**Request IR-10:**

**For each of the screening tests used by PEIEC in analyzing cost-effectiveness, please answer the following questions.**

**a. Please describe what types of costs and benefits PEIEC included in the test.**

**b. Please describe how each test was used to screen programs.**

**c. Please provide the discount rate used for each test.**

Response IR-10:

a) Two tests were used in the analyses of cost effectiveness during plan development – the Total Resource Cost (TRC) test, and the Program Administrator Cost (PAC) test.

For both the TRC and PAC test, the following benefits were included:

- Levelized utility avoided costs of capacity, on a per kW basis;
- Levelized utility avoided costs of transmission and distribution, on a per kW basis; and
- Levelized utility avoided costs of energy, on a per kWh basis.

These benefits were included on a net savings basis (i.e. after accounting for anticipated free-ridership and spill-over).

For additional detail's on the avoided costs used, please refer to PEIEC's response to SYN- IR-16.

For the PAC test, the following costs were included:

- Program administrator incentive costs; and

- Program administrator administrative (non-incentive) costs.

These costs were included on a gross basis.

For the TRC test, the following costs were included:

- Full technology (measure) costs; and
- Program administrator administrative (non-incentive) costs.

Technology costs were included on a net basis, while program administrator costs were included on a gross basis.

b) The PAC test was used as the primary screening test, applied at the portfolio level. Additionally, both the PAC and TRC tests were used to informally inspect measure performance. The PAC was used to inspect incentive levels, while the TRC was used to inspect measure performance relative to incremental (in the case of replace-on-burnout measures) or project (in the case of early replacement) costs. Notably, despite the portfolio-based screening all sectors and programs possess passing (ratio result of one or greater) PAC test results, and all sectors possess passing TRC test results.

c) A discount rate of 3.2 per cent was used for both the PAC and TRC tests. This discount rate was selected, reflecting the PEI government's current long-term cost of borrowing.

**Request IR-11:**

**For each of the programs included in PEIEC's proposed DSM Plan, please provide any and all estimates of free-riders, spillover, or market transformation impacts assumed by PEIEC. Please provide any and all related reports, documents or workpapers associated with those estimates.**

Response IR-11:

The EE&C Plan used net at generator savings assumptions based on Efficiency Nova Scotia 2016 Evaluation Reports, please refer to Attachment 1 of PEIEC's response to SYN-IR-09. Embedded in those savings assumptions are free-ridership levels, spillover levels and the net-to-gross ratio for the program. Following are the embedded assumptions used for each program:

| **Program** | **Free Ridership** | **Spillover** | **Net-to-Gross Ratio** |
|---|---|---|---|
| Energy Efficient Equipment Rebates | 39% | 0% | 0.61 |
| Home Insulation Rebates | 28% | 6% | 0.78 |
| Winter Warming | 0-26% | 0 - 5% | 0.86 |
| New Home Construction | 27% | 20% | 0.93 |
| Instant Energy Savings | 0 - 33% | 0 - 47% | 1.12 |
| Business Energy Rebates | 16-37% | 0% | 0.78 |
| Business Energy Solutions | 7-19% | 0% | 0.83 |
| Custom Energy Solutions | 0-10% | 0% | 0.91 |

**Request IR-12:**

**The following types of programs and measures are not included in PEIEC's proposed DSM plan. For each program not included in the plan, please provide any and all analyses undertaken regarding the program, including all relevant assumptions regarding the program design, costs, benefits, savings, and cost-effectiveness.**

**a. A multi-family program**

**b. An agricultural program**

**c. A strategic energy management or continuous energy improvement program for commercial and industrial customers**

**d. A net zero energy building pilot program**

Response IR-12:

a-d) These specific program types were not analyzed as part of plan development. The customer types targeted by the programs described are served by programs proposed in the plan. The Custom program is expected to include a strategic energy management service. Please refer to PEIEC's response to SYN-IR-01 for analysis relating to all proposed programs.

