

Subcommittee Tracking Sheet Savings Below Code Subcommittee

Meeting #6: May 7th, 2015

I. Agenda Items for Discussion/Materials

- Discuss "Subcommittee Status and Next Steps" proposal
 - Limiting focus to non-altered existing buildings with aim to draft rule set for each identified
 - Reducing frequency of meetings
- Discuss informal comments to be submitted to CPUC Staff
 - Measure characterization list
 - List of measures and possible data sources for each of the three opportunity categories
 - Possibility of using a "system view" instead of limiting recommendations to individual measures
 - Remaining Staff questions
- Discuss developing example workpapers for most promising below code circumstances/measures

II. Meeting Attendees

Alejandra Mejia, Cal TF staff Jenny Roecks, Cal TF staff Annette Beitel, Cal TF Facilitator

Sherry Hu, TF Member Spencer Lipp, TF Member Martin Vu, TF Member Tom Eckhart, TF Member Christopher Rogers, TF Member David Springer, TF Member

Jesse Martinez, SCG Nick Dirr, AEA Luke Nickerman, PG&E Marc Costa, Energy Coalition Devin Rauss, SCE David Sawaya, PG&E

III. Key Issues Discussed

- Work scope for the rest of the year is approved
 - Meetings to go to once a month starting in June



- Informal comments for CPUC Staff whitepaper:
 - 1. Measure characterization list
 - Comments to Staff to use individual measures
 - New York uses individual measures
 - Using the existing individual measure paradigm may resonate more
 - Measure ideas:
 - Judge suggested we don't focus on lighting
 - Compressed air systems; building envelopes; re-tubing boilers (SCG may have good data).
 - Motor rewinds, chillers
 - 2. What types of action in the market lead to buildings failing to meet code/upgrade to ISP? What measures don't get adopted? How do contractors avoid triggering code?
 - "39 fixture retrofit"
 - Not pulling permits—soft costs, paper work, permit fees, timing?
 - o "Equipment on truck" is DOE-standard compliant
 - QI suffers
 - Tenant improvements would have to include controls, may not be worth the trouble/cost
 - Right sizing, even for non-res—actual modeling not being done.
 - Code may not have been re-evaluated for proper engineering criteria
 - 3. What specific data can you provide to prove that retrofits are deferred or designed to avoid code triggers? In what type of buildings? How do we know these are the market norm?
 - RASS-style data, but what we have is very old
 - 4. How do the Commission and CEC's assumptions about rate of turnover compare with your observations of the market? What data can you provide?
 - Pacific Northwest tracks existing equipment age in accessible database
 - 5. How can the CPUC ensure that an existing conditions baseline will not pay for large amount of savings that would occur anyway?
 - Consider addressing preponderance of evidence standard in specific call out box
 - Some states, early replacement = existing baseline. Illinois has a table of rules of thumb for early retirement.
 - Research EM&V studies of other states (IL, etc) that can show lack of free ridership
 - Understanding why equipment gets repaired, and isolating drivers for replacement



- Cost considerations
- NW addressed by program design and focus on procuring gross savings
- Oregon, MA, maybe NY (T&D offsetting projects) have useful policies

IV. Action Items

- ACT: Alejandra to turn subcommittee brainstorm into informal comments to be reviewed at next subcommittee and submitted to CPUC Staff by May 28th.
 - Research practices in other states and if EM&V supports those policies
- ACT: Subcommittee members to share any other data sources, even if initially considered anecdotal. Pictures would be great.
- ACT: Jesse Martinez can draft initial example of upstream effects of code suggestions
- ACT: Tom Eckhart to provide NW database