



# **Incremental, Uncommitted Energy Efficiency Quantification Sub-Project: Caveats and Recommendations**

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# Scope

- Uncertainties
- Recommendations
- Next Steps



# Uncertainties

- Policy
  - Will policy makers and managements of the responsible institutions devote resources to push new EE programs to the extent shown in the scenarios that have been assessed?
  - How will the CPUC's policy toward replacement of savings decay change as technical analyses bring new information to light that is not now available?



## Uncertainties, Cont'd

- Technical
  - Unintended biases introduced by trying to mesh together the results of two quite different modeling systems
  - Time pattern of savings
  - Incomplete assessments within the domain of each model due to lack of resources, e.g. rerunning ASSET with 15% rate increase to discern its naturally occurring savings versus program savings
  - Peak system conditions (time of day, weather)



## Replacement of Savings Decay

- D.04-09-060
  - Cumulative savings goals
  - Established requirement to use in procurement
- D.07-10-032
  - Clarified the definition of cumulative savings with respect to savings decay
  - Required IOUs to replace savings decay to achieve cumulative goals
- D.08-07-047
  - Expand goals from just IOU programs to “total market gross”
  - Endorsed cumulative goals based on Itron’s 2008 Goals Study (Mid-Case)



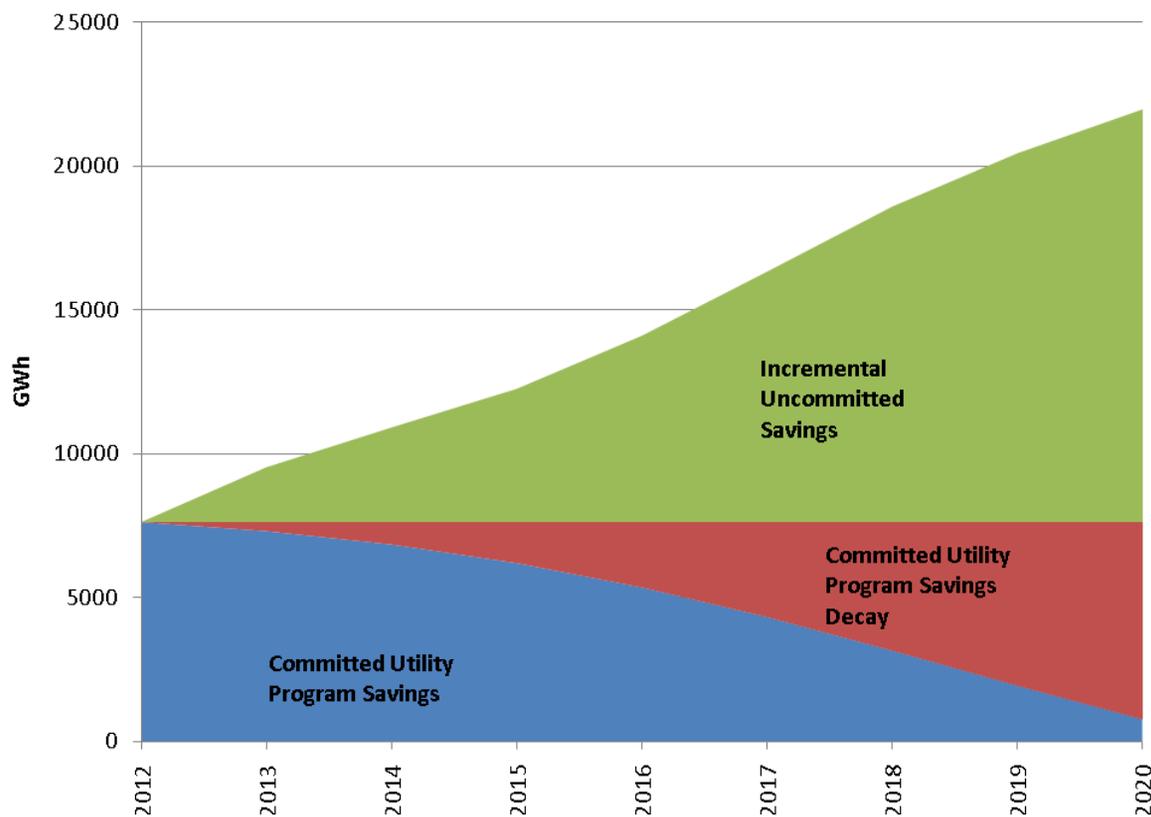
## Replacement of Savings Decay, Cont'd

- D.09-09-047
  - Adjusted goal values downward to reflect updates to ex-ante measure savings assumptions
  - Revised 2012 goal values by using adjusted IOU program savings from D.04-09-060 rather than TMG savings from D.08-07-047
  - Deemed 50% of savings decay to be considered replaced until further study can establish a different value
  - Reiterated previous direction to CPUC/ED to tackle saving decay replacement issues as part of 2013-2015 program design development



## Quantifying Measure Savings Decay

- Staff report
- (Figure 5)





# Revised Estimate of Savings Decay

- Staff quantified savings decay from 2006 going forward, since CPUC has excused IOUs from replacing savings decay from earlier program years
- Comparison of statewide 2020 values:
  - Original (Staff Report, Table 1) - 7,146 GWh
  - Decay starting in 2006 – 3,720 GWh
  - 2006 forward, 50% replacement – 1,860 GWh
- Although the Itron methodology for the SESAT analysis assumed 100% replacement, only a portion of the difference in savings decay would flow through to the final incremental results



# Recommendations

- Goals should be stated in terms that are relative to a baseline projection of set of assumptions
- Credible incremental savings values, usable in the 2010 LTPP, have been prepared starting from the scenarios of the 2008 Goals Update Report
- In addition to the original policy decision of selecting one of the uncommitted scenarios, the CPUC should also adjust the adopted *2009 IEPR* demand forecast with staff's estimate of the saving decay from 2006 forward assuming 50% replacement, eg, about 1,860 GWh in 2020



## Immediate Remaining Steps

- Clarify technical documentation of the results as result of the Feb. 3 workshop and comments (due Feb. 10)
- As necessary, modify policy aspects of staff report was a result of this IEPR Committee and Electricity & Natural Gas Committee workshop
- Transmit final documentation to CPUC as an Energy Commission input into the forthcoming 2010 LTPP proceeding(s)



## Intermediate Next Steps

- Use incremental results in other planning activities, such as the joint energy agency OTC analyses
- Complete current CEC staff training on SESAT and its inputs, and begin implementation for a POU
- Review accomplishments with DFEEQP working group members and set a course of action for the next round of analyses for 2011 IEPR cycle
- Talk with CPUC/ED staff in charge of the next goals update proceeding about “lessons learned” from this effort



## Longer Term Next Steps

- Continue staff's demand forecasting model review and improvement project
- Conceptualize improved linkages between end-use forecasting models and platforms for quantifying impacts of hypothetical energy efficiency program designs
- Assess interactions with other demand-side policy initiatives leading to “managed” demand forecasts
- Develop specific plans for improving this analysis for the 2011 IEPR cycle, and general plans for future cycles