**Request IR-13:**

**Regarding the Enabling Strategies program described on Page 51, please clarify whether the program will include an energy conservation behavioral program. If so, please describe the behavioral program, including information about targeting, frequency and length of participant engagement with the program, platform/media for engaging participants, number of participants, program administrator cost, and other relevant details.**

Response IR-13:

The Enabling Strategies budget does not include a formal energy conservation behavioural program under which energy savings would be claimed. However, under Enabling Strategies activities there will be a variety of outreach and education efforts directed at Island residents and businesses. One of the intended effects of these efforts will be to help people make behavioural changes to reduce their use of energy. Any resulting energy savings, however, will not be measured or claimed under a behavioural change program label.

**Request IR-14:**

**Refer to Page 6 of the Plan where PEIEC described "all of the energy and demand savings included in this document are electricity only; as well all of the reported investment/costs are for electricity only... ePEI will establish detailed procedures for separately tracking costs and energy savings for electricity and other fuels".**

**a. Please explain why the DSM plan does not include fuel savings.**

**b. When does PEIEC plan to establish detailed procedures for separately tracking costs and energy savings for electricity and other fuels?**

Response IR-14:

a. The EE&C Plan is singularly focused on electricity efficiency and conservation. While ePEI is also providing energy efficiency and conservation programming for energy sources other than electricity, these activities are not part of this application.

Most of PEI's electricity is imported from New Brunswick or generated within PEI from wind. As a result, there are no substantial fuel savings from reduced electricity usage resulting from EE&C programs.

b. Operational procedures have been established for separately tracking costs and energy savings for electricity and other fuels. Tracking will commence when the EE&C Plan is approved by IRAC. These separate tracking procedures can be documented within a few weeks of Plan approval and the commencement of tracking.

**Request IR-15:**

**Refer to Page 8 of the Plan, on which PEIEC describes a 10-year Energy Strategy. The Strategy sets a goal to achieve first year savings of 2 percent of electrical and nonelectrical energy consumption by 2020. Similarly, on Page 13 of the Plan, PEIEC states that government funding in the form of the Low Carbon Economy Fund (LCEF) will be used to reduce consumption of electricity and other non-electrical fuels.**

**a. In regards to non-electrical fuels, please provide the following, including all related reports, documents, or workpapers associated with that analysis:**

**i. All fuel types from which PEIEC will include or track savings. Please include the units of measurement that will be used to quantify savings.**

**ii. Anticipated non-electrical fuel savings by program and by fuel type, in the units of measurement specified above.**

**iii. Anticipated non-electrical fuel savings as a percent of total non-electrical fuel sales, with all units converted to MMBTUs.**

**b. How is the goal allocated between i) electricity and other non-electrical fuels, and between ii) each type of non-electrical fuel noted in part a.i of this question?**

**c. Does the goal allocation reflect non-electrical load forecasts? If so, please provide the forecast by fuel type, describe the methodology and assumptions used to develop the forecast, and provide any related reports, documentation, and workpapers.**

**d. How have non-electrical load forecasts and savings been incorporated into the Plan? Please include all related reports, documents or workpapers associated with that analysis.**

Response IR-15:

a. Because the EE&C Plan is singularly focused on electricity efficiency and conservation, information on efficiency and conservation programming for energy sources other than electricity has not been included in this application.

b. The 2016/17 PEI Energy Strategy includes Actions to achieve electricity savings of 2.0 per cent of electricity consumption each year by 2020 and achieve energy savings of 2.0 per cent per year of non-electric, non-renewable fuels. Thus, there is no allocation of the goal between electricity and non-electrical fuels.

As noted on Page 12 of the Application, in consideration of budget constraints and minimizing the effect on the electricity ratepayer, this EE&C Plan does not achieve the 2.0 per cent goal by Year 3, but builds the foundation for EE&C action and potential demand response activities that can continue beyond its three year term.

c. Please refer to (b) above.

d. Please refer to (a) above.

