Introduction to OER and State Energy Plan

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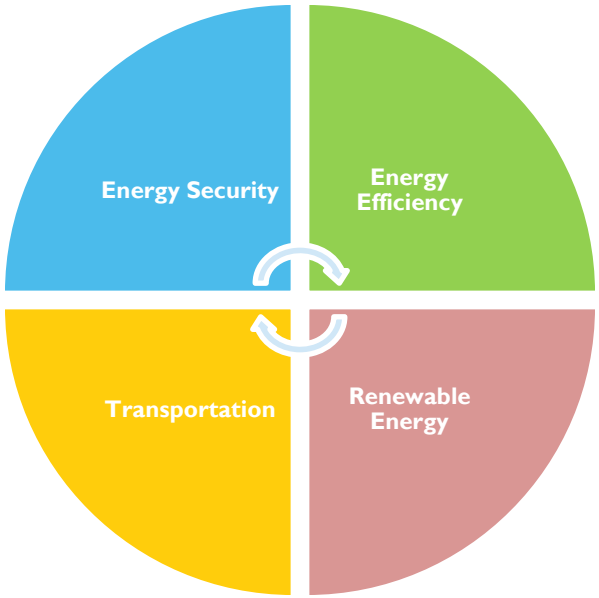
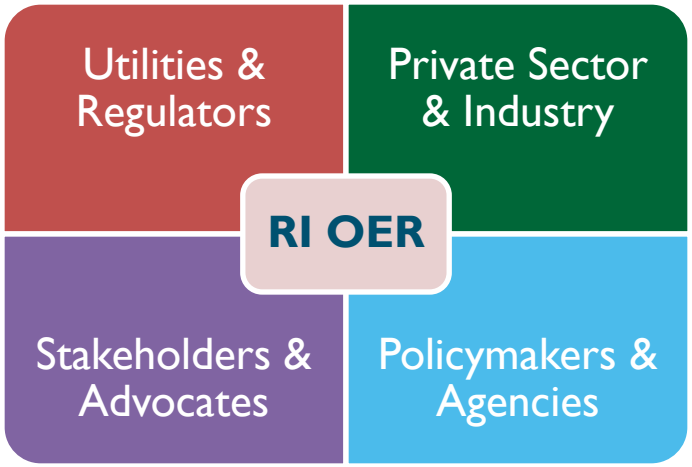
OFFICE OF
ENERGY RESOURCES

RI Office of Energy Resources (OER) Overview

"Leading Rhode Island to a secure, cost-effective, and sustainable energy future."



The OER is the lead state agency on energy policy and programmatic matters



The OER works closely with diverse partners to advance Rhode Island as a national leader in the new clean energy economy

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OER Overview

- **The OER operates at the nexus of the many ongoing efforts to transform the Ocean State energy system.**
- **Core functions include:**
  - Developing, administering, and monitoring a variety of programs designed to promote energy efficiency, renewable energy, alternative fuels, and energy assurance.
  - Offering technical assistance and funding opportunities for end-users, including residents, businesses, and the public sector.
  - Providing policy expertise and support related to strategic energy planning, energy assurance, and clean energy workforce development.
  - Leveraging, coordinating, and aligning inter-agency, public-private, regional, and federal efforts to reach and exceed energy goals.

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 20-member Advisory Council, stakeholder groups, and consultants to complete a 10-year update, with a planning horizon out to 2035
- **The RISEP is an element of the centralized and integrated State Guide Plan (SGP), which:**
  - Sets long-range state policy positions (generally 20 years)
  - Means to evaluate and coordinate projects of state importance
  - Assures consistency of local plans
  - Provides a general background information source

Why do we need a State Energy Plan?

- **Gather Data, Set Goals, and Recommend Action**
  - Understand current / projected impacts of 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**

Why do we need a State Energy Plan?

- **RELIABILITY IMPACTS**
  - Rhode Island has experienced an increasing number of severe weather-related events over the last four years
  - These events contribute to power outages, fuel supply, and other energy assurance issues

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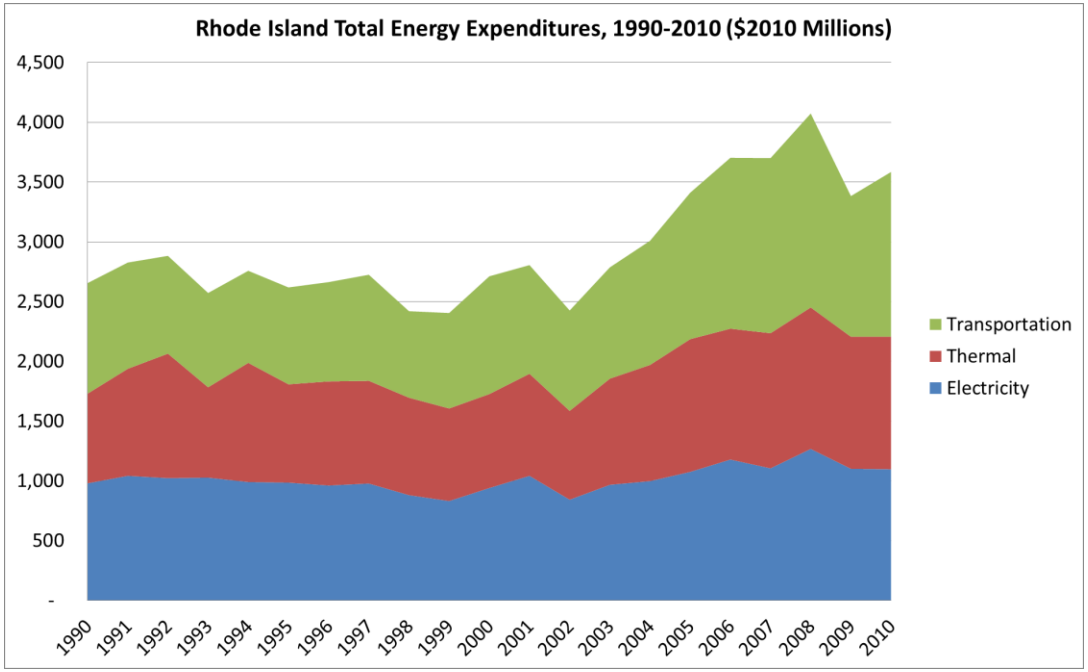
Why do we need a State Energy Plan?

- **ECONOMIC IMPACTS**
  - In Rhode Island's ~$43 Billion economy, energy plays a significant role
  - Total annual energy expenditures have grown from $2.5 Billion to over $3.5 Billion in the last ten years



Source: EIA SEDS

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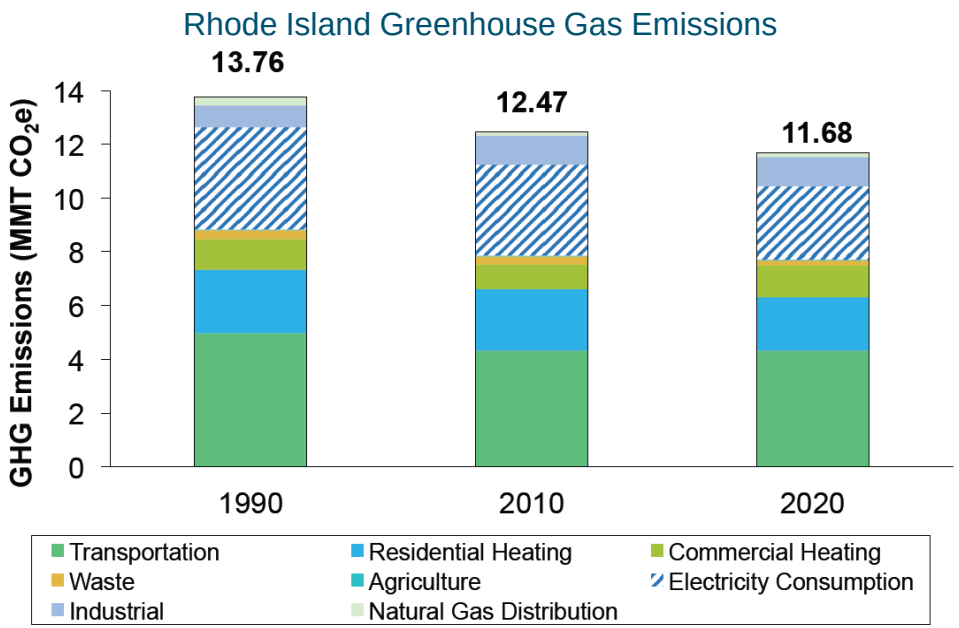
Why do we need a State Energy Plan?

- **ENVIRONMENTAL IMPACTS**
  - Nearly all greenhouse gas emissions in RI are due to the generation and consumption of energy
  - To achieve carbon reduction targets, energy issues *must* be addressed



Source: NESCAUM

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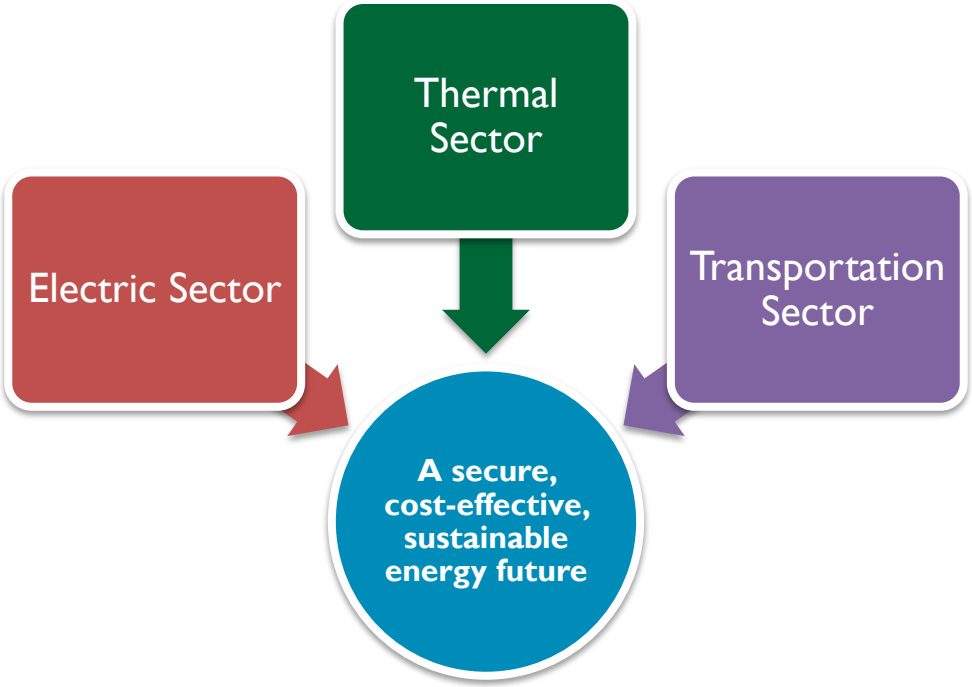
The RISEP Vision Statement



*"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.

