BNI
3 participants is conducted through province-wide activities. Business Development staff
4 directly engage building developers regarding any new development activity occurring in the
5 province.

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Request IR-04:

Reference: Application, page 1 and page 31.

“The Preferred Plan is the DSM Plan which will provide the best value to Nova Scotians by delivering the most energy and demand savings at an affordable price and within a balanced portfolio over the 2020-2022 term.”

“Demand reduction initiatives help customers reduce their electricity demand, which can in turn reduce NS Power’s peak demand. By decreasing NS Power’s peak demand, investments in capacity are deferred or avoided. As firm demand continues to grow in Nova Scotia, it becomes increasingly important to invest in demand reduction initiatives that will mitigate associated long-term rate impacts for ratepayers resulting from investments in capacity.”

Question:

- (a) Does E1 agree that the purpose of the ratepayer-funded DSM investment to be approved in this proceeding is to achieve reductions in electricity energy and demand that would not otherwise be achieved absent such investment?**
- (b) In circumstances where the customer would have otherwise used natural gas as a fuel source absent the provision of electric space heating equipment measure incentives, does E1 agree that such electricity incentives could contribute to an increase in NS Power system peak?**

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Response IR-04:

a) Yes, EfficiencyOne agrees.

b) EfficiencyOne's DSM incentives are aimed to encourage customers to install measures that operate at higher levels of efficiency.

As buildings transition from a combustible fuel source to electricity, to satisfy their primary heating requirements, this would increase electrical energy consumption and system peak demand on the electrical grid. Additionally, as buildings transition from systems that only provide heating to systems that provide both heating and cooling, there would also be an increase in summer electrical load. A common example of this occurs when oil-heated homes transition to heat pump systems. In this situation, EfficiencyOne offers incentives to encourage the homeowner to choose a high-efficiency heat pump over one with a standard-efficiency rating, thereby reducing electrical load that would otherwise be on the grid.

A similar situation could occur in new construction of large buildings. With EfficiencyOne's New Construction service, through the Custom Incentives program, if a customer decides to meet their heating and cooling loads with electricity, EfficiencyOne will work with them to encourage greater levels of efficiency than set out in the baseline National Energy Code of Canada for Buildings (NECB).

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Request IR-05:

Reference: 2020-2022 DSM Plan, page 59 of 62

**The Use of Avoided Costs from the 2014 IRP in the Development of the
2020-2022 DSM Resource Plan.**

**“Given that the 2014 Integrated Resource Plan represents the most recent
full long-term planning exercise in Nova Scotia, EfficiencyOne agrees with
the use of the 2014 Avoided Costs for the 2020-2022 DSM Resource Plan.**

**EfficiencyOne has also included an estimate of the Avoided Costs of
Transmission and Distribution within the 2020-2022 DSM Resource Plan
model. The costs included are consistent with information presented to
DSMAG members by NS Power within a presentation dated October 24,
2018. EfficiencyOne believes these supplied costs to be conservative, and
justified for inclusion, given the specific exclusion of Transmission and
Distribution avoided costs from the 2014 IRP Avoided Cost methodology.**

**Finally, EfficiencyOne has included other resource costs and benefits where
appropriate. These other resource costs and benefits are limited to natural
gas and water impacts, and are based on utility rates, as opposed to true
avoided costs, as such information is not, to EfficiencyOne’s knowledge, in
existence.”**

Question:

Please provide a detailed description of the following:

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- 1 **(a) The avoided costs of energy and generation capacity provided by NS Power from the**
2 **2014 IRP and used in the E1 2020-2022 DSM Resource Plan. Please include avoided**
3 **costs for each year of the study period.**
4
5 **(b) The avoided costs of transmission and distribution capacity provided by NS Power in**
6 **2018 and used in the E1 2020-2022 DSM Resource Plan. Please include avoided costs**
7 **for each year of the study period.**
8
9 **(c) Any non-energy costs and benefits used in the E1 2020-2022 DSM Resource Plan.**
10 **Please include non-energy costs and benefits for each year of the study period.**
11
12 **(d) Please provide the nominal discount rate(s) used by E1 for the total resource cost test**
13 **and program administrator cost test and explain the assumptions used in selecting**
14 **the particular rate.**
15

16 Response IR-05:

- 17
18 a) Please refer to EfficiencyOne's response to SBA IR-13.
19
20 b) Please refer to part a) of this IR response.
21
22 c) Please refer to part a) of this IR response.
23
24 d) The discount rate used for all cost-effectiveness testing was 6.84 percent. This reflects the
25 2019 value of NS Power's WACC/AFUDC rate.¹ This discount rate is assumed to remain
26 constant throughout the study period associated with the 2020-2022 DSM Resource Plan
27 modelling.

¹ M08876, 76340, NSUARB Order, Issued December 20, 2018.

