STATE OF RHODE ISLAND
ENERGY EFFICIENCY & RESOURCE MANAGEMENT COUNCIL

MEETING MINUTES

Thursday, March 13, 2014

3:30 - 5:30 PM

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

Members Present:	Abigail Anthony, Marsha Garcia, Marion Gold, Jennifer Hutchinson, Dan Justynski, Michael McAteer, Joe Newsome, Chris Powell, Paul Ryan
Members Absent:	Joe Cirillo, Julie Gill
Consultants Present:	Mike Guerard, Sam Huntington, Scudder Parker
OER Staff Present:	Sue AnderBois, Peter Aranha, Chris Kearns, Danny Musher, Rachel Sholly
Others Present:	Karen Bradbury, Grayson Bryant, Cecilia Donnelly, Courtney Lane, Angela Li, Karl Munzel, Sean Murphy, Jeremy Newberger, Ben Rivers, Belinda Wong

1. Call to Order

Chairman Paul Ryan called the meeting to order at 3:36 PM.

2. Approval of February Meeting Minutes

Chris Powell made a motion to accept the February meeting minutes as submitted. Joe Newsome seconded and the motion passed unanimously.

3. Executive Director Report

Commissioner Marion Gold introduced OER's new staff person, Sue AnderBois. She then provided an update on the System Reliability Procurement – Distributed Generation (SRP-DG) work. At the November Council Meeting, the EERMC heard a presentation by Danny Musher (OER) on the OER SRP DG Solar Pilot Project. The project is a collaboration between National Grid and OER, using 2011 Regional Greenhouse Gas Initiative (RGGI) Auction Proceeds to demonstrate the capability, costs, and value for distributed solar generation to provide load reduction in a specific, load-constrained area.

National Grid and OER have been working with Peregrine Group, who was hired as the consultant to conduct a case study analysis in the Little Compton/Tiverton area, the location of National Grid's current SRP Program. The study consists of two phases, Task 1: A Solar Resource Deployment Design and Task 2: Program Design & Implementation Strategy. Peregrine has produced a DRAFT product of the Task 1 Solar Resource Deployment Design. The findings show that 250kW of sustained reliable load relief could be achieved with a resource portfolio of 250-300 kW tracking PV system, a 130-160 kW mix of rooftop PV system types for residential and public buildings, and 50-60 kW of storage. As part of their Task 1 report, Peregrine has developed a detailed, quantitative nine-step method to analyze the distribution contribution from solar PV. The methodology includes a step to compare the economics of different PV configurations and screen cost-effective options based on the Rhode Island Total Resource Cost test. Peregrine's draft conclusions show that distributed solar can screen as cost-effective using this methodology for meeting a peak reduction reliability need in a specific, load-constrained area of the distribution grid. The next step in this project is for Peregrine to begin the Task 2 Program Design analysis to propose an implementation strategy to procure the SRP solar and storage resources. The anticipated completion date of the study is the end of March 2014.

Rachel Sholly of the OER gave a quick update on the Energy Expo. We are on track to have between 7 and 100 energy-related companies throughout the show. There will be several free energy seminars on home energy assessments, home energy reports, renewable energy, alternative home heating options, alternative fuel vehicles, and school fundraising programs. We will be raffling a $5,000 Home Energy Makeover, two high-tech Nest thermostat and two kits including high-efficiency lighting and smart power strip. On-going demonstrations include high-tech thermostats, air-tightness testing, and do-it-yourself pipe insulation. U.S. Senator Sheldon Whitehouse and Commissioner Gold will recognize several outstanding Rhode Island energy leaders on Saturday, April 5th 10:00-11:00 AM. Kids get in for free and can learn about energy while having fun in our Kids' Energy Corner. Attendees will be able to have their pictures taken with the Boston Red Sox World Series Trophies on Thursday, April 3rd 7:30-9:00 PM.

Danny Musher of the Office of Energy Resources (OER) presented an update of the State Energy Plan process (see attached). Michael McAteer asked what the study found regarding the built environment versus the transportation sector and then what the most eye-opening finding was. Mr. Musher replied that the transportation sector has had very little support in terms of policy. He also felt that one of the most eye-opening findings was that $7 billion needs to be invested in energy by 2035, especially in areas that do not have sufficient support.

4. Policy/Planning Issues

Vote on Submitting Updates to Standards for Energy Efficiency and System Reliability Procurement to PUC

Mr. Powell made a motion to add "environmental benefits" at the end of the sentence on Page 2 Section I, Letter E. Dan Justynski seconded the motion and all approved. Jennifer Hutchinson asked if the Division of Public Utilities and Carriers (Division) has had the opportunity to comment on these recommendations. Jeremy Newberger replied that the Division's consultant has provided comments to the Division and the Division has decided that if they have comments they will provide them into

the docket. **Abigail Anthony made a motion to approve the 2014 revisions to the Least Cost Procurement (LCP) standards as amended and direct the consultant son team to work with Dan Prentiss to file them at the Public Utilities Commission (PUC). Ms. Garcia seconded and the motion passed unanimously.** Mr. Parker added that he has arranged for Mr. Prentiss to be available to file the recommended revisions.

Update on 3-Year Targets Technical Session

Mike Guerard and Sam Huntington presented on the 3-Year Targets technical session (see attached). Ms. Hutchinson reported that a tentative PUC ruling date has been scheduled for March 27, 2014. Mr. Guerard said that the consultant team is operating under the assumption that the targets will be approved and will feed into the 3-year planning process.

Upcoming 3-Year Plan Process and Issues

Mr. Guerard reviewed the timeline of the 3-year planning process, noting that the Council must vote on the plan in August 2014 for September submittal, so the plan must be complete in July 2014. Mr. Newberger listed some of the things that National Grid plans to include in the draft 3-year plan: new directions in program design, system reliability procurement, evaluation, cost of saved energy, demand management, participation and bill impacts, and finance. Mr. Powell asked to be invited to the Demand Collaborative meetings on behalf of the Energy Council of Rhode Island, as Bill Ferguson is no longer the Executive Director. Mr. Newsome noted that Larry Cretien of People's Power and Light has committed to represent the income eligible sector in the Collaborative meetings. Chairman Ryan asked about the plan signatories. Mr. Newberger explained that people who participate in the planning discussions become signatories and stay a part of the Collaborative through the next cycle. He reminded the Council that there had been discussion about OER becoming a signatory. Ms. Anthony added that footnoted in all plans that the Collaborative is open to anyone who wants to participate and become a signatory to the plan. Mr. Guerard asked the Council to think about themes for the upcoming 3-year plan.

Discussion on Draft EERMC Annual Report

Mr. Guerard presented an update on the development of the EERMC 2014 Annual Report. A solid draft will be ready by March 17. Courtney Lane reported that Peregrine is working on compiling numbers for the jobs report. The methodology changed a bit this year to be more accurate. Methods included a lot of surveying of lead vendors as well as modeling. Ms. Anthony noted that there is not a recommendation to extend Least Cost Procurement (LCP). The final plan is to be filed in 2017, so LCP extends through 2020. The group discussed other ideas for augmenting the policy recommendations section of the report. Commissioner Gold mentioned that the Council may want to consider extending LCP so the timing for reporting works more smoothly. Ms. Sholly will email out most recent version of report and will collect any comments or edits from the Council.

5. Deeper Update on Energy Efficiency Program: C&I Upstream Initiatives

Mr. Guerard provided some introductory slides and then Ben Rivers of National Grid presented an update on their commercial and industrial upstream initiatives (see attached). Mr. Justynski suggested that showing an example of the lifetime cost would be useful because the first cost is

usually higher. Mr. Rivers agreed that communicating this message and value down the chain is a challenge, and described how National Grid is attempting to address this.

6. Other Business

Update from Budget Subcommittee on RI Energy Marketing

Commissioner Gold reported that the Budget Subcommittee is proposing to move forward with a supplemental task for the Consultant team to conduct research and collect information on attitudes and awareness toward energy efficiency offerings in Rhode Island. The Subcommittee has met with Pat Sears, a subcontractor to VEIC, who has experience in this area. This work would be coordinated in close partnership with National Grid, which has expressed interest in sharing existing research and conducting further research in this area. Commissioner Gold noted that a recent marketing study found that trust in National Grid is growing and explained that we want to explore how this growing awareness can be leveraged to increase participation in efficiency programs.

Through the SRP-DG program, National Grid is beginning to integrate distributed generation, renewable energy and energy efficiency more than they have in the past. With this in mind, how do we provide clear and simple information on energy efficiency opportunities to customers? The Budget Subcommittee has reviewed the consultant's budget and scope of work for this study and recommends that the Council approve the request to use $49,500 of the original "supplemental" budget to add this as a subtask of the consultant team's base contract. Ms. Anthony emphasized that this study would be designed to look at branding and performance, building on work that National Grid has done, and that the answers to these questions are not presupposed.

Mr. Justynski made a motion to approve the requested supplemental funding in the memo dated March 11th from the Budget Subcommittee to the Council. Ms. Anthony seconded and the motion passes unanimously.

7. Public Comment

Karl Munzel congratulated Mr. Musher on the State Energy Plan, asked that the EERMC Annual Report be printed in Rhode Island, and encouraged National Grid to work with Jeff Broadhead and the Washington County Regional Planning Council's PRISM streetlight program. Mr. Newberger called the Council's attention to the press release in their packets on the Find Your Four Home Energy Challenge, noting that North Smithfield met their challenge and the next one is kicking off in Warwick next week.

8. Adjournment

Mr. Powell made a motion to adjourn. Mr. McAteer seconded and the motion passed unanimously. The meeting was adjourned at 5:34 PM.

Next Meeting: Thursday, April 10th 3:30-5:30 PM; Conference Room B

Rhode Island State Energy Plan (RISEP)

March 2014

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OFFICE OF
ENERGY RESOURCES

What is the State Energy Plan?

- **The Rhode Island State Energy Plan (RISEP) is a long-range energy planning and policy document**
  - Statute requires five-year revisions; last update was in 2002
  - In 2013, OER worked with a twenty-member Advisory Council, stakeholder groups, and a consultant team to complete a 10-year update
- **The RISEP is an element of the centralized and integrated State Guide Plan (SGP), which:**
  - Sets long-range state policy positions (generally twenty years)
  - Provides a means to evaluate and coordinate projects of state importance
  - Assures consistency of local plans
  - Provides a general background information source

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Why do we need a State Energy Plan?

