



STATE OF RHODE ISLAND
**ENERGY EFFICIENCY &
RESOURCE MANAGEMENT COUNCIL**

MEETING MINUTES

Thursday, November 12, 2015

3:30 - 5:30 PM

Conference Room B, 2nd Floor

Department of Administration, One Capitol Hill, Providence, RI

Members Present: Abigail Anthony, H. Robert Bacon, Joe Cirillo, Roberta Fagan, Marion Gold, Jennifer Hutchinson, Michael McAteer, Joe Newsome, Shigeru Osada, Chris Powell, Betsy Stubblefield Loucks, Karen Verrengia

Members Absent: Diane Williamson

Consultants Present: Mike Guerard, Scudder Parker

OER Staff Present: Ryan Crowley, Danny Musher, Rachel Sholly

Others Present: Rachel Henschel, David Jacobson, Courtney Lane, Angela Li, Jeremy Newberger, Ben Rivers, Chon Wong, Belinda Wong, Muxi Yang

1. Call to Order

Chairman Chris Powell called the meeting to order at 3:32 PM.

2. Approval of October Meeting Minutes

Chairman Powell noted that Scudder Parker's name was listed twice consecutively. Bob Bacon made a motion to approve the October meeting minutes. Joe Cirillo seconded and all approved.

3. Executive Director Report

Commissioner Marion Gold of the Office of Energy Resources (OER) reported that OER, in partnership with National Grid and Treasury, is working develop a pipeline of efficiency projects through the Efficient Buildings Fund (EBF). The bond funding will become available in June. A kickoff meeting will be held on December 2 to educate municipalities about the Rhode Island Infrastructure Bank and the process for EBF. She also reported that progress has been made in regards to development of the commercial and residential PACE programs. Bids have been solicited for companies to run the programs on a turnkey basis. She noted that she has been serving on the selection committee. Abigail Anthony asked if there will be a two separate companies for commercial and residential PACE. Commissioner Gold said at this time, it appears that two different vendors will be selected. Chairman Powell emphasized the importance of EERMC members being represented during the process of choosing vendors.

Finally, the Block Island efficiency program is underway to bring efficiency services to the Island for the first time ever. The program is being funded by Regional Greenhouse Gas Initiative (RGGI) dollars. OER is

working in partnership with National Grid and RISE engineering. The pilot program runs through this fall and is expected to see a savings of \$160,000.

4. Executive Committee Report

Chairman Powell reported that the Executive Committee agreed to roll the budget surplus into a reserve account next year to address needs as they may arise. A work plan is needed from the consultant team to set up next year's budget. The Executive Committee also discussed how to handle funding requests that come to EERMC. Legal counsel and OER each offered input. The group decided that handling such requests would be complex and would likely burden the Council, as someone would need to administer the funding requests and track them. The Executive Committee decided to table the issue for the time being and to not process any requests received. Ms. Anthony added that the issuance of grants does not seem to be within the scope of the Council.

5. Discussion on Executive Committee Membership [VOTE]

Chairman Powell said the Executive Committee reached out to the full Council to ask for a volunteer to serve on the Executive Committee. Betsy Stubblefield Loucks volunteered to serve as the third member. **Ms. Anthony made a motion that Betsy Stubblefield Loucks be appointed to the Executive Committee. The motion was seconded by Karen Verrengia and all approved.**

6. National Grid Presentation on 3rd Qtr. Report & Forecasted Year-End Results

Courtney Lane, Angela Li and Ben Rivers presented an update on the third quarter report and forecasted year end results. Chairman Powell asked if National Grid anticipated to be over or under budget. Ms. Lane said some residential programs might be slightly over budget while all others are expected to be on target. Shigeru Osada asked if and how the report may be viewed publicly. Ms. Lane said the report is filed with the Public Utilities Commission and are publicly available as part of the docket.

Joe Newsome asked if Rhode Island Housing has been cooperative in identifying areas of need. Ms. Li said that the agency has been very engaged and very active. Mike Guerard added that the multifamily program has struggled this year and it is expected that the taskforce will reconvene to resume its work in hope of regaining momentum. Ms. Li informed the council that EnergyWise has been strong for the company and it is expected that targets will be hit and under budget. Ben Rivers said the RIPEP project met its targets. Rachel Sholly from the Office of Energy Resources added that the 100 building RIPEP target has been exceeded and collectively average 20 percent in savings.

7. Review of Finance Expert Contract [VOTE]

Mr. Guerard presented the proposed contract to engage Dunsy Energy Consulting as the EERMC's finance expert. He noted that the EERMC must approve the contract before Dunsy may proceed. He stated that Dunsy is ready to move forward and plans to look at the recommendations made in its previous study to determine which should be pursued. **Mr. Newsome made a motion to approve the proposed contract to engage Dunsy Energy Consulting as the EERMC's finance expert. The motion was seconded by Mr. Cirillo and all approved.**

8. Discussion on Preparing for 2018-2020 Savings Targets Work

Mr. Guerard and Mr. Parker presented an overview of the savings targets requirements needed for submission by September 1, 2016. Chairman Powell reminded Council members that, unlike last time, the council does not have a new study to influence the council's decisions. Ms. Anthony stated that studying the energy savings targets gets to the core of what Least Cost Procurement is and the responsibility of the Council. She added that this is one of the most important tasks of the Council. Mr. Osada stated he is concerned about the amount the ratepayer is paying.

9. Revision to EERMC 2015 Budget [VOTE]

Chairman Powell stated that there is not enough money in the legal fund of the council. It is currently projected to be underfunded by over \$24,491. A vote is needed to move money from the communications fund to the legal fund. The Executive Committee determined \$30,000 may be moved from the communications fund to make up the difference. **Joe Cirillo made a motion to reallocate \$30,000 from the communications budget to the legal budget. The motion was seconded by Karen Verrengia and all approved.**

Per an Executive Committee discussion, it was proposed that the remaining uncommitted 2015 funds be moved into the attorney's client escrow account for use in 2016 at the Council's discretion. The amount is estimated to be approximately \$138,000. **Joe Cirillo made a motion to transfer the remaining uncommitted 2015 funds to the attorney's client fund. Karen Verrengia seconded and all approved.**

10. Review of Draft 2016 EERMC 2016 Budget

Mr. Guerard presented the draft 2016 budget, noting that the Council cannot vote on it until the PUC approves the 2016 Energy Efficiency Program Plan. The Council should be prepared to vote in either December or January.

11. Update on Rate Design Docket

Mr. Parker reported that there is a technical hearing next Wednesday (11/18/15). The Commissioners asked the groups in opposition to the tiered demand charge to coordinate their presentations. There was a hearing in which the motion to strike the proposed access fee for standalone generation out of the filing. The Commission decided without prejudice not to approve the motion. Ms. Anthony said it is clear that the Commissioners are reading the testimony and taking it seriously.

12. Public Comment

Danny Musher from OER reminded EERMC members that the SIRI working group is holding a public meeting on 11/19/15 at 2:00 PM at the Department of Administration. He noted that OER, National Grid, the EERMC, Distributed Generation Board and the consultant team have worked collaboratively to address system integration. All members are welcome to attend.

13. Adjournment [VOTE]

Mr. Cirillo made a motion to adjourn the meeting. Ms. Stubblefield Loucks seconded and all approved. Chairman Powell adjourned the meeting at 5:34 PM.

Block Island Saves

Reducing Energy Costs for New Shoreham Residents and Small Businesses through Efficiency

Summary

The Rhode Island Office of Energy Resources (OER) is pleased to announce the start of the pre-pilot stage of the Block Island Saves energy efficiency program in New Shoreham. Funded with state Regional Greenhouse Gas Initiative (RGGI) auction proceeds (\$500,000), Block Island Saves is working to educate local residents and small businesses on the many benefits associated with reducing energy consumption, and to provide access to a suite of efficiency measures and incentives that can reduce energy costs.

Block Island Saves will consist of two stages: a targeted pre-pilot stage (through 2015) and a more robust full pilot initiative, which will begin in 2016. The pre-pilot stage began in September and is providing OER with an initial opportunity to engage with the community; test its program delivery model; and gather valuable insight and data. During the upcoming winter months, OER will utilize this information to optimize its energy efficiency program prior to commencing open enrollment in Spring 2016.

Block Island Saves Pre-Pilot Program Design

For the 2015 pre-pilot stage, ten (10) residential and six (6) small business customers were selected from an initial pool of twenty-four (24) interested applicants. Applicants not selected for the pre-pilot remain eligible for program participation in 2016.

Fifteen (15) of the selected sixteen (16) pre-pilot participants have received a free energy audit with a RISE Energy Expert. The remaining participant will receive a free audit in 2016 due to scheduling conflicts. All audits have provided participants with recommendations on how to improve their building's energy efficiency. Energy efficient lighting and smart power strips will be offered to applicable customers free of charge. Customers will also be offered a list of available incentives to assist with financing more robust and comprehensive energy efficiency measures including, but not limited to, air sealing, home insulation, and air conditioning. As part of their pre-pilot participation, selected residents and small businesses have provided RISE with twelve (12) months of electric bills and other useful information, including a sampling of winter heating bills.

The Per-Pilot Block Island Saves' Residential Program offers the following:

- A no-cost, no-obligation Home Energy Audit conducted by a trained energy professional;
- Lighting upgrades (LEDs & CFLs) to replace less-efficient incandescent bulbs;
- Air sealing, if applicable – up to 10 hours free (a \$800 value) plus 40% off further sealing, up to \$2,000 in total weatherization costs;
- Insulation, if applicable – 40% cost coverage, up to \$2,000 total weatherization costs;
- Pipe insulation for heat/hot water pipes – free 6 feet from a water heater;
- Advanced power strip (maximum of 2 free);
- Low flow/aerator faucets and shower heads (free);
- Nest Programmable and WiFi capable thermostats installed (\$200 customer co-pay);
- Furnace and boiler upgrade recommendations;



- Water heater upgrade recommendations;
- Appliance, dehumidifier, and air cleaner upgrade recommendations;
- \$250 or \$500 Efficient Air Conditioning rebates (rebate varies with efficiency level);
- \$50 rebate for programmable thermostats for use with energy efficient AC units; and
- A Home Energy Action plan which includes information and tips on how to save energy and reduce overall energy costs. The audit will also include health and safety testing of heating equipment as well as a blower door test.

