

Integrated Energy Resources

An EM&V Framework for Delaware

Consultants' Initial Plan, for May 2015 Energy Efficiency Advisory Council Meeting

Presentation Outline – Structure vs. Content

Structure covers how evaluation activities occur

- Roles and Responsibilities
- Collaborative philosophy
- Content covers some of the key issues in evaluation
 - Application of savings
 - Cost-effectiveness
 - TRM Updates



A Collaborative EM&V Framework

- More emphasis on flexibility and cost-efficiency
- Utilize existing best practices, standards, and protocols
- Result: better outcomes, in less time, for less \$\$
 - Everyone agrees beforehand on methodology, avoids most post-evaluation arguments or need to redo studies
- Statewide efforts whenever possible
 - More cost-effective
 - Adds explanatory power



EM&V Roster

- EM&V Collaborative A group composed of AEP/PA representatives and EEAC's consultants
- DNREC State authority on EM&V
- EEAC Consultants Team includes experts in program areas and evaluation
- AEPs/PAs Any AEP, plus SEU; each will designate a representative for the Collaborative
- Independent Evaluation Contractor(s) selected jointly by Collaborative by competitive bid



Positions Played

- EM&V Collaborative Issues RFP for IEC(s); establishes multi-year evaluation plan and budget; discusses and approves individual study plans, work products, and reports
- DNREC Promulgates regulations; hires and manages EEAC Consultant
- EEAC Consultants Reviews and approves selection of IECs; oversees planning of EM&V activities
- AEPs/PAs Contracts with IECs; tracks and provides data; identifies EM&V needs
- Independent Evaluation Contractor(s) completes all primary EM&V activities





Programs Evaluated Using Ex-Post Verified Net Savings

- Gross savings determined by best available method (e.g., billing analysis, engineering analysis, TRM deemed savings)
- Savings as verified, may be adjusted based on primary EM&V but no retrospective changes to deemed savings Net savings calculated using pre-determined NTG ratios, prospectively
- Changes to TRM are prospective, covered in annual update



Portfolio Level Cost-effectiveness Using TRC

- Total Resource Cost (TRC) test applied as per Framework
- Captures full effective useful life of measures, discounting at societal rate
- Benefits
 - All avoided energy and capacity benefits
 - DRIPE
 - Non-energy benefits (quantifiable and/or adder)
- Costs
 - Program administration costs
 - Incremental measure costs (up to and including labor as appropriate)
 - Non-energy costs (quantifiable and/or adder)



Regular TRM Updates

Aligned with the update process for the Mid-Atlantic TRM

- Updates completed July 1
 - Programs launched January 1 will use updated data in planning for the subsequent year
 - Programs launched in advance of January 1 of the subsequent year will use existing data until the start of the next program year
- DNREC maintains the proposed list of measure additions, deletions, or modifications for inclusion in the update



Making Utilities Whole: Three Components

- Recover 100% of program costs
- Remove dis-incentives: address lost net revenues
- Provide positive incentives: measurable metrics







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Thank You

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Guidance on Cost Recovery and Performance Incentives

- Caveat: for those AEPs that are regulated by the PSC, cost recovery and performance incentives are the purview of the Commission
- Three key components
 - Recover program costs
 - Address lost net revenues
 - Provide incentives (evaluators need to recommend measurable metrics)





Collect 100% of Actual Program Costs

- Strive for proportional allocation of costs by customer class, except for low income
- Amortizing program costs to better align with program benefits has merit, but interest rate likely < WACC</p>
- Annual true-up of under/over-collection
- Program costs NOT included in rate-base



Remove Dis-incentives for Efficiency

- Decoupling is a possibility
- Lost revenue adjustments should NOT be made in isolation; AEPs should not earn above actual net lost revenue
 - Example: Verified efficiency savings of 1,00 MWh, but AEP only 350 MWh short (e.g., hot summer, economic expansion)
- Annual true-up



Provide Positive Incentives

- Give EE/DR similar earnings potential as supply-side investments
- Protect ratepayers against excessive awards
- Based on measureable performance under the AEP's control
- Tied to outcomes (e.g., verified savings, market transformation, cost of savings) rather than actions (e.g., expenditures, meetings, events)
- Scalable, multi-variate, and multi-year