- **Gather Data, Set Goals, and Recommend Action**
  - Understand current and projected impacts of our energy usage
  - Discover opportunities to increase benefits to Rhode Island consumers, businesses, and communities
  - Provide policymakers with an overall picture of the complete array of actions needed to achieve energy goals
- **The RISEP provides necessary information to achieve a shared, positive, long-term energy vision for Rhode Island**

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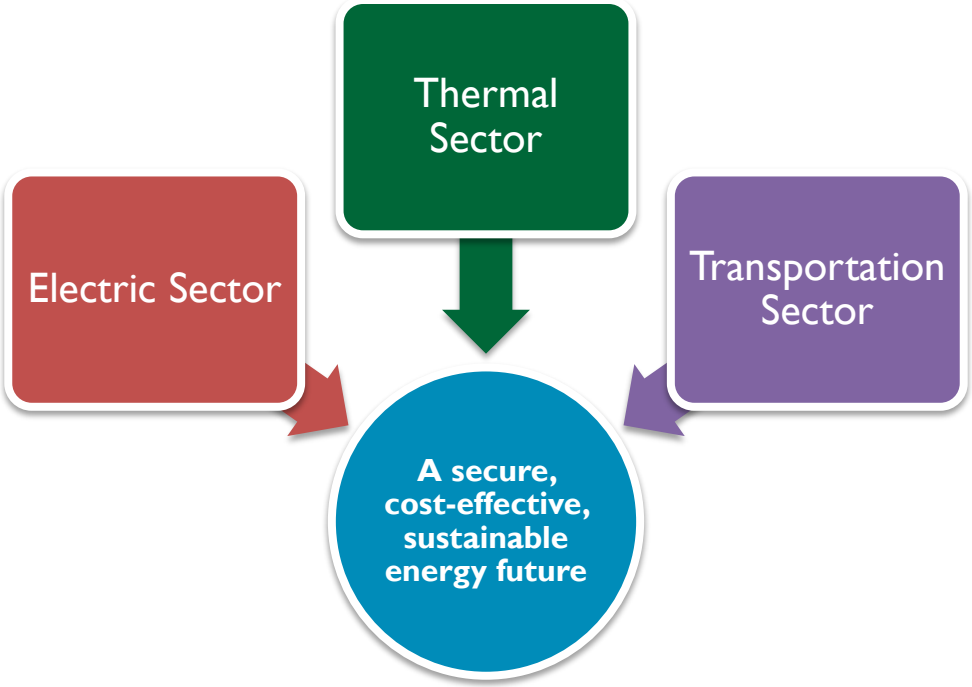
The RISEP Vision Statement



*"In **2035**, Rhode Island provides energy services across all sectors—**electricity, thermal, and transportation**—using a **secure, cost-effective, and sustainable** energy system."*

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Components of the RISEP

Gather Data

Analyze and quantify the amount, cost, supply, and environmental effects of all forms of energy resources—currently used, and potentially available to use—within all sectors in Rhode Island.

Set Goals

Identify measurable targets for providing energy services using a resource mix that meets a set of criteria advancing the health, environmental, economic, and human wellbeing of the people, communities, and environment of Rhode Island.

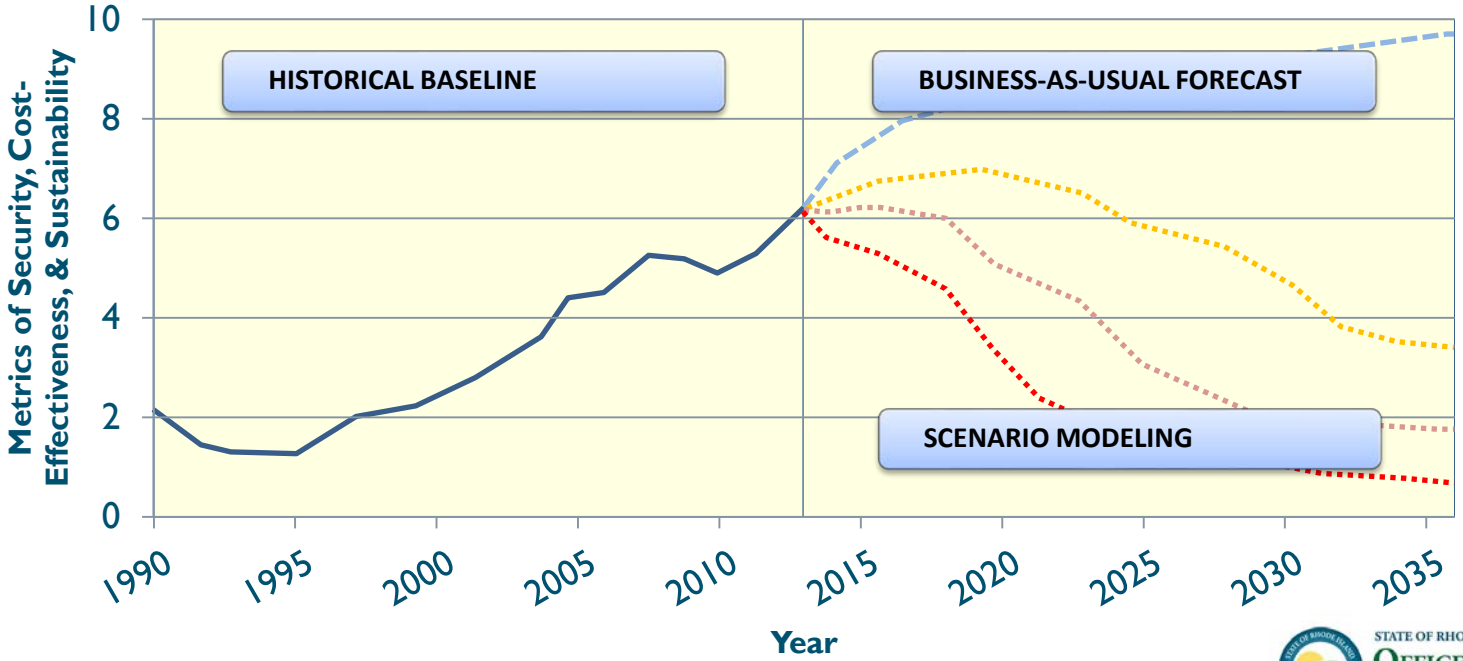
Recommend Action

Design a comprehensive implementation strategy to meet the goals of the Plan through public, private, and individual efforts, consistent with existing policy requirements at the local, state, regional, and federal level.

Gathering Data

Gather Data

Analyze and quantify the amount, cost, supply, and environmental effects of all forms of energy resources—currently used, and potentially available to use—within all sectors in Rhode Island.



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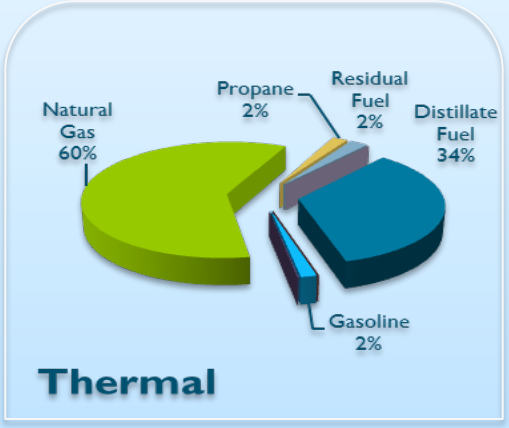
Rhode Island Energy Use Today

72 Trillion BTU

$1.1 Billion/Year

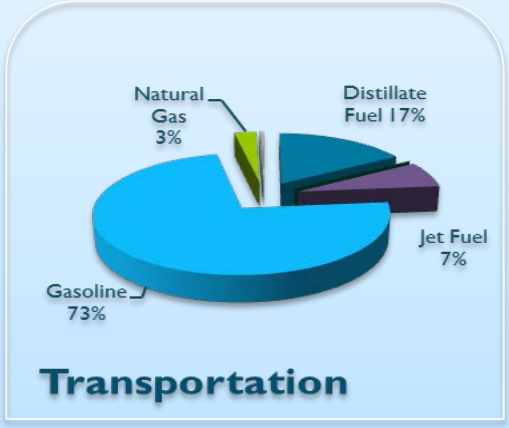
2.9 Million Tons CO_2



63 Trillion BTU

$1.1 Billion/Year

3.9 Million Tons CO_2



64 Trillion BTU

$1.4 Billion/Year

4.5 Million Tons CO_2

RI spends $3.6 billion annually on 200 trillion BTU of energy, emitting 11 million tons of CO2

Source: EIA SEDS, 2010 data

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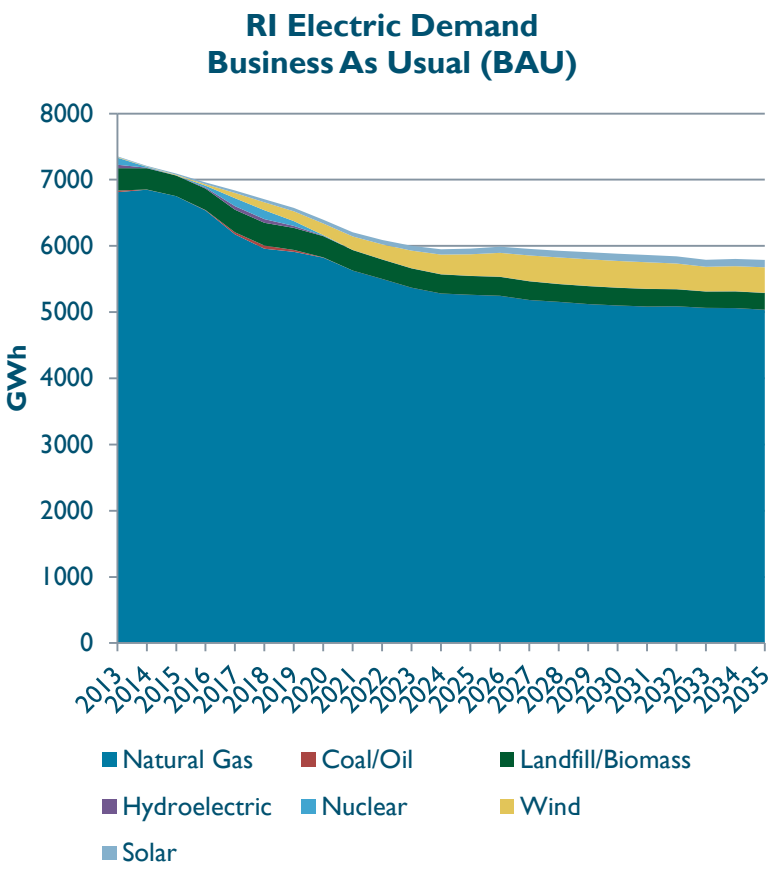
What's in store for the future?