Similarly, the Pre-Pilot Block Island Saves' Small Business Program offers the following:

- A no-cost, no-obligation on-site energy survey of a facility's electrical equipment and thermal systems;
- A proposal outlining recommended energy efficiency improvements based on the site analysis;
- Incentives for approved electrical measures covering up to 70% of installation and equipment costs;
- Removal and proper disposal of replaced fluorescent lamps and ballasts;
- \$250 or \$500 Efficient Air Conditioning rebates (rebate varies with efficiency level);
- \$50 rebate for programmable thermostats for use with energy efficient AC units;
- Air sealing, if applicable – up to \$1,200, plus 40% off further sealing, up to \$4,200 in total weatherization costs;
- Insulation, if applicable – 40% cost coverage, up to \$3,000. (Total weatherization cost coverage can reach \$4,200);
- Lighting upgrades (LED screw-ins and linear lamps);
- Lighting occupancy controls sensors, if applicable;
- Walk-in Cooler efficiency measures, if applicable;
- Programmable and WiFi capable thermostats;
- Building controls (rooftop optimizers, EMS & VFD's, where applicable); and
- Site-specific custom measures.

These offerings are subject to change by OER based upon pre-pilot experience and data, as well as funding availability.

Pre-Pilot Program Benefits

Based upon initial audit reports, the pre-pilot stage alone will save over of 66,700 kWh and 280 MMBtus per year – a significant opportunity to reduce local demand on the island's diesel-fired generation system while shrinking the community's carbon footprint. Overall, the pre-pilot is expected to generate total customer cost savings of approximately \$160,000 over the lifetime of installed measures. These values will be updated over time based upon the insight gleaned from pre-pilot measure installations.

Eight (8) of ten (10) residential energy audits found significant weatherization opportunities. All five (5) small business energy audits found extensive lighting retrofit opportunities, and two (2) of the five (5) received heating equipment/weatherization recommendations. As of early November, six (6) contracts have been signed to complete recommended energy efficiency work. Five (5) other participants are also expected to sign contracts over the next few weeks.

The Benefit to Cost Ratio (BCR) for the pre-pilot stage is projected to be 1.22. This value was calculated from a utility cost perspective and compares the Block Island Power Company's energy-related avoided

costs to pre-pilot incentive and administrative costs. This analysis differs from National Grid's total resource cost (TRC) screening. Under TRC screenings, program benefits include both energy and capacity related avoided costs, as well as additional non-energy benefits (i.e. water savings). TRC costs include program administrative costs and the incremental costs of the installed measures. In addition National Grid's TRC analysis considers impact factors such as spillover and free ridership.

Although the BCR calculation for the pre-pilot stage of the Block Island program is not as comprehensive as National Grid's TRC analysis, it verifies the benefits of the program and provides a directionally-indicative measure of program potential. A more comprehensive TRC analysis will be conducted for the full program pilot in 2016.

Other OER Initiatives on Block Island

Streetlights: OER has been working with the Block Island Power Company to replace seventy-four (74) high-pressure sodium (HPS) streetlights with energy-efficient light-emitting diodes (LEDs). This \$52,000 project is expected to reduce local streetlight energy consumption by approximately 56 percent. Installation began on July 10, 2015 and was completed on October 30, 2015. A site visit to inspect the lights in early winter 2015 will complete the project. Already, the Block Island Power Company (BIPCo) has reduced the Town's monthly streetlight tariff by \$720.83.

Energy Efficiency at Municipal Facilities: OER is working with the Town of New Shoreham to improve energy efficiency at several municipal buildings, including the Public School, Town Hall, Library, and Water Company. More than 30 percent of the costs of selected energy efficiency upgrades are being offset by RGGI-funded incentives (approximately \$102,700) made available through OER's Public Energy Partnership program. In total, these efficiency projects are expected to reduce the collective electric consumption in these facilities by over 50 percent.

Additional Information

For more information on the Block Island Saves program, please contact Becca Trietch at (401) 574-9106 or becca.trietch@energy.ri.gov.

Please visit OER's Block Island Saves website at: <http://www.energy.ri.gov/efficiency/BI/>. This webpage includes summary information on the program; application forms; and printable materials that support the many offerings and incentives available through Block Island Saves.

About the Rhode Island Office of Energy Resources

The Rhode Island Office of Energy Resources (OER) is the lead state agency on energy policy and programs. OER's mission is to lead Rhode Island to a secure, cost-effective, and sustainable energy future. OER works closely with private and public stakeholders to increase the reliability and security of our energy supply, reduce energy costs and mitigate price volatility, and improve environmental quality. Please visit www.energy.ri.gov for more information on OER initiatives.

Rhode Island Energy Efficiency

Third Quarter 2015 | National Grid

November 5, 2015

Overview

During the third quarter, National Grid built upon the momentum from the first half of the year and is forecasting to finish 2015 strong. Several programs, including EnergyWise on the electric side and Small Business Direct Install on the gas side have already met their 2015 savings goals.

Residential programs continued to excel during the third quarter. The residential new construction program had 61 new enrollments and EnergyWise completed 7,467 assessments and 2,046 weatherization projects. The Veterans for Tomorrow project in Providence created 20-units of affordable housing for homeless and disabled veterans. The renovated building achieved an overall savings of 20% over the baseline. In addition, the RI Energy Challenge: Find Your Four! continues to make great strides in the promotion of energy efficiency. During the third quarter, the City of North Providence far surpassed its goal of 800 sign ups by getting over 1,000 households to take the pledge.

Large Commercial New Construction gained great momentum in the third quarter. The program is expected to meet both the electric and the gas savings goal. The Upstream Lighting Initiative is on track to meet 94% of its ambitious goal. Under the Street Lighting initiative, Bristol, Barrington, and Providence have expressed interest in purchasing their own street lights and converting them to LEDs and the beginning steps have been taken to start a street lighting metering pilot. On the Large Commercial Retrofit side, the municipal building sector had great success during the third quarter. In partnership with the Office of Energy Resources (OER), the company has assisted in meeting the target of 100 buildings achieving greater than 15% energy reduction.

During the third quarter, the Company was also hard at work developing the 2016 Energy Efficiency Program Plan. The Plan looks to build upon the success of 2015 by reaching more customers with greater savings in a highly cost-effective manner.

Overall, with increased momentum and year-end transactions nearing completion, the Company is projecting that it will reach 105% of the electric savings target and 103% of the gas savings target. The Company is confident that it will reach these projections, especially when comparing 2015 third quarter results to those in 2014. The Commercial and Industrial electric and gas sectors have achieved a higher percentage of year-end savings goals compared to this time last year. Likewise, the Residential programs are on track compared to the third quarter of 2014. The Company is pleased with the continued progress toward goal and is looking to finish the year with a strong fourth quarter.

2015 Program & Initiative Updates

Residential New Construction

- During the third quarter, 115 units were completed bringing the total for the year to 340 (71.9% of the total goal). Among all the completed homes, 66% were new construction homes and 34% were renovation-rehab homes.
- There were two Tier III homes (a minimum of 45% savings over the program baseline) with one verified as Net Zero Ready and the other as Zero Energy.
- There were 61 new enrollments during the third quarter, which brings total enrollments to 359 for the year.
- Trainings included: 1) RI Housing on new construction and ENERGY STAR requirements, 2) South County Habitat on new construction, ENERGY STAR requirements, and technical review of two projects, and 3) Sankofa Apartments for 50 units on current projects and ENERGY STAR requirements.
- Customer success story: Veterans for Tomorrow, Providence (20 unit building).

Blackstone Valley Development Corporation, in collaboration with Veterans for Tomorrow, LLC, renovated the vacant jewelry manufacturing building, Heaton and Cowing Mill. The project, known as Veterans for Tomorrow, created 20 affordable homes for homeless and disabled veterans. This project is part of a larger state-wide effort called Opening Doors Rhode Island which aims to end veteran homelessness.

The renovation of this old mill building presented a number of energy efficiency challenges, particularly due to the decision to maintain the exposed brick interior walls. Improvements included, the installation of high efficiency condensing sealed combustion Viessman boilers, a Thermal Efficiency domestic hot water system, Energy Star® refrigerators, and rigid foam to the roof area. Despite the difficulties in tightening old mill buildings, this building achieved an overall savings of 20% over the baseline.



Income Eligible

- The IES Field Manual was distributed followed by several training sessions conducted by Jules Junker.
- On marketing, the final tri-fold marketing brochure was distributed to the Community Action Program (CAP) agencies in and the video is expected to be released during the fourth quarter. The video will provide insight into the Home Energy Assessment.
- The Best Practices Meeting was held with topics including: background checks, coordination with the Alliance for Healthy Homes Initiative, and the RI Energy Challenge "Find Your Four!" campaign that is being implemented with all seven CAPs.
- Two Weatherization Technical Committee meetings were held with topics including: field manual release and training, new Occupational Safety and Health Administration (OSHA) confined space regulations, enhanced Combustion Safety Test, and quality Control Inspector (QCI) training.
- Quality Control Inspector (QCI) training and testing continued and several RI auditors are now eligible to inspect Department of Energy (DOE) funded projects.

EnergyWise

- The EnergyWise program continued to perform well during the third quarter.
- 7,467 home energy assessments and 2,046 weatherization jobs were completed in the third quarter. In addition, two new weatherization contractors were on boarded.
- There were 615 completed heat loans through the end of the quarter.
- Gas customers also received an enhanced promotion for the fall to increase weatherization participation.
- A customer success story is included at the end of this report.

