



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

DRAFT MEETING MINUTES

Thursday, April 10, 2014

3:30 - 5:30 PM

Conference Room B
Department of Administration
One Capitol Hill, Providence, RI

Members Present: Joe Cirillo, Marsha Garcia, Julie Gill, Jennifer Hutchinson, Dan Justynski, Chris Powell, Paul Ryan

Members Absent: Abigail Anthony, Marion Gold, Michael McAteer, Joe Newsome

Consultants Present: Mike Guerard, Sam Huntington, Scudder Parker

OER Staff Present: Sue AnderBois, Danny Musher, Rachel Sholly

Others Present: Nick Corsetti, Courtney Lane, Charlie Harak, Sean Murphy, Jeremy Newberger, Sam Nutter, Elizabeth Terry, Belinda Wong

1. Call to Order

Chairman Paul Ryan called the meeting to order at 3:32 PM.

2. Approval of March Meeting Minutes

Dan Justynski made a motion to accept the March meeting minutes as submitted. Chris Powell seconded and the motion passed unanimously.

3. Executive Director Report

In Commissioner Gold's absence, Office of Energy Resources (OER) staff delivered the Executive Director report. Rachel Sholly showed a brief video that National Grid created on the Energy Expo and then provided an overview of how the event went (see attached). Sue AnderBois provided an update on the Home Energy Affordability Loan (HEAL) program, which is in the process of being launched in Rhode Island with Regional Greenhouse Gas Initiative funds (see attached). Danny Musher presented an update on Rhode Island's Renewable Thermal Working Group (see attached).

Julie Gill announced that the Ultra-Low Sulfur Diesel (ULSD) hearing is tomorrow morning and if the rules are promulgated the state will shift to 500ppm ULSD on July 1, 2014 and then 15ppm on July 1, 2018. This ULSD policy is actually more important than the biodiesel blending mandate because it

will be a huge jump in reducing particulate matter, make these systems run more efficiently so they use less fuel, reduce service calls, and reduce maintenance frequency from annually to once every five years.

Mr. Justynski asked if they planned to separate residential and commercial opportunities. One option is to look at all the different customer classes. Mr. Powell asked if there is any opportunity to expand the pilot beyond the residential sector. Mr. Musher replied that they will be examining this in the opportunities report, but the funds are limited to \$500,000 for the pilot, which would not stretch very far. For a long-term program, the recommendations may include the commercial sector depending on what technologies we are trying to support and what market barriers we are trying to address. Mr. Powell noted that there seems to be a disconnect between cutting-edge technologies and available incentives. Mr. Parker added that evaluation of these technologies may need more work in order to create programs.

4. Policy/Planning Issues

Update on Standards and Targets

Mike Guerard presented the update (see attached). The Public Utilities Commission (PUC) approved the EERMC's proposed targets at an open meeting on March 27, 2014. The PUC has been assured that neither these targets nor the forthcoming 3-year plan will lock in a budget. The budget is associated with the annual plan. A PUC procedural conference on the EERMC's recommended standards revisions will be held on April 11, 2014. Scudder Parker noted that the Council did not propose any major changes to the standards.

Upcoming 3-Year Plan Process and Issues

Mr. Guerard reported that now that the targets having been approved, the 3-Year Planning process will begin and will be the focus of upcoming Demand Collaborative meetings on April 30, May 29 and June 23. A draft will be ready for Council review at the July meeting, because the August 2014 meeting will need to include a vote to approve the 3-Year Plan for September 1, 2014 filing with the PUC. Mr. Parker noted that the cold winter increased fuel costs and the EERMC needs to convey to the PUC that energy efficiency has mitigated and can continue to mitigate cold winter price spikes.

Discussion and Vote on Final EERMC Annual Report

Mr. Justynski made a motion to approve the EERMC Annual Report dated April 2014 to be filed in accordance with the required date. Mr. Powell seconded. Mr. Parker added that some edits to the policy recommendations section have been made since the Council last saw the report. Mr. Guerard made sure that the motion presumed that minor edits may be made until close of business tomorrow. All agreed that it did. **The motion passed unanimously.**

5. Deeper Update on Energy Efficiency Program: Multifamily Program

Mr. Guerard introduced Nick Corsetti and Elizabeth Terry of National Grid and Sam Huntington of the Consultant Team to present an update on the multifamily program (see attached). Joe Cirillo expressed concern about codes for the multifamily sector, noting that they are an integral

component of this sector. Mr. Corsetti explained that whenever National Grid does work in a multifamily unit, they assess for code compliance. National Grid also does compliance training. Mr. Guerard added that a barrier to participation is that many multifamily owners know that they have code violations and, therefore, do not want National Grid to come through their buildings.

6. Presentation on National Grid Participation Data

Sean Murphy of National Grid presented on program participation data (see attached). Mr. Newberger pointed out that the PUC has expressed interest in both participation data and equity issues, so this data will be presented to them to facilitate conversations on these issues. Ms. Gill felt that National Grid should establish a standard amount of time for when to get back in touch with customers who have already participated in programs.

7. Other Business

Discussion and Vote on Carryover Contract Funds

Mr. Justynski made a motion to approve the extension of the contract dated March 18, 2013 between the EERMC and VEIC through December 31, 2014 to carry over funds in the amount of \$6,965.22 and to authorize Paul Ryan, Chairman of the EERMC, to sign the amendment. Marsha Garcia seconded and the motion passed unanimously.

8. Public Comment

Charlie Harak, of the MA Energy Efficiency Council, explained that trying to get multifamily programs right is a struggle nationwide. He added that there are now affordable housing funders and his office would be interested in helping RI.

9. Adjournment

Mr. Cirillo made a motion to adjourn. Mr. Justynski seconded and the motion passed unanimously. The meeting was adjourned at 5:27 PM.