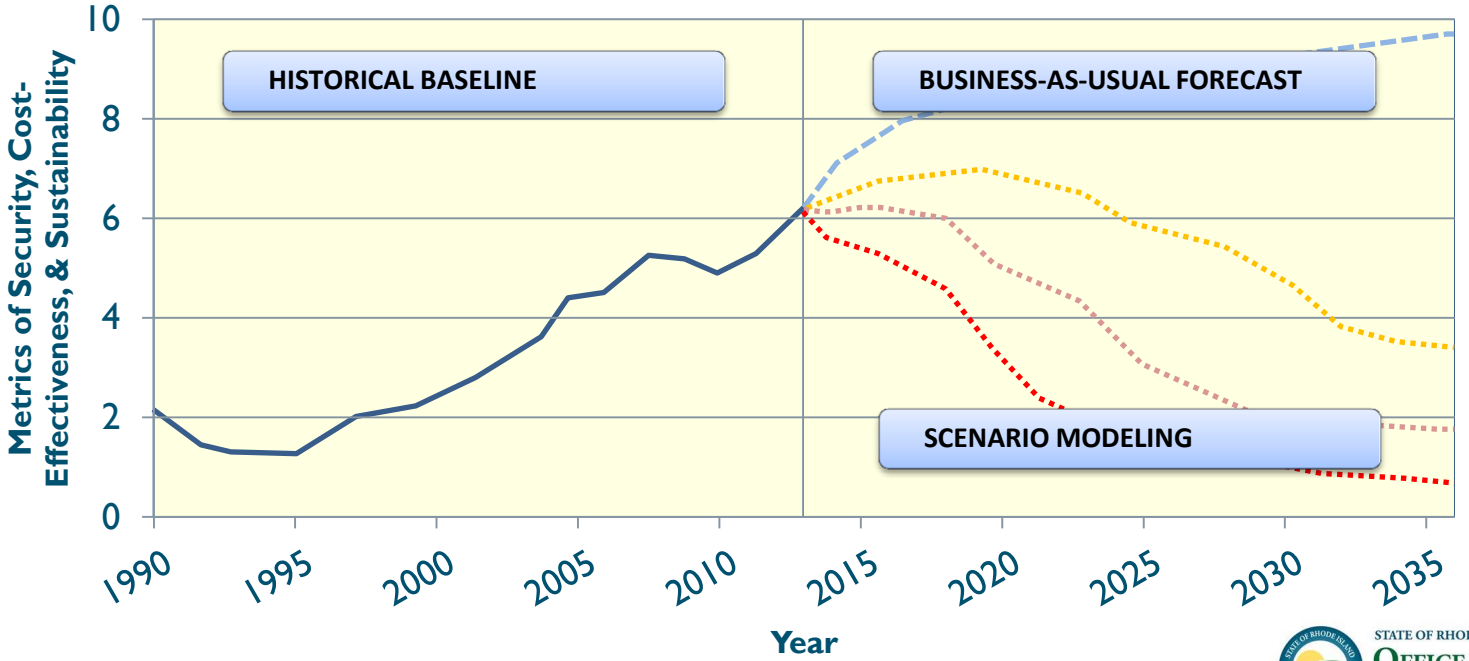
Recommend Action

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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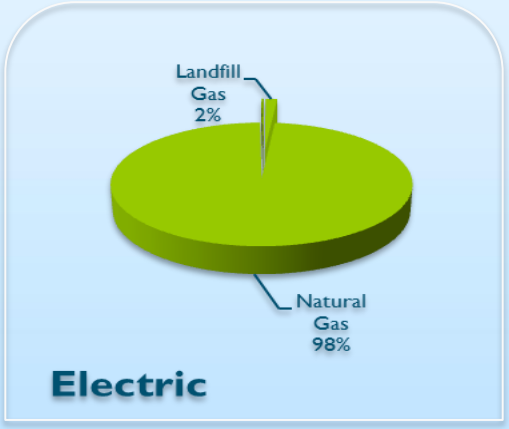
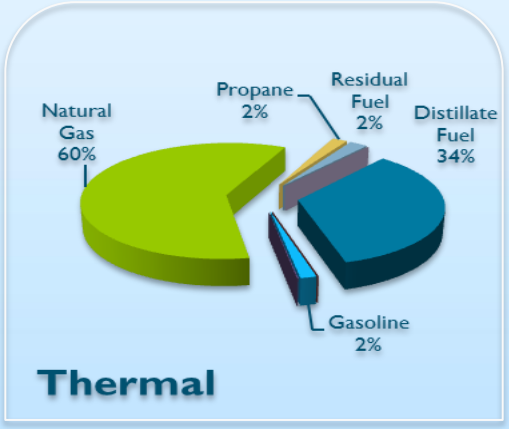
Rhode Island Energy Use Today



63 Trillion BTU

$1.1 Billion/Year

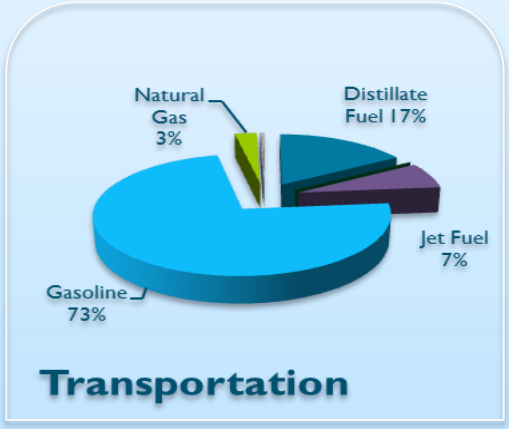
2.9 Million Tons CO_2



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 190 trillion BTU of energy, emitting 11 million tons of CO2

Source: EIA SEDS, 2010 data

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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?

Setting Goals

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.

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

RISEP Targets

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

A Secure, Cost-Effective, and Sustainable Energy Future

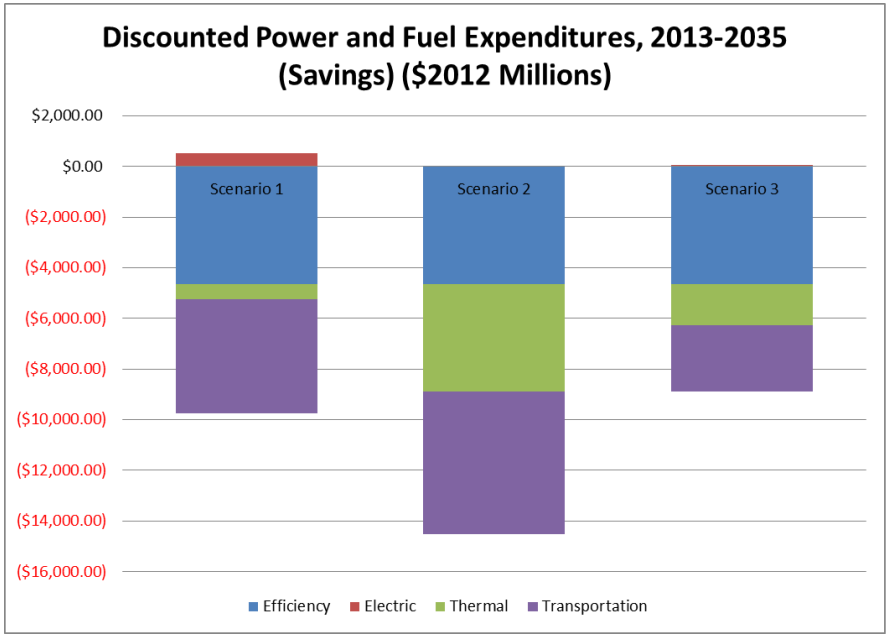
Increase fuel diversity in each sector above 2013 levels

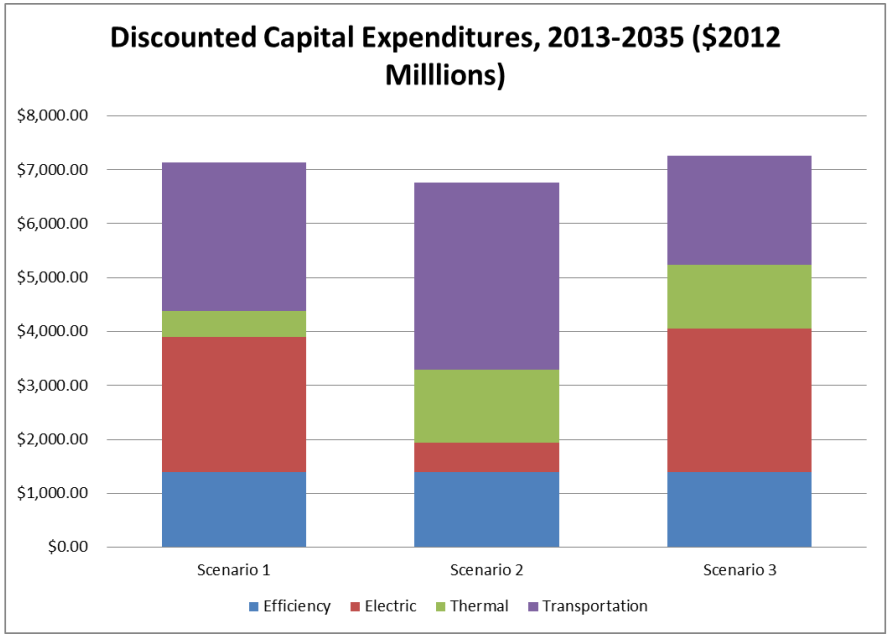
Produce economy-wide net benefits

Reduce greenhouse gas emissions 45% below 2013 levels

Cost-Effectiveness: Net Benefits

- **Business As Usual is the most expensive path for RI**
  - Potential for $8.8 to $14.5 billion in NPV savings
  - Requires approximately $7 billion of NPV investment





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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

How will the policies be used?

- **State agency decision-makers will use RISEP policies to focus programmatic efforts and inform funding allocation decisions**
  - For example, initial RISEP policy recommendations are already guiding OER's proposed RGGI allocation plan
    - Grid Modernization Working Group, Delivered Fuels Working Group, Renewable Thermal Pilot Study, etc.
- **State policymakers and stakeholder groups can use RISEP policies to direct policy efforts**
  - For example, RISEP policy recommendations could help direct efforts to design climate legislation or inform the proposed size of electric, thermal, or transportation policies

Overall, policies provide stakeholder groups with a common understanding of the long-term vision and direction we want to move toward

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20 RISEP Policy Recommendations: "All-Of-The-Above" Clean Energy Strategy

Energy Efficiency!	• Maximize energy efficiency in all sectors
Electric	• Promote local and regional renewable energy
Thermal & Transportation	• Develop markets for alternative thermal and transportation fuels
Security	• Make strategic investments in energy infrastructure
Cost-Effectiveness	• Mobilize capital and reduce costs
Sustainability	• Reduce greenhouse gas emissions

Ex. Maximize Energy Efficiency in All Sectors

- **Continue Electric & Natural Gas Least-Cost Procurement**
  - ~20% cost-effective BAU electric and thermal energy reductions
- **Expand Least-Cost Procurement to Unregulated Fuels**
  - ~15-25% cost-effective thermal energy reductions
- **Reduce Vehicle Miles Traveled**
  - Up to 1/3 cost-effective transportation energy reductions
- **Improve Fuel Efficiency & Reduce Vehicle Emissions**
- **Innovate with State Energy Efficiency Codes & Standards**
- **Improve Combined Heat and Power Market**
  - 400 MW total by 2035

Ex. Make Strategic Investments in Energy Infrastructure

- **Enhance Energy Emergency Preparedness**
  - Target power resiliency investments at critical infrastructure
- **Modernize the Grid**
  - Align utility capital investment plan with least-cost procurement public policy objectives
- **Address Natural Gas Leaks**
  - Align utility capital investment plan with least-cost procurement public policy objectives

Ex. Mobilize Capital and Reduce Costs

- **Expand Financing & Investment Tools**
  - ~$7 billion NPV capital investment by 2035
- **Reduce the Soft Costs of Renewable Energy**
  - Simplify permitting processes & mitigate regulatory hurdles
- **Address High & Volatile Regional Energy Costs**
  - Regional & local approaches to addressing winter and summer peaks, natural gas/low-carbon supply constraints, and high energy costs for consumers and businesses

New England Governors' Regional Energy Infrastructure Initiative

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Disclaimer

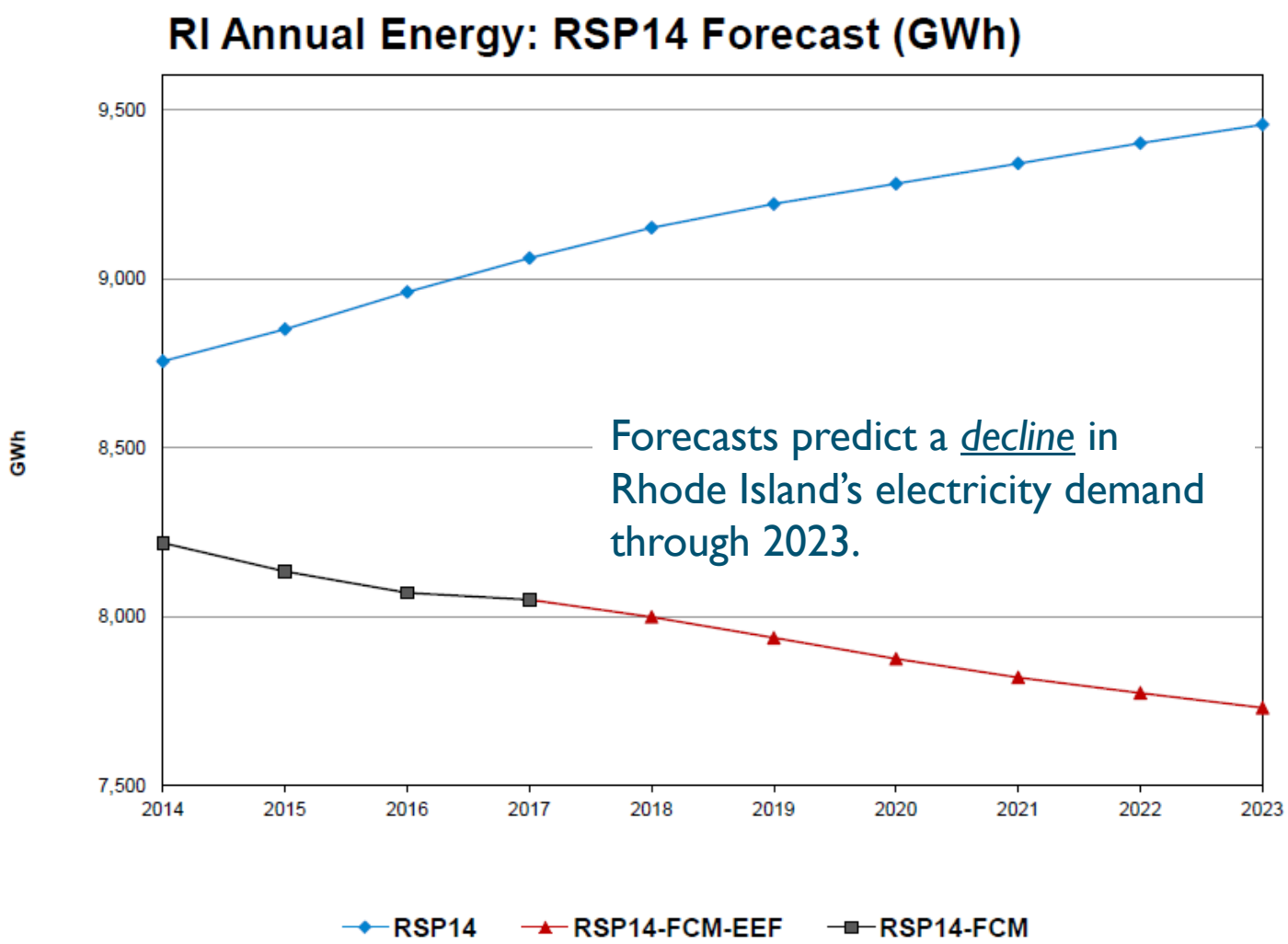
- Study data presented within this report includes directionally indicative costs and benefits associated with hypothetical power system conditions, market scenarios, and infrastructure solutions. As with any study, certain assumptions have been made with respect to underlying conditions, events, and circumstances consistent with generally accepted industry practices. Actual results may materially differ from those projected.

