



**THE ISLAND REGULATORY AND
APPEALS COMMISSION**
Prince Edward Island
Île-du-Prince-Édouard
CANADA

Docket: UE41400
Order: UE19-03

IN THE MATTER of an application by the Prince Edward Island Energy Corporation for approval of a 2018-2021 Demand Side Management Resource Plan, pursuant to Section 16.1 of the *Electric Power Act*.

BEFORE THE COMMISSION ON Friday, May 17, 2019.

J. Scott MacKenzie, Q.C., Chair
M. Douglas Clow, Vice-Chair
John Broderick, Commissioner

ORDER

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1 INTRODUCTION

On June 29, 2018, the Prince Edward Island Energy Corporation (“PEIEC”) submitted an application to the Island Regulatory and Appeals Commission (“IRAC” or the “Commission”) seeking approval of an electricity efficiency and conservation plan (the “EE&C Plan” or the “Plan”) for a three year term from 2018 to 2021. The application and proposed EE&C Plan were submitted voluntarily by PEIEC, in accordance with subsection 16.1(2.1) of the *Electric Power Act*, R.S.P.E.I. 1988, c. E-4 (the “Act”).

The EE&C Plan consists of electricity efficiency and conservation programs that have the primary objective of reducing electricity usage from what would have occurred absent energy savings measures. The EE&C Plan, if approved, will be administered by efficiencyPEI (“ePEI”). ePEI is a service agency that already provides energy efficiency services for PEIEC.

1.1 The Applicant

PEIEC is a Crown corporation created pursuant to the *Energy Corporation Act*, R.S.P.E.I. 1988, c. E-7. It is generally excluded from the definition of a “public utility” contained in section 1 of the *Act*, and is therefore generally exempt from regulation by the Commission (see *Act*, s. 1(3); see also *Energy Corporation Act*, s. 2(6)).

PEIEC is, however, a public utility for the purpose of section 16.1 of the *Act* (see *Act*, s. 1(4)). This means that PEIEC may be ordered by the Commission to submit a DSM plan for review and approval, or that PEIEC may voluntarily submit a DSM plan to the Commission (see *Act*, ss. 16.1(2), (2.1)).

In the present application, the EE&C Plan was submitted voluntarily by PEIEC, in the absence of a Commission order.

1.2 Approvals Sought

PEIEC is seeking approval of the EE&C Plan as filed with the Commission. Specifically, PEIEC seeks approval of the proposed EE&C programs, the proposed annual investment for each year of the Plan, and certain approvals relating to cost effectiveness testing and the evaluation of the proposed programs.

A comprehensive list of the regulatory approvals requested is set forth in Section 10 of the EE&C Plan and are discussed herein.

1.3 Regulatory Process and Participants

The EE&C Plan was filed with the Commission on June 29, 2018. A Notice of Application was posted on the Commission website on July 6, 2018, and also published in local newspapers.

The Notice of Application invited members of the public to comment on the EE&C Plan by submitting written comments to the Commission on or before September 7, 2018. The Notice also advised that a public hearing would not be held unless it was deemed necessary by the Commission. In the absence of a public hearing, the Notice stated that the Commission would finalize its review of the Application in the form of a written Order.

Following publication of the Notice, the Commission received written comments from four interested members of the public. Mr. Roger King also submitted written questions to PEIEC. All comments, questions and responses were posted on the Commission website and provided to PEIEC.

Upon receipt of the EE&C Plan, Commission staff retained the services of Synapse Energy Economics, Inc. (“Synapse”) to assist in the review of the Plan.

Between August and November 2018, Synapse and Commission staff submitted a number of written questions to PEIEC in the form of interrogatories. All interrogatories and PEIEC’s responses were posted on the Commission website.

In February 2019, Synapse completed its expert report which included a detailed assessment of the proposed EE&C Plan. The Synapse report also included a number of recommendations relating primarily to the evaluation of program performance and reporting requirements.

The Synapse report was provided to PEIEC for review and comment. PEIEC provided written comments to the Commission and was generally agreeable to the recommendations made by Synapse.

Upon review of the record and, in particular, the Synapse report and the response of PEIEC, the Commission determined that the outstanding issues were narrow and could be resolved without an oral hearing.

2 BACKGROUND

2.1 Previous DSM Initiatives

In 2015, Maritime Electric Company, Limited (“Maritime Electric”) filed a proposed DSM plan with the Commission (Commission Docket UE21406). In November 2015, the Commission issued Order UE15-02 with respect to the proposed DSM plan. The Commission approved only the public outreach and education components of the DSM plan for the years 2015 to 2020 inclusive, with an annual cost of \$167,500. The Commission did not accept the balance of the DSM plan as filed.

2.2 Overview of Legislative Framework

PEIEC is a “public utility” for the purposes of energy efficiency and demand-side resource measures. As a result, PEIEC is subject to Commission regulation on matters of energy efficiency and demand-side management.

Section 16.1 of the *Act* governs the Commission process to review and approve a proposed energy efficiency and demand-side resource plan. As the EE&C Plan was voluntarily submitted by PEIEC, it must meet the requirements set forth in subsection 16.1(5.1) of the *Act*. Subsection 16.1(5.1) provides:

An energy efficiency and demand-side resources plan that is submitted to the Commission by a public utility under subsection (2.1) shall

- (a) **be for a term that is consistent with industry standards;**
- (b) **satisfy the Commission that the particular energy efficiency and demand-side resource measures contained in the plan are reasonably likely, on implementation, to achieve the results forecast in the plan;**
- (c) **contain a reasonable estimate of**
 - (i) **the financial costs, for each public utility named in the plan and its customers, to be incurred on implementing the plan and over the course of its term, and**
 - (ii) **the financial benefits, for each public utility named in the plan and its customers, to be achieved on implementing the plan and over the course of its term; and**
- (d) **contain a plan for apportioning the costs and benefits referred to in clause (c) between the public utilities named in the plan.**

[emphasis added]

If the Commission is satisfied that the EE&C Plan submitted by PEIEC meets these requirements, then the Plan may be approved by the Commission. Section 16.1(6) of the Act provides:

*On receipt of an energy efficiency and demand-side resources plan from a public utility, **the Commission may approve the plan if the Commission is satisfied that***

- (a) *in the case of a plan submitted pursuant to an order under subsection (1), the plan has been submitted for approval within such time as the Commission required in the order made under subsection (1) directing the submission of the plan; and*
- (b) **the plan meets the requirements of subsection (5) or (5.1), as the case may be.**

[emphasis added]

As a result, the Commission may only approve the EE&C Plan if it is satisfied that each of the following requirements is satisfied:

- (a) The proposed EE&C Plan is for a term that is consistent with industry standards;
- (b) The particular energy efficiency and demand-side resource measures contained in the EE&C Plan are reasonably likely, on implementation, to achieve the results forecast in the Plan;
- (c) The EE&C Plan contains a reasonable estimate of the financial costs and financial benefits for each public utility named in the Plan and its customers; and
- (d) The EE&C Plan contains a plan for apportioning the financial costs and benefits between the public utilities named in the Plan and the apportionment is reasonable.