Next Meeting: Thursday, May 8th 3:30-5:30 PM; Conference Room B

Energy Expo Video



<http://vimeo.com/ecastpro/review/91442916/od726642cc>

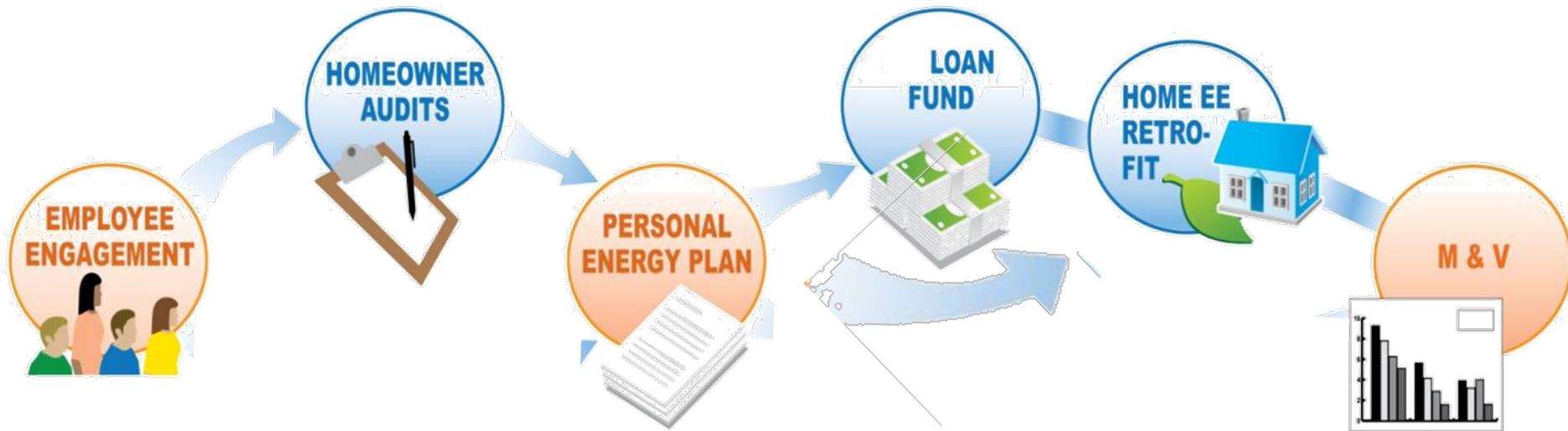
Energy Expo Recap

- 20,000+ attendees - 45% increase
- 95 Energy Expo companies exhibited
- 75+ people participated in RI Energy Leaders Recognition Event
 - Senators Reed and Whitehouse and Congressman Cicilline
- 710,000 coupons distributed through National Grid bills
- 1,300+ coupons redeemed
- \$100,000 paid advertising
- 550 free tickets distributed to EnergyWise customers - 300 redeemed
- 7 pallets of lightbulb kits sold by TechniArt on Saturday alone
- 33 new OER mailing list sign-ups

Home Energy Affordability Loan (HEAL)

- **Employee benefits program to encourage home energy retrofits**
 - Primarily focused on energy efficiency
 - Accessible to all employees regardless of income or credit levels
- **Two Models:**
 - Private Companies perform corporate energy efficiency
 - Use savings to create 0% interest revolving loan fund for employees
 - Private or public companies do not perform EE at an org-wide level
 - Provide employees with information on existing programs (e.g. HEAT loan)
 - Provide employees to low or no interest loans through credit unions
- **Status in RI:**
 - \$48,000 in RGGI funds set aside for pilot
 - April 17th meeting with William J Clinton Foundation/HEAL staff
 - GHHI offer to help identify potential corporate participants

HEAL Process



RI Thermal Working Group

EERMC Meeting
April 10, 2014



STATE OF RHODE ISLAND

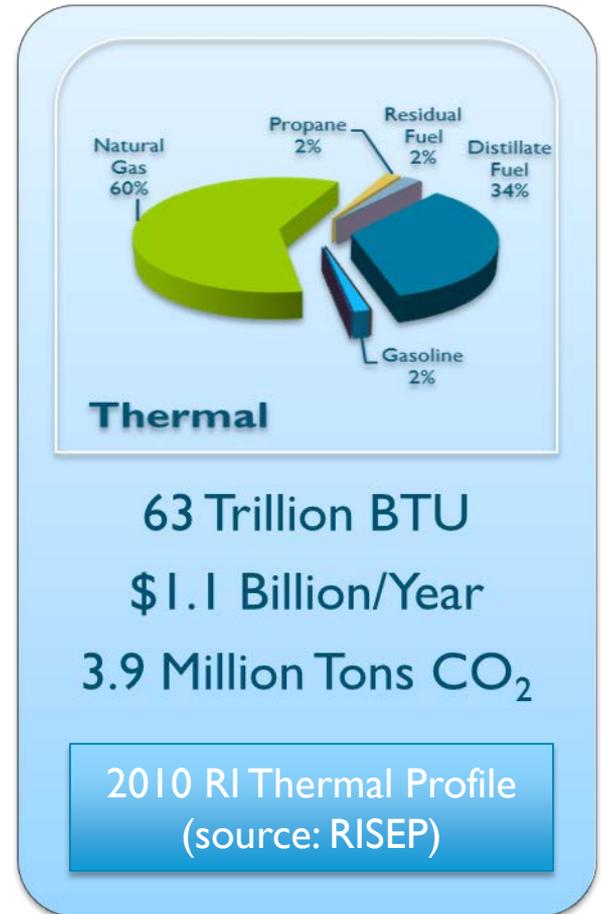
**OFFICE OF
ENERGY RESOURCES**

Background

- **OER is currently completing a 10-year update to the Rhode Island State Energy Plan (RISEP)**
 - Overarching goals by 2035:
 - *Increase fuel diversity above 2013 levels*
 - *Produce net economic benefits*
 - *Decrease GHG emissions 45% below 2013 levels*
 - Twenty policy recommendations to achieve goals

Background

- The RISEP highlighted the thermal sector as a key gap in Rhode Island energy policy
 - The thermal sector accounts for ~1/3 of total energy consumption, yet:
 - *Nearly 40% of RI homes lack robust access to the state's nation-leading energy efficiency programs*
 - *Virtually no renewable heating and cooling market exists in state*
 - Main new thermal policy recommendations:
 - *Expand Least-Cost Procurement to Unregulated Fuels*
 - *Institutionalize Renewable Thermal Funding*
 - *Expand Use of Biofuels*
 - *Address Natural Gas Leaks*



Background

- **Drawing on the RISEP findings, the OER proposed using 2012 RGGI Auction Proceeds to fund two inter-related planning activities related to the thermal sector:**
 - \$41,427 (2.7% of total) will be allocated to fund technical support to a working group dedicated to developing a cleaner and more efficient energy system for the homes and businesses using delivered fuels
 - \$500,000 (16% of total) will be used to research and design a pilot program(s) to evaluate opportunities and barriers for renewable thermal technologies in Rhode Island

RI Thermal Working Group

- The OER plans to address the delivered fuel efficiency and renewable thermal activities in one coordinated effort, through the formation of a RI Thermal Working Group, with the goal of designing:

A *comprehensive market development strategy* for energy efficiency and renewable energy in Rhode Island's thermal sector

Membership

- **Office of Energy Resources (OER)**
- **EERMC Consultant Team**
- **Commerce RI Renewable Energy Fund (REF)**
- **National Grid**
- **Fuel Dealers**
- **People's Power and Light (PP&L)**

RI Thermal Working Group Tasks

1. **Delivered Fuels Energy Efficiency Strategy**
2. **Renewable Thermal Strategy**
3. **Renewable Thermal Pilot**
4. **Fuel Dealer Engagement**

1. Delivered Fuels EE Strategy

- **Goal – “A cleaner and more efficient energy system for homes and businesses using delivered fuels”, including:**
 - Increased building efficiency (weatherization) to reduce the amount of energy needed for heating/cooling
 - Higher efficiency delivered fuel equipment to require less fuel to create heating
 - A transition to cleaner burning delivered fuels (biofuels, ultra-low sulfur diesel)
- **Main tasks (OER staff, C-Team):**
 - Delivered Fuel Market Assessment: Develop a potential estimate
 - Jurisdictional Comparison: Identify program funding and delivery pathways most suitable for Rhode Island

2. Renewable Thermal Strategy

- **Goal – “Evaluate opportunities and barriers for renewable thermal technologies in Rhode Island”, including:**
 - Biomass, solar hot water, ground- and air-source heat pumps, advance biofuels, and biogas
- **Main tasks (Vendor TBD):**
 - Better characterize renewable thermal market growth potential
 - Quantify energy security economic, and sustainability benefits to achieving the identified potential
 - Analyze key market barriers to achieving the identified potential
 - Develop recommended implementation strategies to achieve the identified potential