- Hypothetical infrastructure costs are illustrative and based upon assumed capital costs of upgrades and the annual carrying charges associated with them. They also assume the full transfer of risk to customers and away from merchant entities. These assumptions are not precise or predictive of actual costs that could emerge in a competitive process or as a result of negotiation. They do, however, provide a directional sense of costs associated with power system infrastructure improvements. The potential to risk share could reduce the potential indicative costs.

"All of the Above" Clean Energy Strategy

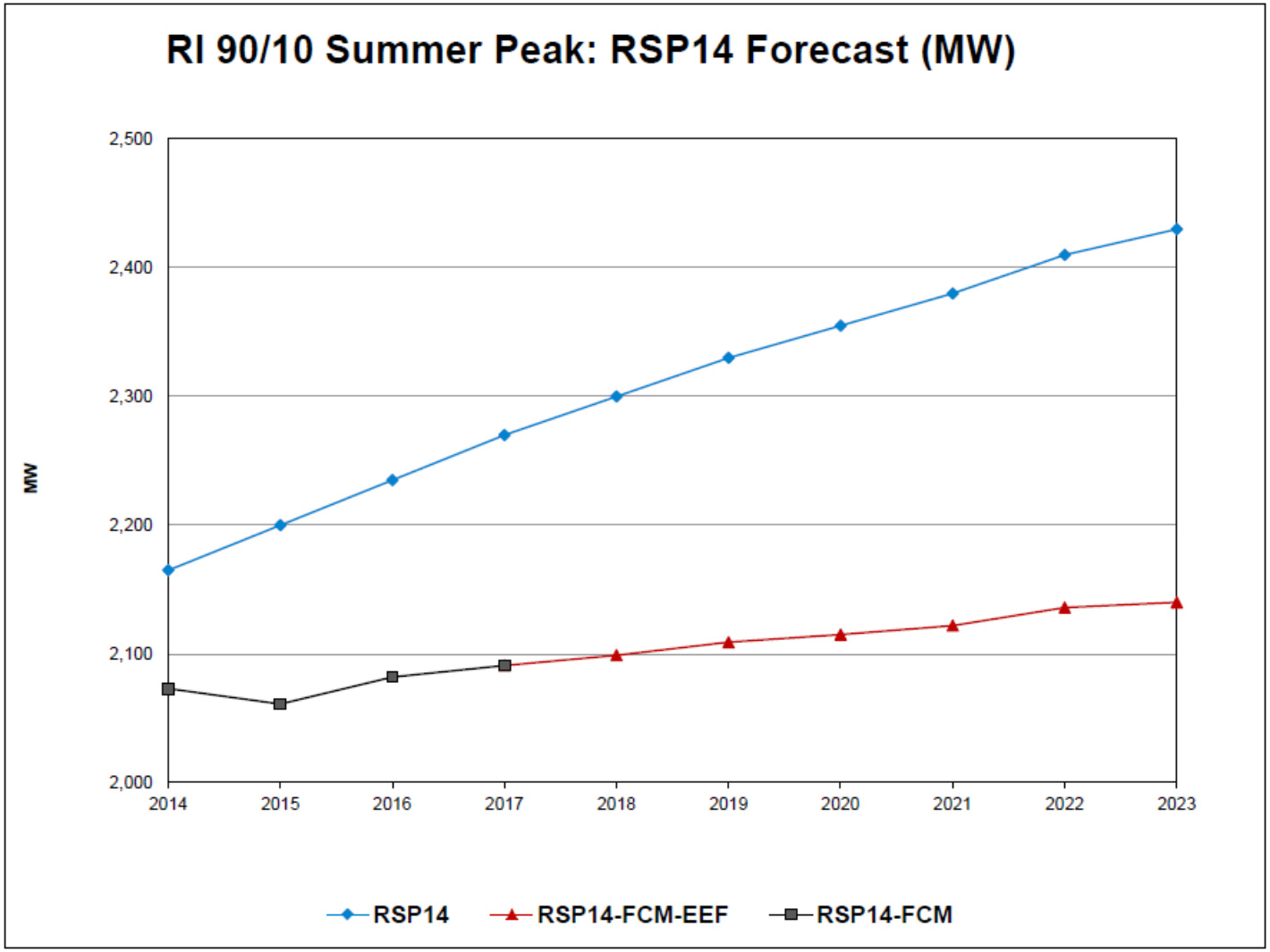
- **OER's State Energy Plan analysis supports the need for both *local* and *regional* investment.**
  - For example, to meet a 45% reduction in greenhouse gas emissions by 2035 and maximize energy portfolio diversity, Rhode Island may have to:
    - Achieve robust energy efficiency gains of 20%; and
    - Develop over 350 MWs of local renewable generation; and
    - Expand the state's Renewable Energy Standard (RES) to 40%; and
    - Successfully develop the Deepwater Wind Projects, including utility-scale; and
    - Facilitate 1,200 MW of new imported Canadian hydropower; and
    - Foster significant local investments in the transportation and thermal sectors.

Example: Energy Efficiency

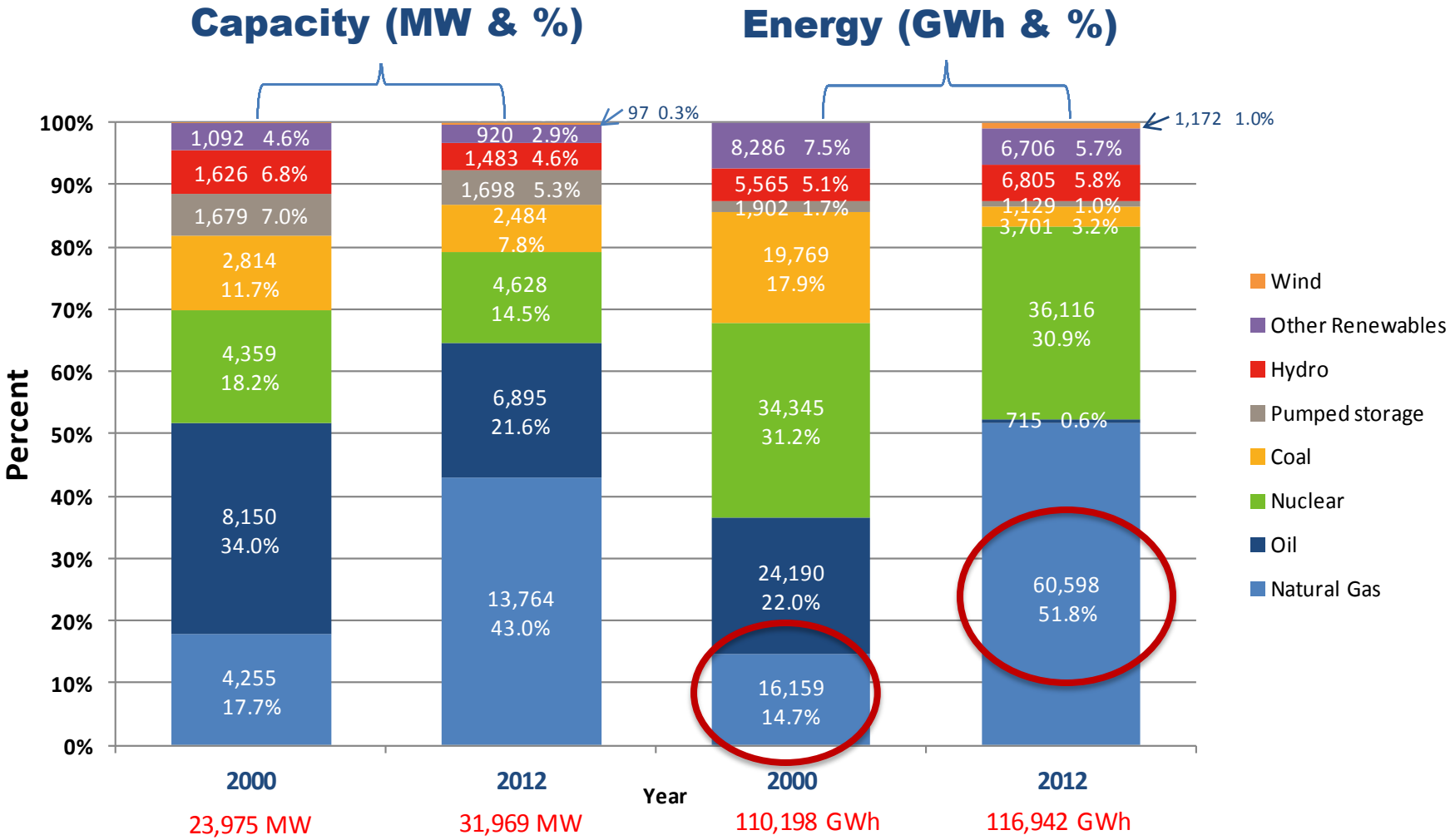


Forecasts predict a *decline* in Rhode Island's electricity demand through 2023.

Example: Energy Efficiency



New England's Energy Supply Costs are driven by Natural Gas



Natural Gas – Energy Price Correlation

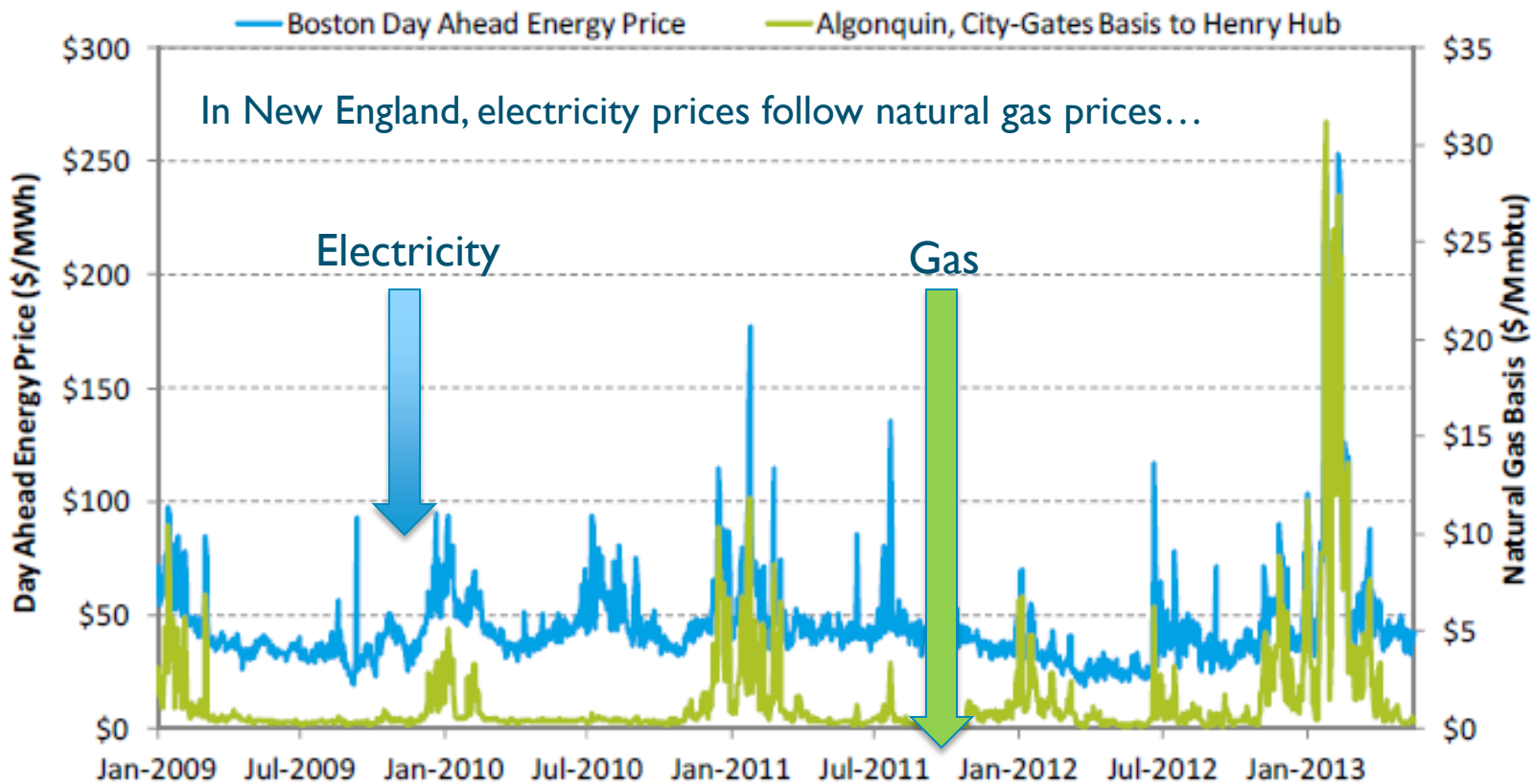


Figure 7 Historical New England Electric and Natural Gas Prices

Source: ISO-NE, Platts

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Difference in Natural Gas Prices
New England vs. National Benchmark

