

Energy Efficiency Resource Standard (EERS) Stakeholder Workshop

New Hampshire Cost Effectiveness Testing

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SAVE THE PLANET, SAVE @ HOME.
SAVE ENERGY AT HOME. HELP PROTECT YOUR FAMILY'S FUTURE.



SAVE ENERGY. SAVE @ MUNICIPALITIES.
SAVE ENERGY AND USE THE EXTRA RESOURCES TO IMPROVE YOUR TOWN'S ROADS.

Total Resource Cost (TRC) Test

Established as NH's Test by the NH Energy Efficiency Working Group (1999)

NH's TRC Test includes:

Benefits

- Energy Savings
- Demand Savings
- DRIPE
- Limited non-energy benefits, such as water and wastewater savings, avoided O&M savings

Costs

- Program costs
- Customers' out-of-pocket costs

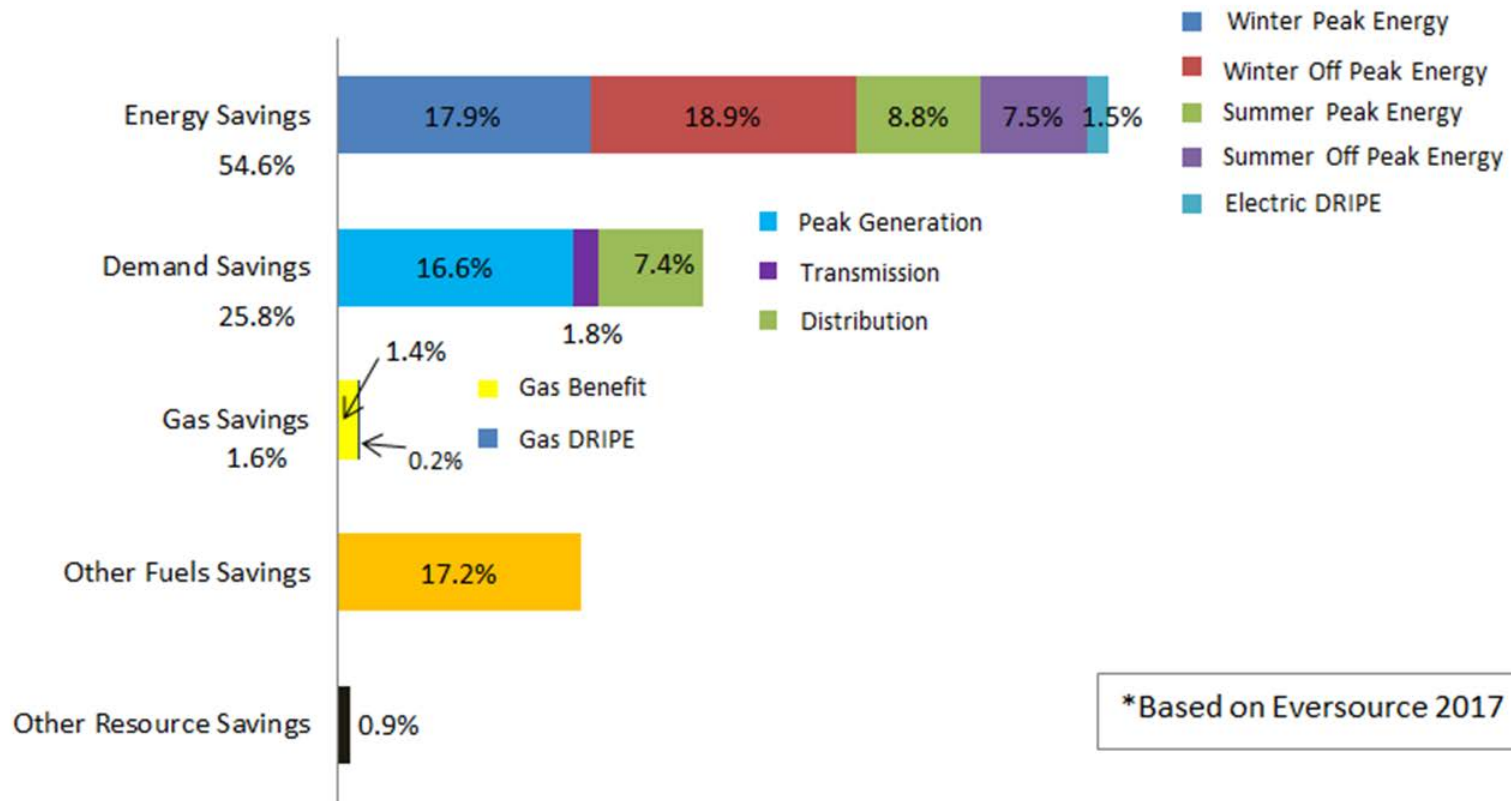
$$\text{TRC Test} = \frac{((\text{Savings} \times \text{Avoided Costs}) + (\text{Other Benefits}))}{(\text{Program Costs} + \text{Customer Costs})}$$