3. Renewable Thermal Pilot

- **Elements:**

- Identify target participant groups, preference will be given to customers using electric heat
- Include evaluation, measurement, and verification to help ground-truth and compare field performance of technologies, understand patterns or customer satisfaction, and track energy and cost savings
- Draw on best practices from other neighboring states' thermal demonstration projects, programs and initiatives
- Complement elements of National Grid's 2014 Energy Efficiency Program Plan focusing on the evaluation of the viability, suitability, and deployment of advanced heat pump technologies in Rhode Island

4. Fuel Dealer Engagement

- **Elements:**
 - Form lines of communication between the fuel dealer community and the working group
 - Share relevant findings of studies
 - Provide trainings or technical support to offer EE or RE thermal products to customers
 - Hold presentations by full service energy providers
 - Work together to develop potential legislation



STATE OF RHODE ISLAND

ENERGY EFFICIENCY & RESOURCE MANAGEMENT COUNCIL

April 10, 2014

Policy/Planning Issues

- Update on Standards and Targets
- Upcoming 3-Year Plan Process and Issues
- Discussion and Vote on Final EERMC Annual Report



1. Update on Standards and Targets

➤ Targets:

- The RI PUC approved the EERMC's Proposed Targets at an Open Meeting on March 27, 2014
- Recognized that EERMC met statutory responsibility; analysis seemed appropriate; and that all key stakeholders backed the targets

➤ Standards:

- Submitted and posted by PUC under Docket 4443 (Same docket used for Targets)
- RI PUC scheduled a Procedural Conference on Friday, April 11, 2014
- Associated Technical Session may also cover in-depth description of Cost-Effectiveness Test (Total Resource Cost)



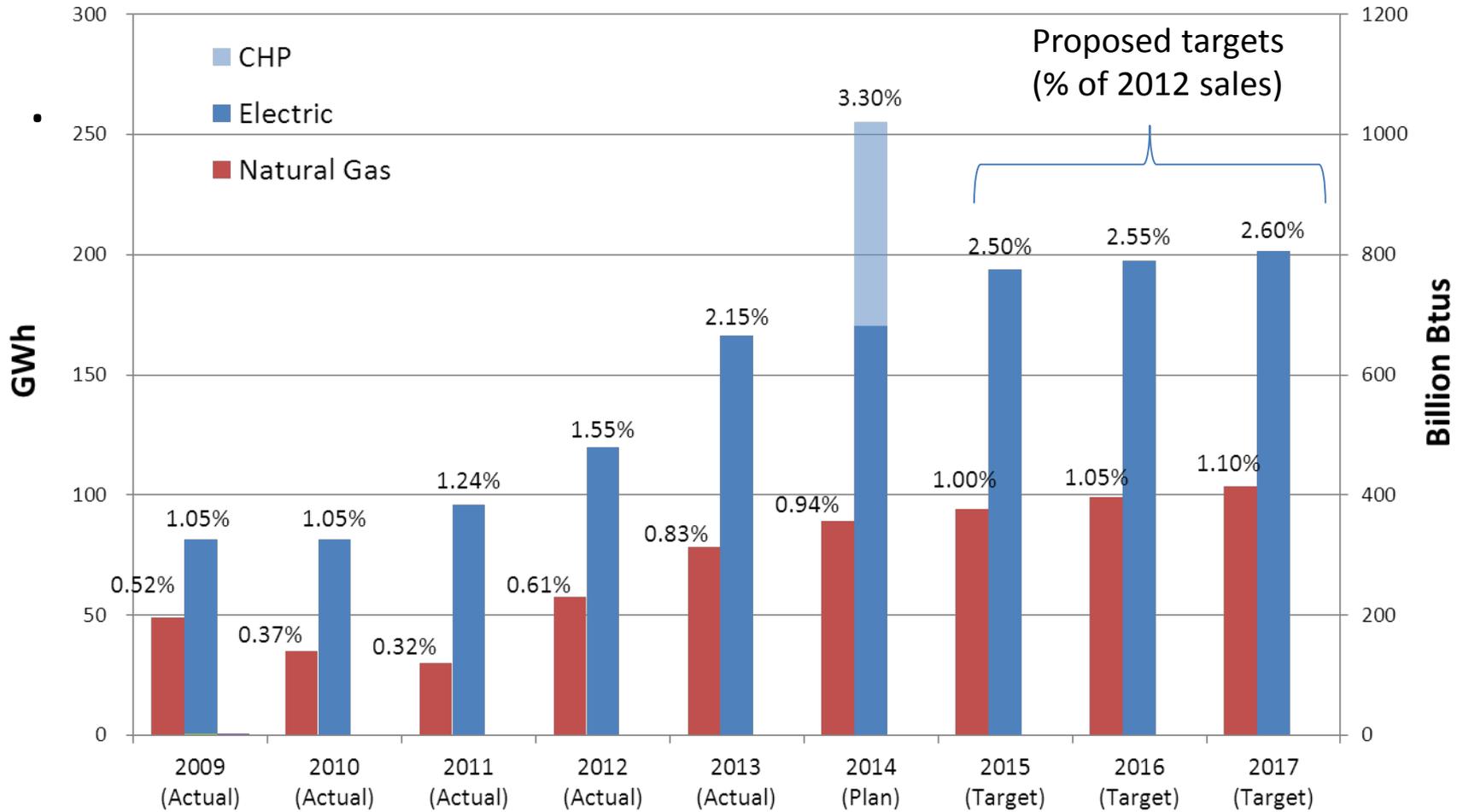
- With Targets are approved, 3-Year Plan will focus on achieving proposed savings targets for electric and natural gas
- The Plan will be focus of upcoming Collaborative meetings
 - Scheduled dates: April 30; May 29; June 23
- EERMC review
 - May meeting – Proposed “Themes” reviewed
 - June meeting – High level review of core programs and proposed areas of innovation and acceleration
 - July meeting – Presentation of Plan draft, including initial budget
 - August meeting – Review of final draft; vote
 - C-Team’s monthly meetings with National Grid Sector Strategy Groups will focus on Plan, esp. innovation and acceleration
- Filed September 1, 2014



3. Discussion/Vote on Final EERMC Annual Report

- Report due Tuesday, April 15, 2014 to General Assembly
 - Submit electronically on 4/15
 - Printed copies available by end of April (???)
 - To be printed at ????? In RI
 - Minor edits possible between now and April 15 to document

Historical context for the proposed targets





3-Year Plan General Timeline & Actions

- **March**
 - Initial Input from Council @ 3/13 meeting (Themes)
 - Collaborative accelerates planning @ 3/25 meeting
- **April – June**
 - Council presentations on developments of Plan relating to research and developments on potential
 - Collaborative continues to work collectively on all issues
 - C-Team & National Grid Monthly strategy group meetings begin focus on best practice research and opportunities for enhancement and acceleration of current programs
- **July**
 - Presentation to Council on proposed plan elements, savings, budgets
 - Appointment of Council Plan subcommittee
- **August**
 - Council vote on Plan, including instructions to Subcommittee to support finalization of Plan leading to submittal
- **September 1, 2104 – Plan submitted to PUC**



Key Stakeholders -- Collaborative

- **National Grid -- Management & Strategy Group Reps**
- **Division of Public Utilities & Carriers**
 - Division's consultant –Synapse
 - Attorney General's Office
- **Office of Energy Resources**
- **Council members and Consultant Team**
- **The Energy Council - RI**
- **People's Power & Light**



Current “Themes”

- **Energy Efficiency is for Everyone** – Overcome traditional barriers that prevent homes and businesses from participating and to provide every RI’er an opportunity to participate.
- **Reaching Customers Where they Live and Work** – Employ customer segmentation, targeted marketing efforts, and various delivery channels to increase participation in energy efficiency.
- **Innovation** – Development and deployment of new energy efficient technologies to continue to move the market to higher levels of energy efficiency.
- **Economic Growth** – Create value for RI through job creation, lowering energy bills for both participants and non-participants, and look for ways to lower the cost of energy efficiency in future years.

