

## 2015-2017 Least Cost Procurement Plan



Presentation to the Rhode Island PUC  
October 15, 2014

- Energy Efficiency Procurement Plan
  - Purpose of the plan
  - Themes
  - Electric and Gas Funding Plans
  - Shareholder incentive and discount rate
- System Reliability Procurement Plan

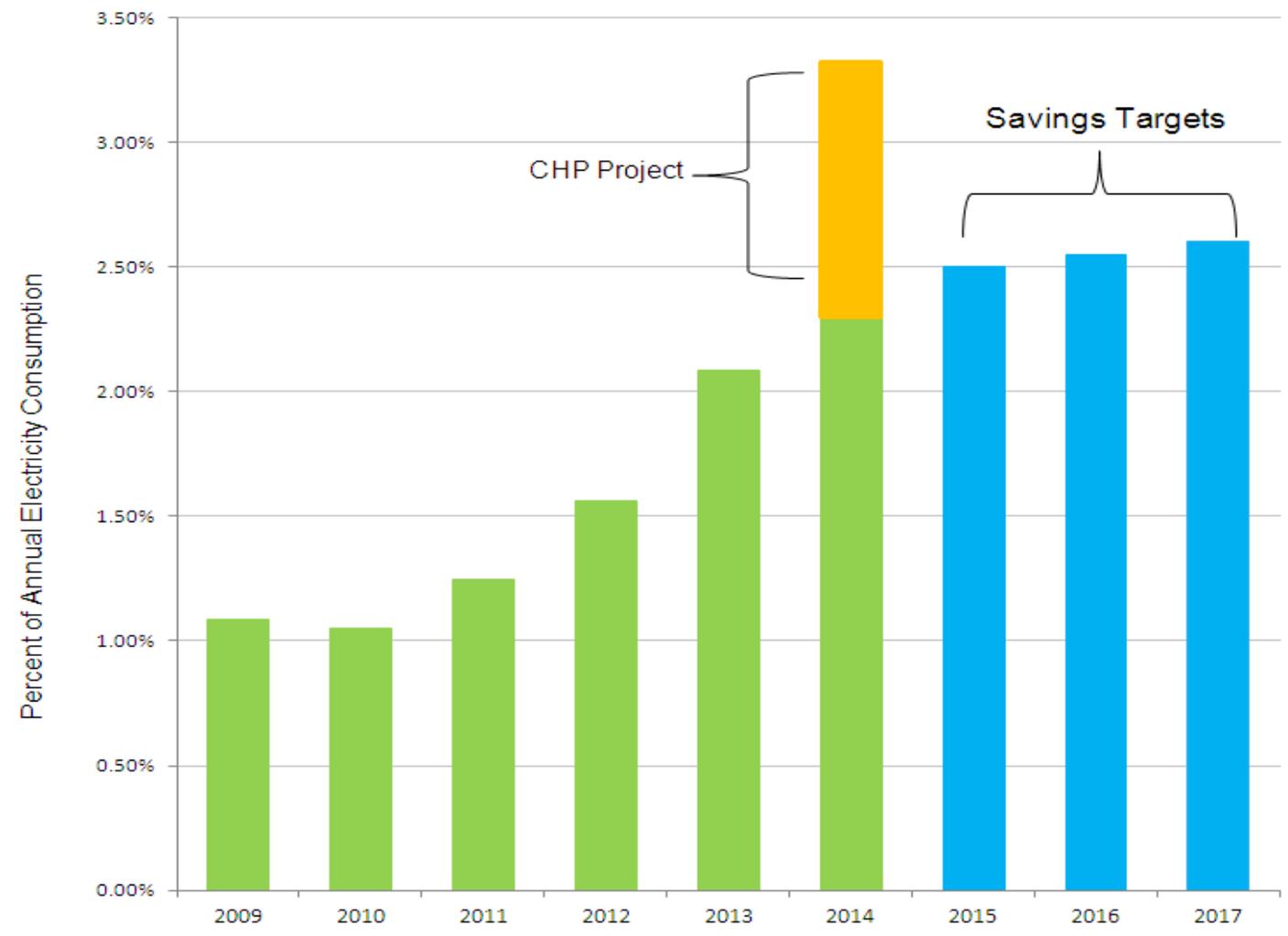
# What is the Energy Efficiency Procurement Plan?