- **Electric Demand Decreasing**
  - Least-Cost Procurement of all cost-effective electric energy efficiency
    - ~20% projected energy reductions
  - Regional Greenhouse Gas Initiative (RGGI)
    - ~20% projected electric GHG reductions
- **Renewable Energy Increasing**
  - Renewable Energy Procurement
    - 16% Renewable Energy Standard
    - >200 MW of wind & solar



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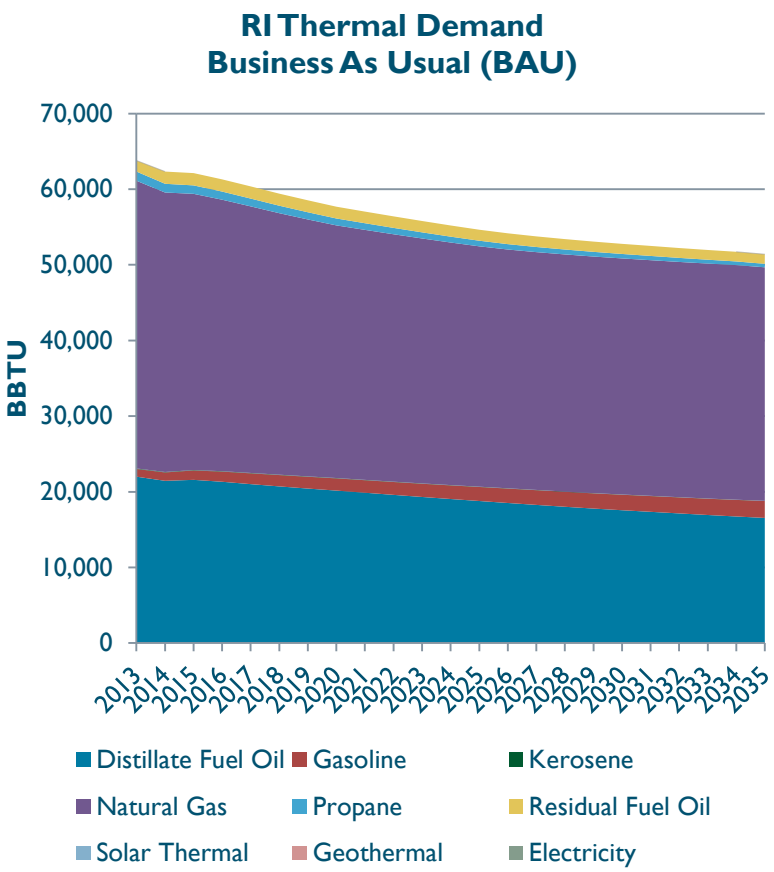
What's in store for the future?

- **Thermal Demand Decreasing**
  - Least-Cost Procurement of all cost-effective natural gas energy efficiency
    - ~20% projected energy reductions
  - Biofuel Blends
    - 5% biofuel blend mandate



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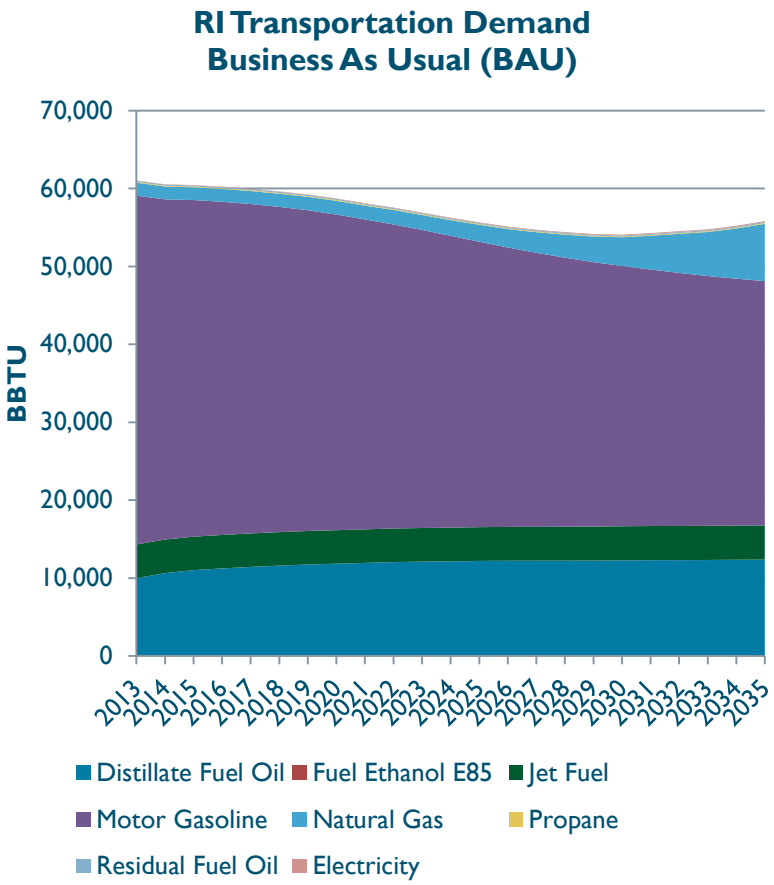
What's in store for the future?

- **Transportation Demand Decreasing**
  - Federal Corporate Average Fuel Economy (CAFE) Standards
    - >10% projected GHG reductions
    - 17% project decrease in gasoline consumption
  - Zero Emission Vehicle (ZEV) MOU
    - 3.3 million ZEVs in participating states



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What does this mean?

Rhode Island is already poised to make significant progress towards a secure, cost-effective, and sustainable energy future

…but can we do better?

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Components of the RISEP

Gather Data

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Recommend Action

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Gathering Data

Gather Data

Analyze and quantify the amount, cost, supply, and environmental effects of all forms of energy resources—currently used, and potentially available to use—within all sectors in Rhode Island.

Navigant modeled three energy future scenarios

Scenario 1 (Security)	• Prioritizes energy security through fuel diversification and grid modernization
Scenario 2 (Cost-Effectiveness)	• Prioritizes cost-effectiveness and economic development while hitting key targets for GHG reduction
Scenario 3 (Sustainability)	• Prioritizes the sustainability of Rhode Island's energy economy through the widespread deployment of renewables, thermal alternatives, and vehicle electrification

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RISEP Targets

- **Scenario modeling shows Rhode Island can:**

A Secure, Cost-Effective, and Sustainable Energy Future

Increase fuel diversity in each sector above 2013

Produce economy-wide net benefits

Reduce greenhouse gas emissions 45% below 2013

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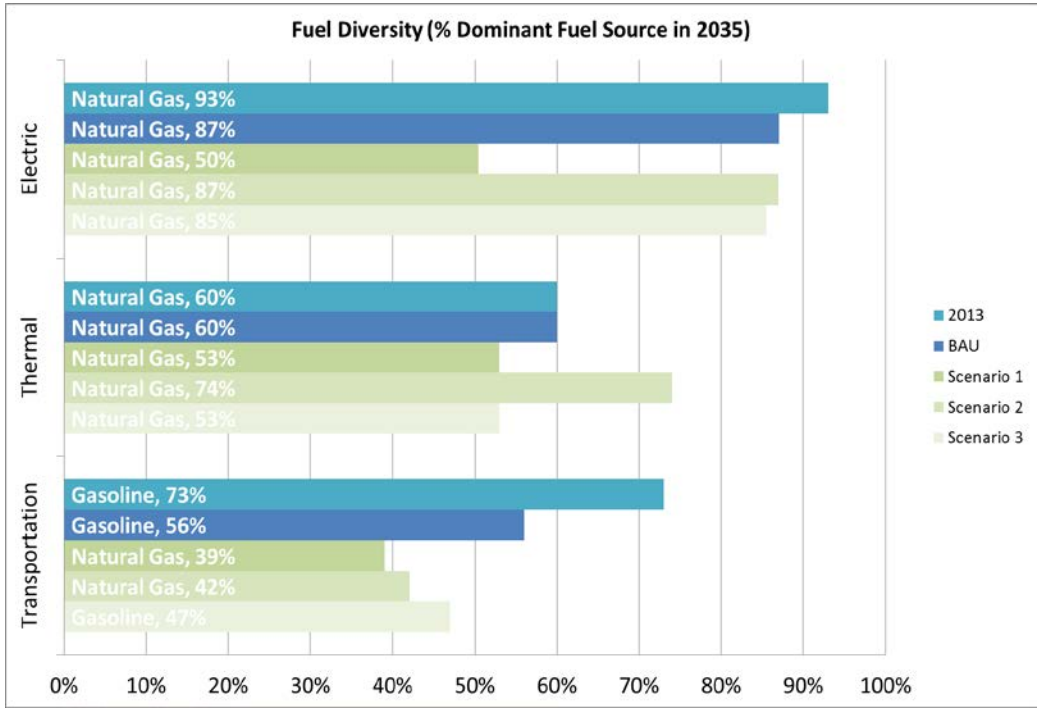
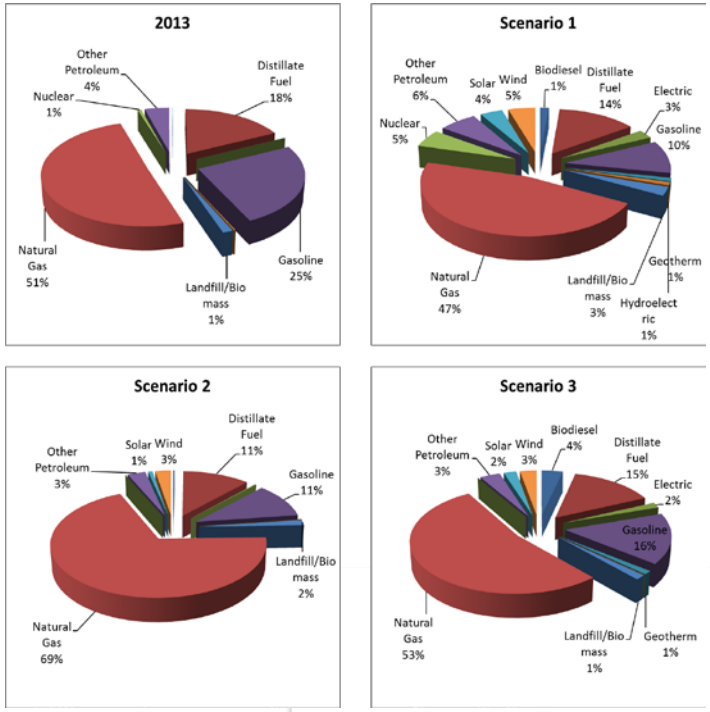
Energy Security: Fuel Diversity