To: Elizabeth Terry, Nick Corsetti, and Angeli Li, National Grid

From: Kate Johnson and Dan York, ACEEE

Date: February 7, 2014

Subject: Technical Assistance to support National Grid's Rhode Island Multifamily Energy Efficiency Program

Overview of technical assistance to be provided by ACEEE

ACEEE will provide technical assistance to National Grid Rhode Island in order to support the continued expansion and improvement of National Grid's multifamily energy efficiency program. ACEEE's contribution will consist primarily of best practice research and program design recommendations on the following three topics. On each topic ACEEE will provide an overview of the options, examples of current programs, and recommended best practices. These resources will be targeted to National Grid but will be adapted or written in such a way to allow them to be shared publicly with the ACEEE Multifamily Working Group and made available on ACEEE's online multifamily resource library.

Priority topics

1. Alternatives to the current incentive structure based on individual measures that will encourage projects with deeper energy savings and maximize program dollars. Examples may include per-unit or square foot incentives and energy performance targets.
2. Screening criteria and targeting strategies that will help to reach and prioritize customers that are willing to undertake deeper retrofits in order to maximize the limited gas budget. These strategies could include the use of benchmarking to screen properties and portfolios for the greatest energy savings opportunities as well as offering tiered levels of service to segment customers.
3. Communications and marketing strategies to enable greater penetration of the multifamily market. ACEEE will particularly focus this work on engaging traditionally hard-to-reach segments of the multifamily market, such as condo associations and building owners with income eligible tenants.

In addition to providing memos and compiling the best available resources on each of these topics, ACEEE will conduct at least one in-person meeting/briefing with the National Grid multifamily program team and any relevant stakeholders in Providence, RI. Additional follow-up activities may be identified at that point and ACEEE will review program plans developed by National Grid as needed.

Timeframe

ACEEE will conduct the best practice research from March to April with a goal for an in-person briefing with the National Grid team in late April or May.

National Grid must file its 2015-2017 3-year plan in September and its 2014 program plan on November 1, 2014.



STATE OF RHODE ISLAND

ENERGY EFFICIENCY & RESOURCE MANAGEMENT COUNCIL

Multifamily – Past, Present, and Future

Presented by:

Nick Corsetti & Elizabeth Terry – National Grid

Mike Guerard & Sam Huntington – EERMC Consultant Team

April 10, 2014



nationalgrid

- The past 5 years (process and performance)
- The current model
- Looking to the future
 - Market potential
 - Outside expertise opportunities
 - New model ideas and strategies
- Wrap up and next steps

- Program model
 - Lack of one point of contact
 - The budget
 - Spanning multiple sectors and programs
 - Struggle between breadth and depth with customers
 - In 2013
 - Issues of integrating project pipelines with customer preferences

- New model
 - Easier customer communication (1 point of contact)
 - Better accounting and program management
 - Budgets still stem from multiple sectors and programs, but is more transparent
 - Strong customer relationships (e.g. RI Housing)
 - Walking through the customer experience

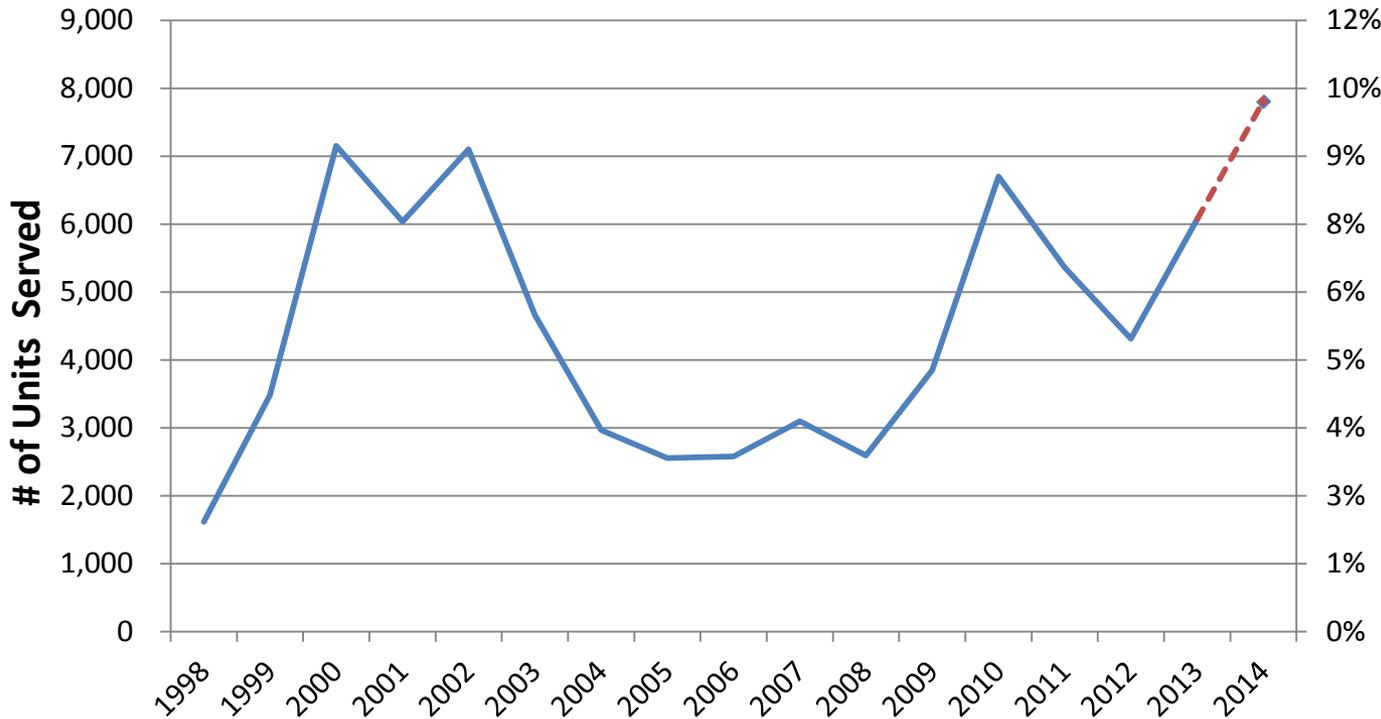
Biggest questions that remain

- How do we best allocate program funding
 - Residential, C&I, new sector altogether?
- How do we ensure comprehensive customer service?
 - Incentive structure, customer experience, etc.
- How do we prioritize projects to ensure most savings per dollar invested every year?
- How do we equip customers properly so that long-term savings and benefits are realized?