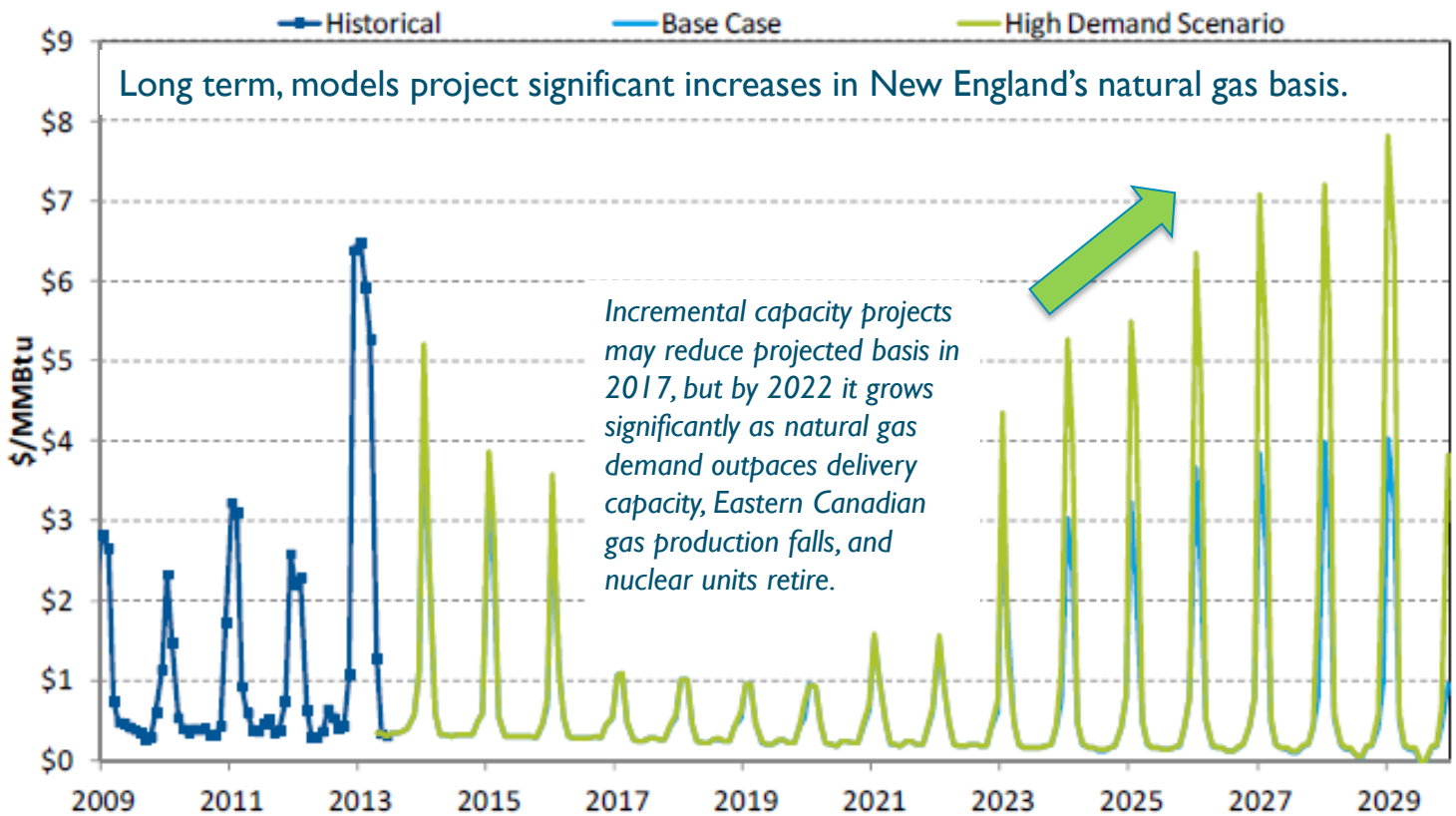

Figure 33 Monthly Algonquin City-Gates Basis to Henry Hub: Base Case vs. High Demand Scenario
Source: Platts historical data, Black & Veatch projection

Basis = the difference in price between New England's gas price and the benchmark price (Henry Hub/NYMEX).

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Projected Energy Prices

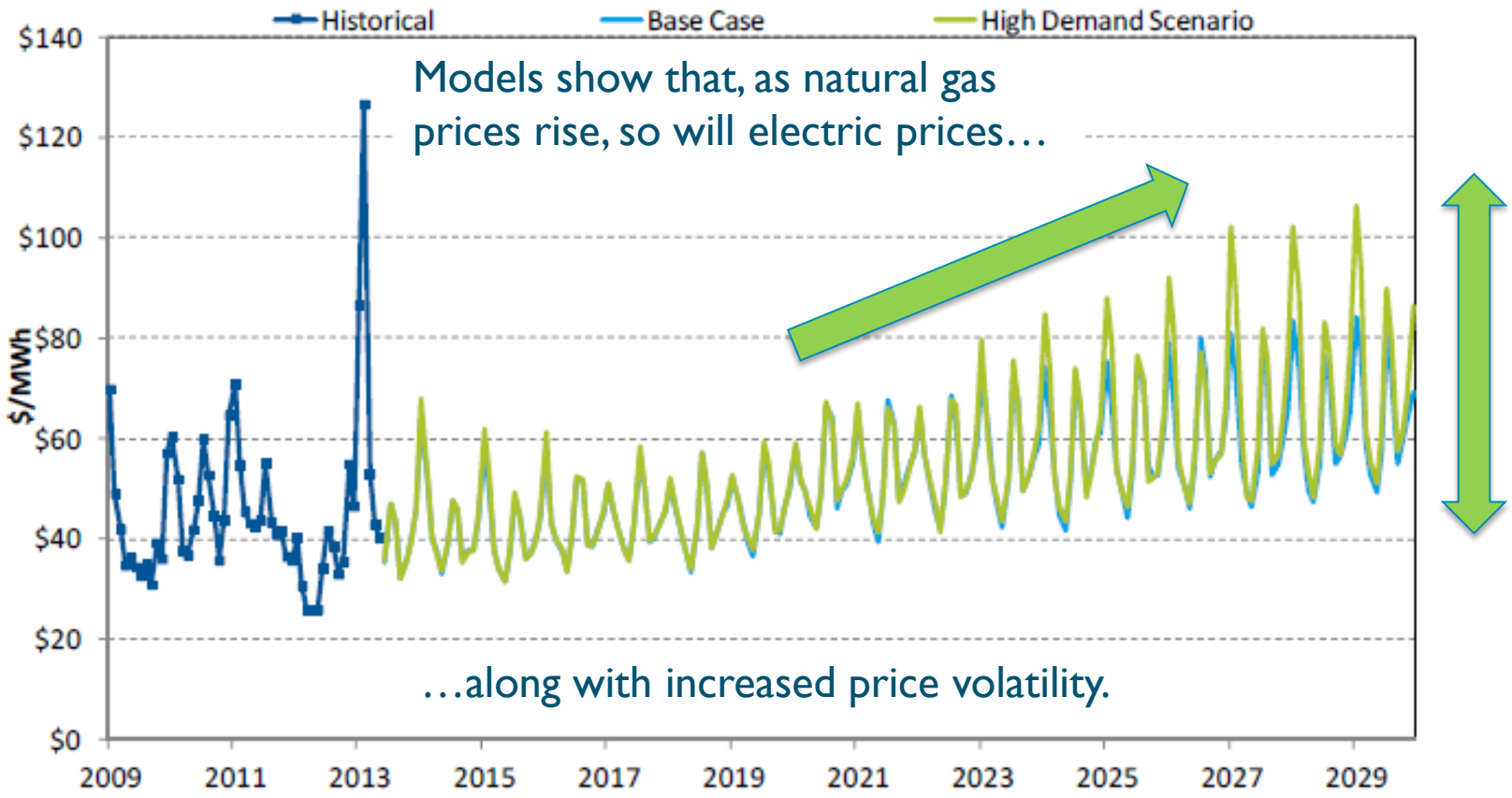

Figure 34 Boston Electric Prices: Base Case vs. High Demand Scenario
Source: *Energy Velocity historical data, Black & Veatch projection*

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Heading into Winter 2013/14…

Futures Prices in New England Soar

Source: Derived from ICE data.

^January and February 2014

*January and February 2013

*Power Note: Prices in $/MWh; 2013 shows Peak Fin-swap prices and 2014 shows peak future prices. SP15 peak futures for Jan and Feb 2014 have not traded yet and the price is the average of the last bid and offer.

*Gas Note: Prices in $/MMBtu. Regional futures natural gas prices are the sum of the Henry Hub futures contract price plus the regional basis futures.

	Location	2014^	2013*
Power	Massachussets Hub	$100.00	$65.65
Power	PJM Western Hub	$44.35	$48.00
Power	Northwest (Mid-C)	$37.37	$34.58
Power	Southern California (SP-15)	$43.12	$42.63
Gas	New England (Algonquin)	$11.75	$6.59
Gas	Mid-Atlantic (Dominion South)	$3.66	$3.78
Gas	Southern California Border	$3.95	$3.88
Gas	Henry Hub	$3.87	$3.77

New England power futures for Jan/Feb 2014 were more than 2x higher than the Mid-Atlantic region…

…and natural gas price futures were more than 3x higher.

- from FERC Winter 2013-2014 Energy Market Assessment Report, October 2013, slide 5.

Residential Rate Impacts Reduce Discretionary Income

PROVIDENCE Journal

"The "overwhelming majority" of the increase, the utility said, is derived from a rise in the cost of wholesale production of electricity — costs that National Grid does not control…"

"Utilities panel approves 12.1 percent rate hike for National Grid electricity"

-G. Wayne Miller,
Providence Journal
December 20, 2013

http://www.providencejournal.com/breaking-news/content/20131220-utilities-panel-approves-12.1-percent-rate-hike-for-national-grid-electricity.ece

C & I Rate Impacts Reduce Investment Opportunities

Small (C-06) & General Commercial (G-02) standard offer kWh rate (fixed) increased by more than 23% in January 2014.

The variable Commercial rate jumped 40% for January/February 2014.

"Unfortunately this increase is driven by market forces we cannot control…"

Timothy Horan
President
National Grid - Rhode Island

Quote taken from www.630wpro.com/common/page.php?feed=2&pt=NEWS%3A+RI+electric+bills+to+rise+by+nearly+%2410+in+January&id=30844&is_corp=0

How did the region prepare?

ISO-NE Winter Reliability Program:

- Approved by FERC; utilized competitive procurement to secure resources.
- Examined incremental need if Winter 2012/13 had been as cold as 2003/04
- Accepted bids for oil inventory and new demand response equivalent to 3.5M barrels of oil (1.95M MWh), with 56 generators participating.
- Total program costs were estimated at $75M, but will settle around $66M due to unit unavailability and failure to procure fuel.
- N.E. burned 2.7M barrels of program oil compared to 1.6M in inventory for Winter 2012-2013.
- Next winter…?

So what actually happened?