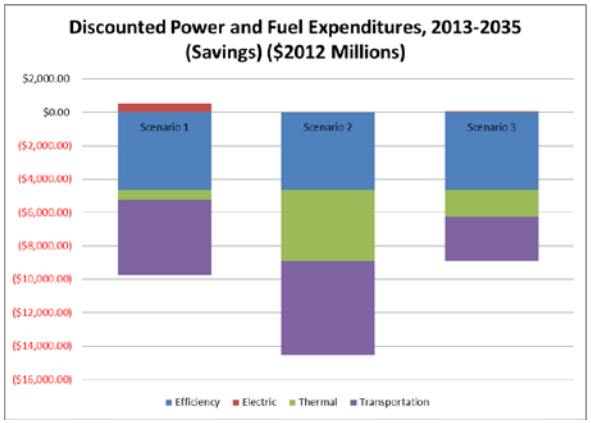
- **Individual sector fuel diversity gains are achievable**
  - Economy-wide gains may not be possible due to the increasing role of natural gas in transportation

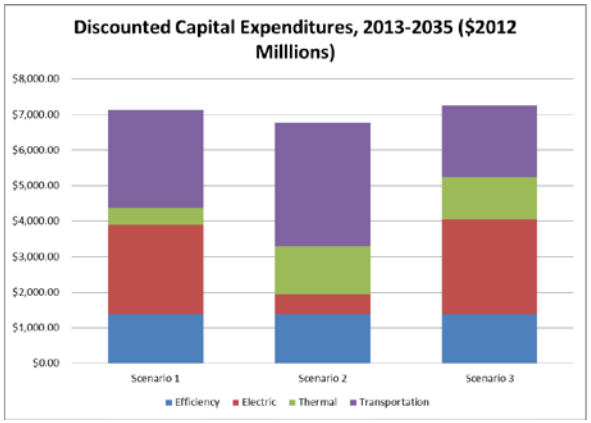


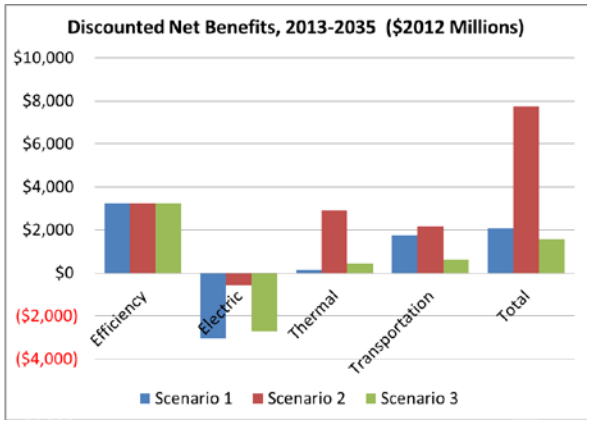


Cost-Effectiveness: Net Benefits

- **Business As Usual is the most expensive path for RI**
  - All scenarios are anticipated to provide economy-wide net benefits to Rhode Island
  - All scenarios are net positive first order job creation → 20,000+ jobs!







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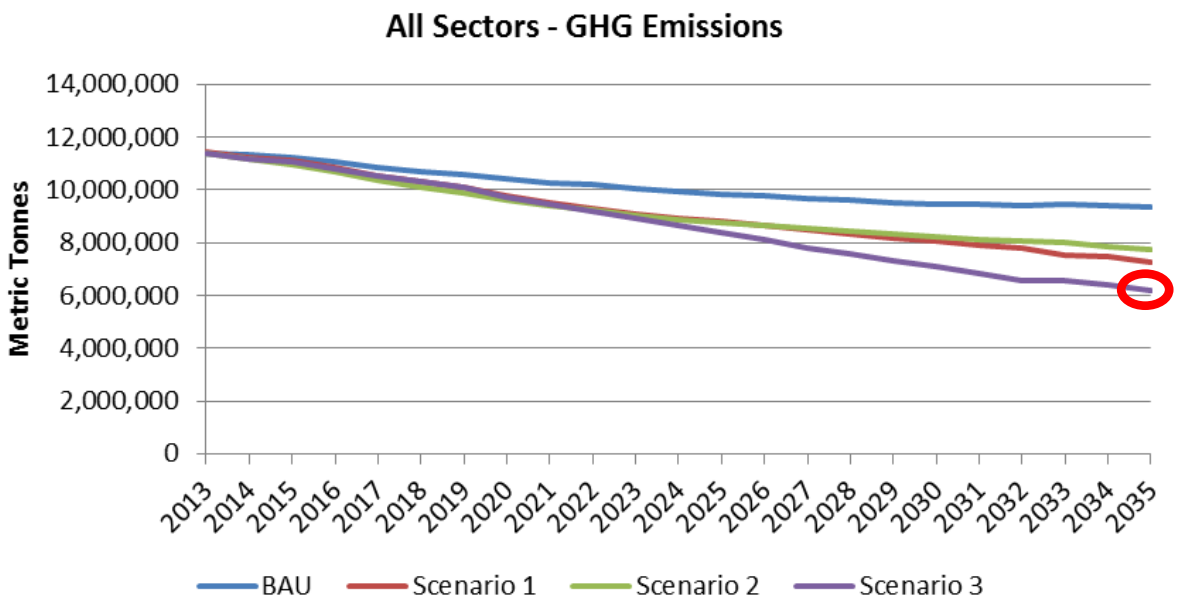
Sustainability: GHG Reductions

- **45% GHG reductions below 2013 levels by 2035 is achievable at reasonable costs**
  - Puts RI on pace to achieve 80% GHG reductions by 2050



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How do we get there?

There will be substantial benefits to pursuing a secure, cost-effective, and sustainable energy future, and substantial costs if we don't

…but how do we get there?

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Components of the RISEP

Gather Data

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Recommend Action

Design a comprehensive implementation strategy to meet the goals of the Plan through public, private, and individual efforts, consistent with existing policy requirements at the local, state, regional, and federal level.

Recommending Action

Recommend Action

Design a comprehensive implementation strategy to meet the goals of the Plan through public, private, and individual efforts, consistent with existing policy requirements at the local, state, regional, and federal level.

- **The RISEP Project Team proposed a portfolio of 20 policy recommendations**
  - The policy recommendations help frame the minimum near- and long-term steps Rhode Island must take to achieve the RISEP targets
  - Recommendations are proposed for:
    - The RISEP security, cost-effectiveness, and sustainability criteria; and
    - The electric, thermal, and transportation sectors

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RISEP Recommendations

- **20 Recommendations:**
  - Security
  - Cost-effectiveness
  - Sustainability
  - Energy Efficiency
  - Electricity
  - Thermal
  - Transportation

City of East Providence - 3.71 MW Solar Project

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Security

- **Increase the resiliency of Rhode Island's energy system:**

Enhance Energy Emergency Preparedness

- *Develop a short- and long-term strategy for mitigating critical infrastructure energy security risks and investing in power resiliency solutions*

Cost-effectiveness

- **Build Rhode Island's capacity to make long-term energy investments at a lower cost:**

Expand Financing & Investment Tools

- *Transition energy programs from grants and rebates towards deploying private capital to create long-term, stable financing for energy efficiency and renewable energy*

Update State Administration of Energy Programs

- *Simplify access to energy programs and maximize their impact through 1) a consolidated, one-stop-shop concierge service for homeowners and private businesses and 2) a tailored and comprehensive public sector "lead by example" strategy*

Reduce the Soft Costs of Renewable Energy

- *Provide guidance at the state and municipal level for uniform, standardized clean energy permitting processes to streamline development and mitigate regulatory hurdles to renewable deployment*

Track Progress Towards Goals

- *Develop improved standardized performance metrics and regular reporting mechanisms to measure success in meeting RISEP targets*

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Sustainability

- **Set Rhode Island on a path to a reduced GHG footprint as a means to address global climate change and insulate citizens and businesses from a future price on carbon:**

Continue Participating in RGGI

- *Continue participating in the Regional Greenhouse Gas Initiative (RGGI)*

Develop a Carbon Reduction Strategy

- *Establish binding near- and long-term greenhouse gas emissions targets and evaluate the most cost-effective portfolio of policies to meet the goals*

Energy Efficiency

- **Reaffirm Rhode Island's commitment to leadership in energy efficiency, the lowest-risk, lowest-cost, and arguably most sustainable energy resource available:**

Extend Least-Cost Procurement

- *Renew Rhode Island's commitment to leadership in energy efficiency by extending the Least-Cost Procurement mandate and its associated provisions beyond 2018*

Expand Least-Cost Procurement to Unregulated Fuels

- *Develop a long-term strategy for sustainably funding energy efficiency programs for delivered fuels customers*

Improve State Energy Efficiency Codes & Standards

- *Strengthen appliance minimum standards, and develop an integrated and long-term strategy to transition to zero net energy buildings*

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Electricity

- **Build on Rhode Island's existing successes to pursue a renewable energy and distributed generation future:**

Modernize the Grid

- *Develop recommendations for electric grid, rate, and regulatory modernization*

Expand the Renewable Energy Standard

- *Increase the Renewable Energy Standard beyond 16% by 2019*

Expand Renewable Energy Procurement

- *Increase the share of renewable energy in Rhode Island's electricity supply portfolio through a mix of clean energy imports, distributed renewable generation, and utility-scale in-state projects*

Improve Combined Heat and Power Market

- *Evaluate additional methods to speed the diffusion of CHP technologies into the Rhode Island marketplace*

Thermal

- **Find new opportunities to transition Rhode Island to a diversified, lower-carbon heating and cooling future:**

Institutionalize Renewable Thermal Funding

- *Create a sustained source of funding to help mature and expand the renewable thermal fuel market*

Expand Use of Biofuels

- *Increase the biodiesel content of distillate fuel blends used by Rhode Island's thermal and transportation sectors*

Address Natural Gas Leaks

- *Review the progress of gas infrastructure repair and replacement in Rhode Island*

Transportation

- **Develop a Least-Cost Procurement strategy for transportation to harness demand-side resources and reduce reliance on oil by investing in alternative fuels:**

Reduce Vehicle Miles Traveled

- *Invest in alternative modes of transportation; promote sustainable development and land use practices; and pilot programs incentivizing reduced discretionary driving*

Reduce Vehicle Emissions

- *Continue to adopt the increasingly stringent vehicle emissions standards set by California up until 2025 and afterwards*