EnergyWise and Income Eligible Multifamily

- During the third quarter, preparations have begun to revitalize the Multifamily stakeholder group in 2016.
- The company is working with the Newport Housing Authority to engage their properties in the Multifamily program.

ENERGYSTAR[®] Lighting and Appliances

- The 2015 in-store lighting survey effort began at the beginning of September. Comprehensive lighting information for products on the shelf is collected for both program participating retailers and non-participating retailers.
- During the third quarter, the pop-up retailer that sells efficient residential lighting and products had good representation at faith based events and fairs.

- In September, the Company launched a special promotion with Sears to promote dehumidifiers and room air cleaners.
- In August, there was an educational table located at The Home Depot in Smithfield in conjunction with the Pro Appreciation Event for contractors.

ENERGYSTAR® HVAC (Heating and Cooling)

- The year-to-date volume of equipment rebates is about 75% of year-to-date numbers through the end of third quarter 2014. The reduction in numbers may be attributed to the reduced incentive amounts in 2015.
- Quality Installation Verification testing numbers remained strong and on-pace with 2014.
- Installation of mini-split heat pumps continued to remain strong.

Home Energy Reports

- During the third quarter, the Home Energy Report program helped customers save 6,684 MWh and 70,202 Therms. That's equivalent to about \$1.3M in customer bill savings. For the year, the program has helped save 26,179 MWh and 451,691 Therms.
- Third quarter savings rates for electric and gas customers were both 1.0%.
- Digital engagement continued to be high with an average email open rate of 28.21%.
- Third quarter enhancements to the customer experience included a gentler neighbor comparison for high users, and an efficient thermostat-focused print module in preparation for winter.

Community Initiative

- During the third quarter, the City of North Providence far surpassed its goal of 800 sign ups by getting over 1,000 households to take the pledge. The City received its Rhode Island Energy Champion street sign at an event held at Johnson & Wales University in Providence. At the event, North Providence Mayor Charles Lombardi challenged City of Providence Mayor Jorge Elorza to join the Challenge as the next Find Your Four! community.
- Providence College, Johnson & Wales, Rhode Island College, Rhode Island School of Design, and Brown University have all signed on to have their students take the Challenge in hopes of contributing support to Providence's participation in the Georgetown University Energy Prize.
- CAP staff across the state have now been trained, and received their customized materials so they can easily talk with clients about energy efficiency and an opportunity to sign up for the Challenge. We have provided outreach materials for 50 staff members as part of CAP participation in the Challenge.
- A new relationship with the Northern RI Chamber of Commerce presents a unique opportunity to work with the business community as we enter the last quarter of the year. Their 600 members represent a variety of

businesses in Burrillville, Central Falls, Cumberland, Lincoln, North Smithfield, Pawtucket, Smithfield, and Woonsocket. The Chamber staff will include Find Your Four! information for members in newsletters, emails, a link on their website, and at upcoming events.

Codes Initiative

- In the third quarter, 2 commercial and 2 residential classroom energy code trainings took place.
- The commercial trainings drew 13 attendees and the residential trainings drew 20 attendees.
- On September 15th, a tour of the Tiverton Library took place that drew 11 participants. The tour highlighted the building's energy efficient features and correlated them to the energy code and/or above code levels.
- Two other in-field trainings that drew 28 participants at Amos House and Woonsocket Career & Technical Center also took place in the third quarter.
- The first commercial daylighting webinar was held in July which attracted 5 attendees.
- The initiative also fielded 6 residential and 3 commercial Circuit Rider phone calls in the 3rd quarter.
- Lastly, there was one residential Circuit Rider field visit made during the third quarter.

Large Commercial New Construction

- Both the electric new construction program and the gas new construction program are expecting to meet their 2015 goals. A large portion of the electric program savings are expected to come through the upstream lighting initiative.
- Upstream Lighting:
 - The Upstream Lighting Initiative is on track to meet 94% of its ambitious goal. Recent months have been strong, including a month that produced nearly 2,000 net MWh, the highest this year.
- Street Lighting:
 - Bristol, Barrington, and Providence have expressed interest in purchasing their own street lights and converting them to LEDs. The beginning steps have been taken to start a street lighting metering pilot.
- Building Operator Certification:
 - A Level I class was held in Providence and ended in July.

Large Commercial Retrofit

- The program is on target to meet 100% of the year end goal.
- In this quarter, the manufacturing initiative gained a lot of momentum and the Company has signed up several large customers for upgrades mainly in HVAC, controls, and process energy related measures. The turnkey

vendor is also providing project management to customers where needed to move projects forward.

- The third quarter was a great success in the municipal building sector. Installation is almost completed for several projects. The Company worked in partnership with OER, to meet the target of 100 buildings achieving a greater than 15% energy reduction. The Company sales and strategy teams have also been actively engaged with OER and other stakeholders in planning for the implementation of the Rhode Island Infrastructure Bank (RIIB) for energy efficiency in municipal sector.
- The Company is expecting three projects to complete their combined heat and power (CHP) installations by end of this year, with commissioning to follow in 2017. The Company's dedicated CHP program manager is working with the sales team and customer to ensure progress in installation.

Small Business Direct Install

- The program is performing well considering that schools and national accounts were removed from the program at the beginning of the year and these accounts offered significant savings. In addition, hundreds of small customers continue use the upstream lighting channel to acquire lamps and fixtures for their businesses and these savings are counted as part of the Large Commercial New Construction program.
- The total value of work installed year-to-date through the Customer Directed Option delivery channel of the program reached \$1 million as of September 30th, accounting for almost 1.4 million net MWh saved. Twelve of the thirteen contractors who brought projects to the program were independent firms who are not Project Expeditors, reflecting the success of the program in diversifying the contractor base beyond the usual energy service companies that participate in National Grid's offerings. Mandeville Sign of Lincoln, RI completed its first project, converting exterior sign lighting to LED technology for a credit union in Cumberland.

Finance

- The Rhode Island Infrastructure Bank (RIIB) has received a healthy number of responses to its commercial and residential Property Assessed Clean Energy (PACE) request for proposals. It is anticipated that the selection of a provider or providers will be complete by the third week of November.

Pilots

- Residential Pilots:
 - The Company is awaiting final results on the electronically commutated motor (ECM) Pump demonstration to explore electric and natural gas savings. The results were expected to be finalized this quarter; however, the analysis has taken longer than the original timeline. We now expect to be able to present results for this demonstration in the upcoming fourth quarter report.

- National Grid is also conducting an analysis for the potential impact residential Wi-Fi thermostats may have on managing peak gas demand during peak winter days. The Company is using data from previous Wi-Fi thermostat demonstrations to determine the amount of capacity that might be available to load shift on a residential home. The Company wants to understand if demand response would have a meaningful customer benefit, and to understand the potential impact to a customer from a comfort perspective.

Evaluation

- RI Evaluation team is continuing to undertake evaluation studies on the Energywise Multifamily program and will report findings in the next quarter report.

Upcoming Events

- RI Hospitality Association Stars of the Industry, December 2, 2015. Twin River Casino, Lincoln, RI from 5-8pm.
- Energy Efficiency booth at the RI Association of School Business Officials trade show, December 4, 2015. Airport Radisson Hotel, Warwick, RI 8am-4pm.

EnergyWise Case Study

The Masters Family A better home with energy upgrades

nationalgrid
HERE WITH YOU. HERE FOR YOU.

Jane and Dean Masters moved into their 95-year-old Providence home 14 years ago and have been restoring it ever since. They knew the two-story Cape had little insulation, and their winter heating bills were high. "It's a small house, but some months we were spending \$450 on oil," said Jane.

So when the Masters decided to convert their home from oil to natural gas, they reached out to National Grid for help making their home more energy efficient. The first step was a no-cost home energy assessment. An Energy Specialist did a whole home inspection, provided them with instant energy saving measures including LED bulbs and advanced power strips, and recommended air sealing, insulation in their exterior walls and attic, and a high efficiency heating system.

With the help of contractors and National Grid, the Masters made all the improvements. "Everyone was really efficient, very professional, and clearly experienced. They guided us through the process very well," said Jane. Incentives from National Grid covered more than half the cost of weatherization, and a 0% interest HEAT Loan made the remaining cost of heating upgrades and weatherization more manageable.

"In the winter, we used to wear extra layers, plus we used an electric blanket and heated mattress pad at night. We kept the house at 58° to save on heating. Now, we're so much more comfortable and energy costs us much less." In fact, the Masters are saving \$480 a year from weatherization work alone.

"Now, we're so much more comfortable and energy costs us much less."

There are benefits the Masters never expected, too. "We hear less noise from the street thanks to the insulation. Plus, our home has increased in value, and we feel like it's a better investment. We love our house now," shared Jane.

"To anyone who's considering having a home energy assessment, do it. Your house will be more comfortable, saving energy can save you money and it's good for the environment, and there are people here to help you."

To sign up for a no-cost energy assessment and learn more about our financing options and savings opportunities, visit ngrid.com/ri-home or call 888-633-7947.