- The next step for sustainable energy efficiency in Rhode Island
- A high level description of the energy efficiency strategies for next three years, 2015-17
- A roadmap for the more detailed program plans
  - 2015 Plan to be filed on November 3
- An illustration of our best estimate as of September 1 of program costs, customer charges, and consumer benefits

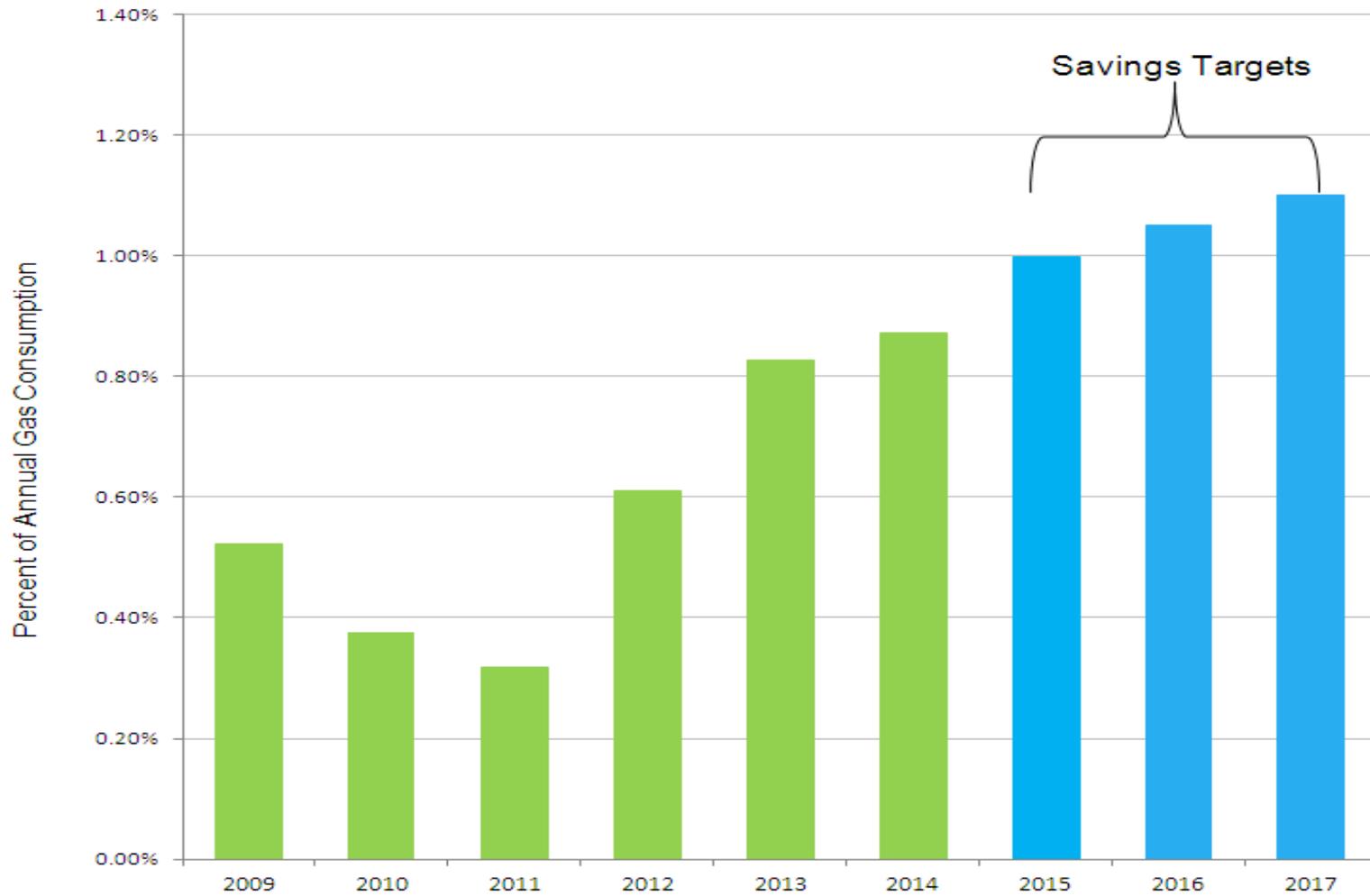
- It means the PUC approves the overall strategic direction and illustrative quantitative parameters for the next three years
- The PUC retains its rights to conduct a separate review of the 2015 Energy Efficiency (EE) Program Plan and System Reliability Procurement (SRP) Report, and act accordingly on that review
- The Company can complete 2015 EE Program Plan and SRP Report for filing on November 3, as they are being developed consistent with this Least Cost Procurement Plan (LCPP)