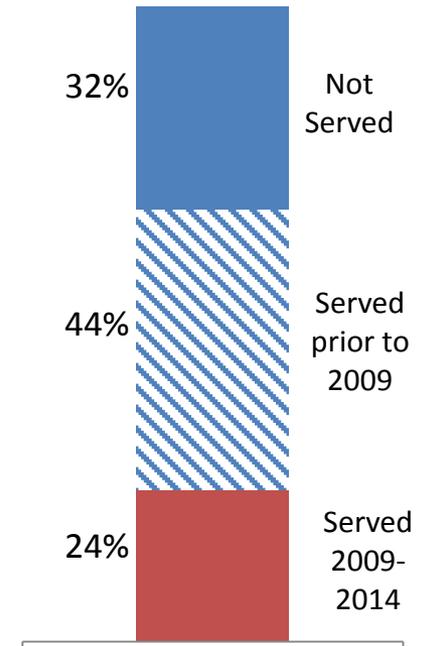
What is the Market Potential?

Estimates range from 10%-25% electric, 20%-30% gas

Two Elements – 1) Market Penetration
 2) Depth of Savings



Historic Market Penetration in Multifamily Sector



Cumulative Participation

What is the Market Potential?

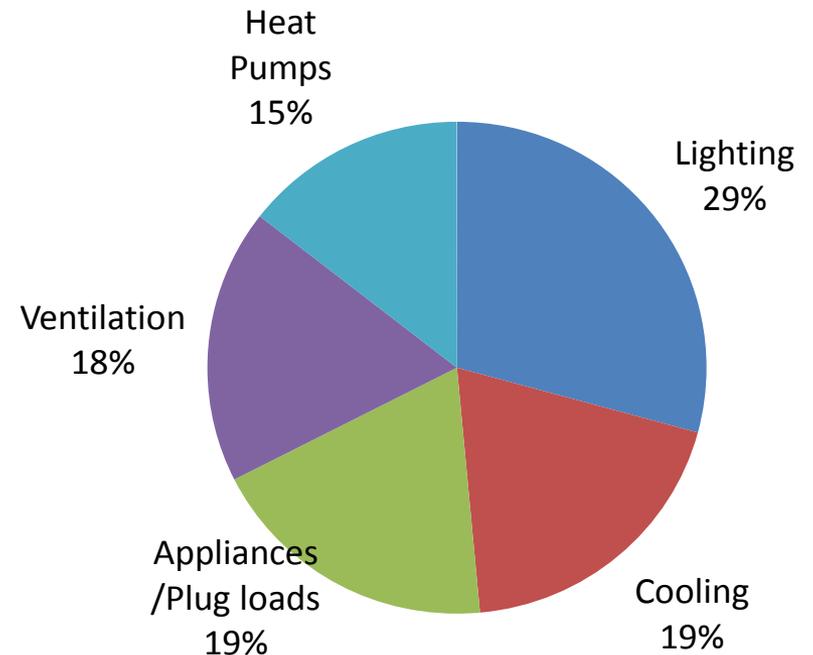
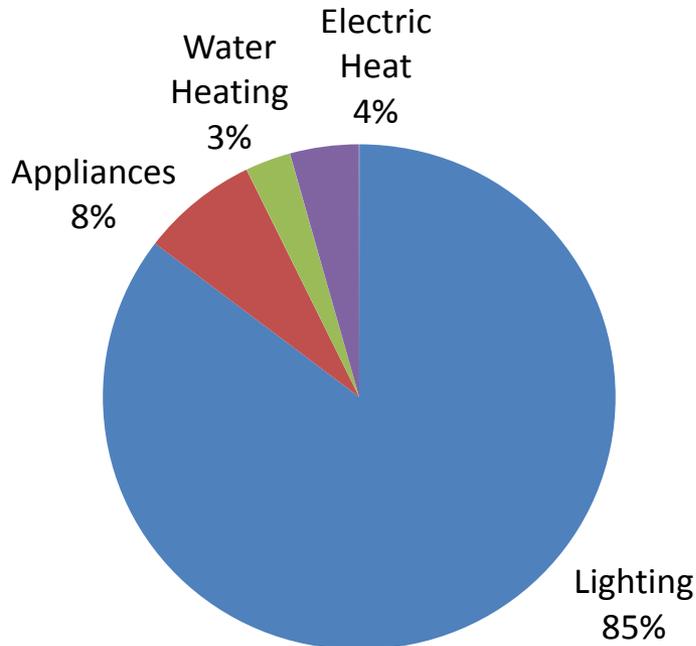
Depth of Savings - Electric

What is being achieved now?

2014 Plan	Electric (kWh)
Savings per Unit	624
% Savings	14%

How does performance compare to potential estimates?

- Significant potential in non-lighting
- These are more expensive, difficult

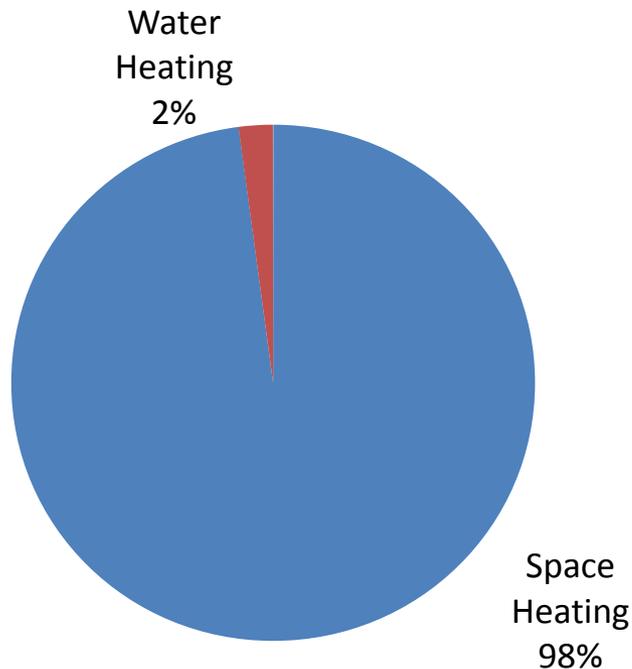


What is the Market Potential?

Depth of Savings - Gas

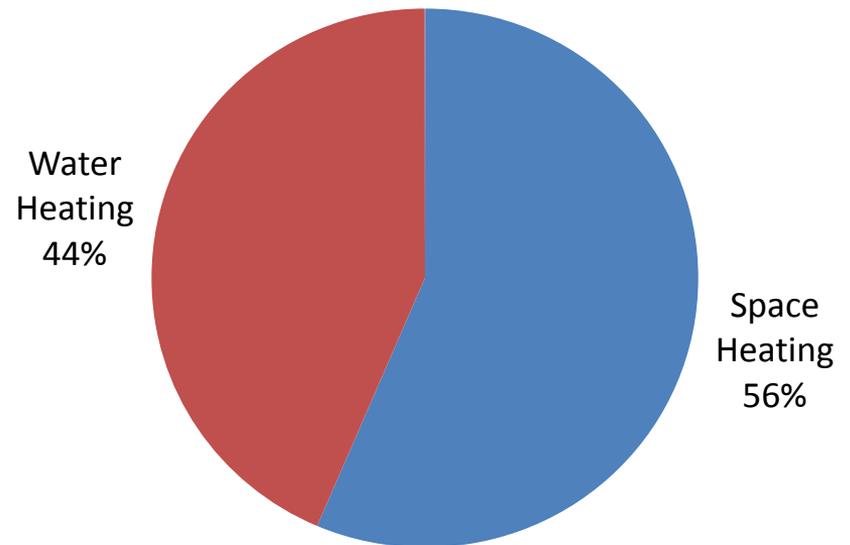
What is being achieved now?

