

Demand Forecast Energy Efficiency Quantification Project (DFEEQP): Working Group Overview

2009 IEPR Staff Workshop:
Joint CEC/CPUC/Itron Project for
Energy Efficiency Measurement and
Attribution

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(Funded through Aspen Environmental Group Technical
Support Contract)
May 21, 2009

Working Group

- 2006 LTPP – Initial issue identification – how much uncommitted EE is embedded in the demand forecast?
- 2007 IEPR – CEC proposed a public process to better delineate EE savings assumptions included in the forecast.
- 2008 (R. 08-02-007) CPUC directed IOUs to participate in Working Group, noting that the CEC’s demand forecast is used as a critical input for arenas including LTPP, EE and GHG related proceedings; IEPR serves as basis for procurement decisions in LTPP (R. 04-04-003).
- 2008 IEPR Update – Two workshops held; DFEEQP and Working Group a “high priority” for 2009 IEPR, continuing through 2011.
- 2009 IEPR – DFEEQP Working Group fully active.

DFEEQP WORKING GROUP ACTIVITY

2008

- Workshops
 - March 11
 - August 14
- Working Group
 - December 1
 - December 18

2009

- Working Group
 - January 29
 - March 11
 - May 4
 - (June 19)
 - TBD

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WORKING GROUP MEMBERSHIP

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- Energy Commission Staff
 - CPUC Staff
 - EE
 - Procurement
 - Dept. Ratepayer Advocates
 - CPUC Consultants
 - EE Goals/Potential (Itron)
 - EE Data
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- IOUs
 - EE
 - Forecasting
 - POUs (Forecasting)
 - ARB
 - NRDC
 - (LBNL)
 - (TURN)

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WORKING GROUP TOPICS

- Forecasting
 - Demand
 - EE Program Impacts
 - EE Standards Impacts
 - EE Goals
 - Committed vs. Uncommitted/Incremental EE
- Procurement
 - Role of EE in CPUC Long Term Procurement Plan
- CPUC EE Goals (IOUs)
- AB 2021 Goals (POUs)
- AB 32 Goals for EE
- EE Evaluation, Measurement & Verification (EM&V) and EE Program Accomplishments Data
- Taxonomy of Terms

EE Program Accomplishments and EM&V Data

TASK:

Identify and Assemble EE Program Accomplishments; Saturation Studies; and Evaluation, Measurement & Verification (EM&V) Data

Challenges:

- Multiple iterations of CPUC program data for each cycle.
- “Final” program results dispersed in multiple (hundreds) of EM&V reports, regulatory documents, decisions.
- Data aggregation, format, etc. varies over time.
- Significant processing and assumptions required for 2009 IEPR preliminary forecast in order to achieve end-use breakouts and to reflect savings levels confirmed via *ex post* evaluation.
- Developing an “improved” set of accomplishments data for use in the future will require even greater effort.

Study Groups: Program Accomplishments and EM&V Data

PROGRESS:

- DFEEQP members share an understanding of the complexity of this situation.
- CEC Staff, CPUC Staff and CPUC Consultants (Itron) developed solutions for 2009 IEPR.
- CEC Staff working through the California Measurement Advisory Council (CALMAC) to:
 - Improve EM&V Reporting for forecasting purposes
 - Include POUs (voluntarily) in addition to IOUs
 - Consider similar reporting issues for distributed generation and demand response.
- Opportunity for forecasting input into construction of 2009-2011 CPUC program reporting and databases.

Study Groups: Taxonomy of EE Savings/Modeling Terms

TASK:

Develop a taxonomy of definitions for terms used in energy efficiency/evaluation, modeling, energy efficiency policy.

IMPETUS:

Comparison of modeling strategies revealed that some terms used to describe modeling concepts, dimensions of energy efficiency savings and evaluation data are not used consistently between the fields of expertise. In some cases new terms are needed.

EXAMPLES:

- “Market Effects”/”Price Effects” – needs consistency between applications.
- “*Ex Ante*”/”*Ex Post*” – terms of art in efficiency evaluation.
- “Features Growth” – new term required to describe changes in consumption involving combined effects of growth and efficiency.

Study Groups: Taxonomy of EE Savings/Modeling Terms

PROGRESS:

- Itron prepared initial Taxonomy discussion paper under contract to CPUC.
- DFEEQP Working Group Taxonomy Committee reviewed initial paper and prepared comments.
- CPUC and CEC staff determined additional attention to this issue would be beneficial.
- CEC and CPUC staff co-authors have been selected.
- Work on a revised Taxonomy paper is underway.
- Revised definitions would enhance communication between stakeholders with different areas of expertise and could be incorporated into future updates of “official” documents, e.g., CPUC EE Evaluation Policy Rules and Protocols.

Study Groups:

Reconciling EE Program Savings and Forecasts

TASK:

IOUs, POU's and Energy Commission staff developed presentations to DFEEQP Working Group regarding overall demand forecasting methods, with special attention to inclusion of energy efficiency in the forecasts.

IMPETUS:

- Share and compare overall approach to demand forecasting (methods, approach to regulatory requirements) at a high level in an informal presentation to working group members with expertise in diverse areas.
- Share, compare and discuss merits of different approaches for incorporating energy efficiency into demand forecasts.

Study Groups: Reconciling EE Program Savings and Forecasts

PROGRESS:

Several presentations by Energy Commission staff to clarify and discuss methods for developing demand forecasts and methods for characterizing committed and uncommitted/incremental energy efficiency.

- IOUs and POUs prepared/delivered presentations regarding approaches used at their organizations and discussed issues with the DFEEQP Working Group.
- Interest expressed by some utilities in developing common forecasting methodologies, possibly including end-use forecasting.

- Transparency
- Stakeholders from diverse organizations and areas of expertise share information in informal setting – fosters communication between “silos”
 - Forecasting/EE Evaluation and Reporting
 - Energy Efficiency/Procurement
 - Utilities/Regulators
 - IOUs/POUs
 - Theory/Practice
 - Implementation/Policy
- Significant stakeholder interest and participation

Working Group: Next Steps

- Discuss methods for and review results of committed EE in revised forecast (Summer 2009) and incremental EE forecast (Fall 2009).
- Continue Working Group forum through 2011 IEPR cycle.
- Monitor and affect developments in EE program evaluation/reporting/data in a manner that can improve inclusion of program impacts in demand forecasts.
- Possibly develop project(s) to compile historic EE program accomplishments data in consistent formats.
- Facilitate opportunities for communication, coordination and consistency in methods to include energy efficiency in demand forecasts. Discuss development of common forecasting methodologies.
- Continue preparation of Taxonomy of Terms.