If the EE&C Plan is approved, the Commission is required to issue an Order to each public utility named in the Plan requiring the public utility to pay the costs as set out in the Plan (see *Act*, s. 16.1(8.1)).

The evaluation of program performance is an integral part of any DSM plan. As a result, if the EE&C Plan is approved, PEIEC will be required to report annually to the Commission on matters such as program implementation, the results achieved, and other information that may be required by the Commission. Such annual reporting is legislatively required by subsection 16.1(13) of the *Act*, which provides:

After the approval of the energy efficiency and demand-side resources plan of a public utility, the public utility shall, within three months after the end of the public utility's fiscal year in each calendar year or part of a calendar year occurring during the term of the approved plan, prepare and submit to the Commission a report for that calendar year, or part of a calendar year, as the case may be, that contains such information respecting the implementation of the plan, including the results achieved, as may be required by the Commission.

3 EE&C PLAN

The proposed EE&C Plan has a three-year term, from 2018/19 to 2020/21. The Plan as filed with the Commission deals only with electricity savings, as the *Act* is concerned only with the reduction or modification of electricity consumption (see *Act*, s. 1(1)(e)).

3.1 Plan Participants

The EE&C Plan, if approved, will be available to customers of both Maritime Electric and Summerside Electric. Although Maritime Electric is a “public utility” and is subject to regulation by the Commission, Summerside Electric is not subject to regulation by the Commission. As a result, the Commission does not have jurisdiction to issue an Order to Summerside Electric requiring the utility to participate in the Plan or to pay any portion of the costs associated with the Plan.

Although Summerside Electric is not subject to Commission regulation, PEIEC and Summerside Electric have entered into a Service Delivery Agreement, a copy of which has been filed with the Commission on a confidential basis. In accordance with the Service Delivery Agreement, PEIEC agrees to provide energy efficiency and conservation services to Summerside Electric, and Summerside Electric agrees to contribute proportionately to the EE&C Plan expenditures approved by the Commission. The Service Delivery Agreement is conditional on IRAC approval of the EE&C Plan.

PEIEC states in the Application that there may be some variation in programs offered to Summerside Electric customers, particularly during the first year or two of the EE&C Plan. PEIEC does not state what these variations may be.

3.2 Overview of Programs

The EE&C Plan has savings initiatives in two sectors: residential programs and business programs.

Residential programs specifically target energy use within the home, and include:

- **Energy Efficient Equipment Rebates:** The program offers incentives on electric space heating and/or water heating systems. This includes rebates on mini-split heat pumps, which are expected to account for approximately 45% of the anticipated energy savings.

In an effort to assist low and modest-income Islanders, the program will offer a special incentive tier with rebates approximately 1.8 times higher for low-income participants.

- **Home Insulation Rebates:** The program offers a subsidy on home energy assessments. Although the energy assessment subsidy has been offered for quite some time, the subsidy will increase so that the participant cost for an energy assessment is reduced from \$150 to \$99.

Participants who heat their home primarily with electricity will also have access to rebates for building envelope upgrades.

- **New Home Construction:** The program offers a rebate for new home construction which achieves an ENERGY STAR/R2000 rating and/or an EnerGuide rating that demonstrates improved performance compared to code-built homes.
- **Winter Warming:** The program will be offered to low-income Islanders and includes the installation of low-cost residential energy efficient upgrades at no cost to participants.
- **Instant Energy Savings:** The program provides in-store rebates on energy efficient products. Rebates will be offered on both larger appliances and smaller purchases, such as light bulbs and thermostats.

PEIEC notes in the Application that additional programs may be added to the residential sector beyond the timeline of this Plan to address gaps in program offerings, such as appliance retirement and changing behavior.

Business programs take a diversified approach to energy savings and incentives that could lead to small or large savings opportunities. The business programs include:

- **Business Energy Rebates:** The program offers rebates to businesses that purchase qualifying energy efficient equipment. There are several mechanisms through which to offer rebates, including mail-in rebates and instant point-of-sale rebates (or discounts). The product mix will include lighting, HVAC, refrigeration, motors, and more, but will initially limit the number of eligible products to allow ePEI to manage the program budget and gage uptake of the products.
- **Business Energy Solutions:** The program offers subsidies for energy assessments for eligible businesses, and substantial rebates for completing eligible energy efficiency improvements.
- **Custom Energy Solutions:** The program offers incentives for both new construction and large retrofits in existing facilities. Unlike the Business Energy Rebates and Business Energy Solutions programs, the Customer Energy Solutions program is intended to offer a more customized approach and program for larger businesses with unique energy usage. The program will specifically target high electricity users.

3.3 Forecast Savings and Budget

The EE&C Plan proposes an expenditure of \$2.77 million for 2018/2019 with forecast first year electricity savings of 5.4 GWh of energy and 1.4 MW of demand. The Plan includes an investment of \$4.66 million in 2019/2020 with forecast savings of 10.8 GWh of energy and 2.6 MW of demand,

and an investment of \$5.88 million in 2020/2021 with forecast savings of 13.1 GWh of energy and 2.9 MW of demand.

In April 2021, at the conclusion of the three-year term, PEIEC projects that the total annual electricity savings resulting from implementation of the Plan will be 29.3 GWh of energy and 6.9 MW of demand.

Table 1 shows the proposed savings broken out by program for each year of the three-year plan. Table 2 shows the proposed budget by program for the three-year term

Table 1 – Planned Savings by Program

Program	Planned Net MWh				Planned Capacity (MW)			
	2018/19	2019/20	2020/21	Total	2018/19	2019/20	2020/21	Total
Energy Efficient Equipment Rebates	2,054	2,841	3,126	8,022	0.71	0.99	1.10	2.80
Home Insulation Rebates	525	1,300	1,843	3,668	0.15	0.37	0.53	1.05
Winter Warming	348	348	348	1,044	0.08	0.08	0.08	0.24
New Home Construction	139	164	287	590	0.04	0.05	0.08	0.17
Instant Energy Savings	1,104	3,744	2,399	7,247	0.24	0.81	0.47	1.52
Business Energy Rebates	874	1,114	1,507	3,495	0.12	0.15	0.21	0.48
Business Energy Solutions	392	534	722	1,648	0.05	0.07	0.10	0.23
Custom Energy Solutions	-	726	2,905	3,632	n/a	0.08	0.32	0.40
Total	5,437	10,770	13,138	29,346	1.39	2.61	2.89	6.89

Source – SYN IR-01 Attachment 1, Summary Programs tab (Table: 2018 – 2020 Programs for ePEI).

