



Ex Ante Review Overview



Energy Division Staff and Contractors
Energy Efficiency Industrial/Agricultural Programs
and Portfolio Forecasting
California Public Utilities Commission
T2WG 6/6/2017



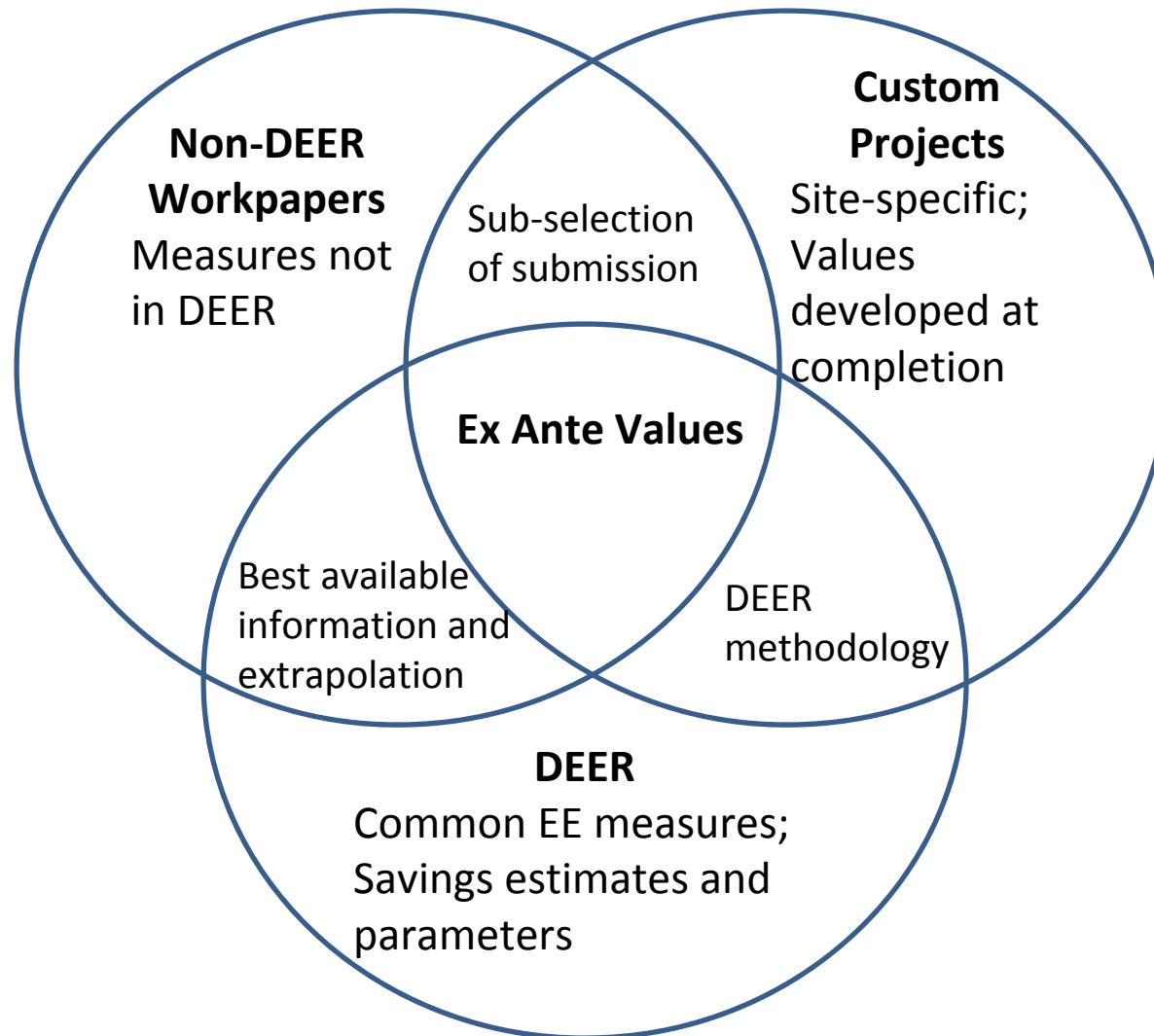
Ex Ante Team Activities

- DEER
 - Assumptions, methods and values
 - Updated for Codes, Standard and Regulation changes as well as to incorporation latest evaluation results and related research
- Non-DEER workpaper review and approval
 - New measures and updates to existing measures
 - Assumptions, methods, baselines, costs, EUL/RUL, NTG
- Custom measure and project review – main topic here
- Other regulatory support





Ex Ante Interrelations





Why Ex Ante Review for Custom?