Weather

- **Winter temps were 13% colder in Northeast**
- **Coldest winter (HDDs and ave. temp) since 1990's.**
- **January was among the coldest months in recent history**
  - 9 days were in coldest 5% of days in past 20 years
- **For stretches, daily average temps were well below historical averages**
  - i.e. December 10-17; January 1-10; February 6-12
- **Yet, there was no extreme cold snap**

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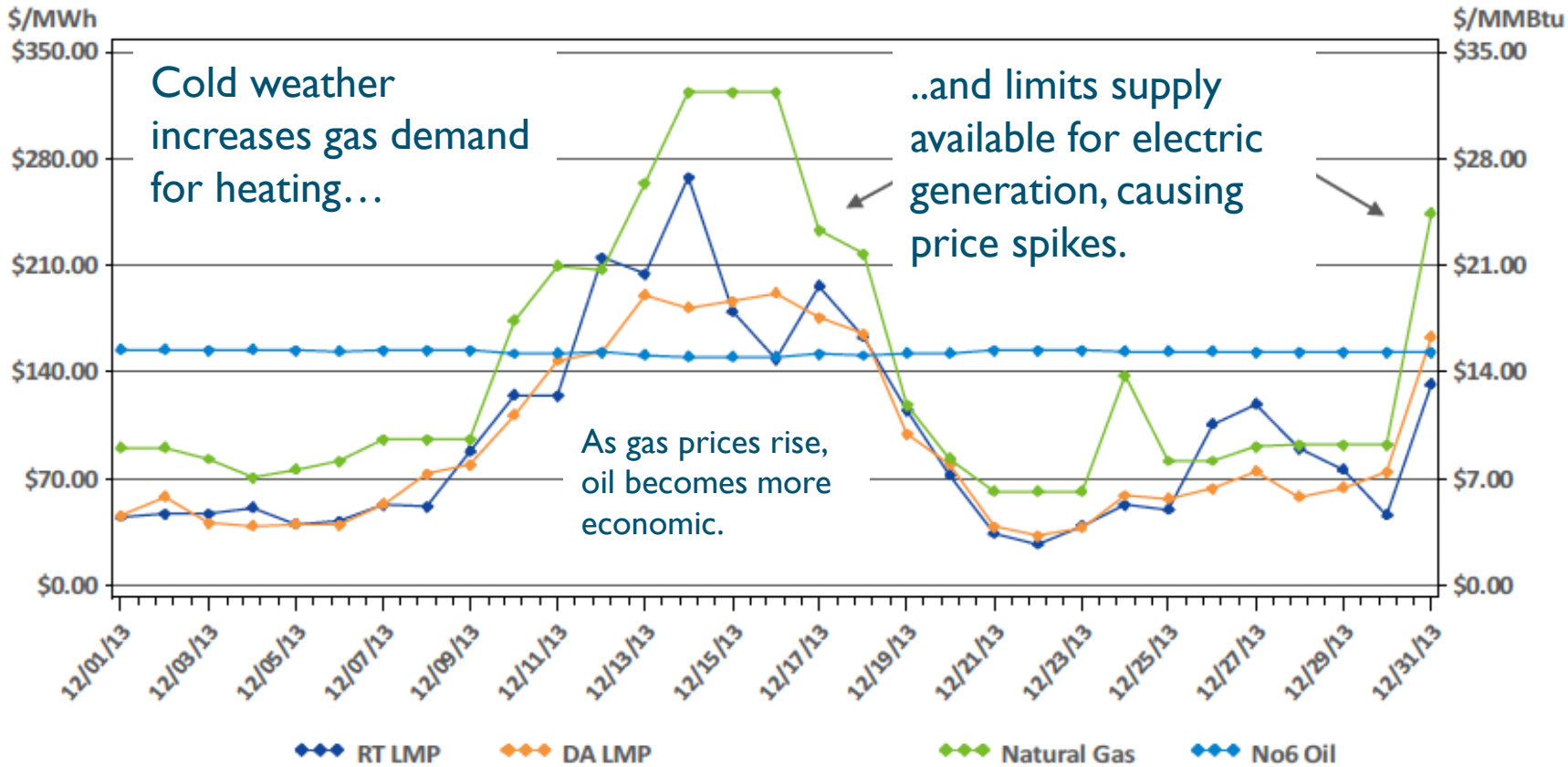
Data and phrasing taken from ISO NE presentation on Winter 2013/14 to NEPOOL PC , 5/2/14, Boston, MA.

DA and RT ISO-NE Hub Prices and Input Fuel Prices: December 1-31, 2013



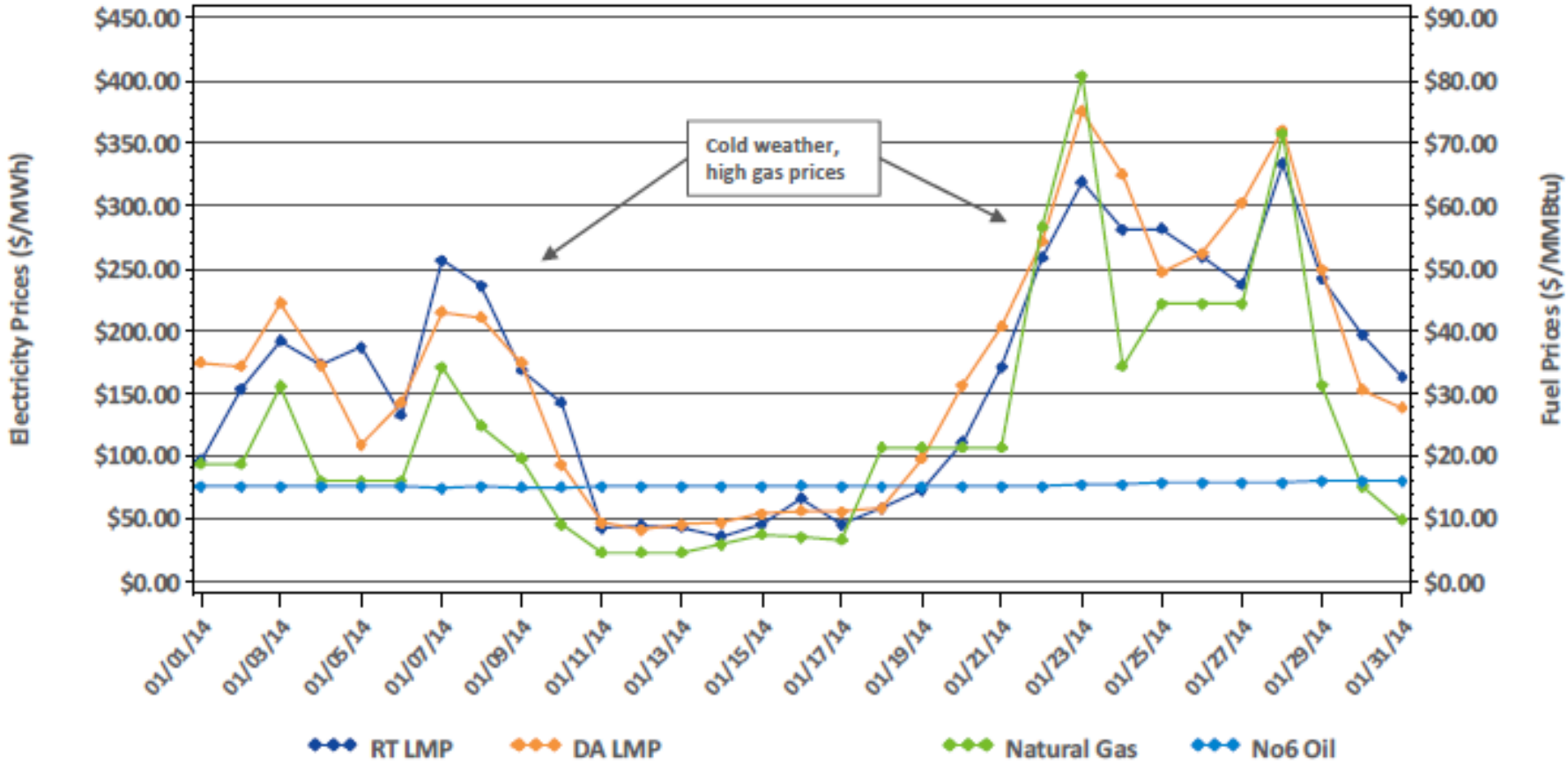
derlying natural gas data furnished by:

ICE Global markets in clear view

Average price difference over this period (DA-RT): $-5.57
Average price difference over this period ABS(DA-RT): $18.38
Average percentage difference over this period ABS(DA-RT)/RT Average LMP: 19%
Gas price is average of Massachusetts delivery points; No6 Oil is New York Spot Price from DOEs Energy Information Administration

Office of Energy Resources

Daily DA and RT ISO-NE Hub Prices and Input Fuel Prices: January 1-31, 2014

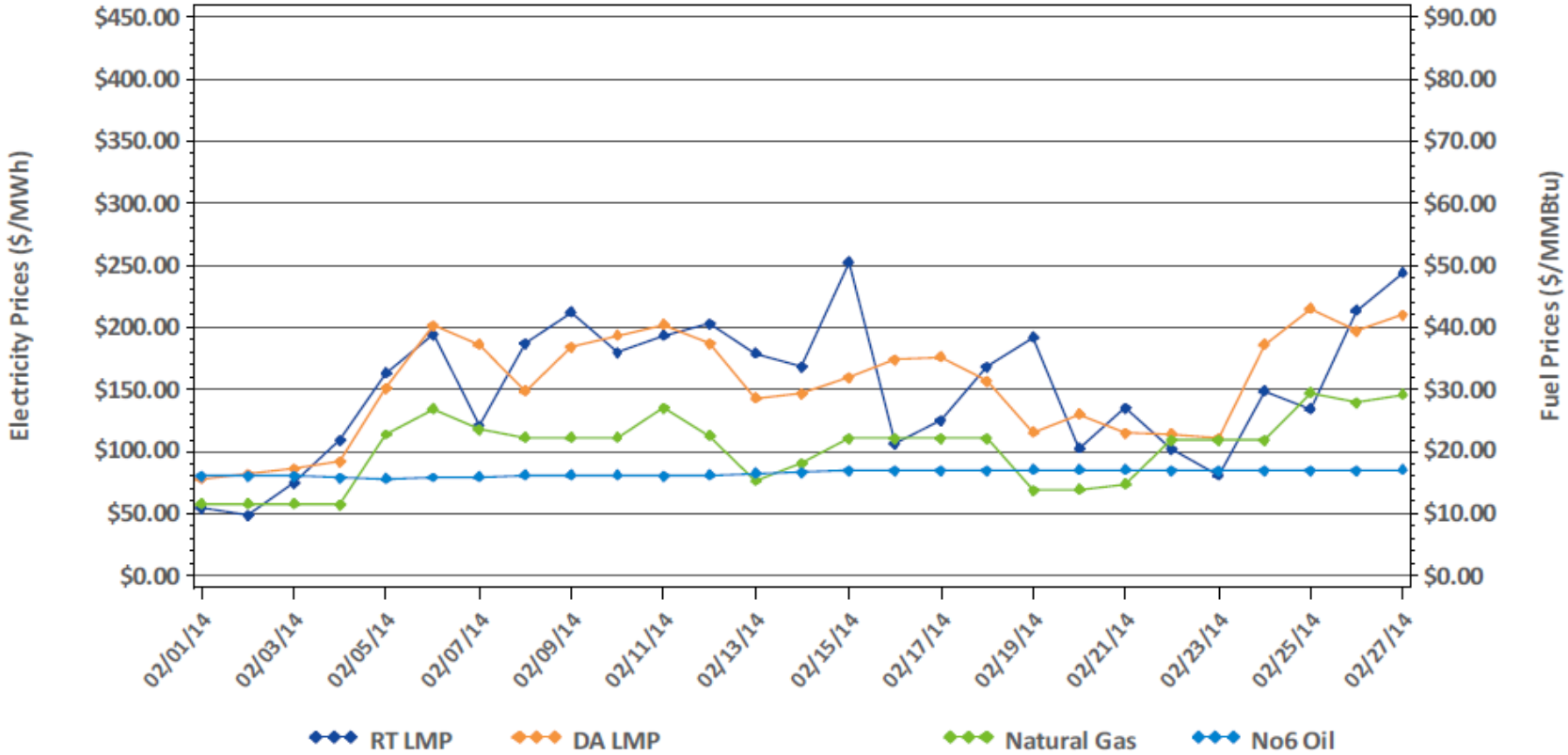


Underlying natural gas data furnished by:

ICE Global markets in clear view

Average price difference over this period (DA-RT): $5.93
Average price difference over this period ABS(DA-RT): $25.99
Average percentage difference over this period ABS(DA-RT)/RT Average LMP: 16%
Gas price is average of Massachusetts delivery points; No6 Oil is New York Spot Price from DOEs Energy Information Administration

