## Demand Forecasting Subgroup: Proposal for Statement of Purpose and Relevant Discussion Topics and Activities

## Statement of Purpose

Provide a forum to share and discuss methodology, input data assumptions, and policy assumptions related to electricity and natural gas demand forecasts in California. The forum is meant to be a catalyst for improving the quality, comprehensiveness, and transparency of demand forecasts and related data inputs, particularly those forecasts presented and/or discussed during the California Energy Commission's IEPR process, and to better integrate these forecasts into resource planning decisions.

## **Relevant Discussion Topics and Activities**

- Changes/upgrades in 2011 IEPR forecast.
- Appropriate scenarios (econ/demo and otherwise) for the 2011 IEPR forecast.
- Comparison of current forecasting techniques used by the Energy Commission, utilities, and other stakeholders, including methodologies and key drivers.
- Comparison of Energy Commission forecast results to utility and other forecasts.
- Identification of new/alternative forecasting techniques that may be relevant but not in widespread use.
- Pros and cons of a Common Forecasting Methodology
- Incorporating uncertainty more fully in demand forecasts, including uncertainty related to energy efficiency and DG impacts.
- Identification of economic/demographic trends within a service area that may affect energy consumption.
- Energy market activities that may affect future electricity and natural gas use, including transportation electrification.
- Provide input to the Energy Commission's Demand Model Methodology Evaluation (DMME) effort.
- Techniques and assumptions for incorporating climate change in demand forecasts.
- Integration of modeling results that use different techniques (e.g. integrating results from econometric forecast with savings from end use models).
- Creation and maintenance of a standardized forecasting glossary of terms.

- Ensuring consistency between estimated historical energy savings and projected savings.
- Integration of a more comprehensive, consumption-based approach to measuring energy savings into demand forecasts.
- Methods for weather adjustment and accounting for extreme weather events in demand forecasts.
- Data collection efforts for data used in demand forecasting.
- Continuity over time (including clarification to changes in methodologies, assumptions, techniques or inputs that render notable changes over time).
- Reflecting demand-side resources in forecasts, in particular energy efficiency and distributed generation. Special topics may include:
  - Compilation of historical impacts
  - "Rebound," naturally occurring conservation, price effects.
  - Attribution of impacts to specific interventions or entities.