Table 2 – Budget by Program

	Budget			Total Costs
	2018/19	2019/20	2020/21	
Energy Efficient Equipment Rebates	803,150	1,186,150	1,449,050	3,438,350
Home Insulation Rebates	302,254	687,903	1,001,201	1,991,358
Winter Warming	257,356	257,356	257,356	772,068
New Home Construction	129,529	142,588	180,493	452,610
Instant Energy Savings	373,014	732,353	645,674	1,751,041
Business Energy Rebates	381,326	441,941	552,038	1,375,304
Business Energy Solutions	267,568	392,493	520,726	1,180,787
Custom Energy Solutions	30,000	260,882	641,028	931,910
Enabling Strategies	75,000	334,946	410,000	819,946
Evaluation	150,000	224,173	225,500	599,673
Total	\$2,769,198	\$4,660,785	\$5,883,064	\$13,313,048

Source – SYN IR-01 Attachment 1, Summary Programs tab (Table: 2018 – 2020 Programs for ePEI).

PEIEC proposes that the funding for 2018/2019, in the total amount of \$2.77 million, be shared as follows:

- \$600,000 contribution by Maritime Electric and Summerside Electric;
- \$1,149,500 contribution by ePEI; and
- \$1,019,500 contribution from the federal government.

It is proposed that, of the EE&C Plan costs recoverable from electricity customers, Summerside Electric would contribute approximately 10 percent of the total recoverable Plan costs, and Maritime Electric would contribute approximately 90 percent. This estimate is based on the percentage of sales of electricity in the Province.

PEIEC has advised that the proposed federal funding is available to ePEI via the Low Carbon Economy Leadership Fund. Provincial government funding is required to access the federal Low Carbon Economy Leadership Funds.

According to the Application, federal funding from the Low Carbon Economy Leadership Fund is available until March 31, 2022. PEIEC expects that Provincial funding will also be available until March 2022, as it is required to obtain federal funding.

3.4 Cost Effectiveness Testing

Cost effectiveness testing directly informs EE&C planning and decision-making processes. The cost effectiveness test provides an analytical framework to ensure that the use of ratepayer funds for EE&C results in sufficient benefits.

There are three common tests used to determine cost effectiveness. These tests are the Total Resource Cost Test, the Societal Cost Test and the Program Administrator Cost Test ("PAC Test"). PEIEC proposes that the PAC Test be used to determine cost effectiveness of the EE&C Plan.

The PAC Test compares the utility's value of energy savings (the present value of long-run avoided energy and capacity costs) to the utility's EE&C expenditures. The test is fully symmetrical, comparing only the program administrator's costs to its benefits, with all of the costs and benefits identified monetarily. PEIEC proposes that the cost effectiveness be assessed at the portfolio – rather than the program – level.

PEIEC recommends that the cost effectiveness testing use the Government of Prince Edward Island's long-term cost of borrowing for the discount rate. At the time of the Application, the long-term cost of borrowing was 3.2%.

3.5 Evaluation and Verification

The purpose of the evaluation and verification process is to assess the impacts of energy efficiency programs and suggest opportunities for improvement.

PEIEC proposes to file evaluations with the Commission on an annual basis. The evaluations will be conducted by an independent evaluation consultant obtained through an RFP process. The evaluator will be contracted for a three-year period to perform evaluations during the term of the EE&C Plan.

During the term of the EE&C Plan, PEIEC proposes to focus on impact evaluations, rather than market and/or process evaluations. An impact evaluation determines the impact of the program, typically in terms of energy and demand savings.

4 SYNAPSE REPORT

Synapse was retained on behalf of Commission staff to assist in the review of the EE&C Plan. Synapse was asked to review the proposed EE&C Plan and provide an opinion as to whether the Plan satisfies the requirements in subsection 16.1(5.1) of the *Act*. In particular, Synapse was asked to opine on each of the following issues:

1. Is the proposed EE&C Plan for a term that is consistent with industry standards?

2. Are the particular energy efficiency and demand-side resource measures contained in the EE&C Plan reasonably likely, on implementation, to achieve the results forecast in the Plan?
3. Does the EE&C Plan contain a reasonable estimate of the financial costs and financial benefits for each public utility named in the plan and its customers?
4. Does the EE&C Plan contain a plan for apportioning the costs and benefits referred to above between the public utilities named in the plan and is the apportionment reasonable?

Between August and October 2018, Synapse posed fifty-one (51) written interrogatories to PEIEC for the purpose of gathering additional information with respect to the Application. PEIEC responded to the interrogatories in a timely manner and to the best of its abilities.

Three of the interrogatories posed by Synapse related specifically to Maritime Electric's general rate application, performance incentive mechanisms, and earnings adjustment mechanism. As PEIEC did not have the information necessary to respond to these questions, Maritime Electric voluntarily submitted the requested information.

Synapse thereafter finalized its report and filed a copy with the Commission. Its findings are summarized below.

4.1 Consistency of Term with Industry Standards

Synapse concluded that the proposed three-year term is reasonably consistent with industry standards. It noted that a three-year term is common for EE&C programs, and that except for single-year plans in 2015 and 2018, Nova Scotia has used three-year plans.

According to Synapse, a multi-year term can foster confidence and continuity in the marketplace. In this way, it may provide a better environment for market transformation than plans with shorter terms. Also, a plan with a longer term can more easily take on large projects or comprehensive measures that require multi-year support.

In PEI, annual reporting on the results of plan implementation is required, in accordance with the *Act*. Since this is a new portfolio, reporting within the three-year term of the Plan will be important. Synapse recommends that the types and formats of information to be reported should be discussed with stakeholders and established early on, so that consistently defined results can be monitored over time.

4.2 Reasonableness of Projected Savings and Participation

In determining whether the EE&C Plan is reasonably likely, on implementation, to achieve the results forecast in the Plan, Synapse considered both the forecasted savings and forecasted customer participation.

Savings

Synapse noted that its assessment of the reasonableness of the savings estimates depends in part on the soundness of the load forecasts. However, information on the load forecasts for the utilities have not been provided or are not available. Instead, PEIEC provided 2018-2022 sales forecasts for Maritime Electric and Summerside Electric in response to an information request.

