22 February 2010

To: Chris Kavalec, Energy Commission; Mike Jaske, California Energy Commission
From: Chris Ann Dickerson, DFEEQP Working Group Project Manager
Subject: DRAFT MEMO: Demand Forecast Energy Efficiency Quantification Project (DFEEQP) Next Steps and Future Plans

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This memorandum represents a compiled list of possible topics for the DFEEQP Working Group going forward, from Q1 2010.

I. Energy Efficiency in the Demand Forecasts (Committed and Uncommitted)

Objective: Scope out a framework for Working Group participation in the ongoing efforts to incorporate energy efficiency in demand forecasts. Consider appropriate Working Group participation in efforts to shape next effort including, including scope, responsibilities, timeline and resources.

A. Continue Prior Energy Efficiency Assessment Activity

- Provide information to Working Group re: energy efficiency activity for 2010 IEPR update (i.e., next efforts will primarily focus on 2011 IEPR rather than 2010 update).
- Contribute to committed energy efficiency analysis and prepare and execute incremental-uncommitted energy efficiency projection for 2011 IEPR.
- Which agencies or entities sponsor any activities undertaken by consultants, e.g., Itron? CPUC for IOUs? DAO for POUs if needed?
- Develop estimates for natural gas efficiency for 2011 IEPR.
- Follow-ups and areas of uncertainty mentioned in the current (January 2010) Itron report include:
    - Consistency with evolving "current" (2010, 2011) CED drivers and updates
    - Account for 2006-2008 (and 2009?) EM&V and other updated EM&V activity
    - Re-run ASSET to account for rate increase and updated EM&V savings estimates
    - Modifications to realization rates, net-to-gross, measure savings assumptions
    - Modify SESAT to produce year-by-year projections
- Continued policy engagement with CPUC LTPP, CPUC Energy Efficiency, POU procurement and efficiency.

B. Expansions of 2009 Activity

- Does a projection need to be prepared for the POUs? If so, for which cycle?
- Coordinate with Energy Commission staff regarding energy efficiency accomplishments from federal stimulus funds/ARRA activity
- Enhanced attention to local and low income energy efficiency initiatives
- Expand the effort to include natural gas efficiency.

II. Demand Forecasting

Objective: Consider whether to expand the Working Group objectives to accommodate general demand forecasting issues that have arisen and been addressed within the Working Group. In practice, the DFEEQP Working Group has served as a forum to address demand forecasting issues beyond just energy efficiency. The DFEEQP-DMME Committee is active in this arena.

A. Common Forecasting Modeling Capability

Stakeholders have expressed interest in developing and/or implementing a common forecasting framework.

- Should we develop and/or support a common forecasting framework?
- Intersection/interaction with Demand Model Methodology Evaluation (DMME) project
    - Discuss options (e.g., Itron's SAE model, other "off the shelf" options, a new model)

B. Model Transparency

- DFEEQP-DMME Committee is working to draft a guideline for transparency of models and data in association with the DMME project underway at CEC
- Consider scope and applicability CPUC's existing guideline

III. Energy Efficiency Program Accomplishments Data Development

Objective: Improve upon progress made in 2009 with respect to compiling energy efficiency program data.

- Compile an historic time series of IOU energy efficiency program accomplishments data. This effort could be conducted with relatively more effort (e.g., examine historical accomplishments prior to 2004, improve upon the data series compiled by Energy Commission staff in 2009), or could be conducted by "blessing" the data series that has already been crafted, or some level of effort in between
- Amend existing "committed" IOU energy efficiency data series to include EM&V results for 2006-2008 (and 2009?) completed in 2009/2010
- Improve upon POU energy efficiency program accomplishments data
- Conduct a more detailed examination of the program mix the CPUC adopted in D.09-09-047
- Improve upon analysis of industrial and agricultural energy efficiency accomplishments
- Re-invigorate efforts to form "Committee on Load Impact Quantification (CLIQ)" activities to improve demand-side program reporting in a manner that facilitates load forecasting
- Continue engagement with CPUC IOU program accomplishments reporting tool to facilitate load forecasting applications.

IV. Engage with Ongoing Research Activities

Objective: Interact with studies underway, soon to be underway, or needed to feed load forecasting applications.

A. California Energy Research

Studies include:

- Saturation studies: RASS, CEUS, IEUS, CLASS.
- CPUC market studies (i.e., not simply load impact research)
- CPUC emerging technology studies
- POU saturation studies and energy efficiency potential studies
- Energy Commission studies on energy efficiency programs funded by federal stimulus/ARRA
- Encourage more research on the impacts of codes & standards – local, state and federal
- Encourage study of energy price effects/price elasticity.