2014 Plan	Gas (MMBtu)
Savings per Unit	5.5
% Savings	16%



How does performance compare to potential estimates?

- 16% savings is mid-range of estimates
- Potential for more water heating
- Going deeper is more expensive



Market Potential:

What conclusions can we draw?

1. There is significant potential for more savings in the multifamily sector
2. Market penetration is robust
3. Depth of savings is pretty good, but some room for improvement
 - Electric needs to expand beyond lighting
 - Gas could go deeper on space heating and could target more water heating

Key Question:

How can the program go deeper given budget constraints and marginal program cost-effectiveness?

Need to improve on cost-efficiency

The number one strategy that is promoted by industry experts –
Better Market Segmentation, More Strategic Targeting

- Conversations with other Program Administrators and implementation vendors
- Multifamily focus groups (2013)
 - Buildings owners and managers
 - Stakeholders
 - Benchmarking
- Leveraging outside expertise

Outside expertise

- **ACEEE Technical Assistance**
 - Through John D. & Catherine T. MacArthur Foundation (see handout)
 - Best practice research and recommendations on:
 - Incentive structure
 - Screening criteria and targeting strategies (benchmarking)
 - Communication and marketing strategies (hard-to-reach, condos)
- **Affordable Multifamily Housing Efficiency Project**
 - Energy Foundation; NRDC; National Housing Trust; National Consumer Law Center; Elevate Energy; and New Ecology, Inc.
 - Best Practices research; Support in developing savings potential

New model ideas and strategies

- How to ensure long-term value – require benchmarking
 - Offering customers a choice
 - Tier 1 – Basic tool (Energy Star Portfolio Manager)
 - Tier 2 – More comprehensive services (i.e. consulting) – engage industry professionals
- Two potential paths of incentives: Prescriptive and custom
 - Prescriptive – lighting/controls/water/HVAC – normal rebate process
 - Custom: Model savings (minimum savings % required)
 - Will incorporate findings from ACEEE research
- Market segmentation
- Engaging the workforce – creating Rhode Island jobs
- QA/QC is important – ensuring high savings per dollar invested

Next steps

- Budget development (3-year plan)
- RFIs and RFPs for new model ideas and strategies
- Incorporate outside technical expertise into 3-year planning

The vision for the Multifamily Program

A more comprehensive and customer-centric programmatic approach that offers long-term value for all Rhode Island multifamily customers, while delivering the highest savings per rate-payer dollar invested

AFFORDABLE MULTIFAMILY HOUSING EFFICIENCY PROJECT

EXPANDING EFFICIENCY IN AFFORDABLE MULTIFAMILY HOUSING—OPPORTUNITY AND CHALLENGES

Making affordable rental housing more energy efficient is a cost-effective way to reduce energy consumption, maintain housing affordability, create healthier and more comfortable living environments for moderate- and low-income families, and reduce pollution. Consider these opportunities in the multifamily sector:

- **Extensive Energy Savings Potential:** Multifamily rental buildings, classified as containing 5 or more apartments, are on average older and less energy efficient, and house 15 million American households.¹
- **Financial Benefits to Low-Income Tenants:** Half of the nation's 15 million very low-income renters reside in multifamily housing.² Low-income families can spend up to 20 percent of their income on energy, compared with only 4 percent for the average household. Cost-effective energy retrofits have been found to reduce heating fuel and electricity usage by as much as 30 percent, helping renting families afford energy and other basic needs.³
- **Improved Health:** Investments in efficiency can create a healthier living environment, lowering incidences of illnesses like asthma, and reduce pollution caused by energy production.⁴
- **Preservation of Housing Affordability:** Owners of affordable multifamily rental properties face high operating and maintenance costs, reducing their ability to invest in their properties. Energy retrofitting multifamily housing preserves affordable homes and frees up capital for maintenance, repairs, and other improvements.⁵ Meeting achievable energy potential by 2020 can create \$9 billion in annual energy savings for tenants and landlords.⁶

Despite these opportunities, efficiency measures are far less likely to be found in multifamily rentals than in any other type of housing.⁷ Why is that the case?

- Owners of affordable housing lack the capital to make efficiency improvements.
- Utilities do not have efficiency programs for multifamily rental housing, and others have not evolved to incorporate new program design breakthroughs. Generally, utility programs are underfunded and fall short of the need.
- Regulations in many states exacerbate barriers to energy efficiency.

Only by coordinating the efficiency and housing sectors can we effectively reduce the energy burden on low-income renters.



Our vision: Electric and gas utilities will deliver programs designed to capture all cost-effective energy efficiency within the affordable housing sector, which will strongly benefit low-income families and building owners as well as utilities



John Wilson
John@ef.org
(415) 561-6700



Todd Nedwick
tnedwick@nhtinc.org
(202) 333-8931 x128



Cai Steger
csteger@nrdc.org
(212) 727-2700



ELEVATE ENERGY
Smarter energy use for all

Abigail Corso
Abigail.Corso@elevateenergy.org
(773) 321-2663



Ed Connelly
Connelly@newecology.org
(617) 557-1700

PARTNERING TO LEVERAGE A NEW OPPORTUNITY

The National Housing Trust (NHT), Natural Resources Defense Council (NRDC), Energy Foundation, Elevate Energy, and New Ecology are working to ramp up energy efficiency investment in affordable multifamily homes. We will be engaging in a dozen states over the next two years, collaborating with local energy and affordable housing partners to ensure that affordable multifamily rental housing receives a fair share of utility funding and that tailored, cost-effective energy efficiency programs are available to all building owners and tenants who want to take part. Our goal is to ensure that electric and gas utilities deliver programs designed to capture all cost-effective energy efficiency within the affordable housing sector, which would benefit low-income families as well as building owners and utilities. Ultimately, we seek to demonstrate that older affordable housing presents excellent opportunities for retrofits that will reliably deliver projected energy savings.

We are selecting states where we can be effective in the short term while building on-the-ground capacity for long-term efforts. In total, based on an increase in efficiency goals and the need to address the underserved multifamily market, we see a window of opportunity to reach more than 4 million affordable apartments in these states.⁸ So far, they include:

California	Michigan	New York
Illinois	Minnesota	Pennsylvania
Maryland	Missouri	Rhode Island

We are optimistic about the potential to increase utility investment in energy efficiency programs for affordable housing. A growing number of states are mandating aggressive efficiency targets for utilities, and the underserved multifamily market presents a natural opportunity for utilities to meet these goals.

ADDING VALUE TO LOCAL LEADERSHIP

The partnership of our organizations brings together a unique team of specialists with wide-ranging expertise and experience in affordable housing, energy efficiency, collaborative processes, and state agency and utility commission engagement. Our aim is to support the work

of local stakeholders who are already engaged in this effort. Based on the state's needs and opportunities presented to us, we will:

- provide technical capacity on utility program design and implementation, financing, marketing, energy efficiency policy, and advocacy campaigns;
- increase engagement of the affordable housing community with utilities and in regulatory proceedings and other state venues;
- connect utilities, housing finance agencies, economic development agencies, affordable housing groups, banks, and other stakeholders;
- coordinate utility programs' resources with complementary housing programs and resources;
- engage and educate building owners and operators of affordable multifamily buildings; and
- disseminate lessons and best practices from other states.