Promote Alternative Fuel & Electric Vehicles

- *Mature the market for alternative fuel and electric vehicles through ongoing efforts to expand fueling infrastructure, ease upfront costs for consumers, and address other barriers to adoption*

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RESOURCE MANAGEMENT COUNCIL

Presentation to the EERMC – March 13, 2014

Policy/Planning Issues

1. Vote on Submitting Updates to Standards for Energy Efficiency and System Reliability Procurement to PUC
2. Update on 3-Year **Targets** Technical Session
3. Upcoming 3-Year **Plan** Process and Issues
4. Discussion on Draft EERMC Annual Report

1. Vote on Submitting Updates to Standards for Energy Efficiency and System Reliability Procurement to PUC

- **At 2/6 meeting, Council expanded Targets Subcommittee role to include Standards, and directed Subcommittee to develop proposed Standards revisions for Council review, discussion and vote at March meeting**

- **Draft submitted to full Council on March 7**

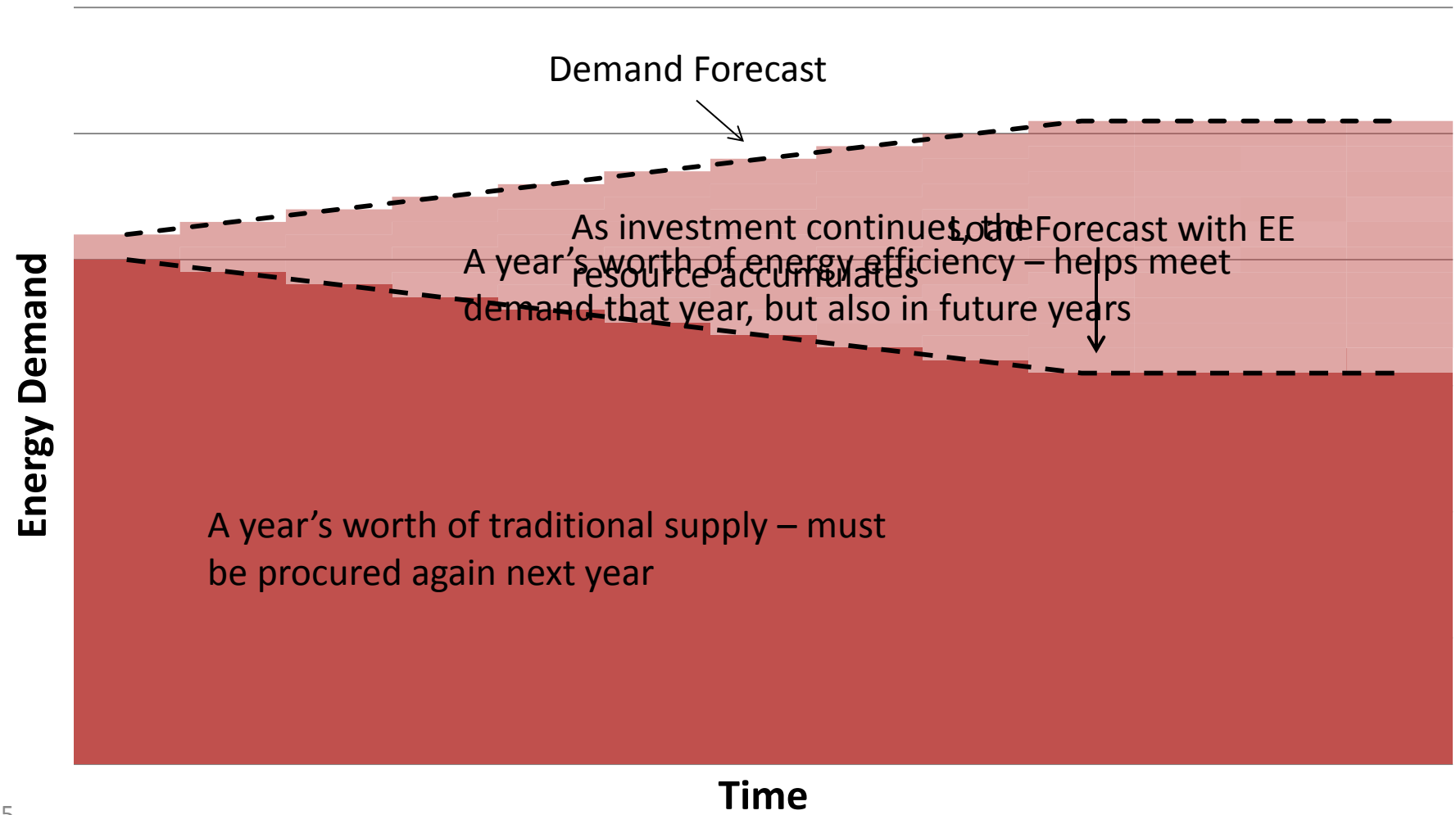
- **Substantive changes to be highlighted are as follows…..**

Modification Highlights

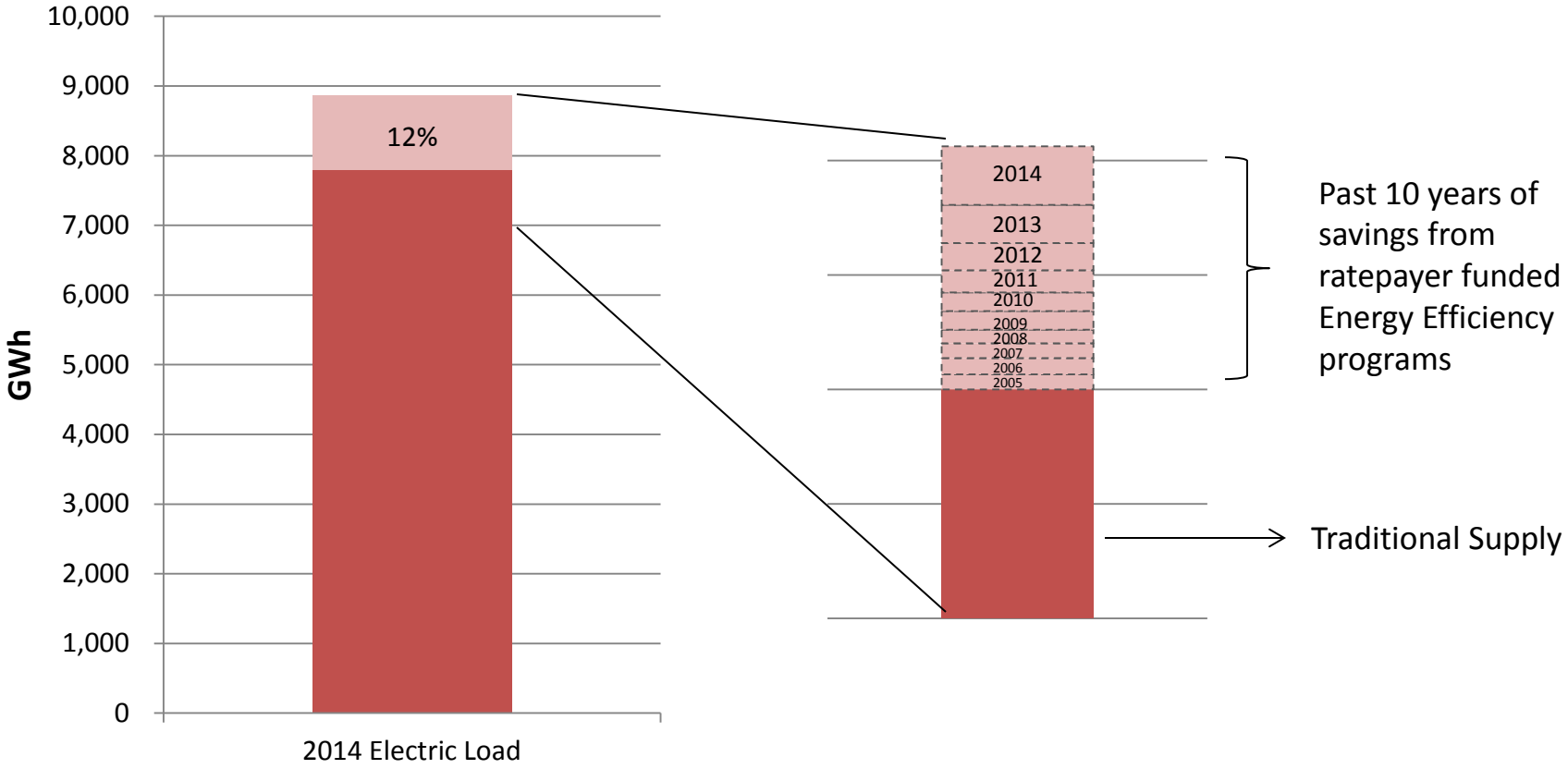
- Updates to communicate maturity of LCP (supplement aggressive ramp-up language)
- Updates to anticipate potential future directions (CHP, strategic electrification, integration of grid modernization, or gas service expansion)
- Updates for consistency with recent legislative changes (Cost-effectiveness findings from EERMC)
- Specific mention of demand management, reflect load management
- Specific requirement to include bill impacts in EE plan (not specifying model)
- Clarification of components of cost effectiveness (GHG for gas, delivered fuels, non-energy impacts, treatment of pilots and OER/EERMC costs)
- Potential consideration of change in schedule
- Potential to address performance over three year period
- Integration of SRP and LCP services

- Technical session held on 2/25
  - EERMC: Introduction by Dan Prentiss & Marion Gold; Presentation of C-Team developed slide presentation led by Scudder Parker
  - National Grid: Presented input supporting process and finding of targets
  - Division: Stated clear support of Targets; Division consultant presented on Bill/Rate impacts that showed e.e. investments resulted in a net average bill saving for Rhode Islanders
- PUC ruling date TBD
- Key themes discussed were resource acquisition, what least cost procurement means, bill impacts, and participation.

