Overview of Benefits to Energy Providers & Governments

An Evaluator Perspective
What are Non-Energy Benefits (NEBS)?

- Low Income Weatherization Programs
- Benefit Subset
- Not Costs
- Differentiated from
  - Documentable Energy Savings
  - Avoided Externalities (e.g., Emissions)
Categories of NEBs

- Energy Provider
- Ratepayer
- Indirect Government/Societal
Energy Provider NEBs

- Arrearages
- Bad-Deb Write Off
- Terminations
- Reconnections
- Rate Discounts
- Customer Calls
- Collection Activities
- Safety Emergency Calls
- Electrical System Reliability
Ratepayer NEBs

- Ratepayer Benefits
  - Comfort Levels
  - Sense of Environmentalism
  - Quiet
    - Dishwasher
  - Lighting Quality
  - Lighting Life
  - Property Value
  - Sale or Lease Ease
  - Energy Price Increase Buffer
  - Reduced Need to Move
  - Reduced Water Usage
  - Reduced Detergent Usage
  - More Durable Equipment
  - More Money for Other Uses
  - Health Care
  - Health Related
  - Fewer Colds
  - Improved Indoor Air Quality
  - Ease of Maintaining Healthy Humidity
  - Improved Safety
  - Heat
  - Warm Up Delay
Government NEBs

- Equity
- Inspection Cost Savings
- Health
- Safety
- Resource Preservation – Water
- National Security
Evaluator Perspective

- Availability of data
- Ability to measure

- Most NEBs are estimated incompletely – it is difficult, impossible, or cost prohibitive to measure every element
- Most NEBs are estimated with little empirical certainty
- Most NEBs are not generalizable, presenting issues of representativeness
Economic and Non-Economic NEBs

• Economic NEBs (and costs) translate into dollar flows in the economy
  – Reduced sick time
  – Improved property value
  – Improved productivity

• Non-economic NEBs have perceived value but do not result in monetary flows
  – Feelings, perceptions
  – Awareness, knowledge
NEB Measurement Examples

- Regularly measured/calculated
  - Arrearages
  - Quantifiable reductions in:
    - Illness
    - Lost days of work
    - Fire/safety losses
    - Shut-offs, etc.
NEB Measurement Challenges

- Not regularly measured/calculated
  - Sense of environmentalism
  - Quiet, comfort
  - Lighting quality
  - Reduction in environmental problems from emissions
North American Utility Experience with NEBs

- [Still working on these slides should have 2-3 examples – NE utilities, Hydro Quebec, CA]
Questions?

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