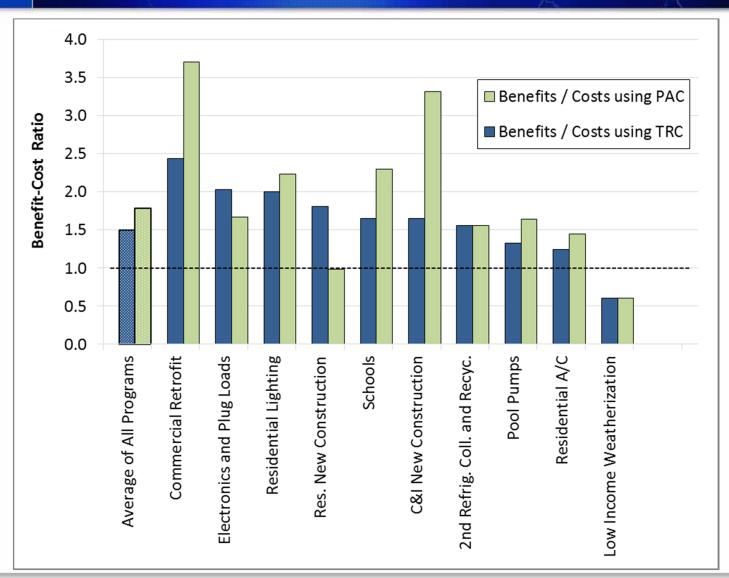


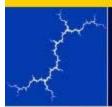


# Energy Efficiency Cost-Effectiveness Tests

NEEP Annual Public Meeting
October 12, 2011
Tim Woolf

# TRC vs PAC: From 2012 Efficiency Plan





### MA Non-Energy Impacts (NEI) Study

- 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.



#### MA NEI Study: Non-Energy Categories - 1

#### **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



### MA NEI Study: Non-Energy Categories - 2

#### **Societal Perspective**

- Reviewed 6 impacts, quantified 1 distinct impact
- National security

#### **Non-Resource Benefits**

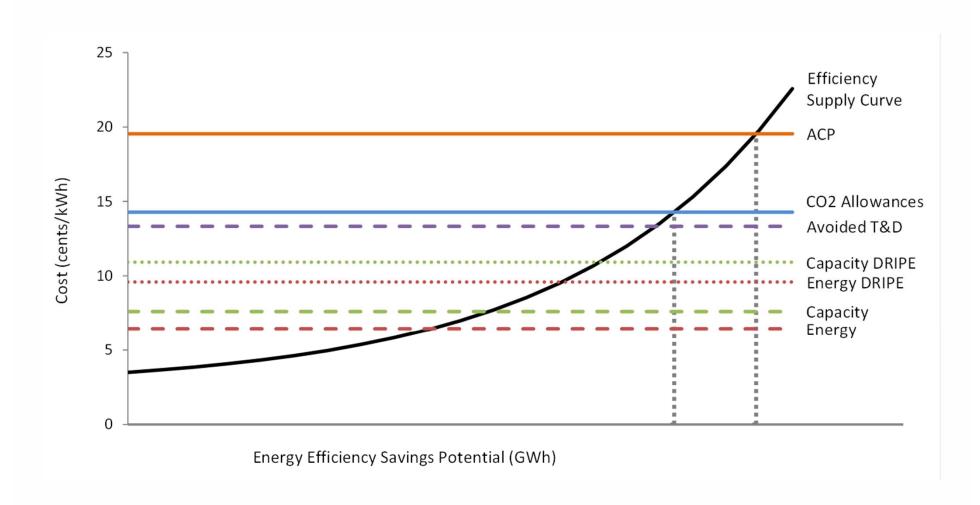
- Reviewed and quantified
   3 distinct impacts
- Avoided landfill space
- Reduced emissions from recycling and incineration

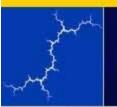
# Participant Perspective (Landlord)

- 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



# ACP as a Proxy for the Cost of Compliance with Environmental Regulations – Implications





# Cost of Saved Energy for 2010 MA EE Programs