- More details on program plans
- Updated projection of revenue from Forward Capacity Market, 2014 projected year end fund balance and sales forecast
- Adjustment to EE program charge calculations
- Revisions of savings estimates based on detail measure mix and latest evaluation results, while still achieving 2015 targets
- Revision of program budgets, based on detailed program plans, analysis and management of cost drivers, measure mix, and negotiations between parties

# Electric Savings Goals



# Natural Gas Savings Goals



- Themes are effective in characterizing and communicating program strategy and direction
  - **Promoting cost efficiency**
  - **Empowering communities and markets to be energy efficient**
  - **Innovating to capture untapped savings**
  - **Developing opportunities for system-level savings and integration**

## Promoting cost efficiency

- Stretch dollars through financing.
- Expand upstream and behavioral programs.
- Continue Codes and Standards efforts.
- Use data to lower marketing costs.



## Empowering communities and markets to be energy efficient

- Leverage cities, towns, and communities.
- Expand and create networks with RI energy stakeholders.
- Leverage existing contractor and retailer networks.
- Enhance current programs to increase participation and reach new markets.



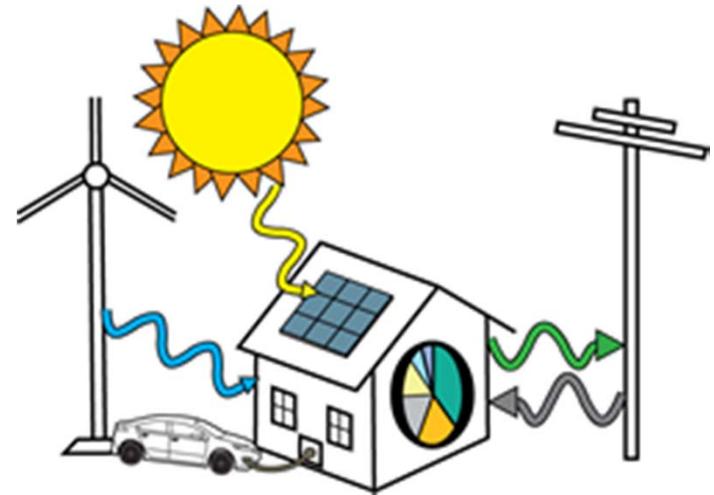
## Innovating to capture untapped savings

- Research new products, technology, and initiatives.
- Lay the foundation for Zero Energy Ready (ZER) buildings.
- Promoting the deployment of LED Street Lighting.
- Examine the potential for strategic electrification.



## Developing opportunities for system-level savings and integration

- EE Strategies include:
  - Promote CHP, integrate EE and renewable energy, pilot behavioral demand response.
- Participate in Collaborative System Integration Working Group



- Business as usual case:
  - 2013 actual measure mix and costs
  - 2014 year to date measure mix and costs
- Changes to business as usual:
  - Increase measure quantity to meet savings targets
  - New implementation strategies
  - Customer interest and demand for services or measures
  - Market transformation
  - Evaluation results

<b>Electric Programs</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
<b>Annual MWh Savings</b>	<b>193,603</b>	<b>197,475</b>	<b>201,347</b>
<b>Annual Peak kW Savings</b>	<b>31,447</b>	<b>32,209</b>	<b>32,181</b>
<b>Total Benefits</b>	<b>\$282,875,002</b>	<b>\$303,660,783</b>	<b>\$ 316,528,156</b>
<b>Total Spending</b>	<b>\$ 86,741,232</b>	<b>\$ 86,052,775</b>	<b>\$ 90,867,248</b>
<b>Benefit Cost Ratio</b>	<b>2.61</b>	<b>2.82</b>	<b>2.76</b>
<b>Cost of Saved Energy per kWh</b>	<b>\$ 0.055</b>	<b>\$ 0.052</b>	<b>\$ 0.053</b>
<b>EE Program Charge per kWh</b>	<b>\$ 0.00966</b>	<b>\$ 0.00997</b>	<b>\$ 0.00941</b>