STRENGTHENING A NATIONAL NETWORK

Finally, we will connect our on-the-ground work in specific states to a national network of diverse and engaged stakeholders. The network will train affordable housing and energy efficiency leaders while facilitating coordination among coalitions and existing networks. This will ensure that best practices, advocacy tools, and other resources are available to the leaders in this space and will secure an ongoing relationship between housing and efficiency advocates—a critical partnership for success.

SECURING WIN-WIN OUTCOMES

We face an important opportunity to achieve significant energy savings and help sustain much-needed affordable housing for our nation's low-income families. Utility spending on energy efficiency programs is expected to increase substantially over the next decade. By effectively targeting these resources to multifamily affordable rental housing, we will help utilities and state governments achieve their energy savings goals, increase housing affordability for low-income households, spur economic growth, and create healthier living environments.

1 www.huduser.org/portal/periodicals/em/summer11/highlight1.html.

2 www.enterprisecommunity.com/servlet/servlet.FileDownload?file=00Pa000000Pdzc4EAB.

3 www.freddiemac.com/multifamily/pdf/mf_closer_look_primer.pdf.

4 Rebecca Cohen, *The Impacts of Affordable Housing on Health: A Research Summary* (Washington, D.C.: Center for Housing Policy, 2011).

5 www.db.com/usa/docs/DBLC_Recognizing_the_Benefits_of_Efficiency_Part_B_1.10.pdf.

6 www.benningfieldgroup.com/docs/Final_MF_EE_Potential_Report_Oct_2009_v2.pdf.

7 www.huduser.org/portal/periodicals/em/summer11/highlight1.html; www.nhtinc.org/downloads/partnering-for-success-action-guide.pdf.

8 Census American Consumer Survey, internal calculations.

nationalgrid

Participation in Rhode Island Energy Efficiency

Presentation to RI EERMC
April 10, 2014



- Why Participation is Important
- How We Define Participants
- Participation Overlap
 - Across programs and time
- Eligible Populations
- Reporting

- Program design
 - Who can participate
 - Who is participating
- Reporting
 - How many people have participated
- Bill impacts
 - How much do participants benefit?



- Definitions put program participation in context
 - Allow us to compare programs
- Definitions follow program design
 - Unique Account Preferred
 - Not always available

Participant Units



Sector	Program	Participation Unit
Residential	HVAC	Unique Billing Account
	Behavior	Unique Billing Account
	EnergyWise Single Family	Unique Billing Account
	Income Eligible Single Family	Unique Billing Account
	Home Energy Reports	Unique Billing Account
	EnergyWise Multifamily	Housing Units
	Income Eligible Multifamily	Housing Units
	Products	Rebates
	Lighting	Calculated Households
Commercial	Large Commercial New Construction	Unique Billing Account
	Large Commercial Retrofit	Unique Billing Account
	Small Business	Unique Billing Account
	Upstream Lighting	Customer Name and Address



- Cross-Program
 - Customer participates in multiple programs in a single year
 - Helps us understand how many unique customers participated in a year
- Cross-Year
 - Participation in same program in consecutive years
 - Helps us understand program design and customer needs

- Residential (2010-2012)
 - Lighting and HER
 - Special cases, large overlap
 - Income Eligible programs had minimal overlap
 - EnergyWise and HVAC – 2.39%
 - EnergyWise and Appliances – 2.70%
 - Result of cross-program promotion
 - Intention and success of program design

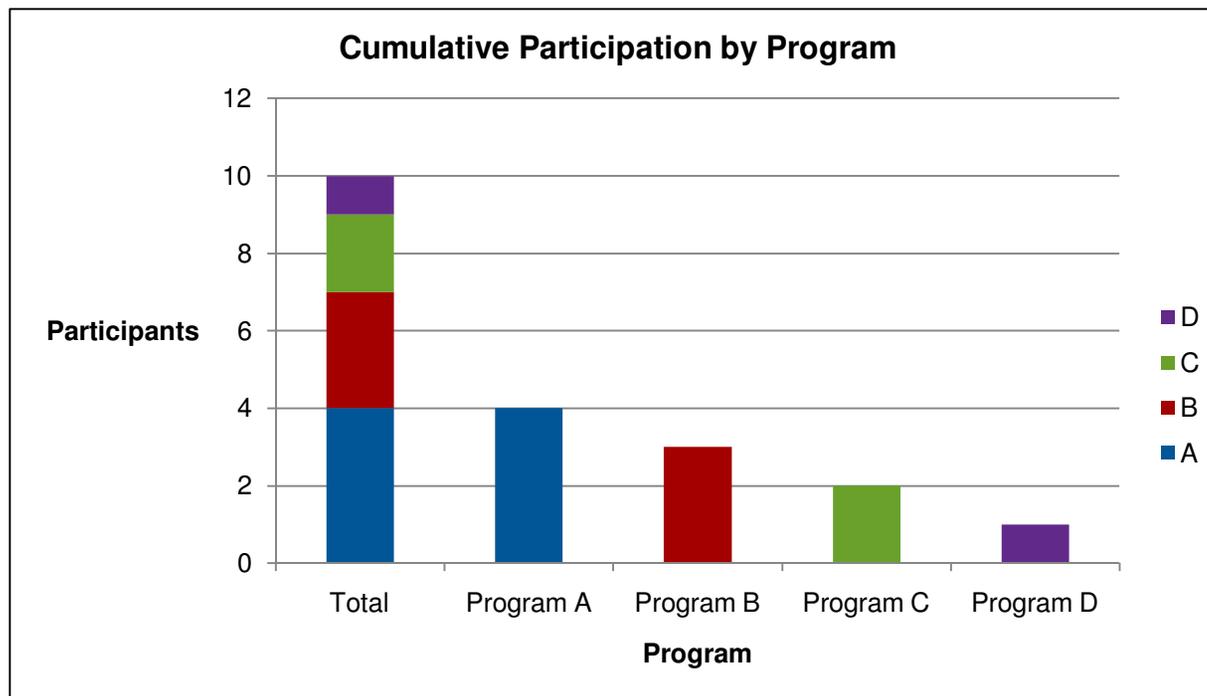
- Commercial (1998-2012)
 - Retrofit and NC: 5.76%
 - Small but real overlap in SBS and LCI
 - Only one way
 - Suggests customers have varied needs
 - Upstream overlap preliminary
 - Programs as pathways for services, not resources for customer segments.