Home

Two-story Cape built in 1919

Efficiency Measures

- Air sealing
- Exterior wall and attic insulation
- Two heating systems
- LEDs and advanced power strips

Project Cost

\$3,952 for weatherization
\$2,321 covered by National Grid incentives

0% HEAT Loan for remaining weatherization and heating system costs (\$20,398)
\$242.83 a month

Estimated Weatherization Savings

\$480 per year

Estimated Heating Savings

\$310 per year

NATIONAL GRID ENERGY EFFICIENCY PROGRAMS IN RHODE ISLAND
Table 1. Summary of 2015 Target and Preliminary 3rd Quarter Results

ELECTRIC PROGRAMS Sector and Program	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
	Demand Reduction (Annual kW)				Energy Savings (Annual MWh)				Customer Participation			Expenses (\$ 000)			Lifetime savings, MWh, \$/kWh, Planned \$/kWh		
	Target	Year To Date	Pct Achieved	Pct Projected	Target	Year To Date	Pct Achieved	Pct Projected	Target	Year To Date	Pct Achieved	Budget	Year To Date	Pct Achieved			
Commercial and Industrial																	
Large Commercial New Construction	6,846	2,913	42.5%		33,702	13,711	40.7%		3,698	1,663	45.0%	\$9,740.3	\$4,041.9	41.5%	156,877	\$ 0.026	\$ 0.029
Large Commercial Retrofit	6,262	3,110	49.7%		48,041	23,405	48.7%		574	274	47.7%	\$15,506.5	\$8,069.3	52.0%	265,726	\$ 0.030	\$ 0.036
Small Business Direct Install	4,143	2,403	58.0%		19,539	10,103	51.7%		1,407	668	47.4%	\$12,000.3	\$6,308.2	52.6%	118,905	\$ 0.053	\$ 0.078
Community Based Initiatives - C&I												\$76.6	\$30.5	39.8%			
Commercial Pilots												\$230.3	\$6.1	2.7%			
Comprehensive Marketing - C&I												\$192.0	\$89.8	46.7%			
Finance Costs												\$4,000.0	\$4,000.0	100.0%			
SUBTOTAL	17,252	8,426	48.8%	96.0%	101,282	47,220	46.6%	102.0%	5,680	2,605	45.9%	\$41,746.0	\$22,545.7	54.0%	541,508	\$ 0.042	\$ 0.044
Income Eligible Residential																	
Single Family - Income Eligible Services	479	328	68.5%		3,680	2,511	68.2%		2,500	2,041	81.6%	\$7,820.2	\$4,887.6	62.5%	27,213	\$ 0.180	\$ 0.211
Income Eligible Multifamily	120	121	100.4%		2,907	2,107	72.5%		8,000	3,157	39.5%	\$2,300.1	\$1,553.6	67.5%	22,622	\$ 0.069	\$ 0.078
SUBTOTAL	599	449	74.9%	103.0%	6,587	4,618	70.1%	99.0%	10,500	5,198	49.5%	\$10,120.3	\$6,441.2	63.6%	49,835	\$ 0.129	\$ 0.152
Non-Income Eligible Residential																	
Residential New Construction	169	73	43.0%		559	468	83.6%		430	340	79.1%	\$962.0	\$699.7	72.7%	5,233	\$ 0.134	\$ 0.138
ENERGY STAR® HVAC	197	174	88.6%		1,020	882	86.4%		1,322	1,383	104.6%	\$1,345.6	\$937.1	69.6%	11,930	\$ 0.079	\$ 0.132
EnergyWise	1,383	1,877	135.7%		11,157	14,509	130.0%		9,000	9,008	100.1%	\$8,883.7	\$7,917.3	89.1%	155,125	\$ 0.051	\$ 0.092
EnergyWise Multifamily	178	94	52.9%		3,898	2,181	56.0%		4,900	3,838	78.3%	\$3,193.9	\$1,607.6	50.3%	24,176	\$ 0.066	\$ 0.093
ENERGY STAR® Lighting	5,125	2,900	56.6%		38,859	21,940	56.5%		104,825	154,328	147.2%	\$8,660.9	\$3,972.8	45.9%	242,005	\$ 0.016	\$ 0.049
ENERGY STAR® Products	652	539	82.7%		4,605	3,462	75.2%		13,438	15,299	113.9%	\$2,297.4	\$1,515.6	66.0%	25,594	\$ 0.059	\$ 0.084
Home Energy Reports	4,161	3,942	94.7%		25,634	25,712	100.3%		268,733	266,996	99.4%	\$2,594.2	\$2,232.2	86.0%	25,712	\$ 0.087	\$ 0.101
Energy Efficiency Educational Programs												\$50.0	\$38.5	77.1%			
Residential Products Pilot												\$523.7	\$64.0	12.2%			
Community Based Initiatives - Residential												\$333.8	\$153.9	46.1%			
Comprehensive Marketing - Residential												\$635.7	\$498.6	78.4%			
SUBTOTAL	11,865	9,598	80.9%	108.0%	85,733	69,153	80.7%	109.0%	402,648	451,192	112%	\$29,480.7	\$19,637.3	66.6%	489,776	\$ 0.040	\$ 0.069
Regulatory																	
EERMC												\$846.1	\$326.3	38.6%			
OER												\$564.1	\$351.4	62.3%			
SUBTOTAL												\$1,410.1	\$677.7	48.1%			
TOTAL	29,715	18,472	62.2%	103.0%	193,602	120,991	62.5%	105.0%	418,828	458,995	109.6%	\$ 82,757.2	\$ 49,302.0	59.6%	1,081,119	\$ 0.046	\$ 0.056
RGGI												\$ 2,030.6	\$ 442.4	21.8%			
System Reliability Procurement												\$ 513.2	\$ 389.5	75.9%			

GAS PROGRAMS Sector and Program	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
	Energy Savings (MMBtu)				Customer Participation			Expenses (\$ 000)			Lifetime savings, MMBtu, \$/Lifetime MMBtu, Planned \$/Lifetime MMBtu						
	Approved Target	Year To Date	Pct Achieved	Pct Projected	Approved Target	Year To Date	Pct Achieved	Approved Budget	Year To Date	Pct Achieved							
Commercial and Industrial																	
Large Commercial New Construction	41,802	8,859	21.2%		227	62	27.3%	\$1,517.8	\$830.8	54.7%	186,848	\$ 4.45	\$ 2.00				
Large Commercial Retrofit	125,711	41,857	33.3%		600	82	13.6%	\$4,208.4	\$1,537.3	36.5%	329,909	\$ 4.66	\$ 5.28				
Small Business Direct Install	3,489	3,556	101.9%		83	75	89.4%	\$318.9	\$131.7	41.3%	34,255	\$ 3.85	\$ 10.77				
Commercial & Industrial Multifamily	9,396	2,027	21.6%		1,968	626	31.8%	\$692.2	\$132.2	19.1%	27,627	\$ 4.79	\$ 4.96				
Commercial & Industrial Pilots								\$73.5	\$7.2	9.8%							
Comprehensive Marketing - C&I								\$102.3	\$32.2	31.5%							
Community Based Initiatives - C&I								\$10.0	\$4.0	39.8%							
Finance Costs								\$500.0	\$0.0	0.0%							
SUBTOTAL	180,397	56,300	31.2%	103.0%	2,878	844	29.3%	\$7,423.1	\$2,675.4	36.0%	578,639	\$ 4.62	\$ 4.32				
Income Eligible Residential																	
Single Family - Income Eligible Services	8,780	6,214	70.8%		400	307	76.8%	\$3,303.5	\$1,647.0	49.9%	124,280	\$ 13.25	\$ 17.79				
Income Eligible Multifamily	19,098	8,416	44.1%		2,900	1,797	62.0%	\$1,721.5	\$568.5	33.0%	122,053	\$ 4.66	\$ 6.86				
SUBTOTAL	27,878	14,630	52.5%	100.0%	3,300	2,104	63.8%	\$5,025.1	\$2,215.5	44.1%	246,333	\$ 8.99	\$ 11.09				
Non-Income Eligible Residential																	
EnergyWise	68,141	48,922	71.8%		2,400	2,045	85.2%	\$6,285.2	\$3,158.1	50.2%	1,082,844	\$ 2.92	\$ 4.72				
Energy Star® HVAC	29,081	21,343	73.4%		1,327	1,121	84.4%	\$1,490.2	\$1,053.6	70.7%	365,396	\$ 2.88	\$ 8.66				
EnergyWise Multifamily	15,863	8,467	53.4%		2,500	1,871	74.8%	\$1,657.8	\$781.7	47.2%	138,014	\$ 5.66	\$ 7.49				
Home Energy Reports	50,806	48,860	96.2%		142,220	127,963	90.0%	\$470.5	\$410.0	87.1%	48,860	\$ 8.39	\$ 9.26				
Residential New Construction	4,796	3,686	76.9%		386	275	71.2%	\$328.7	\$308.6	93.9%	92,146	\$ 3.35	\$ 3.21				
Residential Products Pilot								\$93.4	\$53.5	57.3%							
Comprehensive Marketing - Residential								\$90.5	\$65.5	72.4%							
Community Based Initiatives - Residential								\$32.3	\$17.1	53.0%							
SUBTOTAL	168,687	131,277	77.8%	103.0%	148,833	133,275	89.5%	\$10,448.6	\$5,848.1	56.0%	1,727,260	\$ 3.39	\$ 5.87				
Regulatory																	
EERMC								\$318.8	\$115.5	36.2%							
OER								\$212.5	\$101.6	47.8%							
SUBTOTAL								\$531.3	\$217.2	40.9%							
TOTAL	376,963	202,208	53.6%	103.0%	155,012	136,223	87.9%	\$ 23,428.0	\$ 10,956.1	46.8%	2,552,232	\$ 4.29	\$ 5.85				

NOTES
(1)(5)(9) Targets from Docket 4527 - Attachment 5, Table E-7 (electric) and Attachment 6, Table G-7 (gas).
(3) Pct Achieved is Column (2)/ Column (1).
(7) Pct Achieved is Column (6)/ Column (5).
(9) Participation was planned and is reported in 'net' terms which takes into account free-ridership and spillover.
(11) Pct Achieved is Column (10)/ Column (9).
A planning error occurred in the ENERGY STAR® Lighting program. The correct planned participants should have been 233,364, which would make the current percent achieved 66%.
(12) Approved Budget includes Implementation and Evaluation budgets from Docket 4527, Attachment 5 Table E-2 (electric) and Attachment 6 Table G-2 (gas), adjusted to reflect "Docket 4527 - The Narragansett Electric Company, d/b/a National Grid 2015 Energy Efficiency Program Plan Transfer of Funds Request" approved by the Energy Efficiency Resources Management Council on March 29, 2015, the Division of Public Utilities and Carriers (Division) on March 20, 2015, and the Rhode Island Public Utilities Commission on May 7, 2015; and "Docket 4527 - The Narragansett Electric Company, d/b/a National Grid 2015 Energy Efficiency Program Plan Transfer of Funds Notice" sent to the Division and the EERMC in October 2015.
(13) Year To Date Expenses include Implementation and Evaluation expenses.
RGGI Expenses are counted separate as those funds were not part of the approved 2015 budget. Details on RGGI spend are found in Table 3.
(14) Pct Achieved is Column (13)/ Column (12).
(16) \$/lifetime kWh = Column (13)/Column (15); \$/lifetime MMBtu = Column (13)*1000/Column (15)
(17) Planned \$/lifetime kWh - Attachment 5, Table E-5 (electric) and planned \$/lifetime MMBtu - Attachment 6, Table G-5 (gas).
System Reliability Procurement targets from Docket 4528, not included in Expenses Total