**Request IR-16:**

**Please provide a complete, detailed description of the avoided costs used by PEIEC in evaluating the cost-effectiveness of its proposed DSM programs. Provide the avoided costs for each year of the study period and by utility. Please provide the avoided costs broken out by the following elements, along with the data sources and methodologies used to develop the avoided costs:**

- **a. avoided energy costs (in $/MWh)**
- **b. avoided capacity costs (in $/kW-year)**
- **c. avoided transmission cost (in $/kW-year)**
- **d. avoided distribution costs (in $/kW-year)**
- **e. avoided cost of compliance with current and anticipated provincial and federal environmental regulations**
- **f. avoided line losses**
- **g. any other element of avoided costs assumed**

Response IR-16:

a) A levelized avoided cost of energy of $0.08 per kWh was used for the purposes of cost-effectiveness analysis. This value is consistent with the values used in Maritime Electric Corporation's 2015-2020 DSM Plan. PEIEC does not possess a detailed methodology for this avoided cost component. In addition, PEIEC does not possess information on Summerside Electric Utility's avoided costs.

b) A levelized avoided cost of capacity of $100 per kW was used for the purposes of cost-effectiveness analysis. This value is consistent with the values used in Maritime Electric Corporation's 2015-2020 DSM Plan. PEIEC does not possess a detailed methodology for this avoided cost component. In addition, PEIEC does not possess information on Summerside Electric Utility's avoided costs.

c) A levelized avoided cost of transmission and distribution of $160 per kW was used for the purposes of cost-effectiveness analysis. PEIEC does not possess separate values for transmission and distribution avoided costs. This value is consistent with the values used in Maritime Electric Corporation's 2015-2020 DSM Plan. PEIEC does not possess a detailed methodology for this avoided cost component. In addition, PEIEC does not possess information on Summerside Electric Utility's avoided costs.

d) Please refer to part c).

e) No such avoided costs were included in the cost-effectiveness analysis.

f) Line losses of 11.5 per cent for energy and 15.7 per cent for demand were used for plan design and cost-effectiveness testing purposes. This value is consistent with the values used in Maritime Electric Corporation's 2015-2020 DSM Plan. PEIEC does not possess a detailed methodology for the derivation of line losses.

g) No other element of avoided costs was used.

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**Request IR-17:**

**Please provide any and all estimates that PEIEC has prepared or utilized within the past three years on the costs of provincial or federal regulations on the emission of greenhouse gases. Please provide any and all reports, documents and workpapers supporting these estimates.**

Response IR-17:

PEIEC has not prepared or used any estimates of the cost of provincial or federal regulation on the emission of greenhouse gases in the last three years.

**Request IR-18:**

**Refer to the cost-effectiveness analyses of the programs in PEIEC's proposed DSM Plan.**

**a. For each of the proposed programs, please provide any and all estimates of participant non-energy benefits (e.g., safety, health, reduced operations and maintenance costs, and increased productivity) that PEIEC is aware of, has produced, or has caused to be produced, for its programs or for similar program(s) in other jurisdiction(s). Please provide any and all related reports, documents or workpapers associated with those estimates.**

Response IR-18:

a) PEIEC has not produced any estimates of non-energy benefits for its programs as part of plan development. PEIEC is aware of ongoing efforts in Nova Scotia relating to non-energy benefits but understands that the results of those efforts are not yet publicly available. PEIEC also understands that the effort in Nova Scotia is based upon primary research undertaken in Massachusetts.

Two Massachusetts primary research studies are relevant to the plan proposed by PEIEC. The citations and links to those studies are provided below. The full studies have not been directly included due to their volume.

TetraTech and NMR Group, *Massachusetts Special and Cross-Sector Studies Area, Residential and Low-Income Non-Energy Impacts (NEI) Evaluation* (Prepared for the Massachusetts Program Administrators), 2011. Available at: http://ma-

eeac.org/wordpress/wp-content/uploads/Special-and-Cross-Sector-Studies-Area-Residential-and-Low-Income-Non-Energy-Impacts-Evaluation-Final-Report.pdf

TetraTech, *Commercial and Industrial Non-Energy Impacts Study* (Prepared for the Massachusetts Program Administrators), 2012. Available at: http://ma-eeac.org/wordpress/wp-content/uploads/Massachusetts-Program-Administrators_Commercial-Industrial-Non-Energy-Impacts-Study.pdf
Research from Massachusetts also exists for commercial and industrial new construction measures as well as dedicated low-income programs; those reports are not included here due to those program types not being included in the proposed plan.