Daily DA and RT ISO-NE Hub Prices and Input Fuel Prices: February 1-27, 2014

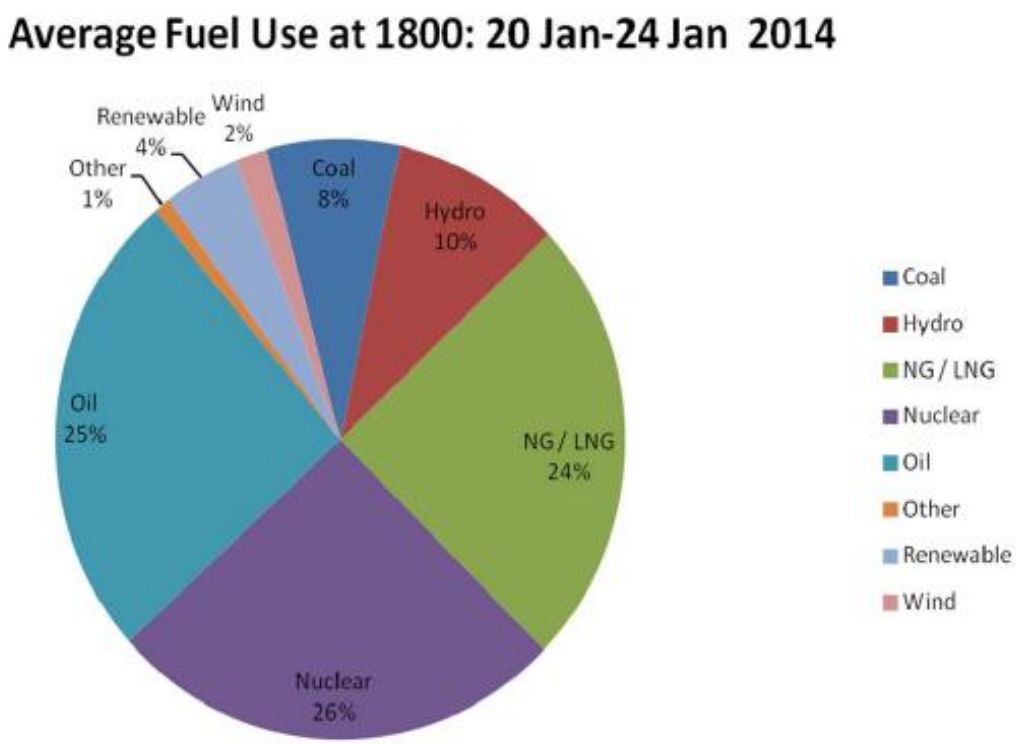


Underlying natural gas data furnished by:

ICE Global markets in clear view

Average price difference over this period (DA-RT): $1.71
Average price difference over this period ABS(DA-RT): $33.08
Average percentage difference over this period ABS(DA-RT)/RT Average LMP: 22%
Gas price is average of Massachusetts delivery points; No6 Oil is New York Spot Price from DOEs Energy Information Administration

Oil and Gas Price Inversion



- Natural gas pipeline constraints drove economics and system reliability needs.
- Oil "in the money"
- Gas prices exceeded oil prices 57% of winter days, compared to 18% in Winter 2012/13.

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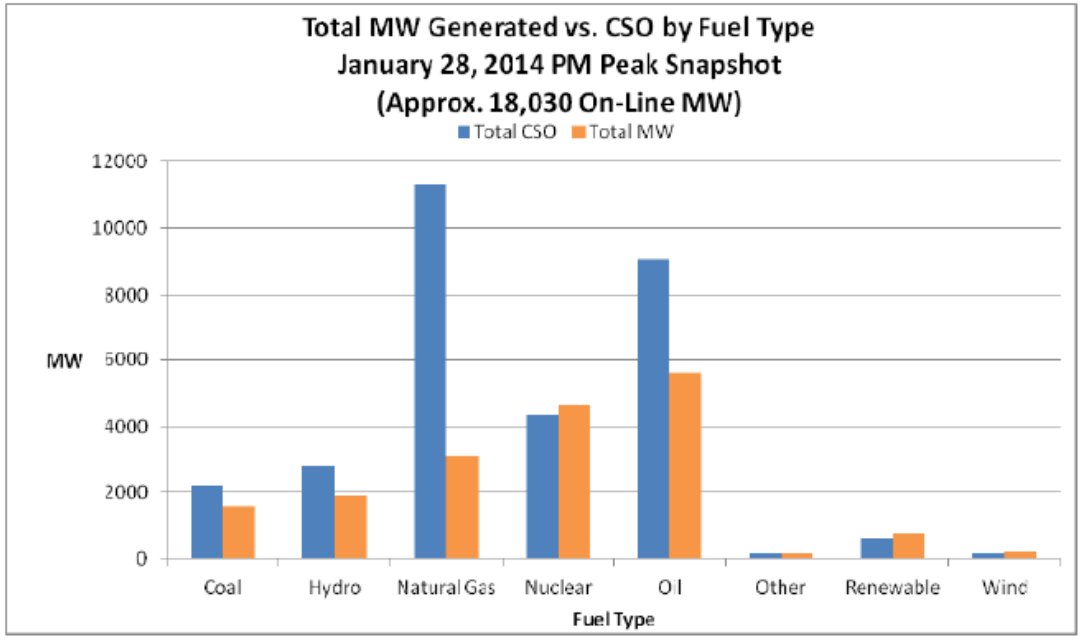
Data taken from ISO NE presentation on Winter 2013/14 to NEPOOL PC, 5/2/14, Boston, MA.

Keeping the lights on



- While oil produced more energy and other assets approached capacity limits, gas units produced far less than capable.
- i.e. on one cold day, at peak, gas gens produced just 3,000 of 11,000 MW capacity

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Keeping the lights on

Lessons Learned, cont.

No. 2: Gas pipelines were constrained even without significant use by gas-fired generators

Despite the limited gas generation, the pipelines from the North were heavily utilized

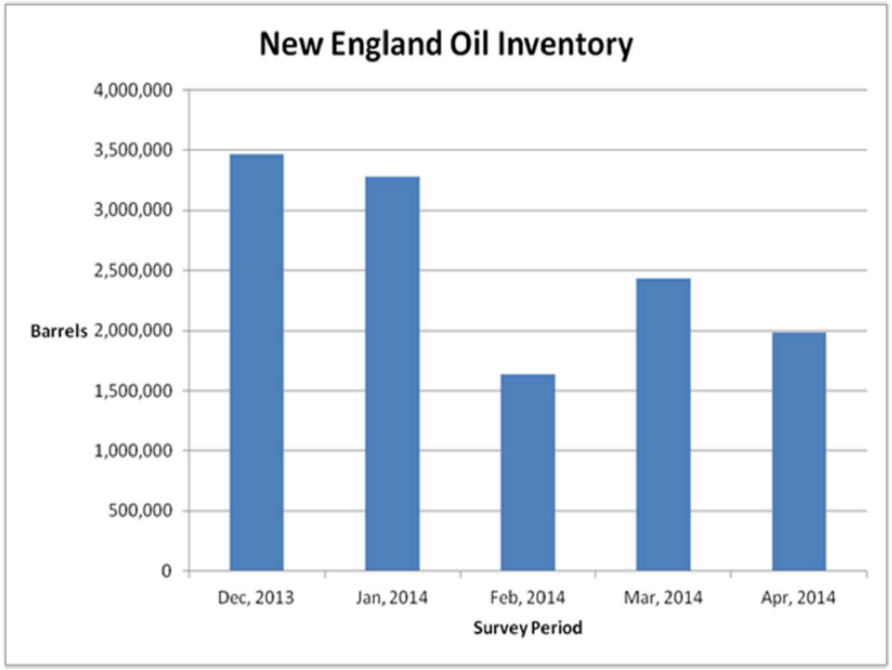
- See the examples from January 22 and 23 below

This raises questions about the viability of gas-fired operating reserves

Pipeline	Location	Operating Capacity	Scheduled 1/22/2014	Scheduled 1/23/2014
Algonquin	Stony Point	1,450,000	1,200,801	1,275,776
Tennessee	Station 245	1,062,800	1,045,901	1,048,312
Iroquois	Waddington	1,150,000	1,041,387	1,065,246
M&N	Baileyville	850,000	833,000	779,000
PNGTS	E. Hereford	168,000	216,759	217,398
Totals		4,680,800	4,337,848	4,385,732
Note: data doesn't show counterflows.				

Keeping the lights on

By February, Oil Was Limited



- Oil inventories ran tight as ability to replenish supply was strained.
- By Feb. 3, much of remaining inventory concentrated at a few, less-reliable units
- Most oil-burning stations had less than 2 days of oil on site.

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Data taken from ISO NE presentation on Winter 2013/14 to NEPOOL PC, 5/2/14, Boston, MA.

Keeping the lights on

- Outages were also a major concern – and a critical variable in maintaining reliability.

- Large generation units were out of service during cold spells:
  - 600 MW dual-fuel unit out from mid-Dec to early-Feb
  - A large coal unit was out during late January cold spell
  - Two oil units comprising 800+ MW missed parts of both January cold spells
  - Significant number of unplanned outages; reductions to conserve oil inventory

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Data taken from ISO NE presentation on Winter 2013/14 to NEPOOL PC, 5/2/14, Boston, MA.

Keeping the lights on

- How do we keep the lights on when nuclear and coal units disappear, oil runs low, and just a quarter of gas-fired generation (normally half your system capacity) is available?

- What happens if one too many generators goes off-line? If a large transmission line sending power into New England trips?

- On behalf of ISO-NE, the Analysis Group estimated that an interruption to electric service could cost the region just under a billion dollars *per hour*.

Winter Gas Prices Nearly Doubled in a Year

* Algonquin Citygate price, December – February average

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Chart taken from ISO NE presentation on Winter 2013/14 to NEPOOL PC , 5/2/14, Boston, MA.

Electricity Prices Followed Gas Prices: Monthly Average Gas Price and RT Hub LMPs

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Chart taken from ISO NE presentation on Winter 2013/14 to NEPOOL PC , 5/2/14, Boston, MA.

At the wholesale level…

- **64% of average daily real-time prices were > $100**
  - 28% in Winter 2012/13
- **For first time in a decade, average daily price exceeded $250… not just once, but nine times!**
- **Energy market costs exceeded $5 billion this past winter.**
  - Compare to $5.2 billion…for **ALL** of 2012.
- **Winter average real time price (Hub) was $132.10**
  - Up 84.4% from Winter 2012/2013 (December through March)
- **Uplift increased from $20.4M in Dec to $73.3M in Jan**

Data and phrasing taken from ISO NE presentation on Winter 2013/14 to NEPOOL PC , 5/2/14, Boston, MA.

RI Wholesale Energy Costs January 2014

Wholesale Component, All Hours	January 2014 (750,860 MWh)	January 2013 (722,159 MWh)	Over-the-year Change $	Over-the-year Change %
Total Wholesale Rate ¢/kWh per 500 kWh	18.728¢ $93.64	9.563¢ $47.82	+9.165¢ +$45.83	+95.8% +95.8%
Energy Only ¢/kWh per 500 kWh	16.345¢ $81.73	8.422¢ $42.11	+7.923¢ +$39.62	+94.1% +94.1%
Total Wholesale Costs	**$140.6 Million**	**$69.1 Million**	**+$71.6 million**	**MORE THAN DOUBLE**

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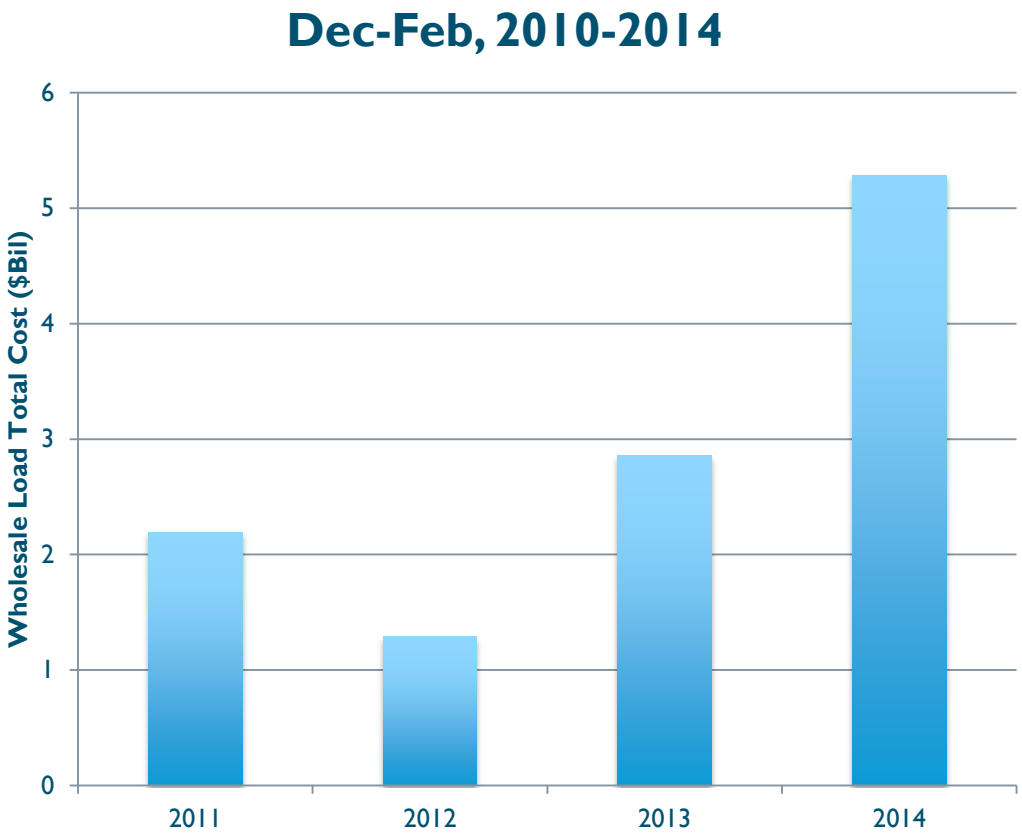
RI Wholesale Energy Costs

Millions $	Dec	Jan	Feb	3-mth. Winter Total
Winter 2010/11	$71.2	$57.8	$42.4	**$171.4**
Winter 2011/12	$27.2	$30.4	$22.6	**$80.2**
Winter 2012/13	$34.3	$69.0	$87.6	**$190.9**
Winter 2013/14	$77.0	$140.6	$105.7	**$323.3**

New England Winter Market Costs

New England Winter $ Millions	
Winter 2010/11	$ 2,194.8
Winter 2011/12	$ 1,289.0
Winter 2012/13	$ 2,861.9
Winter 2013/14	$ 5,286.7



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What can we do about it?