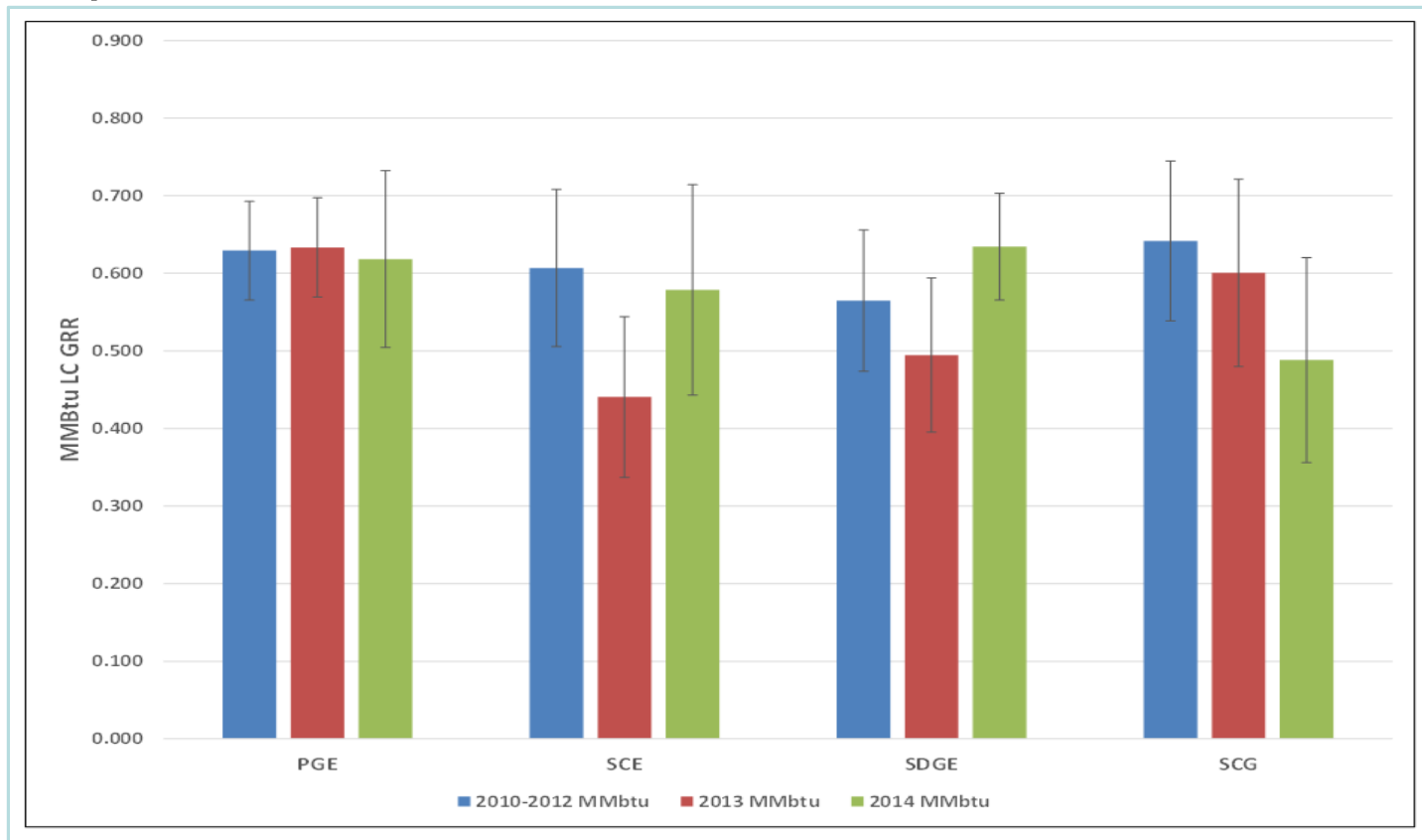
- Ratio of ex post to ex ante values needs improvement.
 - Gross has fallen from $\sim .9$ in 2000 to $\sim .6$ -.7 in 2008
 - Free rider percent has remained at 40%-50%, or increased
- Evaluations have indicated there are areas where policy is not appropriately implemented and that assumptions, methods and data utilized are not always the most appropriate.
- Commission staff has an oversight responsibility to ensure adopted policy is being followed.