PEIEC has not conducted a specific adaption exercise to map these Massachusetts NEB values to measures and/or programs within the proposed portfolio.

**Request IR-19:**

**Refer to the cost-effectiveness analysis of the programs in PEIEC's proposed DSM Plan.**

**a. For each of the proposed programs, please provide any and all estimates of other resource benefits (e.g., other fuel savings and water savings) that analysis PEIEC is aware of, has produced, or has caused to be produced, for its programs or for similar program(s) in other jurisdiction(s). Please provide any and all related reports, documents or workpapers associated with those estimates.**

**b. For each of the proposed programs, please indicate any and all other resource benefits that were used in the cost-effectiveness analysis. Please provide any and all related reports, documents or workpapers associated with those estimates.**

**c. If any other resource benefits were not included in the cost-effectiveness analysis, why not?**

Response IR-19:

a) Please refer to Attachment 1 of PEIEC's response to SYN-IR-18 for Massachusetts estimates of water savings values. This research does not include non-electric fuel savings.

In addition to these sources, PEIEC is aware that Efficiency Nova Scotia modelled other resource benefits (water savings & wood savings) as part of the 2016-2018 DSM Resource Plan regulatory process. Please refer to Attachment 1 (a Microsoft Excel® file to be filed electronically) of this IR response for an analysis reflecting those estimates within the proposed plan, using current Charlottetown water rates and a value of $300 per cord for firewood, and to the table below for summary results. Worksheets from

"Technical Tables" through "Other Resource Benefits" were modified to produce this representative analysis.

The table below shows summary results from the analysis:

| Other Resource Benefits | Benefits - $ by Program Year | | |
|---|---|---|---|
| | 2018/2019 | 2019/2020 | 2020/2021 |
| Energy Efficient Equipment Rebates | $ 477,607.75 | $ 690,939.21 | $ 675,018.95 |
| Home Insulation Rebates | $ - | $ - | $ - |
| Winter Warming | $ 4,105.38 | $ 4,105.38 | $ 4,105.38 |
| New Home Construction | $ - | $ - | $ - |
| Instant Energy Savings | $ - | $ - | $ - |
| Business Energy Rebates | $ - | $ - | $ - |
| Business Energy Solutions | $ 30.66 | $ 41.69 | $ 56.41 |
| Custom Energy Solutions | $ - | $ - | $ - |

This analysis was conducted as part of PEIEC's response to this information request, and does not represent an application for the inclusion of these other resource benefits in the proposed plan.

b) No such estimates were used.

c) Other resource benefits represent a very small portion of the total net present value benefits of the plan portfolio. In addition, the data quality associated with estimates relating to other resource benefits is poorer than those values based on utility avoided costs. PEIEC would also not that prices for cordwood and water vary significantly across PEI.

**Request IR-20:**

**Please refer to Tables 8, 9, and 10 of the Plan.**

**a. Please provide the expected funding breakout between Maritime Electric and Summerside Electric ratepayers. Please provide any and all related reports, documentation or workpapers.**

**b. Please describe the source, nature, and duration of the federal government funding source.**

**i. What is the expected frequency and value of payments within each program year?**

**ii. How will PEIEC maintain the programs between funding installments?**

**iii. Is there a plan for maintaining the EE&C programs if or when federal funds cease or decrease?**

**c. Please describe the source, nature, and duration of the provincial government funding source.**

**i. What is the expected frequency and value of payments within each program year?**

**ii. How will PEIEC maintain the programs between funding installments?**

**iii. Is there a plan for maintaining the EE&C programs if or when provincial funds cease or decrease?**

Response IR-20:

a. It is estimated that, of the EE&C Plan costs recovered from electricity customers, the City of Summerside would contribute approximately 10 per cent of the total recoverable Plan costs, and Maritime Electric would contribute 90 per cent. This estimate is based on the percentage of sales of electricity on PEI, as per section 6 (page 29) of the EE&C Plan. The details of funding contribution will be included in agreements with Maritime Electric and the City of Summerside .