(Benefits) **(Costs)**

Benefits by Category

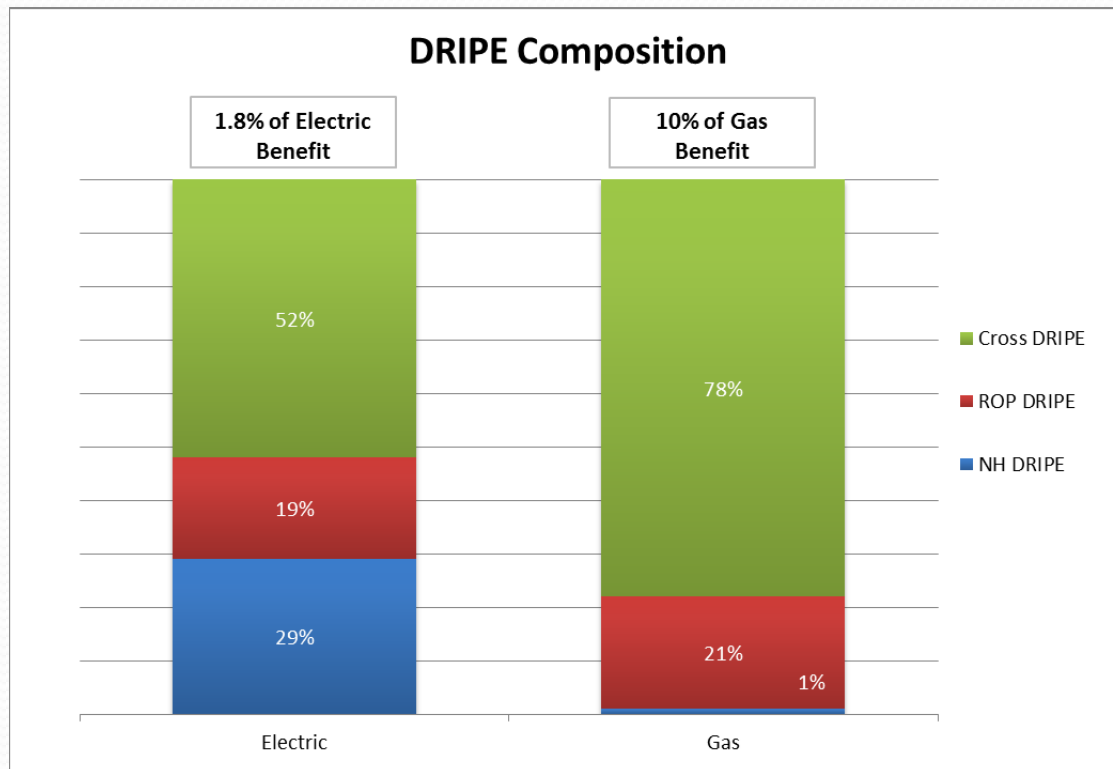
(Eversource 2017 Plan)

% Benefit



DRIPE – Demand Reduction Induced Price Effect (Eversource 2017 Plan)