PEIEC plans to attain a large amount of savings as a percent of sales (0.41 percent) in 2018/19, the first year of the plan. In the following year, savings increase by a smaller increment (0.33 percent) to 0.74 percent of sales. From 2019/20 to 2020/21, savings under the Plan level out

relative to sales at 0.74 percent. Table 3 shows the savings as a percent of sales for the three-year term based on the sales forecasts.

Table 3 – Projected Savings, Projected Sales, and Savings as a Percent of Sales

Year	2018/19	2019/20	2020/21
Projected savings (GWh)			
Residential	5.6	10.2	10.3
Business	1.5	2.8	5.9
Total	7.1	13.0	16.2
Projected sales (GWh)			
MECL	1,229	1,236	1,246
Summerside	137	140	142
Total	1,366	1,376	1,388
Projected savings as a percent of sales (%)			
All PEI	0.41%	0.74%	0.74%

Sources: SYN IR-01 Attachment 1, Summary Programs tab (Table: 2018 – 2020 Programs for ePEI), Elec Use, d Savings tab (Table: Sales Forecast for PEI (GWh)).

Synapse recommends that PEIEC consider increasing savings targets as a percent of sales in the third year, as many jurisdictions have recently achieved savings above two percent of sales.

Participation

PEIEC's estimates of participation are based on several factors: participation results for Nova Scotia's mature programs, the eligible PEI population, ramp-up time needed to develop/expand a program, and potential upcoming appliance/equipment standards.

Synapse concludes that this approach appears to be reasonable for PEI, depending on the specific methodology and assumptions about ramp-up rates. Table 4 summarizes the anticipated participant uptake and the eligible customers by program.

Table 4 – Estimated Participation by Year

Program	Sector	Metric	All Customers (Or units)			Eligible Customers
			2018/19	2019/20	2020/21	
Energy Efficient Equipment Rebates	Residential	Customers	548	815	980	15,663
Home Insulation Rebates	Residential	Customers	75	213	313	15,663
Winter Warming	Residential	Customers	350	350	350	15,663
New Home Construction	Residential	Customers	24	41	46	243
Instant Energy Savings	Residential	Units	28,291	95,901	48,334	Not provided
Business Energy Rebates	Business	Units	4,135	5,272	7,132	7,231
Business Energy Solutions	Business	Units	8,370	10,958	14,825	7,231
Custom Energy Solutions	Business	Customers	0	5	20	Not provided

Synapse recommends that PEIEC establish processes and data collection mechanisms to understand who is participating. The unit of participation (e.g., a customer, an account, a measure installed, a rebate) should be clearly defined at least at the level of the program, if not more granularly (e.g. by measure).

Further, it is important to establish whether participation will be tracked separately by year or over the term of the EE&C Plan. If the number of customers is not tracked for a program, PEIEC should plan on periodic analysis of participation of the sector to ensure that the portfolio is reaching a significant share of customers across all rate classes and a representative share of customers who are typically less likely to participate in EE&C, such as low-income and small commercial customers.

4.3 Estimate of Financial Costs and Benefits to Customers

Savings

A commonly referenced benchmark for assessing a jurisdictions' commitment to energy efficiency is the amount of EE&C spending as a percent of utility revenue. Synapse estimates that the total EE&C budget as a percent of revenue starts at 1.2 percent in 2018/19, rises to 2 percent in 2019/20, and reaches 2.4 percent in the final year of the Plan. On average, states in the United States spend 1.7 percent of total electric revenue on electric efficiency programs, according to the 2018 ACEEE scorecard analysis.

Relative to overall EE&C spending, Maritime Electric and Summerside Electric ratepayer contributions are much lower than utility spending in other jurisdictions because of financial support from the provincial and federal governments. The total proposed utility funding is just 0.3 to 0.4 percent of projected total revenues for all Plan years. This suggests that costs are not the primary constraint on the portfolio for the term of the Plan, and that a more aggressive ramp-up of savings from 2019/20 to 2020/21 could be considered.

Synapse recommends that PEIEC increase the targeted savings in the third year to be more in line with higher achieving states in the United States. In 2017, the top 15 states in the United States averaged spending as a percent of electric revenue of 3.8 percent, with the top three states spending over 6.5 percent.

Synapse also recommends that Summerside Electric develop a revenue forecast, preferably by rate class, to inform current and future EE&C efforts.

Cost Effectiveness

Synapse notes that the Plan does not provide information on MECL's methodology for developing avoided costs. Further, Summerside Electric's avoided costs are not available. Synapse is therefore unable to determine whether the avoided costs are reasonable.

Assuming the avoided costs are reasonable, Synapse concludes that the proposed EE&C Plan is cost-effective at the portfolio level. All programs are cost-effective based on the Program Administrator Cost Test (PAC), which PEIEC recommends as the primary cost-effectiveness test. The results of the PAC and Total Resource Cost (TRC) tests are displayed in Table 5.

Table 5 – PAC and TRC Results

2018/2019	Program Administrator Cost Test (PAC)	Total Resource Cost Test (TRC)
Residential Programs		
Energy Efficient Equipment Rebates	5.8	3.0
Home Insulation Rebates	4.5	0.8
Winter Warming	2.1	2.2
New Home Construction	3.1	1.2
Instant Energy Savings	4.9	2.4
Business Programs		
Business Energy Rebates	2.6	1.1
Business Energy Solutions	1.7	1.6
Custom Energy Solutions	N/A	N/A
Enabling Strategies		
Total	3.9	1.8

Source: SYN IR-01 Attachment 1, Plan Tables tab.

Based on the TRC Test, the only program which is not cost-effective is the Home Insulation Rebates program, with a TRC ratio of 0.8. Nevertheless, Synapse suggests that this program is likely to provide benefits that are not reflected in this score. For one, the Home Insulation Rebates program will likely provide significant non-energy benefits (such as reduced arrearages and improved comfort), which have not been included in PEIEC's analysis. Also, the results of the audit performed through the insulation program can be used to encourage participation in other programs. As a result, Synapse suggests it is reasonable to include the insulation program in the portfolio even with its low TRC score.

4.4 Plan for Apportioning Costs and Benefits

According to the Application, the majority of the funding for the EE&C Plan (79 percent) is intended to come from the provincial and federal governments. Ratepayers will contribute the balance of approximately 21 percent.