Table 2
National Grid
Revolving Loan Funds

Large C&I Electric Revolving Loan Fund			Small Business Electric Revolving Loan Fund		
(1)	2015 Funds Available	\$9,057,728	(1)	2015 Funds Available	\$1,702,050
(2)	2015 Loan budget	\$6,500,000	(2)	2015 Loan Budget	\$1,455,000
(3)	Committed	\$2,946,278	(3)	Committed	\$154,330
(4)	Paid	\$2,338,616	(4)	Paid	\$1,034,908
(5)	Number of loans	39	(6)	Participants	718
(6)	Participants	30	(7)	Savings (MWh)	10,103
(7)	Savings (MWh)	6,754	(8)	Available	\$265,762
(8)	Available	\$1,215,106			
Rhode Island Public Energy Partnership (RI PEP)			C&I Gas Revolving Loan Fund		
(9)	2014/2015 Loan Budget	\$1,000,000	(1)	2015 Funds Available	\$1,000,000
(10)	Committed	\$402,215	(2)	2015 Loan budget	\$1,000,000
(11)	Paid	\$635,674	(3)	Committed	\$355,707
(12)	Repayments	\$70,498	(4)	Paid	\$68,159
(13)	Participants	7	(6)	Participants	2
(14)	Savings (MWh)	1,339	(7)	Savings (MMBtu)	5,024
(15)	Available	\$32,609	(8)	Available	\$576,134

Notes

- 1 Amount Company estimated in 2015 Plan, Table E-10 including 2015 injections.
- 2 Budget adopted by Sales Team for 2015 operations.
- 3 As of September 30, 2015
- 4 As of September 30, 2015
- 5 As of September 30, 2015
- 6 Unique customer names for large business and unique customer accounts for small business (not adjusted for net-to-gross).
- 7 As of September 30, 2015
- 8 Available funds as of June 30, 2015 not including repayments.
- 9 RI PEP funding is over two years
- 10 As of September 30, 2015
- 11 As of September 30, 2015
- 12 As of September 30, 2015
- 13 As of September 30, 2015 - 7 entities with 27 applications.
- 14 As of September 30, 2015
- 15 Available funds as of September 30, 2015.

Table 3
2015 RGGI Budget and Spend

Initiative	2015 Budget	Spend
RI Public Energy Partnership Incentives	\$ 500,000	\$ 285,660
Residential Delivered Fuels	\$ 1,200,000	***
Agricultural Delivered Fuels	\$ 192,700	\$ 18,813
Small Bus Community Bldgs	\$ 137,919	\$ 137,919
Total	\$ 2,030,619	\$ 442,392

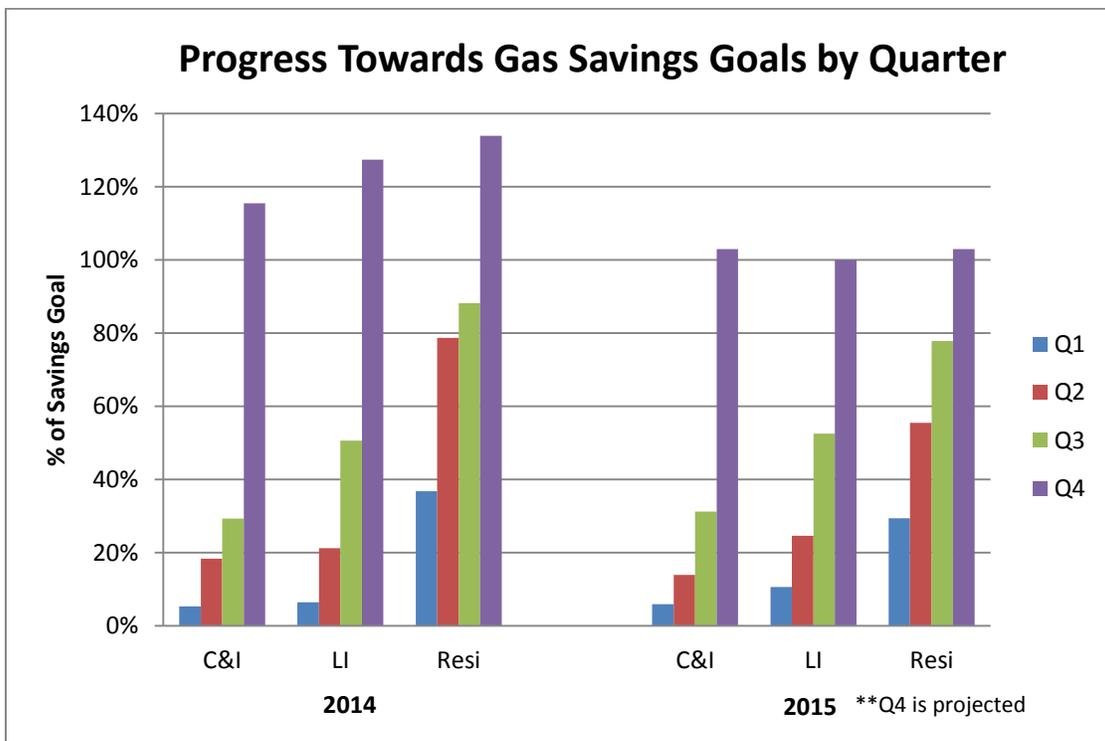
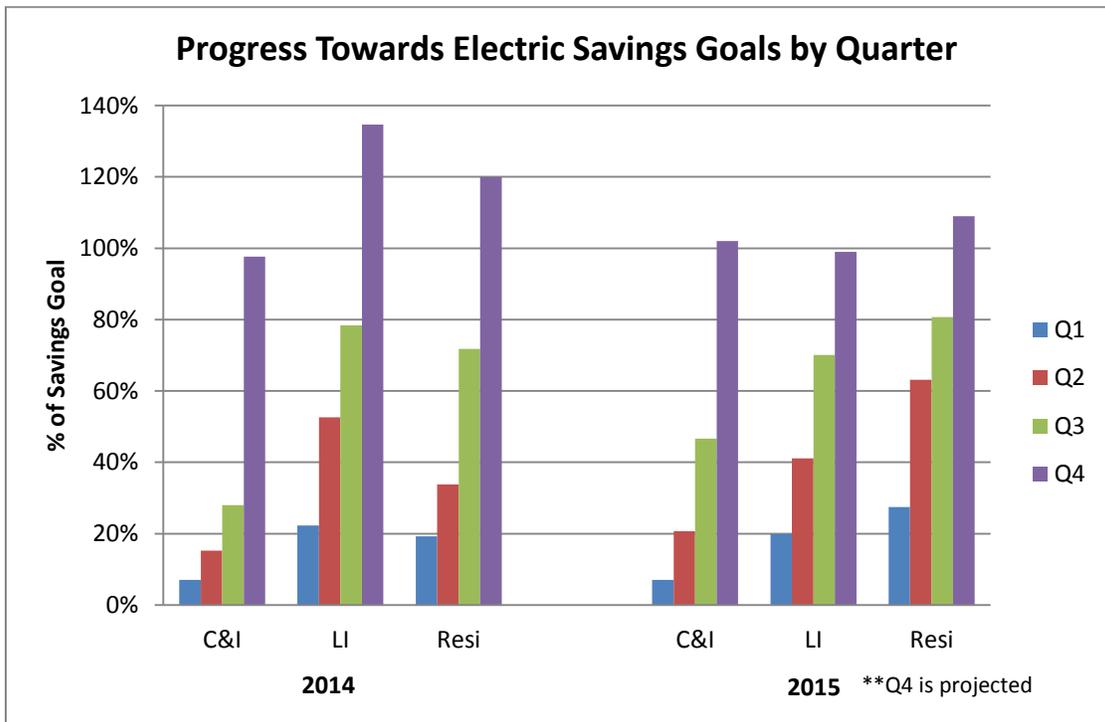
Notes

1. ***As of 9/30/15, the Company spent \$1,145,928 on Residential Delivered Fuels from the EnergyWise Single Family Electric budget since RGGI funds were not yet received. This is currently shown as an expense in Table 1 under the EnergyWise Single Family Electric program. Once the Company receives the RGGI funds it will credit a total of \$1.2M back to the EnergyWise program. By year-end the Company is projecting to spend the full \$1.2M in RGGI funds and approximately \$400,000 from EnergyWise program funds on Residential Delivered Fuels.

1. Budgets may differ from quarterly and annual RGGI reports delivered to the Office of Energy Resources as they represent funds available for program year 2015, net of previous year's spend.

2. Table only includes RGGI funds for specific initiatives. Does not include funds allocated to lowering the energy efficiency program charge or those allocated to loan funds.

Comparison of 2014 and 2015 Progress Towards Savings Goals





STATE OF RHODE ISLAND
**ENERGY EFFICIENCY &
RESOURCE MANAGEMENT COUNCIL**

November x, 2015

Mr. Philippe Dunsky
President
Dunsky Energy Consulting
50 Ste-Catherine St. West, Suite 420
Montreal, Quebec, Canada H2X 3V4

Re: Rhode Island Energy Efficiency Financing Consultant Services

Dear Mr. Dunsky:

On behalf of the Energy Efficiency and Resource Management Council (EERMC), I am pleased to inform you that the EERMC selected your firm based on the Letter of Intent (LOI) submitted on September 21, 2015, to serve as the EERMC's Energy Efficiency Financing Consultant, at its October 1 Council meeting. The EERMC considered many options, and found your response to be the superior choice to support the Council's ongoing deliberations and decision-making needs on optimal financing opportunities and solutions.

