TRC vs PAC: From 2012 Efficiency Plan

- Average of All Programs
- Commercial Retrofit
- Electronics and Plug Loads
- Residential Lighting
- Res. New Construction
- Schools
- C&I New Construction
- 2nd Refrig. Coll. and Recyc
- Pool Pumps
- Residential A/C
- Low Income Weatherization

Graph showing Benefit-Cost Ratio for each category, comparing PAC and TRC.
August 2011 study prepared by Tetra Tech and NMR

Goals:
- Reliably quantify NEIs associated with PA programs.
- Assess reliability and applicability of NEI values in literature to MA PA programs.
- Quantify applicable NEI’s to residential and low-income programs.

Reviewed 56 non-energy impacts.
Quantified 31 non-energy impacts.
Utility Perspective

- Reviewed 11 impacts, quantified 8 distinct impacts
- Arrearages
- Bad debt write-off
- Rate discounts
- Customer calls
- Collection notices
- Insurance savings

Participant Perspective

- Reviewed 29 impacts, quantified 12 distinct impacts
- Improved comfort levels
- Quieter interior environment
- Increased housing property value
- Reduced water and sewer costs
- More durable home and less maintenance
- Health related NEIs
- Improved safety
### Societal Perspective
- Reviewed 6 impacts, quantified 1 distinct impact
- National security

### Participant Perspective (Landlord)
- Reviewed and quantified 7 distinct impacts
- Reduced tenant turnover
- Improved marketability to find renters
- Property values
- Equipment maintenance (HVAC)
- Reduced lighting maintenance
- Reduced tenant complaints
- Durability of property

### Non-Resource Benefits
- Reviewed and quantified 3 distinct impacts
- Avoided landfill space
- Reduced emissions from recycling and incineration
ACP as a Proxy for the Cost of Compliance with Environmental Regulations – Implications
Cost of Saved Energy for 2010 MA EE Programs

- Avoided Cost Cap w/ ACP
- Current Avoided Cost Cap
- Average Cost of Programs: 3.4 cents/kWh

Levelized Cost (cents/kWh)

Energy Savings (MWh)

- Residential
- Low Income
- C&I

C&I Large Retrofit
C&I Small Retrofit
Low-Income 1 Retrofit
to 4 Family