b. Federal funding is available to ePEI via the Low Carbon Economy Leadership Fund. This funding is available until March 31, 2022.

i. Claims will be submitted to the federal government at least once per program year. The value of each claim will be based on eligible expenditures incurred by ePEI, as PEIEC's service agent for purposes of the EE&C Plan, up to the date of claim.

ii. All EE&C Plan expenditures, including those being reimbursed by the federal government, will be included in ePEI's operating budget, which forms part of the Government of PEI's operating budget. Once annual budget approval has been received, the Province of PEI will provide the cash flow necessary to support the budgeted EE&C Plan program expenditures.

iii. Budget allocations will be reviewed in the final year of the plan. Funding from the federal Low Carbon Economy Leadership Fund will be available for one additional year beyond the current EE&C Plan.

c. Provincial government funding is required to access the federal Low Carbon Economy Leadership Funds. As such, it is expected that Provincial funding will also be available until at least March 31, 2022.

i. Provincial government funding of EE&C plan expenditures will occur instantaneously as expenditures are incurred. All EE&C Plan expenditures will be included in ePEI's operating budget, which forms part of the Provincial operating budget. Upon approval of the Provincial budget, the Province of PEI will provide the cash flow necessary to support the budgeted EE&C Plan program expenditures.

ii. Provincial funding of EE&C plan expenditures will be provided concurrently as expenditures are incurred rather than via funding installments.

iii. Budget allocations will be reviewed in the final year of the plan. Funding from the federal Low Carbon Economy Leadership Fund, and hence Provincial funds as those are required to access Federal funds, will be available for one additional year beyond the current EE&C Plan.

**Request IR-21:**

**In addition to the electricity sales provided in Table 7, please provide the following historic information for each of the past four years, by customer class and for each utility:**

- **a. number of customers**
- **b. peak demand for summer and winter (in MW)**
- **c. revenues collected**
- **d. rates, including energy charges, demand charges, customer charges, DSM charges, and any other charges included in customer rates**

Response IR-21:

The electricity sales information provided by Maritime Electric and Summerside Electric was used to compare the EE&C Plan targets to the Provincial Energy Strategy goal for electricity reduction, and to estimate the cost sharing between Maritime Electric and Summerside Electric. In gathering this information, some of the details referenced above were collected by ePEI/PEIEC during the development of the EE&C Plan.. This information was not obtained from Maritime Electric. Summerside Electric provided the following information:

| | 2014 | | | |
|---|---|---|---|---|
| | **Dom** | **Com** | **Ind** | **Flat** |
| **Customers (Annual average)** | 5,877 | 975 | 23 | 219 |
| **Peak Demand (MW) May - Oct** | not collected | | | |
| **Peak Demand (MW) Nov - Apr** | not collected | | | |
| **Revenue** | $7,502,700 | $10,135,993 | $1,280,481 | $516,597 |

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| | 2015 | | | |
|---|---|---|---|---|
| | **Dom** | **Com** | **Ind** | **Flat** |
| **Customers (Annual average)** | 5,897 | 970 | 22 | 226 |
| **Peak Demand (MW) May - Oct** | not collected | | | |
| **Peak Demand (MW) Nov - Apr** | not collected | | | |
| **Revenue** | $8,027,309 | $10,518,059 | $1,359,717 | $528,639 |

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| | 2016 | | | |
|---|---|---|---|---|
| | **Dom** | **Com** | **Ind** | **Flat** |
| **Customers (Annual average)** | 5,917 | 965 | 21 | 234 |
| **Peak Demand (MW) May - Oct** | not collected | | | |
| **Peak Demand (MW) Nov - Apr** | not collected | | | |
| **Revenue** | $8,118,208 | $10,621,634 | $1,389,759 | $536,781 |