The EERMC agrees to accept the Dunsky proposal that featured the following three tasks. However, given the fluid situation of current and evolving financing issues in Rhode Island, we request that the first activity upon contract execution is a kick-off meeting to refine or repoint some of the activities prescribed under each task in the LOI:

- Task 1: Contribute expertise to design and implementation of the emerging financing program offerings
- Task 2: Follow up on recommendations from Dunsky Study / additional specific areas of investigation
- Task 3: Contribute to oversight of National Grid C&I finance offerings

We do anticipate that the proposed activities of the "Communications Commitment" will still cover the primary services and resulting deliverables:

- "... calls where warranted or where requested by EERMC to discuss issues and concerns as they arise, and plan go-forward steps."
- "... Memos will be delivered in three steps: (1) a DRAFT to the EERMC, (2) A call to present the memo findings and receive EERMC feedback, (3) edited FINAL draft will then incorporate EERMC feedback."
- "... regular contact with the key stakeholders (National Grid, RIIB, EERMC, OER etc.) throughout the effort, and will provide regular updates on the emerging program."

The total project budget shall not exceed \$70,000 for activities to be undertaken through October, 2016.

As part of their ongoing role for the EERMC, the VEIC/Optimal Energy Consultant Team will coordinate and manage your activities on the contract, to assure that Council objectives are served and that as



STATE OF RHODE ISLAND
**ENERGY EFFICIENCY &
RESOURCE MANAGEMENT COUNCIL**

financing issues evolve your assignments are pointed to the more critical areas requiring input. Mike Guerard from the Consultant Team will be the primary point of contact.

We look forward to your acknowledgement of receipt of this letter and to launching this project with your team.

Sincerely,

Christopher Powell,
Chair of Energy Efficiency and Resource Management Council

Cc: Alex Hill, Dunsky Energy Consulting
Marion Gold, RI Office of Energy Resources
Abigail Anthony, Energy Efficiency and Resource Management Council
Jeremy Newberger, National Grid
Marisa Desautel, EERMC Counsel
Scudder Parker, EERMC Consultant Team
Mike Guerard, EERMC Consultant Team

CONSULTING CONTRACT

DUNSKY ENERGY CONSULTING, a business entity organized under the laws of the Province of Quebec, Canada (“DEC”), and the Rhode Island ENERGY EFFICIENCY AND RESOURCE MANAGEMENT COUNCIL, a council created by statute, R. I. Gen. Laws §42-140.1-1 *et seq.* (“EERMC”), hereby agree as follows concerning the provision by DEC of consulting services to and for the benefit of the EERMC, and EERMC’s payment for those services. This contract is executed in accordance with EERMC’s authority under R.I. Gen. Laws §42-140.1-6.

1. In September 2015, EERMC issued Request for Letters of Intent for Rhode Island Energy Efficiency Financing Consultant Services (“LOI Request”), which is incorporated by reference into this Consulting Contract.
2. DEC submitted to EERMC a Letter of Intent and Supporting Documents for Offer of Consulting Services (“Letter of Intent”) dated September 21, 2015 in response to the LOI Request.
3. On November x, 2015, EERMC issued its Acceptance Letter, accepting the proposed Letter of Intent, with appropriate modifications to the proposed scope given the evolving market conditions.
4. DEC will provide the consulting services described in the Letter of Intent, with the appropriate modifications as contained in the EERMC’s Acceptance Letter.
5. EERMC will pay DEC the total sum \$70,000.00 for the services provided by DEC under this Consulting Contract, payable as follows:
 - 50 percent (\$35,000.00) on signing of this Consulting Contract.
 - 40 percent (\$28,000) after 90% of initial allocation is expended.
 - 10 percent (\$7,000) upon completion of final project assignments.
6. DEC shall be solely responsible for the payment of all its employees, agents, servants, and independent contractors, including without limitation, in furtherance of this Consulting Agreement. DEC hereby agrees to indemnify and hold EERMC harmless from and against any claims, damages, penalties, or expenses, including attorneys’ fees, incurred on account of any claim made by any employee, agent, servant, or independent contractor of DEC with respect to services provided or work performed in connection with this Consulting Contract.

7. The LOI Request, Letter of Intent and Acceptance Letter are integral parts of this Consulting Contract, whose terms shall, in combination with the terms of this Consulting Contract, govern any dispute concerning the nature, detail, and elements of the services to be provided hereunder, and the payments to be made in exchange for those services.
8. (a) This Consulting Contract and the documents listed in Paragraph 7, above, shall be exclusively governed by and construed in accordance with the laws of the State of Rhode Island.
- (b) Any claim or action for breach of this Consulting Contract and/or the documents listed in Paragraph 7, above, shall be brought exclusively in the state or federal courts of the State of Rhode Island.
- (c) DEC hereby consents to personal jurisdiction under the terms of this Paragraph for resolution of any dispute arising hereunder.

DUNSKY ENERGY CONSULTING

ENERGY EFFICIENCY AND RESOURCE
MANAGEMENT COUNCIL

By: _____
Its:

By: _____
Its: Chairman

By: _____
Its: Executive Director

Memorandum

To: Rhode Island EERMC
From: Scudder Parker & Mike Guerard - EERMC Consultant Team
Date: November 12, 2015
Subject: Upcoming activities and challenges to develop 2018-2020 Savings Targets

The C-Team proposes to begin discussions with the Energy Efficiency and Resource Management Council (EERMC) on the planning and required processes to effectively develop solid, defensible savings targets for the 2018-2020 Least Cost Procurement (LCP) Planning period.

I. Background

In 2010, the legislature adopted the ratemaking concept of revenue decoupling in R.I. Gen. Laws § 39-1-27.7.1. As part of this process, pursuant to § 39-1-27.7.1(f), the Council was required to submit proposed energy savings targets to the Public Utilities Commission (“PUC” or “Commission”) by September 1, 2010. The purpose of these targets was to give the utility guidance on the potentially available cost-effective efficiency resources in the state that would feed into the normal Least Cost Procurement 3-Year and annual efficiency program planning processes under § 39-1-27.7. During these normal planning processes required by Rhode Island law, the efficiency programs and budgets are developed by the utility and the cost-effectiveness of the budgets and programs is reviewed and approved by the Council before being filed with the Commission.

While Rhode Island Law § 39-1-27.7.1(f) only required one specific filing date for targets (September 1, 2010), it is understood as a responsibility of the Commission--and by extension the Council—under RIGL § 39-1-27.7(e)(4), that “the commission shall review and approve with any necessary amendments to performance-based energy savings targets developed and submitted by the Rhode Island energy efficiency and resources management council.” Since the LCP process is legislatively mandated to continue through 2024, and the submittal for approval of savings targets provided valuable support to the initial 3-Year Energy Efficiency and System Reliability Plan (3-Year Plan) filed by National Grid for the 2012-2014 period, the Council decided in 2013 that its analysis and resulting proposed targets would be of assistance to National Grid, the stakeholders, and the Commission in their development and evaluation of the 2015 – 2017 3-Year Plan.

As 2016 approaches (and assuming the same presumption of value) it is time to begin planning to set targets and the associated review and revision of the Least Cost Procurement Standards that will guide LCP and SRP procurement in Rhode Island for the next three-year cycle.

While this would be the third development and filing of 3-Year Savings Targets, and there will be some streamlining due to these prior experiences, it is important to note many of the unique challenges facing the Council this time. Quickly, a review of the previous efforts:

- The first set of targets filed on September 7, 2010, benefited from a recently completed, extensive potential study from KEMA: “The Opportunity for Energy Efficiency that is Cheaper than Supply in Rhode Island, Phase II Report.” (http://www.riermc.ri.gov/documents/KEMA_RI_EfficiencyOpportunityReport_PhaseII_August2010.pdf) In addition to KEMA’s year-plus of work, Council members, the Consultant Team and National Grid all contributed significant time to the effort. The resulting comprehensive document served as the solid basis for the first set of targets. (This project cost nearly \$400,000 and was late by many months.)
- The process for the second set of targets relied on the still relatively current report, but it also required substantial effort to identify the areas that had been inaccurately analyzed (understandable in an industry that is rapidly evolving in technologies, markets, and regulatory/legislative context). Specifically, the main areas requiring significant adjustment included lighting, behavioral programs, CHP, Price Response, plus issues of Net-to-Gross Factors and avoided costs. The C-Team led much of this investigation, with input from National Grid, Council members, and via a stakeholder process primarily centered at the DSM Collaborative. The process also benefited from the development of a Gas Opportunity Report (<http://www.riermc.ri.gov/documents/RI%20Gas%20Opportunity%20Report%202012.pdf>) completed in August, 2012 for approximately \$120,000. This report supported input into gas programs and measures for the 2013 and 2014 annual plans and was funded by the Council through its vote to put unallocated budget into escrow at the end of 2011 to support the research in 2012.

We can draw two conclusions from our planning and implementation experience to date:

- **LCP Works:** Rhode Island has built an impressive capacity to secure cost-effective savings that benefit consumers, the economy and the environment. Energy efficiency resources now provide over 20% of Rhode Island’s electric resource needs.
- **LCP provides real benefits to the Electric and Gas Systems.** National Grid indicates that efficiency investments have had a beneficial effect on the distribution system, they improve customer satisfaction, help manage high bills, and help shift markets and building practices toward more efficient baselines, while creating jobs in RI. An ongoing concern has been how to get the same level of efficiency services for delivered fuel customers as are available to electric and natural gas customers.

II. Planning for the Planning Process

For the 2018-20 targets, the initial potential study from 2010 still holds some value in validating a core baseline. The work underlying the 2015-17 targets will provide a base to continue refining these

primary areas of variability. Yet significant new work will be required to further refine the potential estimates due to ongoing changes in market conditions, core technology and codes/standards, plus anticipating scale and viability of developing services and technologies that may have impact in the medium term future.

