



**DOCKET**

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# Workshop Overview & Objective

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# The Broad Questions

- Given the 2007 IEPR adopted load forecast, how can near-term incremental impacts from the next tranche of EE programs (e.g., 2009-2011) be determined?
  - This question came up in the context of comments on the revised staff demand forecast issued in November 2007.
- Given CEC load forecasts, how can long-term incremental impacts and costs of high penetrations of EE potential be determined (e.g., 2012 and beyond)?
  - This question came up in the comments on the Draft 2007 IEPR concerning its reliance upon the Staff Scenario Analyses Project.



# Several Steps are Involved in Answering These Questions

- What is in the staff demand forecast?
- What are the program design details (targeted customer types, eligibility criteria, measures promoted, incremental impacts of measures promoted or incented, timeframe covered, scale of effort or incentive funds authorized, etc.) that allow comparison of proposed EE programs with what is in the demand forecast?
- How does one compare what is in the forecast with “gross” incremental program impacts to determine “net” program impacts?
- What process changes are needed to address this topic in forthcoming IEPR, LTPP and other forums?



# The Staff Demand Forecasting Models and Assumptions

- How is energy efficiency incorporated into the staff demand forecasting methodology? How does this differ for the model of each economic sector?
- What assumptions about programs are included in the inputs to the models? And what are the results?
- What programs are not quantified in the models, but quantified separately, and used to adjust the model results?
- What non-programmatic price-response or market effects are also included in the models? How should price projections address GHG mitigation costs?



# Understanding Proposed EE Programs or EE Potential Studies

- Comparing EE programs (or subsets of EE potential) with the demand forecast requires detailed information these comparable to demand forecast end-use data
- Ex ante impact assessment for EE programs needs to evolve:
  - Greater design specification and use of data at the level of EM&V studies will be needed to allow comparisons to demand forecast results. Very flexible designs will be extremely difficult to quantify “ex ante” and to compare to demand forecasts
- For EE potential studies existing measure detail is acceptable, but studies may need to evolve, including:
  - High measure penetration feasibility and cost should be modeled in more depth since GHG-motivated policy decisions emphasize this end of the “supply curve”
  - Feasibility and cost differences among alternative program delivery mechanisms



# Reconciling Proposed Programs or Potential Studies with Load Forecasts

- Protocols must be created that require identification of incremental impacts compared to load forecasts
- Program designs have to be sufficiently detailed to allow this to occur, and modeling assumptions such as sequencing, measure replacement, and program/measure interactions need to be harmonized
- Program measures (or potential measures) have to be aligned with end-uses and implicit measures in the demand forecast to enable comparisons
- Quantitative comparisons must facilitate interactions among programs as well as with demand forecasts
- Program funding or potential goal setting decisions must be made in light of both gross and net incremental impacts



# Challenge of Alternative Objectives

Deliverable	Primary Objective	Notes
IEPR Forecast	Accuracy	Warren-Alquist Act requires CEC to quantify all “conservation reasonably expected to occur.” Committed is in forecasts and uncommitted is acknowledged in resource preferences
EE Potential Studies	Savings Attribution	Quantify EE potential, understand motives for measure adoption, and attribute savings to utility actions
Scenario Analysis	Policy Formulation	Test possible outcomes of policy alternatives, focus on “first-order” effects, and probe the “fringes”
GHG Compliance Option	Tradable Incremental impacts	Joint CPUC-CEC proposed decision calls for high levels of EE programs, but would allow “excess” impacts to be tradable



# Next Steps for this Process

- Developing a game plan to achieve the objectives
  - Identifying EE embedded in load forecasts
  - Learning more about proposed EE programs
  - Acquiring characteristics data (measures, costs) for these programs to estimate gross program impacts
  - Learning how to compare the EE impacts in forecasts versus incremental EE impacts using different methods/models
  - Developing protocols for adjusting from gross to net impacts
  - Institutionalizing methods for assessing net impacts of programs when the reference is a particular vintage of CEC demand forecast
- Adopting interim approaches while “the holy grail” is being pursued





# Considerations for Schedule

- Inputs
  - EE Potential Studies (Itron) – March 2008
  - IOUs 2009-2011 EE Program Portfolios – June 2008
  - IOUs Statewide EE Strategic Plan – June 2008
- Analysis
  - DAO has started decomposing its analyses
  - Other elements require additional information and resources
- Results needed by:
  - April 2009 (2010 LTPP Scoping Memo)
  - Other processes?



# Focus for this Initial Workshop

- Understanding the clients for, or other applications using, the CEC demand forecast
- What kinds of energy efficiency are included in the demand forecast, which are in the models, and which are quantified separately and adjusted outside of the models.
- What magnitude of energy efficiency is included in the demand forecast?
- Initial input from IOUs on their methods and Itron regarding their studies