Energy Efficiency as a Resource Acquisition Strategy – A Conceptual Example



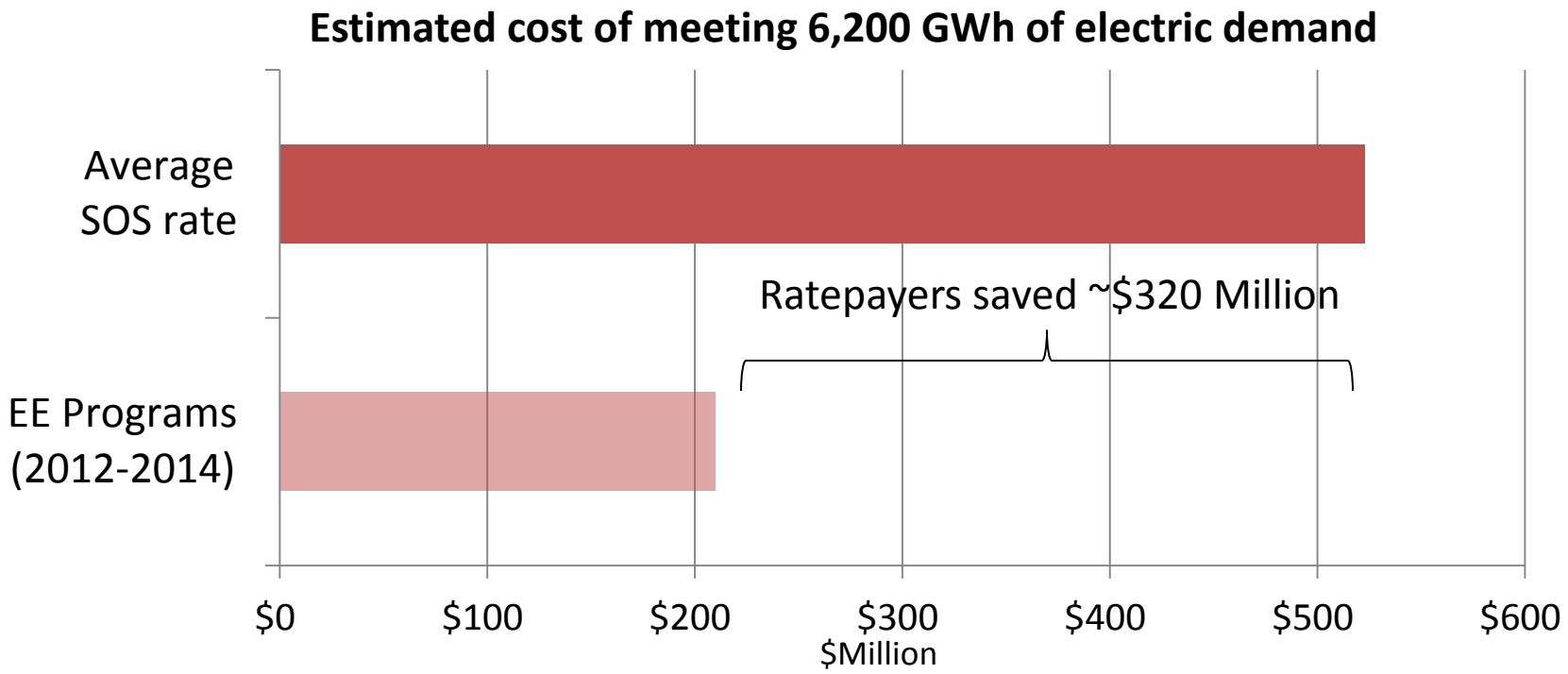
Cumulative Savings from EE ~12% of RI's 2014 Electric Demand



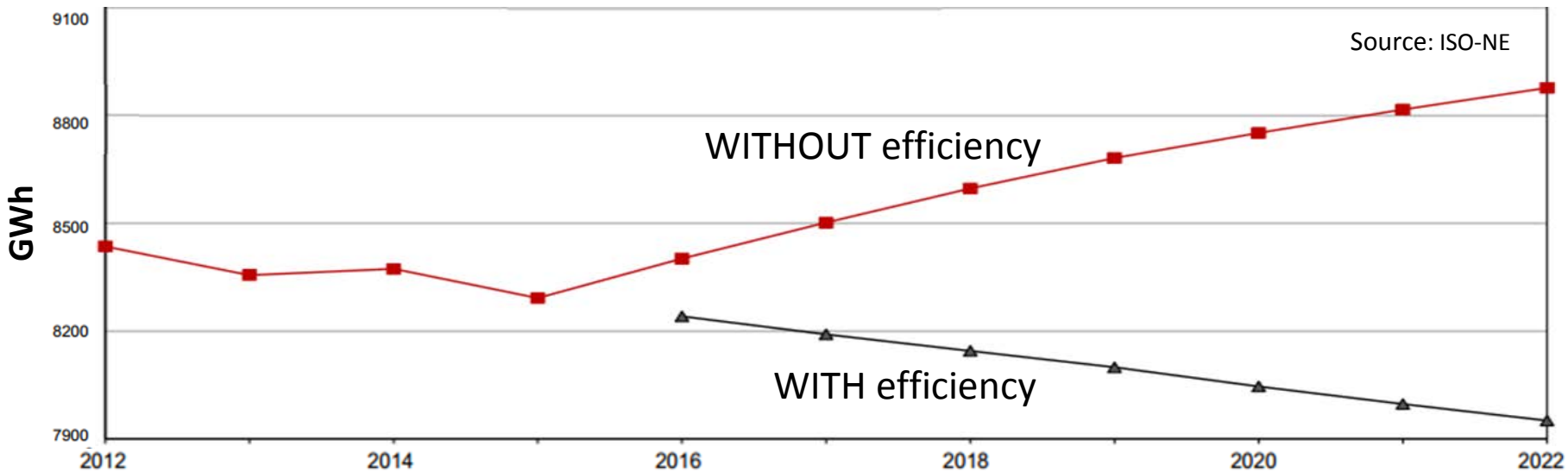
Comparing Costs - A look back at the previous 3 year plan

Energy efficiency measures installed from 2012-2014 will save almost 6,200 GWh over their lifetime, at a total cost of around **$200 million**

Delivering the same amount of electricity at today's Standard Offer rates would cost approximately **$520 million**



ISO-NE's recent load forecast for Rhode Island

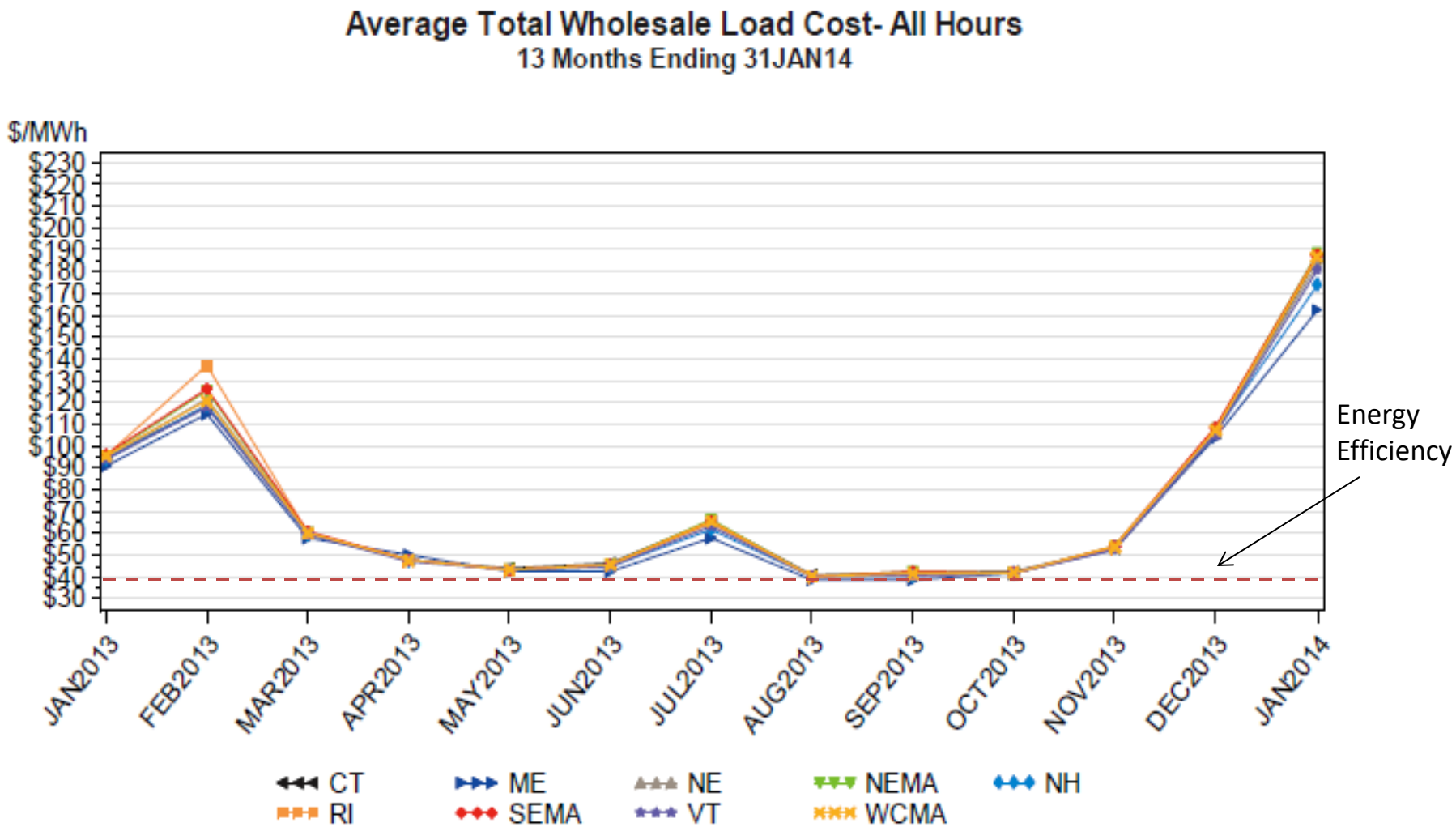


ISO-NE's load forecast is critical to sizing the transmission system properly and forecasting generation requirements.

This was ISO-NE's first forecast to incorporate aggressive future efficiency investments.