B. Regional and National Efforts

- Engagement in WECC, WGA energy efficiency in resource procurement efforts
- Leadership role for other states seeking to undertake resource planning that includes energy efficiency
- Leadership role in national efforts, e.g., EPA has recently identified inclusion of energy efficiency in procurement decisions on a list of key topics in energy efficiency.

V. Improve the Taxonomy of Energy Efficiency Terms

Objective: Follow up on the Taxonomy Committee's recommendation that modeling exercises or modifications should strive to have common operational and conceptual definitions from initiation.

- Recognize level of effort, and in particular, forecasting staff resources necessary for this project to succeed at a level beyond that achieved in 2009
- Naturally Occurring Savings remains a term of particular importance
- Interact with any changes to energy efficiency evaluation protocols, and/or, development or selection of a modeling framework for CED – documentation phase.

VI. Interact with Ongoing Goals Setting Processes

Objective: Bring expertise developed during the 2009 DFEEQP Working Group process to bear on other statewide energy efficiency goal-setting activities.

- If the updated CPUC Energy Efficiency Goals Study will begin in 2010, and presumably finish in 2011, will the updated energy efficiency goals results be available for the 2011 IEPR? If not, will only "minor" analytic adjustments to the 2009 incremental uncommitted projection be required for 2011?
- CPUC Energy Efficiency Goals Update
    - General alignment with demand forecast

    - Implementation of Total Market Gross measurement
    - Measure replacement and decay policies
- California Air Resources Board (CARB) AB32 Scoping Plan implementation/updates (2010 update is anticipated)
- AB 2021 Implementation through Energy Commission DAO.

VII. Re-Invigorate Working Group Processes

Objective: Continued improvement of Working Group processes.

- Re-engage processes to develop a DFEEQP Working Group website to facilitate project management.

VIII. Recap of 2008 Memorandum Establishing DFEEQP Working Group

Objective: Review Working Group accomplishments, including successfully completed items, items ongoing, and items that have been completed but may now be taken to a second level.

	Role Anticipated for Type of Subgroup			
Purpose/Activity	**WG Management**	**Substantive Teams**	**Interested Stakeholders**	***Progress 2008-January 2010***
WG Formation, event organizing, meeting management	CEC-provided consultant with input from CEC, CPUC and Itron organizes IOU, POU and others into several substantive teams and general members	None	None	*Underway.*
Improved Taxonomy of Terms	Organize a meeting of entire WG to sort through comments from WG based on Itron/CEC Staff taxonomy paper	Review, comment, discuss	Review, comment, discuss	*Taxonomy Committee formed in 2009; Interim products completed plus glossary for incremental EE report. Substantial work remains, would require resources and stakeholder commitments (especially forecasters).*
Extracting Measure Penetration Data from Program Studies and Compiling into a Longitudinal Data base	Identify likely IOU and POU experts and recruit into process	Measure saturation team formed just for this purpose, drawn largely from program evaluation experts	None	*Completed at a limited level. A more complete effort would entail substantial resources (retrospective) as well as interaction with CPUC-EM&V reporting requirements (prospective).*
Marginal Efficiency Distribution of Appliance Sales in California	Project team scour sources for marginal distribution data	WG teams would Review any quantitative results	None	*Completed. Additional efforts would entail substantial resources (retrospective) as well as interaction with CPUC-EM&V reporting requirements (prospective).*
Identify Components and Impact of Structural Inducements to Greater Electricity Usage	Identify likely IOU and POU experts and recruit into process	Structural inducements team formed for this purpose would identify and acquire data, discuss implications for increased usage, speculate on inclusion in various forecasting models	None	*A useful area for subsequent activity.*

Purpose/Activity	WG Management	Substantive Teams	Interested Stakeholders	*Progress 2008-January 2010*
Market and Price Induced EE Measure Penetration	Identify likely experts and recruit into process	Market/price Induced team examines likely rate increases, broad market transformation activities from non-programmatic EE and GHG mitigation efforts	None	*A useful area for subsequent activity.*
Utility Program Characterization to Improve Inclusion in Models	identify likely IOU and POU experts and recruit into process	Program Characterization Team would review how required program characterizations could be aligned to modeling details (sectors, end-uses, etc.)	None	*Ideas initiated for CALMAC/CLIQ, but CALMAC was inactive in 2009. Some CEC staff involvement with IOU reporting tool is underway. Further efforts would be of value.*
Methodology to Prepare Uncommitted EE Program Impact Assessments	Organize a meeting of entire WG to sort through comments from WG based on Itron/CEC Staff paper	Review alternative definitions of committed and uncommitted and proposals to develop uncommitted EE projections as a May 2009 IEPR product	None	*Completed by Energy Commission staff.*