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| | 2017 | | | |
|---|---|---|---|---|
| | **Dom** | **Com** | **Ind** | **Flat** |
| **Customers (Annual average)** | Not collected | Not collected | Not collected | Not collected |
| **Peak Demand (MW) May - Oct** | 20 | | | |
| **Peak Demand (MW) Nov - Apr** | 27 | | | |
| **Revenue** | Not collected | Not collected | Not collected | Not collected |

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**Request IR-22:**

**Please describe the methodology and assumptions used to develop the sales forecast in Table 7, and provide any related reports, documentation, and workpapers.**

Response IR-22:

The sales forecast details and assumptions used in the Plan were provided directly by Maritime Electric and Summerside Electric in the Fall of 2017, with updates made in June 2018.

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**Request IR-23:**

**In addition to the electricity forecast provided in Table 7, please provide any and all forecasts that PEIEC has of the following information for the next four years, by customer class and utility, including a description of the methodologies and assumptions used to develop each forecasted value:**

**a. number of customers**

**b. peak demand for summer and winter (in MW)**

**c. revenues collected**

**d. rates, including energy charges, demand charges, customer charges, DSM charges, and any other charges included in customer rates**

Response IR-23:

Some of these details were collected during the development of the EE&C Plan. Summerside Electric provided electricity demand forecasts, and the following is a summary of that information:

| | 2018 | 2019 | 2020 | 2021 |
|---|---|---|---|---|
| **Peak Demand (MW) May - Oct** | 21 | 21 | 22 | 22 |
| **Peak Demand (MW) Nov - Apr** | 28 | 29 | 29 | 30 |

For related information collected for Maritime Electric, please refer to Attachment 1 of PEIEC's response to SYN-IR-30.

**Request IR-24:**

**Has PEIEC established whether low and modest income customers will contribute to the funding of EE&C programs? If not, please describe how low and moderate income programs will be funded. Please provide any and all related reports, documentation or workpapers.**

Response IR-24:

Low- and modest-income residential customers will contribute to funding EE&C programs through the rate rider for residential customers, which apply to all residential customers regardless of income level. This funding from residential customers is multiplied with the funding contributions of the Federal Government and the Province of PEI as noted on pages 33 and 34 of the Application.

It should be noted that incentive levels are enhanced for low income clients (household income < $35,000 per year). In addition, applicants with household income less than $50,000 per year are eligible for Winter Warming without any cost of participation to the client. Both of these programs are funded through the EE&C Plan. Home Comfort is a whole home retrofit program for low income funded entirely by Government (federal and provincial).

Information on PEI energy efficiency incentives for low-income is available at: https://www.princeedwardisland.ca/sites/default/files/publications/energy_efficient_equipment_rebates_brochure_2018.pdf and https://www.princeedwardisland.ca/sites/default/files/publications/home-insulation-rebates_pei_2018.pdf.

**Request IR-25:**

**Refer to Page 24 of the DSM plan, lines 8 to 14.**

**a. Based on PEIEC's review of energy efficiency program cost recovery mechanisms in other jurisdictions, please indicate which jurisdictions recover program costs annually.**

**b. Please describe in detail the administrative burden of resetting riders for each rate class.**

**c. Are there any jurisdictions that set EE&C rate riders on a three-year term basis? If so, please indicate which jurisdictions use this approach.**

**d. Regarding the administrative burden of resetting the EE&C rate riders every year, does PEI have any other rate riders that are reset every year? If so, please describe the experience with modifying the rider annually.**

**e. Would it be administratively burdensome to reset EE&C rate riders annually if the rate riders do not differ for each rate class? Why or why not?**

Response IR-25:

a) PEIEC did not review energy efficiency program cost recovery mechanisms in other jurisdictions as part of Plan development.

b) Resetting rate riders requires a number of distinct steps. Some steps involve only the program administrator, others require effort by the electricity utilities, and still others require involvement by the Regulator, stakeholders, the program administrator and electricity utilities. Typical steps are presented below.