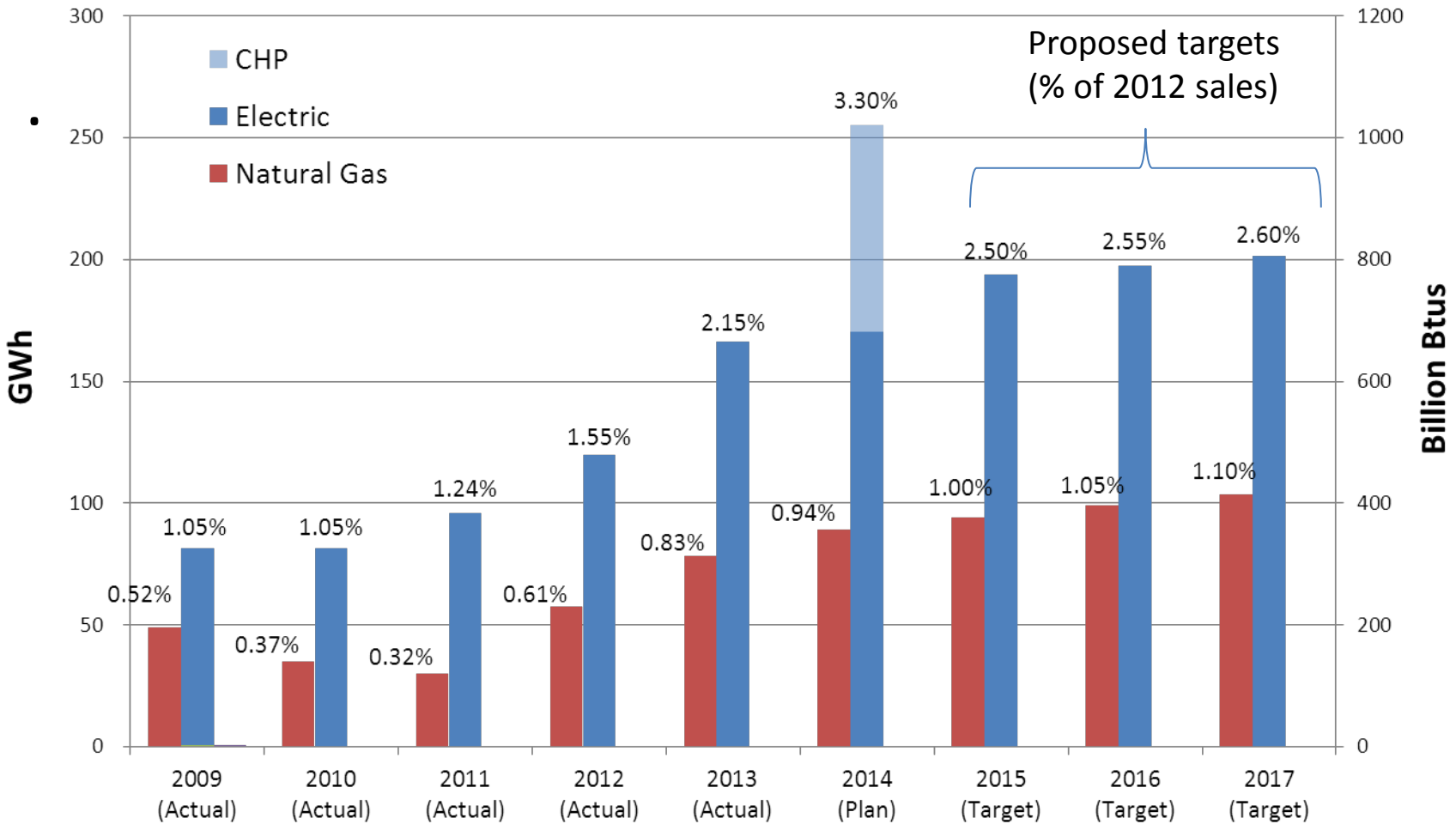
A declining load forecast defers the need for expensive transmission investments, creating real savings for consumers. For example – the VT/NH Needs Assessment identified savings of $259 million in deferred or avoided transmission investments due to demand reductions from efficiency.

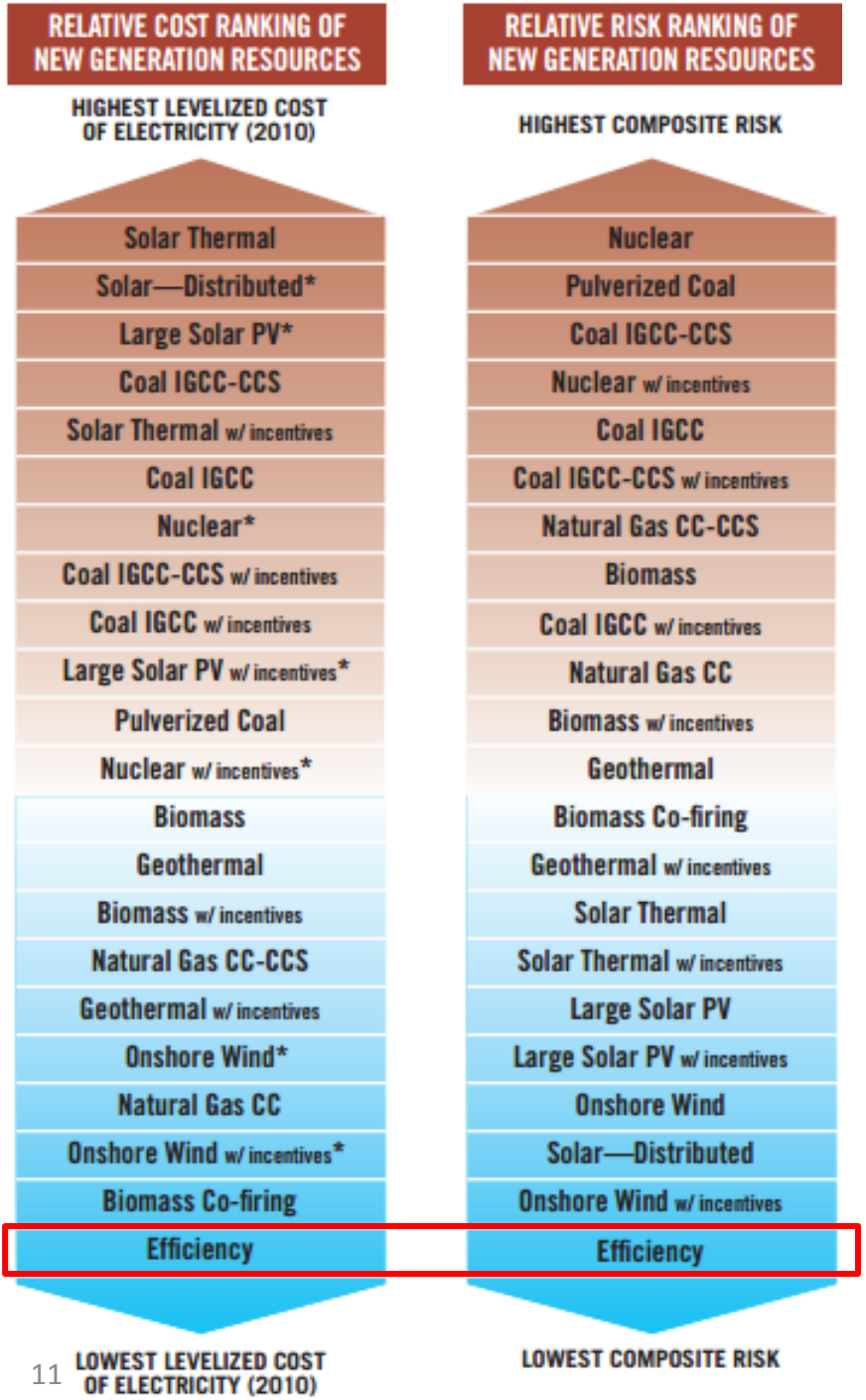
Low Risk - The long term nature of efficiency resources locks in low-cost energy, protecting ratepayers from price volatility



Source: ISO-NE

Historical context for the proposed targets





STATE OF RHODE ISLAND
ENERGY EFFICIENCY & RESOURCE MANAGEMENT COUNCIL

How to Think About Energy Efficiency Investments:

A low cost, low risk, *Energy Resource*

2012 report published by Ceres and authored by former utility regulators identified energy efficiency as the lowest-cost, lowest-risk resource for current utility planners

3. Upcoming 3-Year **Plan** Process and Issues

- Process commences in March leading to 9/1/14 filing with PUC
- Until PUC rulings on Standards and Targets are issued, planning has to proceed on presumption of approval of these key elements effecting Plan

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.

4. Discussion on Draft EERMC Annual Report

- Report due Tuesday, April 15, 2014 to General Assembly
- Work underway – OER, Council reps and National Grid, coordinated by Consultant Team, scheduled to have completed draft by March 17.

4. Discussion on Draft EERMC Annual Report

Table of Contents

- Letter from the Chair
- Letter from the Executive Director
- Council Membership
- Who We Are and What We Do
- 2013 ACHIEVEMENTS AND HIGHLIGHTS
  - 2013 Programs and Initiatives
  - Residential Programs and Initiatives
  - Income Eligible Services, LIHEAP/WAP
  - Commercial, Industrial & Public Programs and Initiatives
- Regional Greenhouse Gas Initiative
- National Grid Energy Efficiency Jobs Study
- Energy Efficiency in Rhode Island: An Engine for Economic Growth
- 2013 System Reliability Procurement Plan
- Looking Forward
- 2013 Energy Efficiency Program Plan Highlights
  - Residential
  - Commercial & Industrial
- Policy Recommendations
- Appendix A – Case Studies

4. Discussion on Draft EERMC Annual Report

- Key pieces to be finalized include:
  - Letter from Chair
  - Policy Recommendations
  - Jobs report from National Grid
- Input needed from EEERMC on Policy Recommendations
  - In 2013, Financing & Labeling/Disclosure recommended "policies"
  - Additional list of "EERMC Principles": RGGI; Unregulated fuels; and "economically vulnerable" customers
  - Referencing the RI State Energy Plan policy recommendations, 3 suggested items for discussion follow….

Proposed Policy Recommendations

1. Develop a Comprehensive financing approach to support aggressive Least Cost Procurement in Rhode Island.

2. Commence a comprehensive investigation of the potential for Grid Modernization to provide LCP services and other benefits to Rhode Islanders.

3. Strengthen appliance minimum standards

Important EERMC Principles:

- **Use RGGI funds to provide benefits to Rhode Island consumers**
- **Improve Efficiency for Unregulated Fuels**
- **Support coordination of efficiency services for economically vulnerable Rhode Island consumers**

Policy Recommendation Discussion

- Other items as “Recommendations” or “Principles”???

Policy Recommendations – Suggestion #1

Develop a Comprehensive financing approach to support aggressive Least Cost Procurement in Rhode Island.

- Rhode Island is already a leader in developing Financing strategies for Energy Efficiency, but it needs to keep leading. With PACE beginning implementation and aggressive utility financing approaches an integrated part of National Grid programs, and with the OER making revolving loan funds available to supplement Grid programs, many positive efforts are under way in Rhode Island.

- The challenge is now to move into a whole new level of capital mobilization for efficiency financing so that it becomes a ready, convenient, obvious and clearly beneficial investment for homeowners, small businesses, institutions and industry.