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Request IR-06:

Question:

Regarding the incentive structure, please provide:

- (a) Details of the development of the structure and magnitude of incentives for New Construction projects under the Custom Project incentives Program.**
- (b) An explanation of any changes to the structure, type, or magnitude of incentives made by E1 in 2017 or 2018 as part of the New Construction component of the Custom Incentives Program.**
- (c) An explanation of how E1 calculates the participant incentive for a New Construction space heating-related conservation measure application. In providing this explanation, please explain how the incentive level determination made by E1 would use the following pieces of information: baseline cost, project costs, floor area of the building, energy use index, baseline energy use, and project energy use, as appropriate. Please also explain using examples as follows:**
 - i. A case in which the incentive level provided is under the DSM measure incentive cap.**
 - ii. A case in which the incentive level provided is above and thereby limited by the DSM measure incentive cap.**
 - iii. Any other example(s) E1 deems necessary to illustrate how incentive levels are determined for the New Construction program.**

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1 Response IR-06:

2
3 a) Please refer to EfficiencyOne's response to HG IR-01 part b) for changes to the eligibility
4 for an incentive, effective April 2017.

5
6 A review of the New Construction service was conducted in 2017, with the objective to
7 optimize the New Construction incentive structure, in order to increase uptake in the service
8 and resolve process challenges. Additional benefits that were anticipated included reducing
9 perceived barriers for customers and energy modelers, driving market transformation in new
10 construction, and generating greater savings per project. EfficiencyOne collected
11 information from stakeholders that had previously participated in the New Construction
12 service. The feedback received included information on barriers to success, as well as
13 suggestions on how the service could be improved. Information from other jurisdictions was
14 also collected; specifically, as related to incentive structure and baseline criteria.

15
16 Following this review, in 2017 EfficiencyOne changed its incentive structure to the structure
17 as outlined in EfficiencyOne's response to HG IR-01 part f). Prior to this change, the energy
18 model incentive maximum was \$15,000, which was deducted from the implementation
19 incentive. Furthermore, the implementation incentive was calculated at \$0.10/kWh
20 electricity saved, regardless of performance.

21
22 In 2017, the structure changed to include an incentive of \$0.12/kWh saved for buildings with
23 energy savings of greater than 40 percent when compared to that of the base case building
24 designed to National Energy Code of Canada for Buildings (NECB) 2015 requirements.
25 Furthermore, EfficiencyOne also began incenting energy modelling at 50 per cent of eligible
26 costs, up to \$10,000. The energy model incentive is no longer deducted from the
27 implementation incentive.

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1 The incentive changes were driven by feedback from stakeholders, who recommended a
2 higher incentive for capital intensive efficiency measures, a clear path or structure to achieve
3 a higher incentive, and a base incentive for the energy model in addition to the
4 implementation incentive. The clear structure allows participants to estimate their rebate.
5 The higher rebate rate of \$0.12/kWh encourages participants to further improve the energy
6 efficiency of their buildings. The energy modelling incentive helps to educate participants in
7 energy efficiency opportunities.

8
9 The incentive cap for New Construction projects is \$500,000; however, very few projects
10 have reached that incentive level. EfficiencyOne cannot disclose the details of specific
11 projects and incentives. Please refer to EfficiencyOne's response to HG-01 part f) for more
12 details on the incentive structure for the New Construction service, including how the
13 incentive is calculated.

14
15 b) Please refer to part a) of this IR response.

16
17 c) Please refer to part a) of this IR response.

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Request IR-07:

Question:

With regard to the modelling assumptions for incentives provided for space heating and/or domestic hot water measures in a New Construction project funded through the Custom program:

(a) Please specifically describe the methodology, assumptions and supporting documentation collected to support the new building HVAC system performance assumptions.

(b) Please specifically describe the methodology, assumptions and supporting documentation used to determine the fuel type in a new building in the absence of any E1 incentives.

(c) With respect to the response to (b), please indicate which of the following characteristics of the space heating and domestic hot water system are determined by the applicant and which are determined based on E1's program rules and assumptions:

- i. Baseline space heating and domestic hot water fuel type.**
- ii. Baseline space heating and domestic hot water equipment characteristics.**
- iii. Baseline space heating and domestic hot water system performance.**

Response IR-07:

a) Any project participating in the New Construction service, through the Custom Incentives program, is required to submit a full set of project design documentation including:

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- 1 • Energy model report including a summary of the project, reference and proposed
- 2 energy consumption and peak energy demand, in addition to explanations of any
- 3 issues, assumptions or workarounds used to generate the energy model or calculated
- 4 energy savings;
- 5 • Electronic simulation files for both the reference and proposed buildings;
- 6 • Calculations for renewable energies, where applicable;
- 7 • Construction drawings including architectural, mechanical, electrical, refrigeration
- 8 and process, where applicable; and
- 9 • Building systems specifications and approved shop drawings for all systems
- 10 identified in the energy model.
- 11
- 12 b) The selection of the fuel type in a new building is the decision of the building developer
- 13 and their design team. EfficiencyOne provides incentives for the Energy Efficiency Design
- 14 and Modelling at 50 percent of eligible costs, up to \$10,000. The results of this model may
- 15 inform the fuel type.
- 16
- 17 c) Please refer to EfficiencyOne's response to Heritage Gas IR-02 part f).