- A cost allocation exercise must be conducted (typically by the Program Administrator) to determine expected forward looking spending on a rate class basis (whatever basis the rate rider will be assigned as). The frequency of conducting this analysis must match the temporal granularity of the rate-rider (e.g. annual). It is possible to conduct several annual analyses as a batch (e.g. each of the three years of a three-year plan), although caution must be exercised, as the further forward-looking the analysis the more inaccurate it may be. These inaccuracies can either result in a lack of flexibility in responding to the market (i.e. locked-in rate class investment amounts) or require subsequent revisions to the estimates. Accurate forward-looking information (e.g. energy requirement and demand forecasts) is also required from the electricity utilities, if any kind of system-based allocation is to be a part of the cost allocation methodology.

- If a balance adjustment procedure is part of the cost allocation methodology, actual investment by rate class, actual energy and demand information by class (if using some portion or a total system-based allocation methodology), and actual recoveries by rate class must be calculated for the purposes of generating the balance adjustment portion of the rate rider.

- A regulatory process by IRAC would likely be required each year to provide intervenors a venue to comment on the proposed rate riders, and inspect the methodology used to generate said rate riders.

- Finally, the relevant electricity utilities would have to implement the updated rate riders, by way of changes to billing systems and other associated systems.

c) Please refer to the response in (a).

d) Neither Maritime Electric nor Summerside Electric has other rate riders that are adjusted annually. PEI currently provides a 10 (10%) percent rebate on residential electricity bills.

e) Assigning rate riders using only one global rate rider amount would greatly decrease the complexity of performing the required cost allocation and recovery analyses associated with generating the rate riders. The regulatory and utility billing administrative burdens would still exist in this scenario. In addition, using one rate rider amount for all classes may introduce challenges associated with class cross-subsidization.

**Request IR-26:**

**Refer to the cost recovery mechanism discussed on Page 24 of the DSM plan and the proposed programs presented on Table 2 through 4 of the DSM plan. Please provide a summary table that presents rate classes targeted under each proposed EE&C program.**

Response IR-26:

The programs below will be available to the rate classes as indicated:

| Program | Rate Classes Targeted |
|---|---|
| **Energy Efficient Equipment Rebates** | Residential |
| **Home Insulation Rebates** | Residential |
| **Winter Warming** | Residential |
| **New Home Construction** | Residential |
| **Instant Energy Savings** | Residential |
| **Business Energy Rebates** | General Service, Small Industrial, Large Industrial |
| **Business Energy Solutions** | General Service, Small Industrial |
| **Custom Energy Solutions** | General Service, Small Industrial, Large Industrial |

**Request IR-27:**

**Refer to Page 26 regarding the proposed program cost true-up mechanism.**

**a. Suppose one program under one rate class is under-subscribed in one year, but another program under the same rate class receives higher than expected demand/participants beyond its allocated budget. For this kind of situation, is PEIEC proposing any mechanism to shift funding between programs in a timely manner to meet the changing market demand? If so, please explain this mechanism in detail. If not, please describe how PEIEC plans to address this issue.**

Response IR-27:

a) PEIEC supports the inclusion of budget flexibility by rate class and by program as part of the approval of this DSM Resource Plan. This flexibility is an important tool to manage changing market conditions and to react to actual program interest, participation, , and electricity savings; these actuals will inevitably vary from Plan as noted on page 24 (lines 16-18) of the Application,

PEIEC proposes submission of mid-course adjusted program investment and savings goals as part of an annual submission to IRAC. While a plan is in progress, PEIEC requests to have the ability to shift investment and savings targets between programs through notice provided to IRAC. In all cases, PEIEC intends that this submission be informational (i.e. as opposed to an application).

In terms of the degree of changes, PEIEC will include a detailed rationale for changes to program investment, or an individual savings target in excess of twenty-five (25%) per cent of the original filed plan.

The timing of this submission to IRAC is expected to occur following Q2 of each year, coinciding with the expected release of program evaluation reports, a key piece of information used to determine required adjustments.