In this effort the consultant team will supplement the base of available market assessment resources through analysis of potential measures and strategies and related savings levels that are currently being developed in the region and nationally. This will involve a combination of literature review (including review of the target-setting efforts in nearby jurisdictions), assessment of current program practice and learning, consideration of emerging opportunities, and analysis of unique opportunities in new markets and sub-markets.

While these activities will be a significant component of the 2016 proposed scope of work from the C-Team, we also recommend that work begin over the balance of 2015 to support an effective completion of this EERMC responsibility. The Saving Targets will need to be filed at the beginning of September, 2016. Since the Council will need to vote to approve these at the second week of August 2016 council meeting, it means a near final draft needs to be distributed to the Council the first week of August. Given that, most of the work on the Savings Targets will be completed in July, 2016. An early start would critically add six weeks to the six-plus available months of work in 2016 leading to the final draft.

III. Emerging Opportunities

If the theme for the last LCP planning cycle was to “consolidate and institutionalize” Rhode Island’s impressive efficiency resource acquisition capability, and the significant benefit it provides to the people of Rhode Island, it may be that the theme for the next cycle should be: **“full integration of LCP into Rhode Island’s energy system.”**

The basic insight on which Rhode Island LCP has operated is unchanged. There are now, and there continue to emerge, remarkable opportunities to increase the efficiency of our energy use. There continue to be barriers to adoption of new technologies and strategies that would yield significant benefits to customers and society, and these barriers warrant focused and strategic planning and investment to increase adoption and participation.

At the same time, there are a number of significant developments (regulatory, technological, and market-driven) that should inform the planning process for the 2018-20 LCP Plan:

LCP and SRP are being “stretched”: As we “go deep” in our understanding of how to provide energy services to consumers and society we begin to recognize five emerging dynamics that challenge and expand our assumptions about LCP. These emerging insights should inform the setting of targets and the framework of the Standards for the next LCP Procurement planning process.

- **Efficiency is one of a number of emerging customer-side resources. Increasingly it will need to be considered in relationship to the others.**
- **There are new uses for electricity that may increase benefits to customers and society while also increasing electric use.**
- **The timing of energy use, as well as its efficiency, has potentially significant value.**
- **Efficiency and other customer-side resources pose significant challenges to and opportunities for the evolution of our energy systems.**
- **Full and thoughtful evaluation of the costs and benefits of all resources is important to making wise choices.**

The collaborative process in Rhode Island has already begun to address these issues. A sub-committee of the Collaborative that calls itself the System Integration Rhode Island (SIRI) effort has been working to frame the discussion of these issues by stepping back and taking an overview of the utility system. It will be issuing a report on its work and some recommendations to accompany them.

The proceeding on rate design in which the EERMC has submitted testimony (Docket No. 4568) also begins to raise some of these issues, even though the docket itself is not designed to do so.

In a sense it is the success of LCP to date that has helped create new opportunities that require our attention, consistent with the EERMC's charge, and the underlying policy of the state of Rhode Island.

As the Consultant Team begins to consider the analytical work that will be required to set accurate and appropriate "targets" for the 20180-20 cycle we need to assess how these emerging themes should be addressed in our work. It may be that significant analytical work will be required to do this appropriately.

- Should we begin to quantify the potential benefits and risks of certain forms of strategic electrification and their impact on the system? Should we propose a program approach to such an effort, and metrics to measure and evaluate success?
- Should we begin to assess the potential value of using electricity at times that have higher value and lower cost to the system? This area of opportunity also relates directly to the emerging opportunities for including a wide array of distributed resources in Rhode Island's energy development strategy (distributed generation, storage, new grid planning and management approaches)
- Should we support a review of the Total Resource Cost Test to see that it provides a full and accurate basis for evaluating a wide array of energy choices and options?

(We have provided a further discussion of these issues as attachment A)

IV. Recommendations

- Start a process promptly to develop and begin executing a project management plan for this process:

- Have the C-Team develop a preliminary but thorough memo to the full EERMC on challenges and needs, including initial task list.
- In order to guide this effort, consider the creation of a subgroup similar to what was established for the Finance Expert selection, reporting to the Executive Committee on progress and for direction.
- Set aside funds to support any studies/analysis/reports from outside sources to help credibly identify and document savings potential in key sectors, programs, measures and/or upcoming innovation.
- Identify appropriate strategy to determine which, if any, non-traditional areas of energy efficiency resulting from innovation being investigated by SIRI, e.g. strategic electrification, should be considered in the savings targets

Attachment A:

To: Rhode Island EERMC

From: Scudder Parker

Date: Nov 12, 2015

Subject: New Energy Opportunities: Strategic Electrification, Demand Response, and Distributed Resource Integration.

The Consultant Team provides this Memorandum to help focus the attention of the EERMC on what it believes to be an increasingly important set of dynamics in the evolving energy system. The upcoming development of the 2018-20 Savings Targets, and the 2018-20 Least Cost Procurement Plan and System Reliability Plan (SRP) represent two key decision processes that would be appropriately informed by these considerations. We believe they also connect to and inform (and should be further informed by) the ongoing System Integration Rhode Island (SIRI) initiative.

The energy system is changing. We need to keep working to understand these changes in order to plan for an energy future that is able to meet customers' needs while adapting to the speed of technology and the availability of new information. With the efforts already under way and important infrastructure in place, Rhode Island is well positioned to look ahead and be pro-active in planning for the changes that are coming. We believe that Rhode Island's Least Cost Procurement mandate provides an excellent context for considering these issues.

It is important to think about the emerging new energy opportunities because they force us to expand our thinking beyond the traditional (valuable but constrained) focus on incremental efficiency of specific technologies.

There are three dynamics that contribute to the New Energy Opportunities (NEO): They are:

1. **Strategic Electrification:** The emergence of new electric technologies that open the door to significant electrification in sectors of the economy that have been dominated by combustion of fossil fuels.
2. **Distributed Resources:** The rapid development and deployment of a wide range of technologies that are becoming increasingly important to meeting customer energy needs. We refer to this set of technologies and capabilities collectively as Distributed Resources. It includes energy efficiency, which has to date been the primary focus of the EERMC, distributed generation (including CHP¹ and renewables), energy storage, load and demand management capabilities.

¹ In Rhode Island, CHP is treated as an efficiency resource, because when well-designed it can significantly increase total system efficiency compared to simple combustion generation.

3. **A New Vision of the Electric Distribution System:** There is an emerging vision of the distribution (and to some extent the transmission) system as more than simply a “delivery” system for energy produced at large central station generation facilities, but as a system re-designed to enable and support both strategic electrification and distributed resource development through system design, operation, and active load management.

We believe this NEO has implications for current National Grid Program design, and implementation and for least cost energy efforts more generally. We believe it also suggests possible dramatic shifts in energy markets in the next few years.² It poses significant challenges, but also offers very positive opportunities.

The context of the larger NEO is essential to understanding the opportunity represented by strategic electrification.

Strategic Electrification:

Description: There are several emerging technologies that have significant potential to provide benefits to customers and the economy of Rhode Island that do not simply and exclusively fit the traditional tests that have been used to identify measures and design programs under Rhode Island’s current “Least Cost Procurement” (LCP) mandate. These include measures that may provide significant savings not just through increased efficiency of electric use, but also through effective substitution of electric use for applications that have traditionally been dominated by fossil fuels.

These measures include, but are not limited to:

1. New and rapidly improving heat pump technologies. These technologies move heat and cold from one place to another, often with very high efficiency. They include but are definitely not limited to:
 - a. Heat pump technologies for space heating and cooling. While air-to-air heat pumps have been around for years, they are now rapidly increasing in efficiency and cost-effectiveness. They can provide improvements over traditional air conditioning technologies, but they also can provide cost-effective heating for an increasing portion of the heating season. While initial attention has been focused on units in residential and small commercial settings, new improvements suggest this technology may be beneficial to larger and more complex facilities as well. Ground-or water-source heat pumps continue to improve and may be increasingly beneficial in larger facilities or in applications with hydronic distribution.
 - b. Heat pump water heating in the residential sector has become an established technology, currently incentivized in National Grid programs. It provides hot

² Please note Developments in one Utility Service Territory in Maine:
<http://www.mainebiz.biz/article/20150615/CURRENTEDITION/306119994/1088>

water at an estimated efficiency improvement of 2.5 times the efficiency of traditional electric resistance hot water heating, and it competes with fossil fuel heating in many settings.

- c. Heat pump clothes dryers are improving in efficiency and performance, and certainly can compete with electric resistance clothes drying, and with gas applications.
2. Electric vehicles. EVs are a small part of the current transportation market, but they are increasing in viability as battery design and vehicle range improve. Electric vehicles could contribute significantly to cost savings for consumers, to reductions in total emissions, and to other innovations in the transportation sector. Electric vehicles also could provide a new and much-desired value to the electric sector--the ability to store electricity at low cost times and deliver electricity at times of greater need.

Implications: None of these technologies is completely new to the discussion about Rhode Island's energy future. Some of them are already receiving support in specific applications from National Grid programs. But in combination they could signal an important transition in the way we think about and plan for least cost procurement in Rhode Island.

Distributed Resources:

“Distributed resources” is a term of art for a number of new technologies and strategies that help meet customer energy needs; are generally located in, at, or near customer facilities; and are likely to be owned by customers. These resources stand in contrast to “central station” resources that generate power on a large scale, are generally distant from customers, and are owned by utilities or independent generators. Distributed resources include efficiency in end use technologies (the primary focus of EERMC attention to date) but they also include distributed generation (including renewable generation and CHP at the building or community scale) storage, and load and demand management. By 2017 energy efficiency will meet almost 23% of Rhode Island's electric energy needs. Solar generation is increasing rapidly and is decreasing in cost. Energy storage and demand response are emerging as powerful new ways to accommodate more intermittent generation and provide better timing of energy use and demand.

