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**EO Collaborative  
Evaluation Workgroup Meeting Notes  
December 7, 2009, 1:30 - 4:00**

**1. Michigan Energy Measures Database Overview** – by Rick Morgan of Morgan Marketing Partners. Note: Presentation was recorded and will be available on the website.

- What database is and isn't.
  - Consistent assumptions to be applied across utilities.
  - Accurate information that may be used in EE programs.
  - Documentation for regulatory review (reconciliations).
  - Measures: deemed, weather sensitive and non weather sensitive.
  - Review of incentive programs in other states.
  - Review recommendations of energy organizations (Energy Star, etc.).
2. Objectives: *See presentation on website*
- Includes measures not traditionally considered to be energy effective.
  - Customized modeling for Michigan, allowing for consistent application across the state.
  - Definition of terms:
    - “Deemed” – forward looking values for the upcoming year, policy process based on data provided to consultant.
    - Weather sensitive and Non weather sensitive data.
    - Not in database – measures with large variability of application and use. Considered “custom” measures. Measures may shift between categories, i.e. new technology until enough experience is gathered to determine a baseline.
    - Does not include technical or market potential.
  - Non weather sensitive
    - Measure selection, evaluation and documentation.
    - Cost estimation.
    - C&I Measures.
      - ⇒ Detail behind the spreadsheet numbers: hours of operation, on-peak/non peak coincidence factor, Kwh, assumed measure life, size, recommended size, installation costs, miscellaneous notes. (List of acronyms contained on another spreadsheet.)
      - ⇒ Coincidence factor is the same for all utilities.
      - ⇒ Changes and new items are highlighted in yellow.

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- Point made that the information contained in the database shapes the use of the database, i.e. policy.
- Need for factors to be applied when it comes to program evaluation (net-to-gross). Factors should not be “buried” so they can be reviewed in the course of doing a program evaluation.
- Keep in mind the discount factor may increase, not just decrease.
- Methodology and Assumptions document reflects back to the notes in the spreadsheets.

Question/Comment (Q/C): Marty Kushler: Early replacement must be kept in mind by the utilities. Documentation and verification of how many measures were installed is necessary. (CFL bulb example) Static database need a way of customizing/targeting those assumptions to reflect real world.

- Residential CFL Savings
  - ⇒ Reasonable and conservative.
  - ⇒ CA study: realization rates over time, installation rates. Small rate (15%) not installed the first year.
  - ⇒ Final number is a product of the two: net to gross multiplied by the verified (gross) savings.
- Weather Sensitive Measures
  - ⇒ Took into account different building types and structure age (both residential and C&I).
  - ⇒ 7 different (MI cities) regions.
  - ⇒ Modeling simulations done at various levels of energy efficiency.
  - ⇒ Identify baselines (may be adjusted).
  - ⇒ Savings – based on field observations.
  - ⇒ Select mix of variables for weighted average for a measure: weather zone, age of homes, fuel type.

Q/C: Airports were chosen for temperature data and they tend to be located by water making their readings irrelevant.

Pete Jacobs via telephone: No adjustments were made for this, note made that the Lansing and Detroit Metro airports are inland. If a city were chosen to represent one of the 7 regions, would that same limitation apply? No good answer, look at availability of weather data contrasting lakeside vs. inland.

Rick Morgan: Consensus of the group to change this, if this is an important issue. Cost/benefit analysis probably is 1/100 of a per cent. Wind is included in the model. Model was developed by talking to the group and getting their input. Looked at what the return was for including/excluding cities. Up to future groups if this is considered important enough to include in the balance.

Art T: Close enough for planning purposes.

Climate Zones were looked at and there were small differences 5-8%.

- Labor costs of installing measures were included for some measures (DEER database, 2005) in some utility jurisdictions.

Q/C: Adjustments made in CA DEER database costs vs. Michigan labor costs?

No, no adjustments were made. Data was not exclusively taken from DEER database.

Q/C: Marty Kushler: Costs – important to look at the costs in the database vs. evaluation.

Evaluation should be producing costs used in cost/benefit analysis. Michigan uses Utility Cost Test, so we don't have to get "down in the weeds".

- Best use of database:
  - Help in forward-looking planning, everyone uses the same numbers.
  - Implementation issue – if data submitted in an application claims savings outside database, then questions may be raised.
  - Database should be updated annually, every 2 years. Baseline and technology changes should be reflected.
  - Assumptions can be adjusted, (summary and back up data is available, but not posted on internet).
  - Database is a good start – reasonable and conservative base. With challenges of a quick start, this is a good starting point.

### **Question/Answer period:**

Sami Khawaja, Cadmus Group: Understand what Rick Morgan is recommending – deemed savings number: determining if goals have been met, measures installed x number = the number. Actual data is still recommended on a going forward basis. (Yes)

Brad, Detroit Energy contractor: Database will be the main arbitrator for 2010-11 values.

Rick: Yes

Marty Kushler: Senses the Commission will be interested in more than a multiplication of measures and numbers. There will be other issues to be considered, net to gross, certified savings, etc. Elements that require judgment more than just multiplying numbers: who was served, number of people, units in use. More sophisticated questions will be asked than just a mathematical equation.

Some fuzziness of numbers in the contract, assumptions fit the program assumptions?

Commission will be the ones to make the final decision.

Rick: Contract goal achievement of the deemed savings, with adjustments going forward. Policy and implementation issues in future reports are a reality. Deemed goal of assessing if the

contractual goal is reached vs. certifiable numbers reached. No problem with numbers being adjusted in the future.

Terry Mierzwa, Consumers Energy: feels Rick summarized the process well. Feels the database will be adjusted in the future to accommodate 'discount factors'

Pat Poli, MPSC, Expected that MEMD would be used for 2009 with values adjusted for 2010, looking at using 2009 as a "stub year" to get started.

Group member: excluding retro fit expertise vs. hardware?

Rick: looking at education and behavioral changes. Program performance of retro-fitting varies greatly. Not to say there shouldn't be a retro-fit program, but didn't want to incorporate in the initial database. Need a pilot program to get values.

Terry M., Consumers Energy: planning a pilot and will bring back data to the group.

Rick: narrow down buildings in retro-commissioning (improve an existing building's operating systems to operate efficiently without changing out any of the hardware) to similar structures.

Database may be updated without ongoing input from Rick's group.

**Phone questions:**

- Person working with industrial customers self-direct customers: delamping included?

Rick: Yes

- What about counting the savings of not running a fan which did not change the machine's performance?

Rick: maintain functionality, energy efficiency rather than doing without. If functionality could be maintained without that fan, perhaps you were over-functioning to begin with. (Initial response: No, but it would be up to the group.)

Pat P, MPSC: next meeting dates, based on contractor availability. General training – 2 part training in afternoon, first session: January 19, 2010, second session: February 23, 2010 from 1-5:00 pm

Rob O., MPSC: Introduced Statewide Baseline Study concept that staff is interested in pursuing. Part of the mission of this group is to look at research opportunities. Establish a subgroup for baseline study. Commission wants this opened up to all interveners as well as to the utilities. Look at developing a long-term strategic plan for analysis; state-wide potential study. Email Pat Poli if you want a copy of the one-page summary of the Statewide Baseline Study concept.