- Residential
 - Overall, small overlap
 - Appliances and HVAC: 1.9% and 5.2%
 - Audit Programs, 4-9%
 - Customers can not receive audits in consecutive years
 - Follow-up work observed as repeat participation
 - Lighting overlap assumed to be 10%
 - Working assumption was required

- Commercial
 - Higher than in residential
 - Retrofit – 16.3%
 - NC – 11.2%
 - Contributing Factors
 - Time Scale of Projects
 - Size of facilities and amount of equipment
 - Customer resources

- Who can participate?
- In each program, multiple eligible customer segments
 - Income Eligible
 - Low-Income and Standard Rate customers
 - Large Commercial Retrofit
 - Some small business customers
- Eligible populations from program view is complex
 - Rate-class view is appropriate for reporting
 - Important to understand program eligible populations for program design and implementation

- Cumulative Participation by Rate Class
 - Each year, add new unique participants
 - Split out by program



Proposed Participation Reporting

- Net Program Participants
 - Apply Free-ridership and Spillover so savings and participants are in the same terms
- Two perspectives
 - Program attribution (net participants)
 - Portfolio progress (cumulative)

To Rhode Island Energy Efficiency & Resource Management Council (EERMC)
From VEIC/Optimal Energy Consultant Team (C-Team)
Date April 10, 2014
Subject First Quarter Activity Report to the EERMC

Highlights from the Consultant Team

During the first quarter of 2014, the C-Team's focus of activities was on finalizing the elements needed to begin the Three-Year Planning process, including the Proposed Targets approval and revision to the Standards for Energy Efficiency and Conservation Procurement and System Reliability (Standards), and initial steps for supporting the development of the Three-Year Plan. Also, the team played an increased role in developing and coordinating the Annual Report to the General Assembly due April 15, 2014. The Team also continued its ongoing role of program implementation oversight, support to the Office of Energy Resources (OER), and stakeholder communication and coordination.

Policy and Planning

2015 – 2017 3-year Target, Standards & Plan

- For the Targets:
 - In coordination with the EERMC Targets & Standards subcommittee, developed and presented information on the Targets at the RI Public Utilities Commission (RIPUC) Technical Session on February 25.
 - Attended RIPUC Open Meeting on March 27 on 3-Year Targets, where the proposed Targets were approved.
- For the Standards
 - Participated in ongoing discussions and work with the EERMC Targets & Standards Subcommittee to finalize the proposed revisions.
 - Supported the submittal of the EERMC-approved proposed revisions to the Standards to the RIPUC on March 15.
- For the Plan
 - Participated in monthly DSM Collaborative meetings focused on process and planning to develop the 2015- 2017 Plan.
 - Began investigation of innovative approaches to present to council members, the DSM Collaborative, and National Grid Strategy Groups.

Annual Report to the General Assembly

- Coordinated the development of the Annual Report, including establishing timelines and roles/responsibilities of key parties, writing and editing of key sections, and interface with the design group assembling the document.

Other Activities

- General support for EERMC council meetings, including drafting agendas, and support and delivery of presentations on:
 - Cold Climate Heat Pumps
 - Income Eligible Services
 - C&I Upstream Products
 - Multifamily Program, including coordination of meeting w/ Energy Foundation group
 - Policy/Planning issues
- Supported the development and delivery of a presentation on benefits of energy efficiency for an OER briefing to the Governor's Office.
- Preparation for and participation in a meeting on Energy Efficiency sponsored by Environment Northeast in Connecticut, in part reporting on what has been going on in Rhode Island.
- Drafted a memorandum on the role of financing in potentially increasing the cost-per-unit of efficiency savings for Rhode Island.
- Ongoing support and analysis on the proposed Street Lighting Tariff
- Worked on assessing the benefits of efficiency in reducing portfolio risk for utilities and jurisdictions like Rhode Island.
- With input and direction from the EERMC Budget Subcommittee, developed a proposed approach to the EERMC for review and investigation of energy efficiency promotion and awareness in RI. Upon approval from EERMC at March meeting, began the study to inform a report to the EERMC due in summer, 2014.

Oversight of 2014 Energy Efficiency Program Plan Implementation

Sector Program Implementation and Oversight

- Participated in monthly meetings with National Grid's Sector Strategy Groups, reviewing program results, issues and upcoming activities identified in the 2014 EEPP.
- Engaged in discussion with National Grid on defining and establishing a transfer of data sufficient to support ongoing oversight and program strategy enhancements.
- Research and analysis on program/product areas, including DHP's, Multifamily, Industrial processes, TopTen products and Income Eligible Services.

- Review of summary and implications of regional lighting hours of use (HOU) study including consideration of impacts on EnergyWise direct install lighting savings
- Team members participated and reported on key industry events applicable to RI:
 - NEEP Heat Pump Working Group planning next steps for heat pump research and promotion in the Northeast
 - New Buildings Institute/NASEO webinar on Zero Net Energy Policies
 - DOE SSL webinar
 - NEEP HPWH and ENERGY STAR LED webinars
 - ASAP furnace standards call

Codes and Standards

- Continued participation in Working Group, including review and comment on program elements and savings projections.

Stakeholder Partnerships; OER Support Activities and Innovation/Research

C-Team members participated in a wide range of activities over the last few months to support current efforts, and development of new initiatives, aimed at supporting robust advancement of least cost procurement objectives. These included:

- Delivered Fuels/Thermal Renewable Working Group and pilot – Participated in steering committee activity and provided supporting research and analysis for this RGGI-funded project led by the OER with stakeholder engagement from Commerce-RI, People’s Power & Light, National Grid, and fuel dealer representatives.
- Alliance for Healthy Homes – Supported and participated in Steering Committee and Working Group activities for this collaboration of multiple state agencies and key stakeholders serving their multiple objectives in a coordinated, streamlined fashion to maximize the health and energy efficiency of all RI residential units.
- Emerald Cities-Providence – Ongoing discussions with the group’s Executive Director to support linkage with rate-payer funded programs and state agency efforts that align with Emerald Cities’ efforts to reduce the environmental impact of existing building stock while creating greater economic opportunities for local residents.
- RI Public Energy Partnership (RIPEP) – Participated in monthly steering committee meetings, as well as working group sessions with key stakeholders, and reviewed and commented on program materials and strategies, and RGGI funding integration.
- Other RGGI projects supported included the Farm/Agriculture allocation for delivered fuel efficiency; Community Center supplemental incentives; and Home Energy Assistance Loan initiative.

EERMC CONSULTANT TEAM

- PACE – Continued work with OER on the design and upcoming process issues relating to launching PACE in 2014.
 - Participated in regularly scheduled calls with OER to review project progress and deadlines.
 - Reviewed two drafts of an RFP for a finance partner and provided comments, and provided agenda for proposed meeting with banks.
 - Discussed options for funding loan loss reserves and pros and cons of using ARRA funds for project capital.
 - Provided requested materials from 10 PACE programs around the country, providing best practices suggestions and examples of marketing and program design elements.
- Grow Smart RI – Meeting with Scott Wolf to provide background and information on value of energy efficiency to represent to their membership, and explored potential for reviewing historic preservation issues relating to energy efficiency adoption.
- Meeting w/ RI SEIU State Council on energy efficiency in nursing homes/assisted living facilities, with tie in to legislation overseen by DHS.
- Regular meetings with OER Commissioner on status of statewide activities
- RI Housing (RIH) – Supported coordination of RI Housing projects with Multifamily Program via meetings with RIH, National Grid and RISE, and via follow-up communications on status.

System Reliability Plan, State Energy Plan and Renewables

- Advised with selection of contractor for economic impact study of the Renewable Energy Fund and Distributed Generation initiatives.
- Provided review and comments on State Energy Plan objectives and goals.
- Assisting with economic net benefits analysis based on Navigant and ENE reports.