Synapse notes that there appears to be adequate assurance that the federal funding will continue throughout the term of the Plan, and beyond. Federal funding is available through March 31, 2022. Provincial funding is required to obtain the federal funding and is included in PEI's operating budget. Because cutting provincial funding would jeopardize federal funding, it is unlikely that the province would cut funding for the program.

Synapse notes that the long-term viability of the programs will depend on ongoing funding sources. An abrupt shift to a greater percentage of expenses being recovered from ratepayers at the end of the Plan term could lead to a noticeable increase in rates.

Recovery through Separate Line Item

To recover the ratepayers' portion of costs of the EE&C programs, PEIEC recommends recovery through a separate line item on electricity bills. Synapse recommends against this approach.

According to Synapse, energy efficiency is an electricity resource, just as generation, transmission, and distribution facilities are electricity resources. There is no need to separately present the costs for energy efficiency resources to customers, any more than there is a need to break out all the costs necessary to pay for generation, transmission, or distribution.

Further, Synapse submits that presenting the energy efficiency charge separately on customers' bills can be misleading. This is because the charge would include the costs of the efficiency resources but it would provide no indication of the benefits that they offer in terms of reduced generation, transmission, and distribution costs.

Amortization of Expenses

PEIEC recommends that program costs be expensed as incurred (rather than amortized over several years). Synapse agrees with this approach, especially since the ratepayer contribution is relatively small over the term of the Plan.

Tracking of Costs and Benefits

PEIEC recommends tracking expenditures and electricity savings separately by utility and by rate class. As noted in the Application, allocating and recovering costs by rate class may lead to significant variations in the charge from year-to-year. Thus, PEIEC recommends that riders be set and held for the three-year term and that there be a true-up by rate class at the reset of the EE&C rate rider. Synapse agrees that this approach is reasonable.

The allocation of costs between Maritime Electric and Summerside Electric (90 percent and 10 percent respectively) is based on sales. Synapse notes that PEIEC does not appear to have a

plan for monitoring savings and costs by utility to ensure that customers get benefits commensurate with their contributions. The *Act* requires that the EE&C Plan contain a plan for apportioning costs and benefits between the public utilities and their customers, and thus appears to require an accounting of costs and benefits by utility. Synapse recommends that PEIEC track the costs and benefits for each utility.

4.5 Other Issues

Synapse notes that the proposed EE&C Plan provides more savings from residential programs than business programs, especially in the first year. This contrasts to sales, which are evenly split between the residential and commercial sectors. Synapse recommends that the EE&C budget be allocated proportionately across residential and commercial sectors as soon as possible.

Synapse also notes that the EE&C Plan is not designed to target peak load, even though peak demand is projected to grow. This concern was also raised by interested members of the public. Synapse recommends that the EE&C Plan should place a much higher priority on programs targeting measures that reduce peak load growth, and also suggests that PEIEC revise the Plan for years two and three to better incorporate peak load considerations.

Synapse further notes that utilities that are dependent on electricity sales for revenue may not support EE&C measures. Instead, the reduction in revenue creates a disincentive for utilities to support energy efficiency. To address this problem, many jurisdictions introduce some form of decoupling. Decoupling allows a utility to recover fixed revenue requirements through an annual rate adjustment mechanism and breaks the link between revenue and sales. Synapse therefore recommends reconciling Maritime Electric's forecast revenues with actual revenues on an annual basis.

4.6 Comments from PEIEC

A copy of the Synapse report was provided to PEIEC for their review. PEIEC was specifically asked to provide any comments they may have with respect to the recommendations made by Synapse.

PEIEC filed written comments in response to the recommendations made by Synapse. PEIEC was generally agreeable to the recommendations, subject to the following exceptions:

- PEIEC does not agree with the recommendation that it should consider modifying the Plan in the second and third years, and specifically does not agree that it should consider increasing savings as a percent of sales in the third year. In response, PEIEC notes that this is an initial three-year plan and that the targets set out in the Plan are reasonable and achievable. PEIEC advises that the Plan as proposed is intended to balance *"the appropriate considerations of achieving ambitious electricity efficiency and conservation targets with a focus on affordability."*
- Although PEIEC recommends that the ratepayer portion of EE&C costs should be shown as a separate line item on electricity bills, Synapse disagrees with this approach. In response, PEIEC notes that this was a recommendation received from a stakeholder during the consultation process. However, PEIEC is prepared to support the recommendation made by Synapse.
- Synapse recommends that the EE&C Plan should place a much higher priority on programs targeting measures that reduce peak load growth. In response, PEIEC recognizes the need and value of programs to reduce peak load. However, the EE&C Plan focuses on load reduction (rather than peak load reduction), for several reasons. PEIEC notes, for example,

that although thermal storage can be an effective measure of load reduction, customer uptake is unlikely without a corresponding rate incentive, such as a time-of-use rate. PEIEC also notes that load control, such as direct control of electric water heaters, requires substantial management by the utilities. Instead, PEIEC has proposed to initiate programs it can primarily manage itself with cooperation from the utilities.

- Synapse recommends the provision of further information by both Summerside Electric and Maritime Electric. While PEIEC agrees that the provision of this information would be of assistance in administering the EE&C Plan, it notes that it is not in a position to require either utility to provide the suggested information.

5 COMMISSION FINDINGS

The Commission is satisfied that the EE&C Plan as filed meets the requirements set forth in subsection 16.1(5.1) of the *Act*. In particular, the Commission is satisfied that:

- The EE&C Plan is for a term that is consistent with industry standards;
- The particular energy efficiency and demand-side resource measures contained in the EE&C Plan are reasonably likely, on implementation, to achieve the results forecast in the Plan;
- The EE&C Plan contains a reasonable estimate of the financial costs and financial benefits for each public utility named in the plan and its customers; and
- The EE&C Plan contains a plan for apportioning the financial costs and benefits between the public utilities and the apportionment is reasonable.

The EE&C Plan is therefore approved as filed for the three-year period from 2018/2019 to 2020/2021.

Synapse has made several recommendations which are intended to result in increased energy and demand savings if implemented. Although the Commission encourages increased savings, it accepts that the targets established by PEIEC are reasonable in the circumstances and represent an appropriate balance between forecast savings and customer cost, particularly for an initial EE&C Plan.

As noted by PEIEC in the Application, to meet the PEI Energy Strategy's target for an annual electricity reduction of two percent in 2020/2021 would require an annual investment of approximately \$10 million to \$11 million. This amount is almost double the budget proposed by PEIEC in the third year of the Plan. Although the Commission encourages PEIEC to consider programs that may increase savings for subsequent EE&C plans, the Commission is satisfied that the initial EE&C Plan reaches an appropriate balance between DSM measures and affordability.