Think *Locally…*

- **Rhode Island <u>must</u> continue to robustly invest in clean energy and energy-alternative resources…**
  - Energy efficiency and Least-Cost Procurement
  - Distributed Renewable Generation
  - Renewable Energy Standard
  - Long-term Contracting Standard for Renewable Energy

- **Importantly, many of these investments generate local economic opportunities and create local jobs.**

…but also act *Regionally.*

- **…but the problem is much bigger than Rhode Island.**
  - Our energy system crosses borders and is highly integrated.
  - A reliable bulk electric system is a necessity to local health and safety, and to economics.
  - New England is competing with other regions to attract new businesses and investment opportunities…
  - …while its residents struggle to manage a growing energy cost burden, which reduces disposable income and stifles growth.
  - To remain economically competitive we **must** act regionally.

The New England Energy Infrastructure Initiative

- **Make strategic, coordinated investments in regional energy infrastructure that will:**
  - Improve energy system reliability and diversify supply portfolio;
  - Strengthen state and regional economic competitiveness;
  - Meet common energy and environmental policy goals;
  - Increase the supply of cleaner, no-to-low carbon generation;
  - Mitigate energy price volatility; and
  - *Achieve what no single state could do on its own.*

Initiative Scope

- **These goals can be achieved through two major energy infrastructure investment strategies:**
  - Expand pipeline capacity to increase natural gas supply into New England, reducing supply constraints and associated energy price volatility.
  - Expand electric transmission to facilitate utility-scale development and delivery of no-to-low carbon energy resources, such as hydroelectricity.

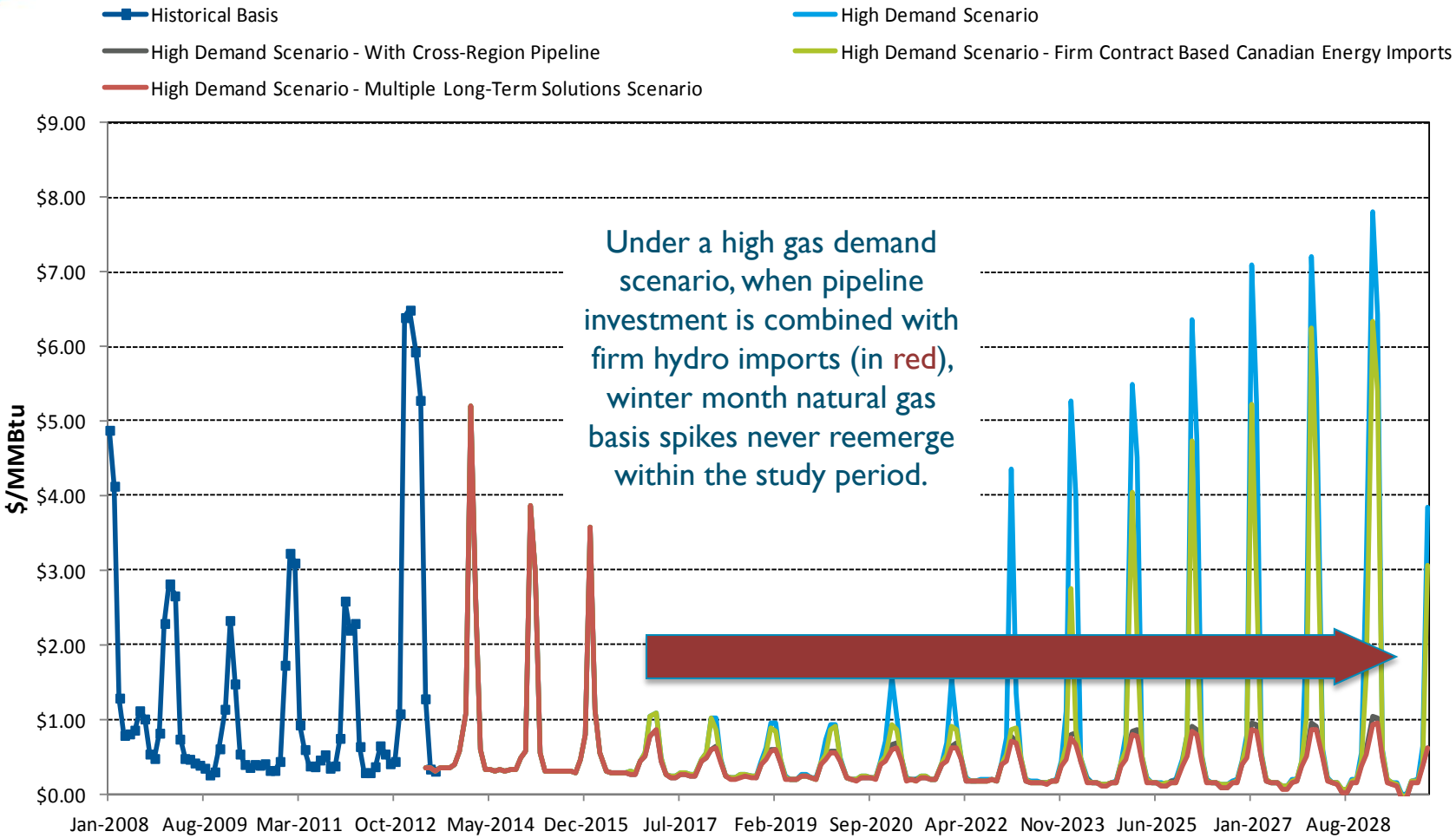
Expanding Natural Gas Capacity

- Drive investment in pipeline infrastructure by allowing for recovery of costs through electric rates.
- Costs shared appropriately by the States.
- Work with ISO-NE and stakeholders to develop tariff language and a structure that will ensure any new capacity will be made available in a manner that primarily benefits electricity customers.
- Tariff & cost allocation will require FERC approval.

Expanding Electric Transmission to Facilitate Clean Energy

- The States will issue one or more coordinated RFPs to advance the development of transmission and delivery of at least 1000+ MWs of clean energy into New England.
- Infrastructure costs would be recovered through ISO-NE tariff or through merchant projects in a manner that ensures costs are shared appropriately among the states.
- Depending on procurement structure, a subset of states (directly or through their utilities) may procure the power to ensure its delivery into the region.

Directionally-Indicative Impact on Natural Gas Basis



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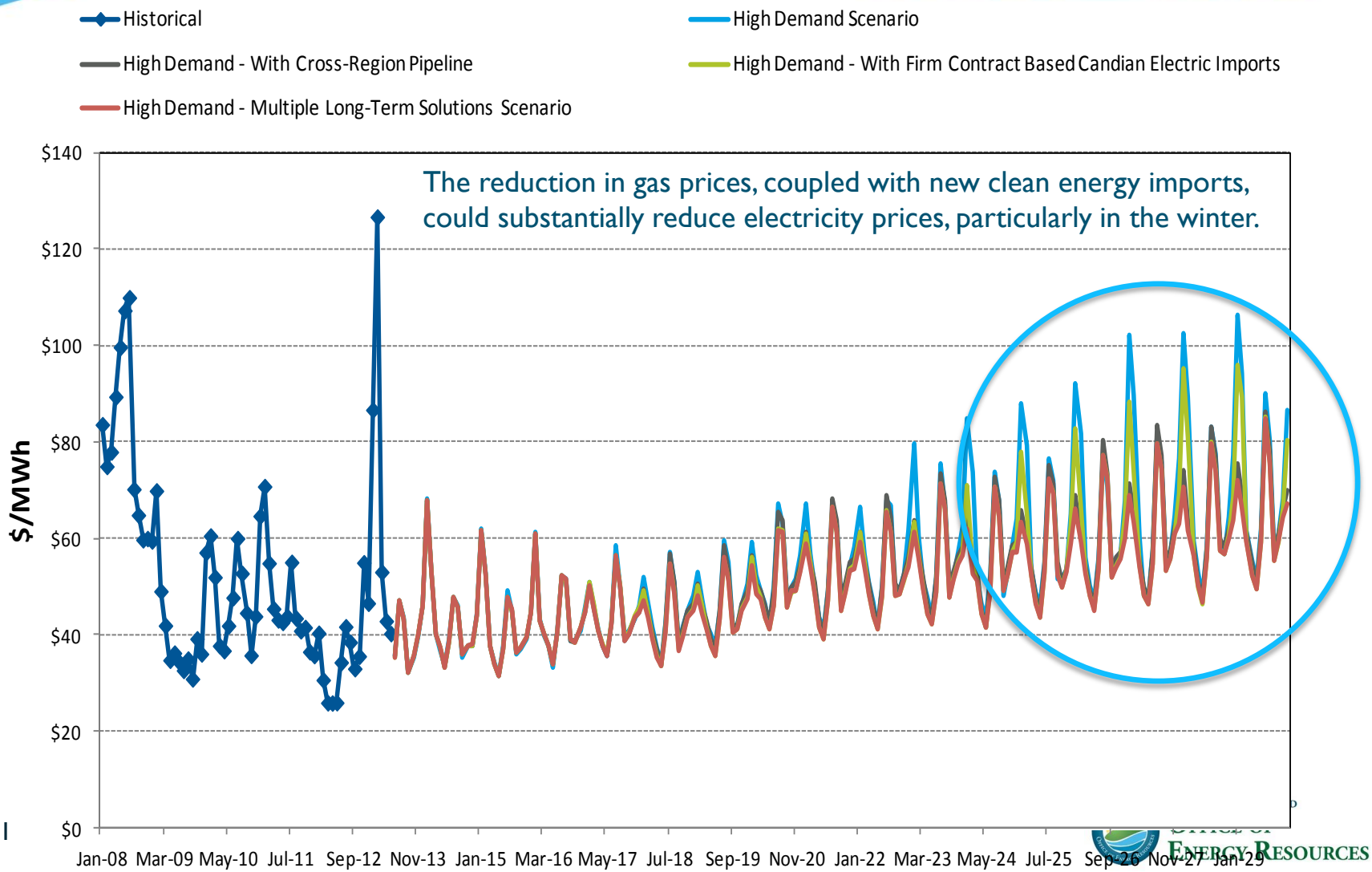
Impact of Multi-Solutions Scenario on Electric Prices