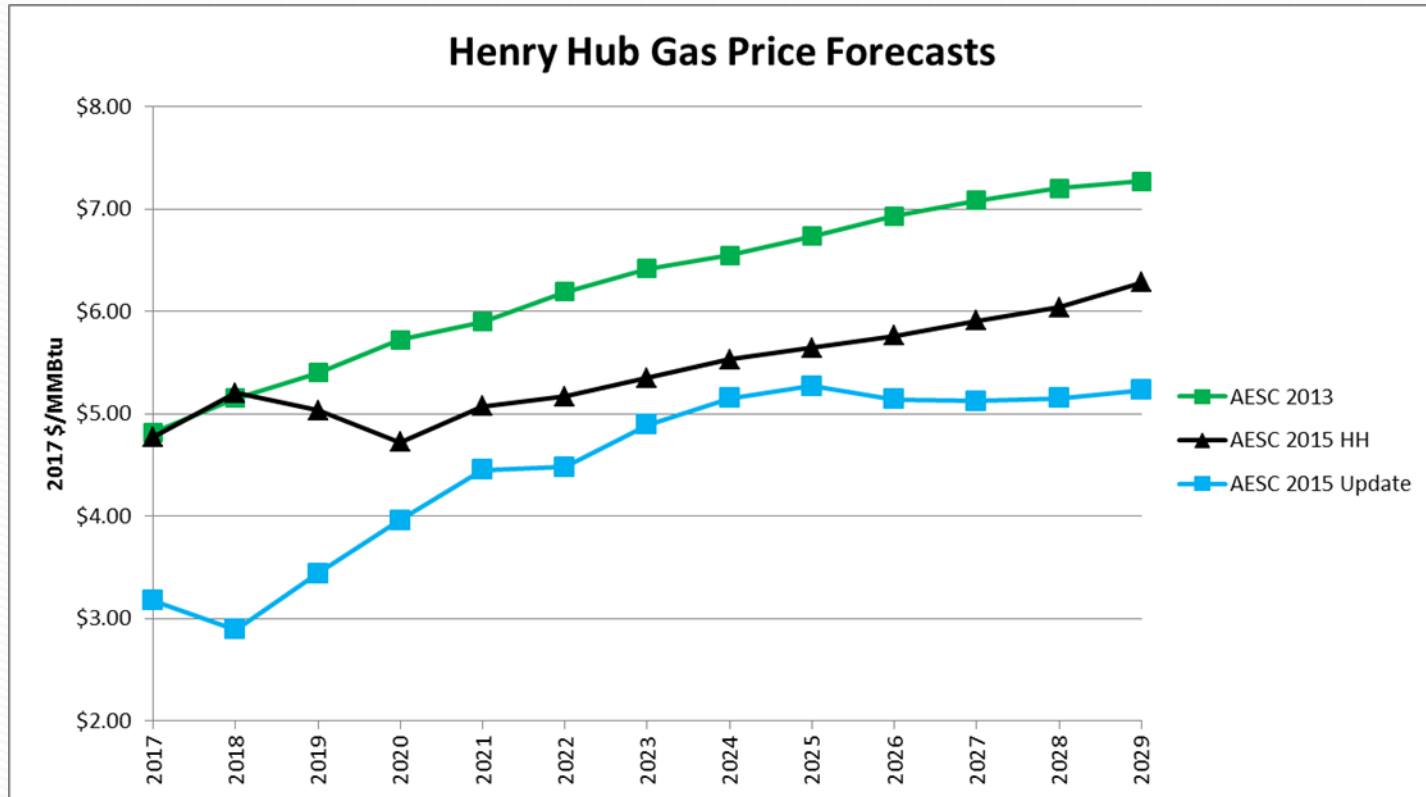
- Reduced Supply Costs resulting from lower demand
- Rest Of Pool DRIPE reflects the regional energy market
- Cross DRIPE reflects linkage between gas and electric markets
- DRIPE benefits declining sharply in 2018



Avoided Cost Study (AESC)

- Avoided Energy Supply Component (AESC) Study Group;
 - 6 New England States
 - Program Administrators, State Government Representatives, EE Consultants
- 2015 AESC was the most recent prior study
 - Study has been done every 2 years
 - Now will be 3 year cycle with option for interim updates
 - Based on updated market prices and forecasts
- 2015 AESC Update – for NH, VT & RI
- Significant decline in avoided costs for both electric and natural gas due primarily to lower projected natural gas costs as well as pipeline expansion projections

Declining Natural Gas Prices Driving Lower Avoided Costs



- ~10 Percent Decrease Electric (2017 – 2018)
- ~15 Percent Decrease Gas (2017 – 2018)

Benefit-Cost Testing Illustration

Savings	Avoided Costs	NPV (10 years)
1036 kWh	\$0.09	\$799
0.4 kW	\$276.79	\$949
31.1 MMBtu (Oil)	\$17.00	\$4,533
500 gallons (Water)	\$0.008	\$34
Total Benefit		\$6,316

Customer Cost	Program Cost	Total Cost
\$2,088	\$3,155	\$5,243

Total Benefit	Total Cost	B/C
\$6,316	\$5,243	1.2

Current Factors Impacting Measure and Program Cost-Effectiveness Screening

- Declining avoided costs for fossil fuels, including natural gas
- Increases in baselines
- Approach to NEIs compared to surrounding states

Questions?

