

**EE SAG**  
**Technical Advisory Subcommittee**  
**April 13, 2010**

**Planning Assumptions:**  
**Similarities and Differences Across Administrators**  
Discussion Topics

**Objective:** Discussion of planning tools and data for 2011 – 2014 EE Portfolios

- Same across administrators?
- Different, if so, why?

**Planning Tools**

- **Cost-Effectiveness Analysis Tool** – will administrators all be using DSMoore for cost-effectiveness analysis? **AIU will be using DSMore**
  - Same version and identical software or modified differently for each?
    - Electric Avoided costs – how derived? Will they be public?
    - Gas Avoided costs – how derived? Will they be public?
    - Carbon Adders – how derived? Will they be public? How will carbon adders be applied (to avoided costs, program costs?)
    - Avoided Costs – general questions
      - Avoided costs – will avoided costs be utility-specific, IL-based or regional (PJM, MISO?) **Ameren avoided Costs will be based on market forecasts of Mississippi Valley Wholesale electric and Henry Hub natural gas prices. Prices will include forecasts of carbon costs. Prices will be non-public because forecasts are competition-sensitive.**
  - Will DSMoore be available to collaborative members or will a license agreement and/or non-disclosure agreement be required? **Integral Analytics, vendor of the DSMore tool, will waive the licensing fees of 4 Commission/Staff users for regulatory purposes only because “two or more utilities or program administrators in the state are licensed users.” Additional setup and support fees are reduced, but still exist.**
- **Building Simulation Model** to model savings from envelope measures and other weather-sensitive measures

- Common building simulation model (such as DOE-2)? Where applicable, measures in Ameren’s measure library have been run in DOE-2.2 using the appropriate weather and building characteristics.
- Has the proposed building simulation model been certified by DOE or field-calibrated in some manner? Yes, in California. The DOE uses DOE-2.1E or EnergyPlus.

## Data

- **Common Technical Resource Manual (TRM)?**
  - Will costs, savings, EULs, IMCs, etc. be memorialized in TRM? If not, what form will measure-level data be memorialized? The primary source for documentation of these numbers will be the 3-year DSM implementation plan that is filed with the ICC. They will also be available in the TRMs as the implementation teams construct those documents in order to support their delivery of programs.
  - Are there going to be deviations to any TRM input assumptions, and/or measures? If yes, how will the deviations be justified and decided upon? Deviations from the DSM plan will be initiated by implementation and market needs and verified that TRC is greater than 1.
  - Will the TRM or measure-level assumptions be available before the October filing? When? A timeframe has not yet been specified for TRM. Preliminary, measure-level assumptions should be available mid-summer.
- **Non-Weather Sensitive Measure**
  - Will costs, savings, EULs, IMCs be identical across administrators? These factors should be similar, but will not be identical. Due to system differences in time-of-peak, customer usage patterns, etc; it may not be recommended to have identical characteristics for all measures across administrators.
- **Weather sensitive Measures**
  - How many “prototype” houses are being modeled?
    - Ameren has modeled the following combinations for the Residential sector:
      - Three building types: Single-family, Multifamily, and Manufactured homes
      - Three vintages: Old ,Average, New

- Up to 8 HVAC systems: Central AC with elec furnace, Central AC with gas furnace, Central air source heat pump, Central dual fuel heat pump, Elec furnace no AC, Gas furnace no AC, PTAC, PTHP.
  - Ameren has modeled the following combinations for the Business sector:
    - 13 Building types: Assembly, Big Box Retail, Fast Food Restaurant, Full Service Restaurant, Grocery, Hospital, Hotel, Large Office, Light Industrial, Primary School, Small Office, Small Retail, Warehouse
- How were the housing types selected?
  - Segmentation analysis of market research data from billing system, census data, DSM potential studies, and NAICS codes.
- What is planning assumption for cooling & heating degree days?
  - Used Typical Meteorological Year (TMY2) for Springfield, IL.
- **Discount rate?**
  - What is each using? 7.67% for all cost effectiveness tests.
  - What is basis for? This is the Ameren corporate WACC (weighted average cost of capital).
  -
- **Measure Definitions & Operational Characteristics**
  - Same measure definitions for all end uses? If not which definitions are different and why? Ameren does not know if the definitions and baselines correspond to those used by others.
    - It is unlikely that operational characteristics are the same because of reasons described above: namely: different populations, different system-wide characteristics, different weather, building characteristics, etc.
  - Costs of measures broken out by rural/urban or geographically?
    - Ameren measure costs are not currently broken into geographic groups
  - Cost of labor and installation broken out by rural/urban or geographically?
    - Ameren labor and installation costs are not currently broken into geographic groups
  - Impact of measures on peak and energy – separately?
    - Yes, Ameren Illinois has the information in this format.

- Impact of measures broken out by peak and energy in an interactive manner (Bundled set of measures given various combinations of measures) ?
  - Analyses can be re-run with different groupings, assumptions, and inputs as necessary, given a sufficient amount of time. It is not clear exactly what kind of “interactiveness” this question is asking for.
- EULs – are they consistent? Ameren used industry standard sources to attain measure EULs, but does not know what other utilities are using.
- Hours of operation assumptions consistent for same measure/application? Ameren used industry standard sources to attain measure EULs, but does not know what other utilities are using.
- Estimated gross and net savings, TRC, lifecycle cost/kWh broken out by measure as well as program/portfolio? Gross savings, net savings, and TRC are available by measure, program, and portfolio.
- Customer side/Renewable measures included? These measures were considered in the measure screen.
- **Measure-Level Cost Data Updated Based on Program Experience?**
  - Updating measure-level costs with actual program data? Where available.

### Load Forecasting

- Will each utility use a load forecast in their planning process? Yes, Ameren will coordinate with the load forecasting team.
- If so, will each used their own forecast or will forecasts be combined or might there be a statewide forecast? Ameren does not plan at this time to use a statewide load forecast.
- Will the collaborative be allowed access to the forecast?

(Crandall note: I am not sure if a load/energy forecast will be used however, it could be quite useful to target/design incentive levels for programs and thereby enhance effectiveness for dollars spent. This may not be covered by the market potential study.)

Yes, the collaborative will have access to the relevant results of the Ameren load forecasts.

