STATE OF RHODE ISLAND
ENERGY EFFICIENCY & RESOURCE MANAGEMENT COUNCIL

Frequently Asked Questions

June, 2015

What is Least Cost Procurement?

Least Cost Procurement is the principle of ensuring that the utility purchases the lowest cost energy resource- energy efficiency- first. Rhode Island law requires National Grid to invest in all cost-effective energy efficiency that is less expensive than buying electricity or natural gas (R.I.G.L.§ 39-1-27.7). Electricity from a combined cycle natural gas power plant costs about 12-16 cents per kilowatt-hour (kWh) (Synapse Energy Economics, 2013), while it costs about 4 cents to save a kWh through efficiency (Acadia Center, 2015(c)). Rhode Island's Least Cost Procurement strategy is based on economics, flexible to changing market conditions, and designed to maximize consumer benefits.

What is the Energy Efficiency & Resource Management Council (EERMC)?

The EERMC is made up of representatives of a wide range of consumer interests, including low income, residential, business, industrial, and environmental. The EERMC has a statutory responsibility to oversee National Grid's energy efficiency programs, guide energy efficiency program planning and budgeting, provide stakeholder involvement in program planning, monitor and evaluate the effectiveness of efficiency programs, and promote public awareness and understanding of energy efficiency (R.I.G.L. § 42-140.1). Rhode Island- and other states with similar stakeholder engagement- is seeing among the highest market penetration of efficiency goods and services, the largest savings rates in the country, and the largest per capita economic benefits (Acadia Center, 2015 (c)).

If energy efficiency is such a good deal, why don't people do it on their own?

There are many well-documented market barriers, market failures, and other reasons why consumers consistently fail to adopt cost-saving efficiency measures that are in their own economic best interest (Acadia Center, 2012, 2015 (d)). For example, it's impossible to identify inefficiencies by looking at a typical energy bill. Consumers cannot easily pinpoint what appliance to replace with a more efficient model or what building energy improvements to make to lower their energy costs. It is hard for consumers to calculate and be relatively certain that making an efficiency investment will save money by reducing their energy bills over time. In addition, energy consumers-especially businesses- typically want a 2- to 3- year payback for an efficiency project, but are happy with an 8-year or longer payback for other investment choices (Acadia Center, 2015(c)). Often, it just seems like too much time and effort to research an efficient upgrade, fill out a loan application, find a contractor and get quotes, and supervise workers in their home or business.

How do Rhode Island's Energy Efficiency Programs work?

RI's comprehensive energy efficiency programs are designed to overcome most of these impediments through three primary tools (Acadia Center, 2015(c)):

- **Technical assistance and information**: Guidance from energy efficiency professionals can make energy efficiency improvements more understandable, accessible, and easily implemented by homeowners and business people. Experts help consumers work through the available information

about upfront costs, how to choose a contractor, quotes and pricing, available incentives, and resulting energy savings. Experts also provide back-end assistance through commissioning and training on the use of new equipment to make sure the customer knows how to operate it as intended.

- **Financial incentives and rebates:** Incentives help by reducing the risk (or perceived risk) of not recouping an energy efficiency investment and by guiding customers to the best options. Energy efficiency incentives reduce the length of the payback period and make the project feasible, even for business customers that must conform to strict payback periods. Financial incentives come in several forms. For example, a residential customer is eligible to receive a free home energy assessment during which the auditor will install energy efficient lighting and other measures at no-cost. The customer may also be eligible to have his home weatherized and pay only 50% of the total project cost. Sometimes, the rebate is already built into the price of the energy efficient product. For example, National Grid buys down the price of LED lightbulbs at retailers like Home Depot, Lowes, and local hardware stores so that the sticker price is significantly lower than it otherwise would be. The objective is to design the incentive to the market and fuel type, while simultaneously minimize the costs of saving energy.
- **Efficiency financing**: Access to capital is a barrier to implementing efficiency for some customers, and various forms of financing have been used to cost-effectively address this in many markets. Loans can help homeowners or business owners with efficiency upgrades when access to capital is a problem.

Energy rates are too high already! Doesn't the Energy Efficiency Program Charge just make my bills higher?

One perspective is that RI's energy efficiency programs make our energy bills more expensive. This is misleading at best. Far from being any sort of "extra," the Energy Efficiency Program Charge is the only portion of the bill that helps us save money. Energy efficiency is the least-cost fuel source (Acadia Center, 2015(a)). Buying electricity from a power plant like the natural-gas fired Manchester Street Station costs 12-16 cents per kWh, yet saving power through energy efficiency actions costs about 4 cents per kWh. The Division of Public Utilities-- the state agency charged with watching out for consumer interests-- recently commissioned the research firm Synapse Energy Economics to see what efficiency is really doing for our electric bills. The analysis finds that a homeowner who gets a home energy assessment can save approximately 12% on her electric bill by replacing inefficient lighting and appliances and upgrading home insulation and weatherization. Factor in savings on natural gas or fuel oil use and total spending on energy is even lower. And small business customers, who are eligible for free energy audits, can save as much as 37% to 47% by installing high efficiency equipment and making recommended retrofits (Synapse Energy Economics, 2014).

What if I'm already energy efficient? Why do I have to keep paying?