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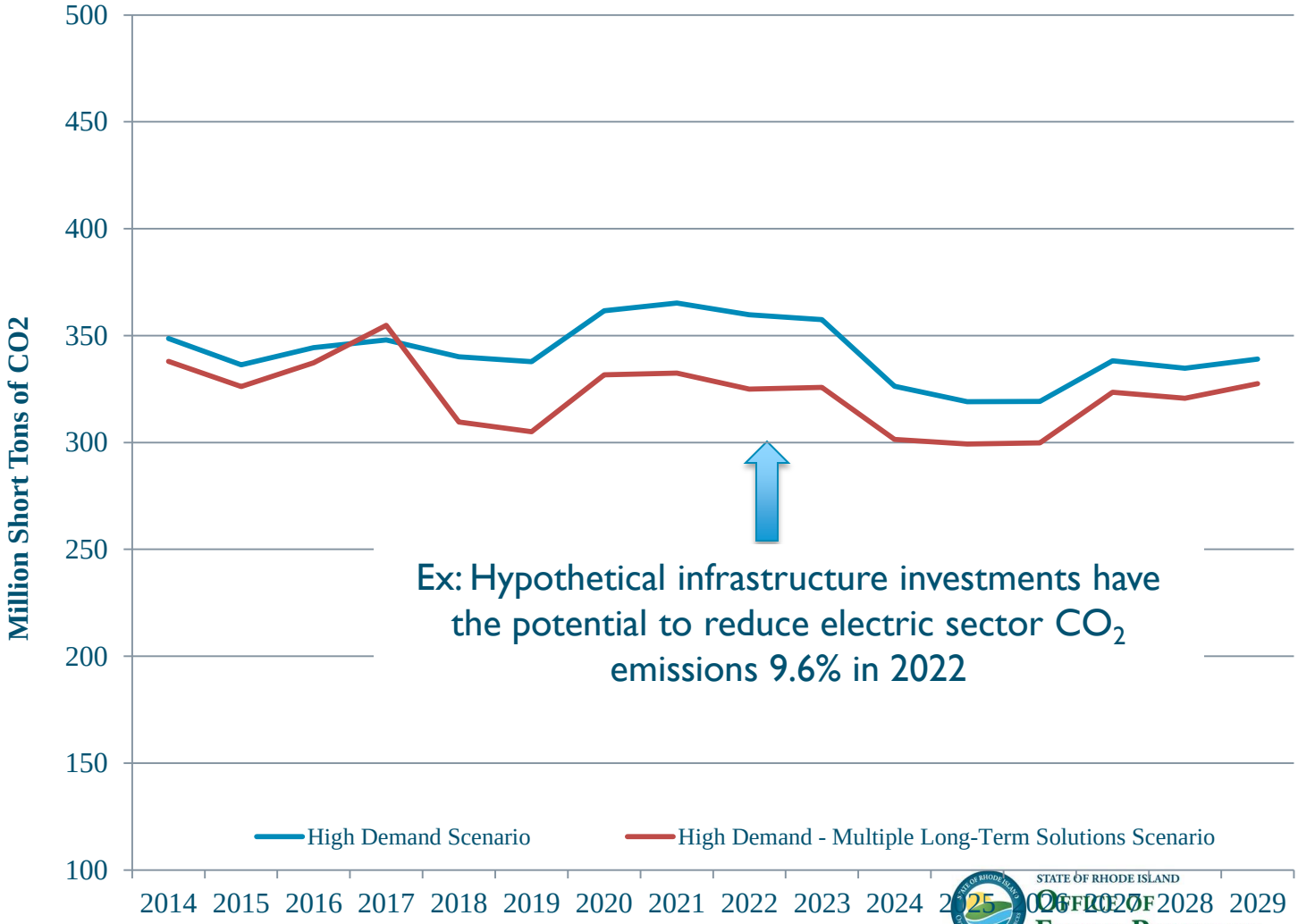
Projected CO_2 Emission Reductions from Power Sector

Although not monetized in the net benefits data, increased hydro imports can substantially reduce CO_2 emissions from the power sector as a whole…even with expanded natural gas capacity.



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Rhode Island Public Energy Partnership (RIPEP)

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RIPEP is…

A *collaboration* among…

- RI Office of Energy Resources
- National Grid
- URI Outreach Center
- Narragansett Bay Commission
- Energy Efficiency and Resource Management Council
- Key State and Municipal Agencies

… to achieve *deep energy savings* in state and municipal facilities

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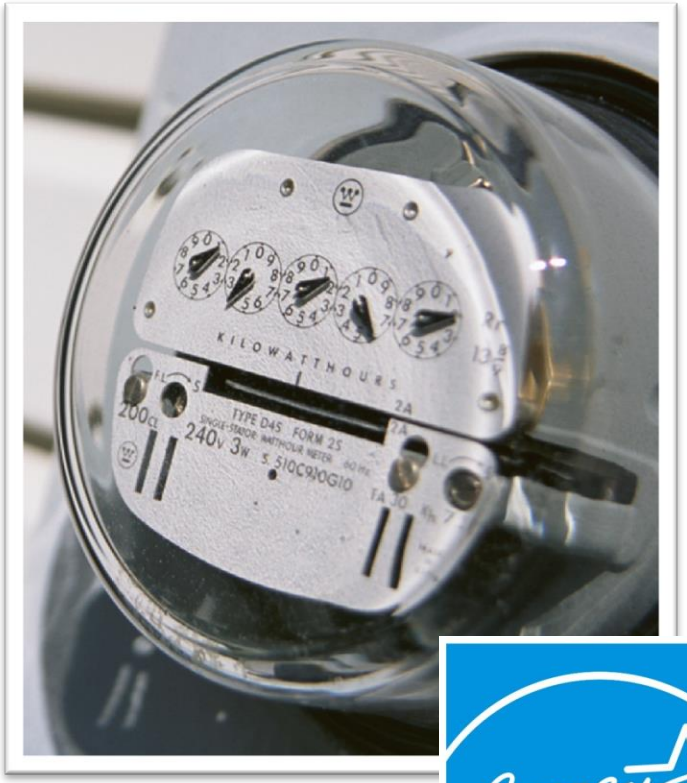
Goals of RIPEP



- Create an **inventory** of energy consumption & expenditure
- Help approximately 100 public facilities achieve **20% energy savings**
- Identify and mitigate **barriers** to efficiency improvements

ENERGY STAR

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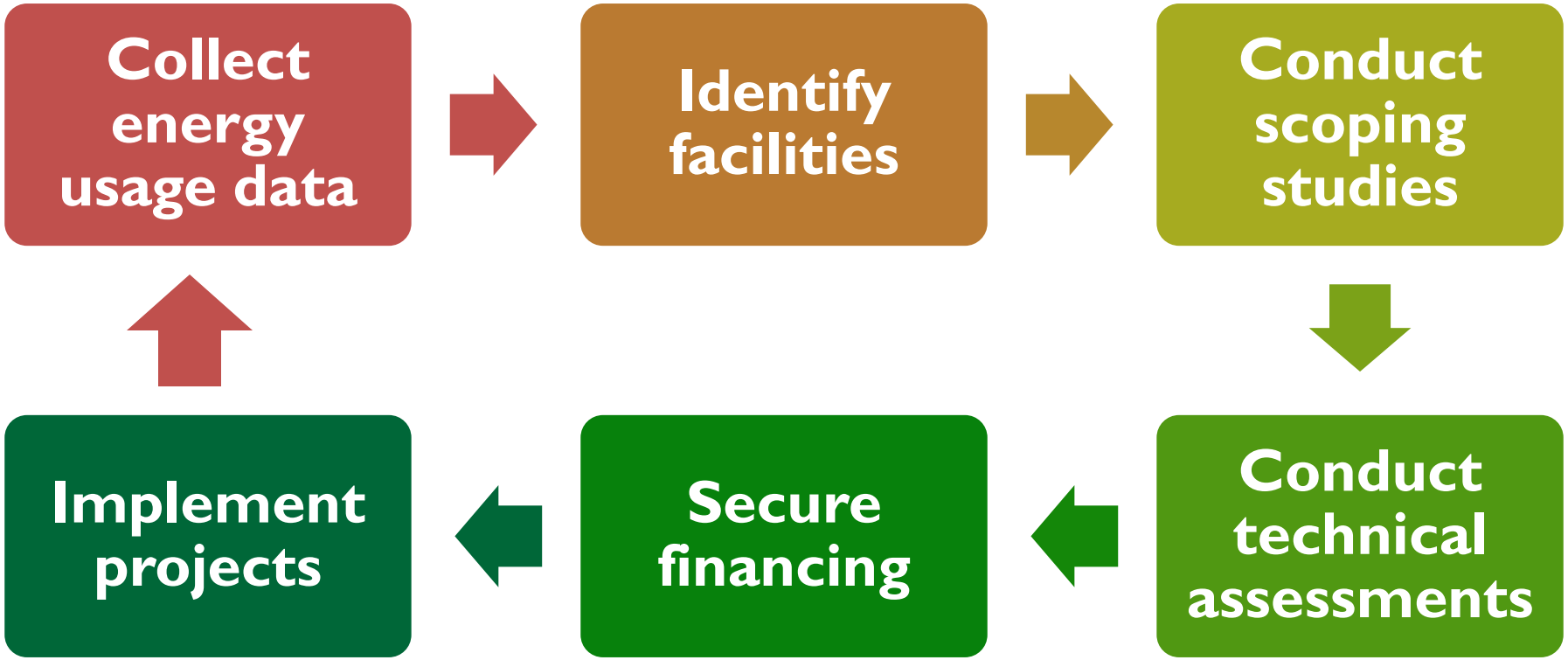
Driving Energy Savings

The process…



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Data Update

Energy Baselines Completed

- 135 State Facilities
- 92 Municipal Facilities
- 114 Schools (~40% of schools)
- 10 Water Supply Facilities

Baselines have been used to identify ~40 locations for scoping studies and energy efficiency retrofits

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Case Study: South Kingstown Building Efficiency Retrofits

Peace Dale Library

70% heating savings

Heating plant replacement, oil to gas conversion & indoor lighting

Public Safety

18% electric savings

Interior & exterior lighting

Town Hall

69% heating savings

Heating plant replacement and oil to natural gas fuel conversion

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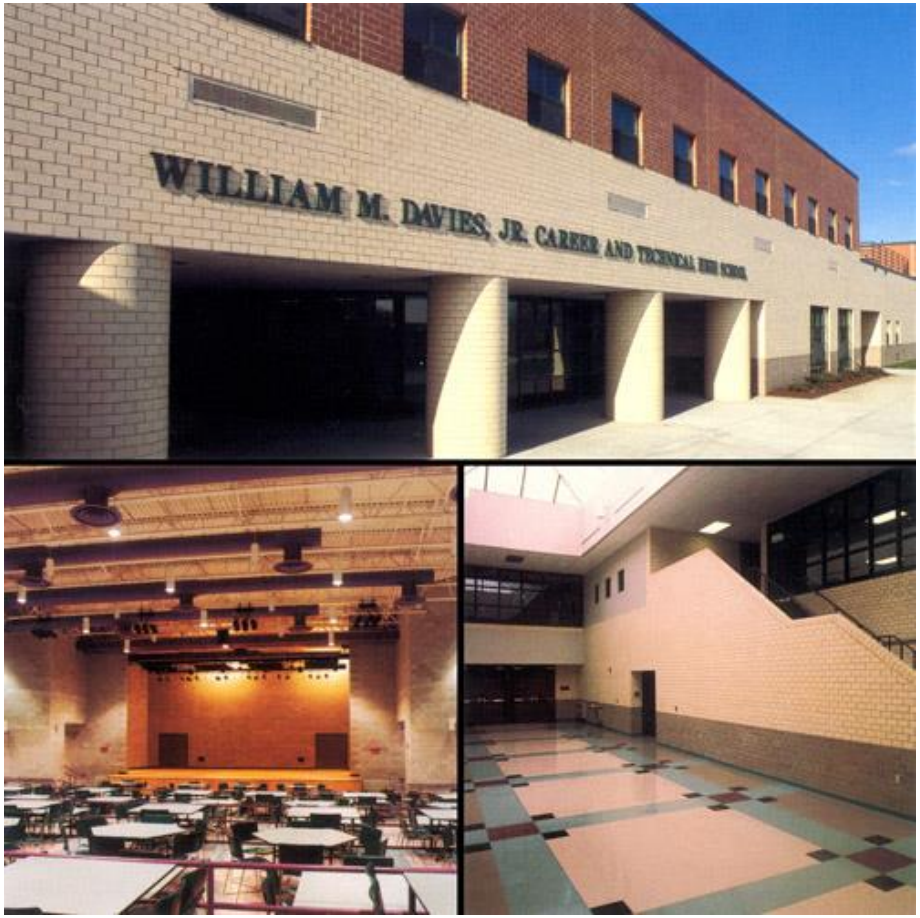
Davies Showcase Project



- High-efficiency lighting
- Variable speed drives on boiler pumps
- Additional control points on energy management system
- Total Project Cost: $582,000
- Utility Incentive: $287,000 (48%)
- Customer Cost: $295,000
  - On-bill repayment
- Simple payback: 1.9 years
- **Estimated over 50% electric reduction**

- Out to bid for HVAC project

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Current Partner Schools

Bristol Warren
- Kickemuit Middle School

Coventry (all electric)
- Blackrock Elementary School
- Western Coventry Elementary School
- Tiogue Elementary School

Cumberland
- North Cumberland Middle School

East Greenwich
- East Greenwich High School

Middletown
- Forest Avenue Elementary School

North Providence
- North Providence High School

Providence
- Asa Messer Elementary School
- Roger Williams Middle School

South Kingstown (all electric)
- Matunuck Elementary School
- West Kingston Elementary School

Tiverton
- Tiverton High School
- Tiverton Middle School

West Warwick
- Maisie Quinn Elementary School
- Greenbush Elementary School

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Current Partner Municipalities

Water Supply Facilities

- Block Island Water Company
- Bristol County Water
- East Smithfield Water
- Kingston Water
- Lincoln Water
- North Kingstown Water
- Paige Associates
- Pawtucket Water
- Providence Water

Municipal Buildings

- Town of Barrington
- Town of Lincoln
- Town of Portsmouth
- City of Providence EMA
- Town of Smithfield

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