Collectively these technologies can meet an increasing portion of customer demand, often at lower cost (clearly the case with efficiency), and can provide both benefits to the overall electric system, and improvements in both environmental profile and economic impact. They also present challenges and potentially impose new costs to accommodate large scale adoption, or to facilitate capability-building that will permit their deployment at scale.

As Rhode Island families and businesses continue to benefit from the state's emergence as a national leader in energy efficiency implementation the potential for deeper efficiency across all forms of energy, the prospect of new forms of generation, and new strategies to

manage their load and reduce costs are increasingly seen as attractive opportunities for them. The marketplace is devising technologies and offerings at an accelerating rate. Rhode Island's LCP mandate, and the programs offered by National Grid have been critically important drivers of this change.

This emergence of distributed resource strategies begins to blend with the opportunities offered by "strategic electrification" described above. It is (for instance) now possible to convert to heat pumps, make your house very efficient, and generate much of your own electricity from solar panels. Customers are already connecting the ability to generate their own electricity with the opportunity to electrify new components of their energy usage. Rhode Island's policy leadership needs to recognize this dynamic as an opportunity.

In this rapidly changing environment new opportunities for the electric grid to provide value to customers and society begin to emerge.

A New Vision for the Electric Distribution System:

There is an explosion of discussion about what the electric utility will look like in the future. It is not the purpose of this memorandum to discuss all these options or review these debates. Much of that work is being done in Rhode Island already through SIRI. But at the heart of all the debate and discussion is the opportunity to have the electric grid emerge as a facilitator, broker, and supporter of the emergence of a new, customer- and market- empowering, cleaner, and much more dynamic energy system.

Rhode Island's work with System Reliability in Tiverton/Little Compton has already begun to consider how energy efficiency and load management can be integrated with focused solar installation to improve reliability and lower costs. Increasingly, discussions about LCP begin to identify opportunities for a grid that anticipates, stimulates, and incorporates distributed resource investment and active demand response in a manner that increases reliability, provides real savings, supports innovation, and improves both the environment and the economy. As traditional efficiency strategies interact with utility investment through the utility Infrastructure, System and Reliability (ISR) budget, opportunities for further evolution of the opportunities for least cost provision of total energy service begin to emerge.

Questions about Strategic Electrification

Why are these technologies of particular interest? And why do they merit special consideration by the EERMC?

Because they push us to consider whether our definition of LCP should apply not simply to increased efficiency **within** a fuel type (electricity, natural gas, delivered fossil fuels) but also to substitution of one fuel type for another. It is not clear for instance that National Grid can,

under the currently approved Standards, actively promote electric measures that displace fossil fuel use.

It is interesting to note however, that with regard to natural gas, there is historical precedent that allows for active promotion of natural gas over electric resistance heat and delivered fossil fuels. As worded, the language of that memorandum could logically apply to electric substitution for other fuels, but this option has not been actively considered and discussed.

Opportunities for Demand Response and Load Control

The only active implementation of Demand Response in Rhode Island by National Grid is the Demand Response component of the Tiverton/Little Compton System Reliability Plan effort. While there may be large customers in Rhode Island who participate in regional (ISO) system peak demand response efforts, those activities are not coordinated or promoted by National Grid.

There are potential benefits to having the capability to control customer usage in real time to regulate constraints on the distribution, to improve load shape and system utilization, to reduce supply costs, and to support and respond more comprehensively to system peaks that drive both distribution and commodity costs.

While Rhode Island Least Cost Procurement legislation clearly anticipates that managing the time of energy use could be a part of Least Cost Procurement, this activity has not been fully integrated into Rhode Island LCP program design and implementation.

EERMC 2015 Budget

Updated thru: 11/9/2015

SBC Income	
2014 escrowed funds	\$ 26,660
SBC - Electric (2015)	\$ 846,100
SBC - Gas (2015)	\$ 318,800
TOTAL INCOME	\$ 1,191,560

	Budget CY 2015	Monthly Expense												Total Expended - actual and estimated		Total Remaining		Projected EOY Balance	
		Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	\$	%	\$	%	\$	%
Consultant Services	\$ 782,000.00	\$ 53,052.93	\$ 54,428.84	\$ 57,971.41	\$ 56,424.04	\$ 42,744.21	\$ 62,671.75	\$ 63,269.32	\$ 97,382.05	\$ 92,914.88	\$ 75,000.00	\$ 56,638.89	\$ 59,501.68	\$ 772,000.00	98.7%	\$ 10,000.00	1.3%	\$ 10,000.00	1.3%
<i>Core allocation</i>	\$ 697,000.00	\$ 52,276.61	\$ 53,923.75	\$ 57,077.00	\$ 56,400.00	\$ 42,635.00	\$ 62,455.00	\$ 62,901.25	\$ 95,703.75	\$ 91,988.75	\$ 75,000.00	\$ 46,638.89	\$ -	\$ 697,000.00	100.0%	\$ -	0.0%	\$ -	0.0%
<i>Travel/Expenses</i>	\$ 5,000.00	\$ 776.32	\$ 505.09	\$ 894.41	\$ 24.04	\$ 109.21	\$ 216.75	\$ 368.07	\$ 1,678.30	\$ 427.81	\$ -	\$ -	\$ -	\$ 5,000.00	100.0%	\$ -	0.0%	\$ -	0.0%
<i>Supplement 1 -approved</i>	\$ 40,000.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 498.32	\$ -	\$ 10,000.00	\$ 29,501.68	\$ 40,000.00	100.0%	\$ -	0.0%	\$ -	0.0%
<i>Unallocated</i>	\$ 40,000.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 30,000.00	\$ 30,000.00	75.0%	\$ 10,000.00	25.0%	\$ 10,000.00	25.0%
Approved Studies	\$ 96,660.00	\$ -	\$ -	\$ -	\$ 23,350.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 70,000.00	\$ 93,350.00	96.6%	\$ 3,310.00	3.4%	\$ 3,310.00	3.4%
<i>Finance Study, Phase 1</i>	\$ 26,660.00	\$ -	\$ -	\$ -	\$ 23,350.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 23,350.00	87.6%	\$ 3,310.00	12.4%	\$ 3,310.00	12.4%
<i>Finance Study, Phase 2</i>	\$ 70,000.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 70,000.00	\$ 70,000.00	100.0%	\$ -	0.0%	\$ -	0.0%
Legal Counsel	\$ 15,000.00	\$ 1,966.50	\$ -	\$ 4,599.50	\$ 2,050.00	\$ 1,250.00	\$ 2,125.00	\$ 2,125.00	\$ 4,050.00	\$ 6,325.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 39,491.00	263.3%	\$ (24,491.00)	-163.3%	\$ (24,491.00)	-163.3%
Communications	\$ 50,000.00	\$ -	\$ 2,914.50	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,914.50	5.8%	\$ 47,085.50	94.2%	\$ 47,085.50	94.2%				
Council Travel	\$ 3,000.00	\$ -	\$ -	\$ -	\$ -	\$ 106.15	\$ 106.15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 212.30	7.1%	\$ 2,787.70	92.9%	\$ 2,787.70	92.9%
Energy Expo 2016	\$ 50,000.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000.00	\$ 50,000.00	100.0%	\$ -	0.0%	\$ -	0.0%					
OER Staff Support	\$ 95,516.10	\$ -	\$ 95,516.10	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 95,516.10	100.0%	\$ -	0.0%	\$ -	0.0%				
EERMC Interns	\$ 10,000.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.0%	\$ 10,000.00	100.0%	\$ 10,000.00	100.0%					
Subtotal	\$ 1,102,176.10	\$ 55,019.43	\$ 54,428.84	\$ 62,570.91	\$ 81,824.04	\$ 44,100.36	\$ 163,333.50	\$ 65,394.32	\$ 101,432.05	\$ 99,239.88	\$ 80,000.00	\$ 61,638.89	\$ 184,501.68	\$ 1,053,483.90	95.6%	\$ 48,692.20	4.4%	\$ 48,692.20	4.4%
Unallocated SBC Income	\$ 89,383.90																	\$ 89,383.90	
TOTAL FUNDS REMAINING																		\$ 138,076.10	

EERMC Executive Committee Budget Recommendations for Council Consideration and Vote on November 12, 2015:

- 1) Reallocation of \$30,000 from "Communications" to "Legal" budget line item to accommodate projected billings through end of 2015.
- 2) \$50,000 of Expo 2016 allocation should be moved into client fund/escrow
- 3) \$70,000 allocated for Finance Study Part 2 should be moved into client fund/escrow
- 4) Release of \$30,000 in pre-committed funds to support C-Team expenses through end of 2015. (Rate design case; intern reimbursement; new projects)
- 5) C-Team shall be authorized to recover expenses related to Interns in 2015 (approximately \$4,000). These dollars had been previously allocated in a separate line item of the budget.
- 6) Net balance of unexpended 2015 funds shall be moved into client fund/escrow at the appropriate time in December to support special projects in 2016, at the EERMC's discretion.

2016 EERMC Planning Budget
as of 11/9/15

<u>Income</u>	
2016 EE Plan - Electric	\$ 793,100
2016 EE Plan - Gas	\$ 233,300
Total	\$ 1,026,400

<u>Client Fund Balance as of 1/1/16</u>	
Expo 2015	\$ 50,000
Finance Study	\$ 70,000
Unallocated Carry-over	\$ 138,000
Total	\$ 258,000

** will be expended in 2016*

** will be expended in 2016*

** estimated*

<u>Projected Allocations</u>	
Core Consultant Services	\$ 782,000
Legal Counsel	\$ 40,000
Communications	\$ 15,000
Counsel Travel	\$ 500
Expo 2017	\$ 50,000
Total	\$ 887,500

<u>Budget Summary</u>	
Income	\$ 1,026,400
Client Fund (unallocated)	\$ 138,000
Projected Allocations	\$ 887,500
Balance	\$ 276,900

** estimated*