IALC Gross impact results

- » GRR results are historically low (>0.40 and >0.65)
- » Comparison of 2010-2012, 2013, and 2014 GRRs:





Why review before agreement with customer is signed not later?

- Cost effectiveness involves both the savings estimates as well as the costs
 - As directed by the Commission and ALJ- Improving savings estimates can result in **more effective use of incentive \$**
- History of reaction to ex post evaluation
 - Review and oversight moved into the process to assist CPUC and PA's in finding issues and providing guidance designed to improve results
 - Provide real time oversight to accelerate improvement





Objectives of the ex ante review process

- Improve the accuracy and reliability of the Energy Efficiency portfolio overall energy savings and cost effectiveness estimates
- Foster ongoing improvements to the quality and consistency the portfolio implementers' own internal due diligence activities relating to ex ante values





Due Diligence

- Due Diligence is an investigation of a business or person prior to signing a contract, or an act with a certain standard of care, the process through which a potential investor can evaluate a major planned investment for its cost, benefits and risk.
- We are all involved in the due diligence effort.





CPUC DECISION 11-07-030

- “Ex Ante” Decision adopted by CPUC in July 2011 and re-affirmed by two subsequent Decisions in 2012 for use in 2013 and beyond
- Appendix B describes the custom project EAR process
- Sets minimum project documentation requirements
- Applies to Commission Staff (CS) selected and non selected projects
- Allows review prior to customer agreement so as to approve all values (savings, incentives, life, costs, etc.) used for EE savings “claims” and cost-effectiveness calculations
- Allows reviews of non-selected projects later (correct errors and set prospective requirements)





CPUC DECISION 12-05-015

- Amplified and added clarifications and details to direction and policy in D.11-07-030
- Clarification of project classifications (NC/NR/ER/etc.)
- Details of baseline definitions and selection including requirements for use of early retirement classification
- Details use of EAR “free rider” reviews to provide guidance and set rules to improve “net” performance
- Details of TRC cost calculation and how that values can limit incentives
- Clarification on expectation for above code/ISP activities and no “like” or “regressive” baselines





Process for Pre-Claim Custom EAR

- CMPA-Custom Measure and Project Archive
- Summary list of custom projects uploaded to CMPA, bi-monthly basis.
- Commission Staff reviews list, selects projects- selected projects may be pre-application stage through claims stage.
- Utility uploads project documents to the CMPA, email notification sent to various parties.
- Commission Staff dispositions are posted on the CMPA, email notification sent to various parties





2016 Ex Ante Review Summary

- 70 ex ante reviews of projects for the four Utilities
- CPUC Staff issued 342 corrective actions
- Issues: energy savings impacts, process, policy, program rules, and program influence and documentation.





PA Reviewer ID Deficiencies

- Submitted Application Package is often incomplete
 - Poor project description
 - Insufficient documentation
 - Lack of internal quality control (QC): Inconsistencies
- Submitted calculations are insufficient, inaccurate, or hard to follow.
- Applications do not provide equipment vintage, EUL or RUL values
- Baselines not properly defined and do not address applicable codes, Federal/State regulations, and industry standard practice
- Incremental measures costs not provided
- Failed site inspection because equipment not operating or already has been replaced
- Selected M&V plan is not appropriate for retrofit type
- Little evidence of Program influence provided





Ex Ante Review Reality

- Commission Staff review only a small percentage of custom projects.
- PAs generally *appear* to put more effort into projects Commission Staff pick for review than non-selected projects.
- Because PAs *appear* to put additional emphasis on “picked projects”, Commission Staff reviewed projects may not be representative of the full project population.





Role of the Commission staff reviewer

- **Not** to supplement the PA reviewer.
- Reviewing the PA reviewers' due diligence efforts.
- We rely on the PA reviewers to accomplish the Commission's goals:
 - Improving the reliability of the savings estimates
 - Undertake ISP studies
 - Enhance calculation methods as needed
 - Set appropriate M&V requirements
 - Ensure project compliance with CPUC policy





Wrap Up

- Our work plays an important role in the implementation of the CPUC authorized ratepayer funded programs.
- All implementers and reviewers should be engaged in a due diligence effort on behalf of the rate payers as well as the Utility customers.
- The CPUC has authorized ex ante review to improve the accuracy and reliability of the Energy Efficiency portfolio overall energy savings and cost effectiveness estimates.