Synapse and interested members of the public expressed concern over the lack of EE&C programs that are aimed specifically at addressing peak load demand. The Commission shares these concerns. As peak load is anticipated to grow annually, it is imperative that steps are taken to reduce peak demand. The Commission directs PEIEC to consider targeted programs that may reduce peak load as part of the DSM Potential Study, and expects that such programs will form part of PEIEC's subsequent EE&C plans.

The Commission recognizes that a reduction in peak demand may require coordination and cooperation between PEIEC, Maritime Electric, and Summerside Electric, and encourages PEIEC and the utilities to begin working on EE&C programs that will reduce peak load demand for inclusion in the next EE&C plan.

The evaluation of program performance is an integral part of any EE&C plan. As this is the first comprehensive EE&C plan to be implemented in the Province, it is critical that a clearly defined evaluation framework be defined at the outset so that program performance can be monitored over the term of the Plan.

As noted by Synapse, performance evaluation should be ongoing and should not be performed only at year-end. As a result, the Commission directs PEIEC to develop a comprehensive evaluation framework to be filed with the Commission on or before October 31, 2019. The evaluation framework should incorporate the recommendations made by Synapse and, in particular, should:

- track program performance on a quarterly and annual basis;
- clearly define the financial costs and financial benefits by utility and sector; and
- establish processes and data collection mechanisms to understand who is participating, including clearly defined units of participation (e.g. a customer, an account, a measure installed, a rebate).

This list is not exhaustive.

In the event the evaluation framework identifies programs that are not performing as expected, either in terms of savings or participation, the Commission expects that PEIEC will seek to address the issues during the term of the EE&C Plan. This may include applying to the Commission to amend or modify the approved Plan to ensure that customers receive benefits commensurate with their contributions.

The Commission accepts the proposal by PEIEC that it shall establish a rate rider for each of Maritime Electric's rate classes and that the rate riders shall be set for the term of the Plan. In the event a "true-up" is required for any of the rate classes at the end of the term, it can be considered by the Commission as part of subsequent EE&C plans.

The Commission directs that the rate rider shall be included in the rates for electrical service charged by Maritime Electric, and shall not be identified as a separate line item on customers' bills. Although the Commission does not have jurisdiction over Summerside Electric, it would encourage it to also follow this practice for the reasons set out by Synapse.

Upon approval of the EE&C Plan, PEIEC is required to report annually to the Commission. This requirement is set forth in subsection 16.1(13) of the *Act*, which provides:

After the approval of the energy efficiency and demand-side resources plan of a public utility, the public utility shall, within three months after the end of the public utility's fiscal year in each calendar year or part of a calendar year occurring during the term of the approved plan, prepare and submit to the Commission a report for that calendar year, or part of a calendar year, as the case may be, that contains such information respecting the implementation of the plan, including the results achieved, as may be required by the Commission.

Synapse has developed a comprehensive framework for triannual, annual and quarterly reporting. A copy of the framework is attached as Appendix "A" to the Synapse report. The Commission

directs PEIEC to use the framework in preparing its annual report to the Commission, and to include with its annual report all (or substantially all) of the information suggested by Synapse.

Order

WHEREAS on or about June 29, 2018, the Prince Edward Island Energy Corporation (“PEIEC”) submitted an application to the Island Regulatory and Appeals Commission (the “Commission”) pursuant to subsection 16.1(2.1) of the *Electric Power Act*, R.S.P.E.I. 1988, Cap. E-4 (the “*Act*”), seeking approval of an electricity efficiency and conservation plan (the “EE&C Plan” or the “Plan”) for a three-year term from 2018 to 2021 (the “Application”);

AND WHEREAS a Notice of Application was published on the Commission website and in local newspapers;

AND WHEREAS interested members of the public were invited to comment on the Application;

AND WHEREAS Commission staff retained the services of Synapse Energy Economics, Inc. (“Synapse”) to assist in the review and evaluation of the EE&C Plan;

AND WHEREAS PEIEC is generally agreeable to the recommendations made by Synapse in relation to the EE&C Plan;

AND WHEREAS the Commission has determined that the outstanding issues are narrow and can reasonably be addressed without an oral hearing;

AND WHEREAS upon approval of the EE&C Plan, the Commission is required to issue an Order to each public utility named in the Plan requiring the public utility to pay the costs as set out in the EE&C Plan;

AND WHEREAS the only public utilities named in the EE&C Plan are PEIEC and Maritime Electric Company, Limited (“Maritime Electric”);

AND WHEREAS Summerside Electric is not a “public utility” as defined in the *Act*, and is therefore not subject to regulation by the Commission;

AND WHEREAS the Commission has considered all of the evidence filed in relation to the Application;

AND WHEREAS the Commission is satisfied that the EE&C Plan meets the requirements set forth in subsection 16.1(5.1) of the *Act*;

NOW THEREFORE, pursuant to subsection 16.1(6) of the *Act*, the Commission orders as follows:

IT IS ORDERED THAT:

1. The EE&C Plan as filed by PEIEC on June 29, 2018 is hereby approved effective as of the date of this Order.

2. The EE&C Plan shall remain in effect until March 31, 2021.

Apportionment of Costs

3. PEIEC shall recover the costs of the EE&C Plan as follows:

Year 1 (2018/2019)	
Maritime Electric Funding	\$600,000
Summerside Electric Funding	
Province of PEI Funding	\$1,149,500
Federal Government Funding	\$1,019,500
Total Funding	\$2,769,000
Year 2 (2019/2020)	
Maritime Electric Funding	\$970,000
Summerside Electric Funding	
Province of PEI Funding	\$1,916,000
Federal Government Funding	\$1,774,000
Total Funding	\$4,660,000
Year 3 (2020/2021)	
Maritime Electric Funding	\$1,200,000
Summerside Electric Funding	
Province of PEI Funding	\$2,431,500
Federal Government Funding	\$2,251,500
Total Funding	\$5,883,000

4. The funding to be provided by Maritime Electric and Summerside Electric shall be shared proportionately between the utilities based on the percentage of sales of electricity in the Province.
5. In the event that Summerside Electric fails or refuses to pay its proportionate share of the funding in any given year, its share shall not be collected or collectable from Maritime Electric or its ratepayers.
6. Maritime Electric shall be required to recover its proportionate share of the funding from its ratepayers and shall remit this amount to PEIEC/efficiencyPEI on a monthly basis.