- The OER and the EERMC should continue to explore strategies that are emerging in other jurisdictions that include various forms or a “Green Bank”, the creation of secondary markets for efficiency loans, Customer financing through employers; and increased utility financing with integrated incentives and on-bill financing.

Policy Recommendations – Suggestion #2

Commence a comprehensive investigation of the potential for Grid Modernization to provide LCP services and other benefits to Rhode Islanders.

The concern for Modernizing the Grid addresses several dynamics and opportunities that are actively emerging in the energy marketplace:

- The growing adoption of AMI that has the capability to collect data from customers at 15 minute or hourly intervals. This capability produces powerful new information about customer use and opportunities for savings and demand management. Rhode Island has not yet invested in aggressive AMI installation.
- Emergence of new tools and capabilities to gather, collect, and use this data to inform and provide direct feedback to customers to support better energy decision-making.
- The ability to use/coordinate data with other customer information (location, weather, etc.) that can help utilities and efficiency efforts recognize opportunities for customer savings.
- This technology offers the opportunity for much more aggressive demand management that could improve System Reliability and help manage costly system and distribution level peaks.
- It can also be used to integrate and manage higher levels of renewable energy, and can be adapted to provide both natural gas and electric information (and even conceivably delivered fuel information).
- It can be used to more effectively integrate new electric technologies like heat pumps and electric transportation into the utility system
- Other new technologies that provide for dynamic, real-time grid management can help improve reliability and outage recovery.

Policy Recommendations – Suggestion #3

Strengthen appliance minimum standards

Existing statutes in RI set minimum energy efficiency standards for appliances and buildings. In 2005, the General Assembly enacted RIGL § 39-27, setting appliance and equipment efficiency standards for a diversity of energy-consuming products sold and installed in the state. Subsequent legislative action at the federal level instituted nationwide standards, preempting many of RI's minimum standards. Although the U.S. DOE prohibits states from setting standards for appliances covered by mandatory federal standards (though it can grant waivers to states wishing to establish stricter standards), states may set standards for products not covered by federal standards.

For appliances, policymakers should continually screen additional technologies for inclusion under the state appliance efficiency standards or consider requiring that standards stay current with the latest standards established by California, which historically have set the precedent for subsequent federal standards.

Important EERMC Principles:

- **Use RGGI funds to provide benefits to Rhode Island consumers:** To ensure that Rhode Island consumers realize the benefits of the RGGI program, the EERMC recommends that the Office of Energy Resources continue to direct RGGI proceeds to investments that will provide significant benefit to Rhode Island ratepayers. OER should accomplish this through supporting least cost procurement directly; through investments in innovative strategies that support LCP over the long term; and through strategies specifically designed to advance market- based approaches to EE and RE development. OER has used RGGI funds to market segments that may be under-served or are difficult to reach. RGGI funding used to develop these markets and increasingly draw in the utility least cost investments to address their efficiency opportunities helps increase the comprehensiveness of and broad participation in these programs.

Important EERMC Principles:

- **Improve Efficiency for Unregulated Fuels:** The EERMC commits itself to continue working with the General Assembly, fuel oil dealers, and other stakeholders to establish a sustainably funded efficiency program offering for consumers who heat with oil, kerosene, or propane. While National Grid's single-family program continues to provide some incentives to weatherize delivered-fuel heated homes, a fuller, more sustainable allocation is required to offer incentive amounts equal to those customers with electric or natural gas heat.

Important EERMC Principles:

- **Support coordination of efficiency services for economically vulnerable Rhode Island consumers:** The EERMC intends to build on activities started in 2012 to support synergies and leveraging of efforts in this time of dwindling funds with the multiple private, public and non-profit entities that remain firmly committed to meeting housing affordability challenges in Rhode Island. While energy is a key component of affordable housing, issues related to health and safety also impact affordability. Tremendous opportunity lies in leveraging funds, and then coordinating and synchronizing housing interventions to address energy, health and safety in a comprehensive package.

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C&I Efforts to Maximize Savings: Upstream Products

Presented by:

Ben Rivers – National Grid

Mike Guerard – EERMC Consultant Team

March 13, 2014

Vermont Energy Investment Corporation || Optimal Energy Integrated Energy Resources

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Introduction

- Ongoing Challenges to reach more customers and increase savings cost-efficiently is consistently being met
- Upstream Products in C&I are an example of innovative ways being deployed to meet challenge
  - Upstream Lighting is a success
- Not an easy process!!!
- RI at cutting edge of these efforts, with not a lot of jurisdictional comps to learn from

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HERE WITH YOU. HERE FOR YOU.

Upstream Products

Ben Rivers – National Grid

Mike Guerard – Optimal Energy

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HERE WITH YOU. HERE FOR YOU.

Upstream Products

Ben Rivers – National Grid

Mike Guerard – Optimal Energy

Upstream Lighting

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Basics

Customers receive discount at point of sale – no forms or delay for the customer (Better Customer Experience pg62)

Several types of LFL and many types of screw in LED lamps

Uses Energy Star list as qualification source

Popular with customers

Savings 2012-2013 ~45,000 MWh

Low cost per kWh to deliver

Ecova is the processing partner

Reasons for Success

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- Nearly a dozen products types incentivized
- Pro-active and capable program manager
- Many distributors – they see path to profitability - resources
- Many manufacturers + lots of new products hitting the market
- Popular with customers
  - Very rapid payback
    - National Grid can cover a high percentage of incremental cost
  - Exciting technology people can understand

Reasons for Upstream HVAC

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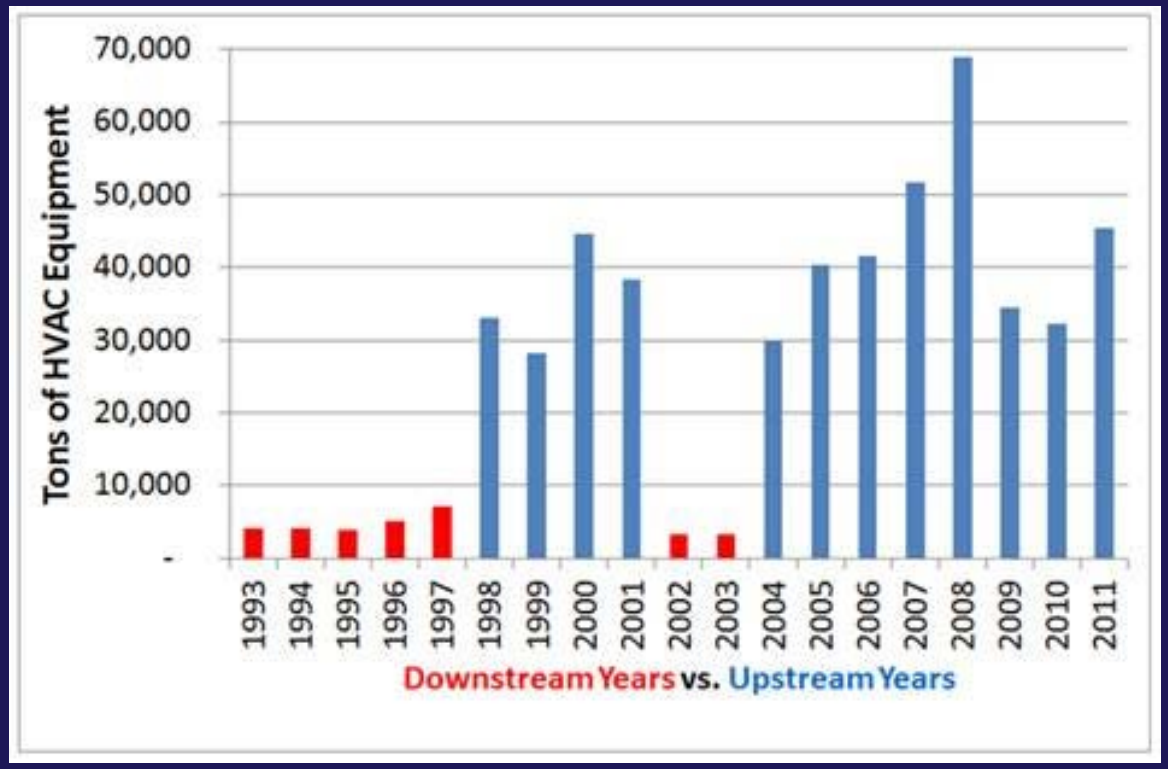
Success in other markets



Data Courtesy of PG&E, graph created by Energy Solutions

Reasons for Upstream HVAC

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- Potential - cooling and heating accounts for half the total energy operating costs in commercial and government buildings and according to CEE cooling is the top contributor to summer peak demand
- Upstream Lighting has been very successful for National Grid as an initiative
- Upstream should work well under the following conditions (2013 plan)
  - Third party list that is respected and certain attributes (AHRI)
  - Situations where the distributor functions as a trusted advisor or has significant interaction with customer
  - Was previously an prescriptive measure

Simply put…we think we can get more savings and with less burden to the customer

Partners/Vendors Involved

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Energy Federation Inc. (EFI) – Data Processing, Program Management

Conservation Services Group (CSG) – Customer Outreach

Selected through a competitive bid process

Rich Boehler – Program Manager, National Grid

Upstream HVAC Performance

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2011 – 359 MWh

2012 – 500 MWh

2013 – 350 MWh

2014 – First full year of this initiative

Stretch goal = 1,100 MWh + custom

First work package uploaded Jan 2014

Potential barriers to going forward

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- National Grid can not afford to provide same level of incremental cost as Upstream Lighting – What is the correct balance?
- Distributors view initiative as burden – can't see path to profitability – Should we offer a temporary or perm. transaction fee + SPIFF to sales?
- Non-proactive program management at EFI as compared to Ecova – Does our contract properly motivate them?
- Distributors are concerned that the program is not going to be around/ be fully funded in the long term
- Branch managers not sure they are allowed to participate
- Potential split incentive at some locations

Potential Solutions to Barriers

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- Increase the amount of incremental cost we pay on select pieces
- Temporary transaction fee – nominal amount to cover costs
- Temporary SPIFF to sales people
- Review contract signed by EFI/CSG to see if there existing carrots or sticks we can use to our advantage/ contract modification
- Continued education/ exposure to the initiative and its goals
  - Case studies of success - large or high profile jobs
- Make sure that the proper levels of the company are involved

Future Upstream Efforts

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- Gas furnaces
- Boilers
- Water heaters
- Variable Refrigerant Flow (VRF) Systems
- Air Cooled Chillers

- Many potential lighting measures

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Questions & comments?

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