**Request IR-28:**

**On Page 6 and Page 29 of the Plan, PEIEC references the existing and future involvement of Summerside Electric in DSM programs.**

**a. Please describe Summerside Electric's historical involvement with energy efficiency programs and activities.**

**b. Please provide all available savings data for the programs and activities identified in part a. of this question.**

**c. Has Summerside Electric signed any agreement with PEIEC for PEIEC's EE&C service? If so, please provide the agreement. If not, please provide any documentation that shows the utility's commitment to PEIEC's EE&C programs.**

Response IR-28:

a. The development of the EE&C Plan did not include a historical review of Summerside Electric's energy related initiatives. However, Summerside Electric currently offers incentives under its "Heat for Less Now" demand reduction program. In addition, residents in Summerside are eligible for current and past ePEI programs.

b. PEIEC does not have this information in its possession. The development of the EE&C Plan by ePEI/PEIEC did not include a collection of historical savings data from Summerside Electric's energy related initiatives.

c. PEIEC and the city of Summerside have been in negotiations since June 2018 on an operational agreement with regard to EE&C service. In the event an agreement is reached, PEIEC will immediately file a copy of the agreement with the Commission.

**Request IR-29:**

**Refer to Page 30 of the DSM plan regarding evaluation and verification (E&V) of energy savings.**

**a. Has PEIEC developed an E&V plan? If so, please provide it.**

**b. If the answer to part a. of this question is no, please answer the following questions:**

**i. Please explain why the entity has not developed the plan yet, and when it is planning to develop an E&V plan.**

**ii. Has PEIEC included the cost of developing an E&V plan in its EE&C Plan? If so, how much did it allocate to this task?**

Response IR-29:

a. PEIEC has not yet developed a detailed evaluation and verification plan.

b. (i) A high-level overview of the evaluation activities, by year, is provided in Appendix B of the EE&C Plan. A more detailed E&V Plan has not yet been developed as the programs and funding have not yet been approved. Upon approval and implementation of the EE&C Plan, PEIEC will, within six months, issue a request for proposals for an independent evaluator. PEIEC will then provide the selected evaluator an overview of the desired activities, and will work with the evaluator to develop the E&V Plan. This ensures both buy-in and approval from both PEIEC and the third-party evaluator.

b. (ii) A budget for evaluation activities has been included in the EE&C Plan. This budget would include working with the third party evaluator to develop the E&V plan. The

evaluation budget is as follows: $150,000 for 2018/19; $224,000 for 2019/20; and $225,500 for 2020/21.

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**Request IR-30:**

**Please provide any and all estimates that PEIEC has of the rate impacts of its DSM programs. Please provide any and all related reports, documentation or workpapers.**

Response IR-30:

For an estimate of impacts on rates and bills, please refer to the Microsoft Excel® file in Attachment 1 of this IR response, which has been filed electronically.

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**Request IR-31:**

Please provide any and all estimates that PEIEC has of the bill impacts of its DSM programs. Please provide any and all related reports, documentation or workpapers.

Response IR-31:

Please refer to PEIEC's response to SYN- IR-30.

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**Request IR-32:**

**Please provide any and all related reports, documents or workpapers associated with the recovery of lost revenue from ratepayers.**

Response IR-32:

Please refer to PEIEC's response to IR 30, Attachment 1 for information on lost revenues and lost contributions to fixed costs. This analysis shows that lost revenues are largely counterbalanced with utility avoided costs.

In addition, with the current PEI regulatory practice, MECL's filing for multi-year rate case includes annual adjustments for both load and revenue requirements. With these annual load adjustments also incorporating load loss resulting from EE&C programs, any loss of contribution to MECL's fixed costs will be minimized as noted on pages 25-26 of the Plan.

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**Request IR-33:**

**Has PEIEC established a position on whether it should be allowed to earn shareholder incentives with regard to the implementation of energy efficiency programs? If so, please describe PEIEC's position, and please provide any related reports, documents or workpapers associated with it.**

Request IR-33:

PEIEC has given no consideration on whether it should be allowed to earn shareholder incentives in relation to the implementation of energy efficiency programs. PEIEC has no immediate intention to further consider this position.