7. PEIEC shall establish the appropriate rate rider for each of Maritime Electric's rate classes, which rate riders shall be set for the term of the Plan.
8. The rate rider shall be incorporated into Maritime Electric's rates for electrical service and shall not be identified as a separate line item on customers' bills.
9. The costs of the EE&C Plan shall be treated as an expense as incurred rather than amortized over the life of the EE&C measures.

Cost Effectiveness

10. PEIEC shall use the Program Administrator Cost test to determine the cost effectiveness of the EE&C Plan.
11. The Program Administrator Cost test shall be applied at the portfolio level.
12. PEIEC shall use the Government of Prince Edward Island's long term borrowing rate in the calculation of cost effectiveness testing.

Evaluation and Verification

13. PEIEC shall establish a Demand Side Management advisory group within ninety days from the date of this Order to address issues with implementation over the term of the EE&C Plan.
14. PEIEC shall work with the Demand Side Management advisory group and stakeholders to develop a comprehensive evaluation framework.
15. The comprehensive evaluation framework shall be submitted to the Commission for review on or before October 31, 2019.
16. The comprehensive evaluation framework shall include, among other things:
 - i. processes and data collection mechanisms on program participation;
 - ii. the financial costs for each public utility named in the EE&C Plan and its customers, to be incurred on implementing the Plan and over the course of its term;
 - iii. the financial benefits for each public utility named in the EE&C Plan and its customers, to be achieved on implementing the Plan and over the course of its term; and
 - iv. program performance on a quarterly and annual basis.
17. PEIEC shall retain the services of an independent evaluation consultant, within ninety days from the date of this Order, to evaluate the EE&C Plan on an ongoing basis.
18. The independent evaluation consultant shall be contracted over the term of the EE&C Plan to perform ongoing evaluations of the EE&C Plan and programs.

Annual Reporting

19. In each calendar year during the term of the EE&C Plan, PEIEC shall prepare and submit a report to the Commission, which report shall include substantially all of the information set forth in Appendix "A" hereto.
20. In each calendar year during the term of the EE&C Plan, PEIEC shall reconcile Maritime Electric's forecast revenues with actual revenues, on an annual basis, and shall file the reconciliation with the Commission as part of its annual report.
21. The annual report shall be filed within three months after the end of PEIEC's fiscal year in each calendar year, or part of a calendar year, occurring during the term of the EE&C Plan.

Other Matters

22. PEIEC shall undertake a DSM Potential Study in 2019/2020 to inform the next EE&C Plan, which study shall include (among other things) measures to reduce peak load demand and the proportionate allocation of EE&C costs across residential and commercial sectors.
23. PEIEC shall not make any material changes to the EE&C Plan as approved herein without the prior approval of the Commission.

DATED at Charlottetown, Prince Edward Island, on Friday, May 17, 2019

BY THE COMMISSION:

J. Scott MacKenzie, Q.C., Chair

M. Douglas Clow, Vice-Chair

John Broderick, Commissioner

NOTICE

Section 12 of the *Island Regulatory and Appeals Commission Act* reads as follows:

12. The Commission may, in its absolute discretion, review, rescind or vary any order or decision made by it, or rehear any application before deciding it.

Parties to this proceeding seeking a review of the Commission's decision or order in this matter may do so by filing with the Commission, at the earliest date, a written Request for Review, which clearly states the reasons for the review and the nature of the relief sought.

Sections 13(1) and 13(2) of the *Act* provide as follows:

13(1) An appeal lies from a decision or order of the Commission to the Court of Appeal upon a question of law or jurisdiction.

(2) The appeal shall be made by filing a notice of appeal in the Court of Appeal within twenty days after the decision or order appealed from and the rules of court respecting appeals apply with the necessary changes.

NOTE: In accordance with IRAC's *Records Retention and Disposition Schedule*, the material contained in the official file regarding this matter will be retained by the Commission for a period of 2 years.

Triannual reporting	Metric	Units	Details
Recommended reporting requirements - consistent with PEIEC's proposed portfolio	Narratives		
	Portfolio description		Overview of portfolio accomplishments.
	Program descriptions		By program. Include description, participant definition.
	Program successes		By program.
	Variations in cost-effectiveness over 25%		By program.
	Variations in savings over 25%		By program.
	Variations in budget over 25%		By program.
	Program challenges		By program.
	Lessons learned		By program.
	Cost-effectiveness		
	Planned cost-effectiveness	Ratio	PAC test. By program, sector, portfolio, year.
	Actual cost-effectiveness	Ratio	PAC test. By program, sector, portfolio, year.
	Savings		
	Planned savings	kW, MWh	Gross and net annual capacity for summer and winter (kW), gross and net annual energy for annual and lifetime (MWh). By program, sector, portfolio, utility, year.
	Actual savings	kW, MWh	Gross and net annual capacity for summer and winter (kW), gross and net annual energy for annual and lifetime (MWh). By program, sector, portfolio, utility, year.
	Actual as a percent of planned savings	%	Gross and net annual capacity for summer and winter (kW), gross and net annual energy for annual and lifetime (MWh). By program, sector, portfolio, utility, year.
	Savings as a percent of sales	%	Annual electric energy savings (MWh) as a percent of annual electric sales (MWh). By portfolio, year.
	Benefits		
	Planned benefits	\$	NPV benefits (energy, capacity, transmission, distribution). By program, sector, portfolio, year.
	Actual benefits	\$	NPV benefits (energy, capacity, transmission, distribution). By program, sector, portfolio, year.
	Actual as a percent of planned benefits	%	NPV benefits (energy, capacity, transmission, distribution). By program, sector, portfolio, year.
	Net benefits	\$	NPV net benefits by program, sector, portfolio.
	Budget		
	Planned budget	\$	NPV costs by cost categories (inc. administration, marketing, evaluation, sales technical assistance & training, participant incentive, participant costs, performance incentives, other). By program, sector, and portfolio, year.
Actual budget	\$	NPV costs by cost categories (inc. administration, marketing, evaluation, sales technical assistance & training, participant incentive, participant costs, performance incentives, other). By program, sector, and portfolio, year.	
Actual as a percent of planned budget	%	By cost categories (inc. administration, marketing, evaluation, sales technical assistance & training, participant incentive, participant costs, performance incentives, other). By program, sector, and portfolio, year.	