The energy system is fairly unique in that everyone benefits from energy efficiency. Even consumers who do nothing to their own houses or offices (or have already made energy efficiency upgrades) benefit from their neighbors' energy efficiency actions. By reducing the state's demand for power, we drive down the average price and those savings are passed on to all electric customers. The Division's study finds that these bill savings significantly outweigh the amount—an average of just over 1%-- that we all pay to finance low cost, low risk energy efficiency investments (Synapse Energy Economics, 2014). We benefit from system savings in other ways too. In 2012 and 2013, energy efficiency policies in Massachusetts and Vermont allowed regulators to defer indefinitely more than 10 planned transmission upgrades, saving all New England ratepayers about $416 million in transmission costs (Acadia Center, 2015 (c)). During the winter of 2014 along, without savings from energy efficiency programs, wholesale electricity prices would have been 24% higher and Rhode Island's electricity costs would have been about $98,000,000 higher during the three-month winter period (Acadia Center, 2015(b)).

What is "decoupling?"

In the past, promoting energy efficiency was bad business for most electric and natural gas utilities. Utility revenue increases with sales, and when customers invested in efficient, the utility lost money. Decoupling is an increasingly common way to regulate how a utility gets paid. It breaks the link between the utility's revenue and the amount of energy it sells, removing the disincentive for the utility to be a full partner in energy efficiency and clean resource investments. In order to ensure that National Grid is a full partner in delivering on RI's energy goals, the General Assembly adopted decoupling in 2010 (R.I.G.L § 39-1-27.7.1). Decoupling changes only the way the utility is compensated for its distribution costs. Under decoupling, delivery charges are not based on sales, but rather on how much it costs to run the system and maintain the grid. This revenue cap is determined in a rate proceeding before the Public Utilities Commission, and the utility must justify and manage to these costs. If the utility collects more revenue than allowed by the cap, customers get a credit on their bill next year; if the utility collects less, customers will see a small surcharge. Customer savings achieved through energy efficiency benefit them directly and do not impact the utility's bottom line. As of September 2014, 21 states have electric decoupling and 25 have natural gas decoupling. In the Northeast, Maine, Vermont, Massachusetts, Rhode Island, Connecticut, and New York all have electric decoupling (American Council for an Energy Efficient Economy, 2015).

Rhode Island's real problems are jobs and the economy. Why are we spending money on energy efficiency?

In addition to enabling nation-leading levels of energy savings, Rhode Island's investments in cost-effective, low cost energy efficiency are creating jobs and boosting economic activity. Energy efficiency reduces the cost of doing business in Rhode Island and lowers residents' energy bills, leaving them with more disposable income to spend on other goods and services. These two effects lead to job creation and economic growth. Every $1 million invested in energy efficiency leads to the creation of 45 job-years of employment, and every $1 invested boosts Gross State Product by $4.20 (National Grid, 2014). The results speak for themselves:

- Since 2008, Rhode Island has invested $558 million in energy efficiency and consumers have realized $1.99 billion in economic benefits.
- The state's energy efficiency investments will create over 25,000 job-years of employment economy-wide and add $2.34 billion to Gross State Product.

Rhode Island's 2014 Energy Efficiency investments alone will generate the following benefits over a 13 year period (Rhode Island Energy Efficiency and Resource Management Council, 2015):

- Create 3,607 job-years of employment
- Boost Gross State Product by $331 million
- Increase personal income by $244 million
- Increase state tax revenue by $15 million
- In 2014, 618 full-time equivalent jobs were directly related to the delivery of the state's energy efficiency programs, a 15.7% increase from 2013.
- 899 companies were involved with delivering Rhode Island's energy efficiency programs, with 77% of those companies located in Rhode Island.

Why does National Grid earn a "performance incentive" energy efficiency?

There is an inherent conflict between the traditional utility business model and Rhode Island's Least Cost Procurement policy to reduce the state's energy costs by investing in all cost-effective energy efficiency. Under the traditional business model, the utility earns revenue when it sells electricity (or natural gas) – energy efficiency directly undermines the utility's bottom line by reducing sales. Rhode Island adopted decoupling in

order to address this conflict. Decoupling keeps a utility from over or under-collecting an approved revenue cap due to increases or decreases in sales. However, decoupling only removes the *disincentive* for energy efficiency; it does not provide an *incentive* for the utility to be a full partner in implementing Least Cost Procurement. Performance incentives are a key tool to motivate the utility to achieve high levels of energy efficiency savings by:

- Allowing energy efficiency activity by the utility to be a source of earnings, rather than just a pass-through expense.
- Putting energy efficiency investments on a more comparable footing with other types of utility investments, such as in new power plants or transmission and distribution, which are allowed to earn a rate of return.
- Offering a financial reward and motivation directly tied to achieving measureable successes in saving energy.

The performance incentive is one effective tool for delivering economic benefits and cost savings to Rhode Islanders that far exceed the amount invested. Between 2011 and 2014, Rhode Island has invested about $140 million in cost-effective energy efficiency and National Grid has been rewarded approximately $11 million for achieving those energy savings. As a result, Rhode Island consumers have realized $745 million in net economic benefits- an amount 66 times greater than the total performance incentive reward. National Grid is given the opportunity to earn 5% of the total energy efficiency spending budget for achieving 100% of the energy savings goals approved by the Public Utilities Commission. It is worth noting that Rhode Island offers one of the lowest performance incentives for energy efficiency in the country, while achieving highest-in-the-nation energy savings goals. The median award among states with similarly-designed performance incentives is 8%, with a low of 4.2% and a high of 15% (American Council for an Energy Efficient Economy, 2015). The performance incentive signals that utility executives must take energy efficiency seriously in Rhode Island, and devote the necessary resources to achieving the energy savings goals set by the Public Utilities Commission. The benefits to Rhode Island consumers far outweigh the cost of both the energy efficiency investment and the performance incentive reward.

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Note: This document was authored by Abigail Anthony, Rhode Island Director of Acadia Center and has been endorsed by the Energy Efficiency and Resource Management Council for official use.

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