# 2015-2017 Natural Gas Summary



<b>Gas Programs</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
<b>Annual MMBtu Savings</b>	<b>376,915</b>	<b>395,760</b>	<b>414,606</b>
<b>Total Benefits</b>	<b>\$ 59,415,057</b>	<b>\$ 64,517,962</b>	<b>\$ 67,758,168</b>
<b>Total Spending</b>	<b>\$ 24,416,348</b>	<b>\$ 25,778,730</b>	<b>\$ 27,388,832</b>
<b>Benefit Cost Ratio</b>	<b>2.02</b>	<b>2.07</b>	<b>2.05</b>
<b>Cost of Saved Energy per MMBtu</b>	<b>\$ 7.27</b>	<b>\$ 7.23</b>	<b>\$ 7.28</b>
<b>EE Program Charge per Dth</b>	<b>\$ 0.681</b>	<b>\$ 0.658</b>	<b>\$ 0.697</b>



- Incentive mechanism will remain the same as the 2014 EE Program Plan except for a proposed performance metric to incent demand savings (kW).
- Target based-incentive rate split 70% kWh and 30% kW.
  - 3.5% of spending budget for achieving 100% of energy goals.
  - 1.5% of spending budget for meeting 100% of demand goals.
  - Does not increase overall incentive.
- Gas incentive rate remains at 5.0% of spending budget.

- Plan and the benefit-cost model are stated in present value terms.
- Discount rate equals the 12-month average of the historic yields from a twenty-year US Treasury note, using 2013 to determine the twelve-month average.
- Reflects revised Standards “a low-risk discount rate which would indicate that energy efficiency is a low-risk resource in terms of cost of capital risk, project risk, and portfolio risk.”
- The discount rate will be reviewed and updated for each EE Program Plan.

- Plan is consistent with legislative/regulatory requirements
  - Consistent with revised standards
  - Cost effective
  - Less expensive than supply
  - Meets approved savings targets
- Builds upon strengths while delivering new and innovative services for customers
- Incorporates recommendations from the Collaborative and Council
- Fulfills our commitment to maintain positive trajectory for EE

# 2015 – 2017 System Reliability Procurement Plan

- A high level description of the system reliability procurement strategies for next three years, 2015-17
- A roadmap for the more detailed annual reports
  - 2015 Report to be filed on November 3, 2014
- Does not contain cost information because, unlike EE, there are no specific goals to design to and it is hard to predict what projects might be undertaken over coming three years

# System Reliability Procurement Screening

- **As stated in Chapter 2 the LCP Standards, capital projects will continue to be screened against the 4 criteria in Section D**
  - Wires project budget > \$1M
  - Need must be unrelated to asset condition
  - Wires project start of construction must be at least 36 months in the future
  - Need must be <20% of total area's load
- **Needs passing above criteria will be further screened for NWAs based on factors including:**
  - Ability to meet the identified system needs
  - Anticipated reliability of the alternatives
  - Risks associated with each alternative
  - Potential for synergy savings based on alternatives that address multiple needs
  - Operational complexity and flexibility
  - Implementation issues
  - Customer impacts

- **Explore market-based solutions**
  - E.g. 3<sup>rd</sup> party proposals and competitive procurement
  - Test potential for increasing diversity and decreasing costs
- **Apply NWA as a partial solution**
  - Reduce scope of wires solution vs defer
  - May apply more to transmission projects than distribution
- **Increase coordination to maximize benefits to customers**
  - Optimize levels of overlap among LCP initiatives
  - Build on communication and collaboration already taking place between EE and SRP
- **Maximize benefits to ratepayers**
  - Examine funding sources and benefit/cost mechanisms
- **Apply lessons learned to enhance future results**
  - Utilize the benefit of experience in 2012-2014
  - Apply results of the on-going evaluation of the Little Compton and Tiverton pilot

# 2015 – 2017 NWA Technology Considerations

- **EE and Demand Response**
  - Build on existing progress
  - Introduce new EE measures; test new forms of DR
- **Renewables and Energy Storage**
  - Coordinate with RI OER to incorporate solar through their Solarize initiative
  - Explore energy storage as a complement to solar to maximize peak load reduction
- **Volt Var Optimization**
  - Incorporate lessons learned from the Company's current VVO pilot in RI
- **Dynamic Pricing**
  - Explore options and potential for incentivizing customers who proactively save energy
  - E.g. charging for electric vehicles, peak load rebates, time of use or tiered rates etc.

# Questions and Discussion