	Participants		
	Planned participants	Number	By program, sector, portfolio, year.
	Planned participants as a percent of eligible customers	%	By program, sector, portfolio, year.
	Actual participants	Number	By program, sector, portfolio, year.
	Actual participants as a percent of eligible customers	%	By program, sector, portfolio, year.
	Actual participants as a percent of planned participants	%	By program, sector, portfolio, year.
	Funding Sources		
	Funding	\$	By source (MECL, Summerside, Federal, Provincial). By year.
	Key assumptions		
	Discount rate	%	Include source, real or nominal, number of years over which it's evaluated.
	Avoided costs	\$/MWh, \$/kW	Energy, capacity, transmission, distribution, carbon prices, and other key benefits.
	Pollutants	Metric tons	NOx, SOx, CO2. By Sector, year.
	Annual average marginal line losses	%	Transmission and distribution, applied to energy benefits.
	On-peak marginal line losses	%	Transmission and distribution, applied to capacity and transmission and distribution benefits.
	Variables included in cost-effectiveness test		List costs and benefits for each test used.
	Weighted average measure life	Years	Portfolio, program.
	Evaluation study results		Provide all evaluation study results that occurred within the 3-year term. Organized by sector.
Recommended reporting requirements - consistent with Synapse's recommendations	Savings (Other fuels)		
	Planned savings	Therms, MMBTU, Gallons	Annual and lifetime natural gas savings (therms), deliverable fuel savings i.e. oil and propane (annual MMBTU), water savings (annual gallons). By program, sector, portfolio, year.
	Actual savings	Therms, MMBTU, Gallons	Annual and lifetime natural gas savings (therms), deliverable fuel savings i.e. oil and propane (annual MMBTU), water savings (annual gallons). By program, sector, portfolio, year.
	Actual as a percent of planned savings	Therms, MMBTU, Gallons	Annual and lifetime natural gas savings (therms), deliverable fuel savings i.e. oil and propane (annual MMBTU), water savings (annual gallons). By program, sector, portfolio, year.
	Benefits (Other fuels)		
	Planned benefits	\$	By benefit (natural gas, deliverable fuels, water). By program, sector, portfolio, year.
	Actual benefits	\$	By benefit (natural gas, deliverable fuels, water). By program, sector, portfolio, year.
	Actual as a percent of planned benefits	%	By benefit (natural gas, deliverable fuels, water). By program, sector, portfolio, year.
Good practice	Non-energy benefits		
	Value of non-energy benefits	\$/MWh or % of benefits	By benefit type. By program, sector, portfolio, year.

Annual reporting	Metric	Units	Details
Recommended reporting requirements - consistent with PEIEC's proposed portfolio	Narrative		
	Program successes		By program.
	Variations in cost-effectiveness over 25%		By program.
	Variations in savings over 25%		By program.
	Variations in budget over 25%		By program.
	Program challenges		By program.
	Lessons learned		By program.
	Cost-effectiveness		
	Planned cost-effectiveness	Ratio	PAC test. By program, sector, portfolio.
	Actual cost-effectiveness*	Ratio	PAC test. By program, sector, portfolio.
	Savings		
	Planned savings	kW, MWh	Gross and net annual capacity for summer and winter (kW), gross and net annual energy for annual and lifetime (MWh). By program, sector, portfolio, utility.
	Actual savings*	kW, MWh	Gross and net annual capacity for summer and winter (kW), gross and net annual energy for annual and lifetime (MWh). By program, sector, portfolio, utility.
	Actual as a percent of planned savings	%	Gross and net annual capacity for summer and winter (kW), gross and net annual energy for annual and lifetime (MWh). By program, sector, portfolio, utility.
	Benefits		
	Planned benefits	\$	NPV benefits (energy, capacity, transmission, distribution). By program, sector, portfolio, year.
	Actual benefits*	\$	NPV benefits (energy, capacity, transmission, distribution). By program, sector, portfolio, year.
	Actual as a percent of planned benefits	%	NPV benefits (energy, capacity, transmission, distribution). By program, sector, portfolio, year.
	Net benefits	\$	NPV net benefits by program, sector, portfolio.
	Budget		
	Planned budget	\$	Cost categories (administration, marketing, incentive, evaluation and participant costs). By program, sector, and portfolio.
	Actual budget	\$	Cost categories (administration, marketing, incentive, evaluation and participant costs). By program, sector, and portfolio.
	Actual as a percent of planned budget	%	Cost categories (administration, marketing, incentive, evaluation and participant costs). By program, sector, and portfolio.
	Participants		
	Planned participants	Number	By program, sector, portfolio.
	Actual participants	Number	By program, sector, portfolio.
	Actual as a percent of planned participants	Number	By program, sector, portfolio.

	Funding Sources		
	Funding	\$	By source (MECL, Summerside, Federal, Provincial). By year.
	Key assumptions		
	Discount rate	%	Include source, real or nominal, number of years over which it's evaluated.
	Avoided costs	\$/MWh, \$/kW	Energy, capacity, transmission, distribution, carbon prices, and other key benefits.
	Pollutants	Metric tons	NOx, SOx, CO2. By Sector, year.
	Annual average marginal line losses	%	Transmission and distribution, applied to energy benefits.
	On-peak marginal line losses	%	Transmission and distribution, applied to capacity and transmission and distribution benefits.
	Variables included in cost-effectiveness test		List costs and benefits for each test used.
	Weighted average measure life	Years	Portfolio, program.
Recommended reporting requirements - consistent with Synapse's recommendations	Savings (Other fuels)		
	Planned savings	Therms, MMBTU, Gallons	Annual and lifetime natural gas savings (therms), deliverable fuel savings i.e. oil and propane (annual MMBTU), water savings (annual gallons)
	Actual savings*	Therms, MMBTU, Gallons	Annual and lifetime natural gas savings (therms), deliverable fuel savings i.e. oil and propane (annual MMBTU), water savings (annual gallons)
	Actual as a percent of planned savings	Therms, MMBTU, Gallons	Annual and lifetime natural gas savings (therms), deliverable fuel savings i.e. oil and propane (annual MMBTU), water savings (annual gallons)
	Benefits (Other fuels)		
	Planned benefits	\$	By benefit (natural gas, deliverable fuels, water). By program, sector, portfolio.
	Actual benefits*	\$	By benefit (natural gas, deliverable fuels, water). By program, sector, portfolio.
	Actual as a percent of planned benefits	%	By benefit (natural gas, deliverable fuels, water). By program, sector, portfolio.

* For annual reporting, report evaluated values where available. If the relevant evaluation studies have not been completed within the annual term, report deemed or preliminary values. Indicate in reporting table whether the values are evaluated or otherwise.

Quarterly reporting – Required for the first year			
Recommended reporting requirements - consistent with PEIEC's proposed portfolio	Program launch qualitative updates		By program.
	Customers		
	Planned first year customer count	Number	By program.
	Customer count YTD	Number	By program.
	YTD customers as a percent of planned first year customers	%	By program.