Southern California Gas Company

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November 25, 2015

SoCalGas Comments on Existing Conditions Baselines Savings Potential Technical Analysis Workshop

On November 6, 2015, California Public Utilities Commission ("Commission") Staff facilitated a workshop to present the Commission's approach to existing conditions baseline per (D). 14-10-046 and the recently passed Assembly Bill ("AB") 802. The workshop focused on Navigant's technical analysis and methodology to quantify the impacts of existing baselines to inform the 2018 Goals and Potential study. Southern California Gas Company ("SoCalGas") submits these comments on the key questions Commission Staff asked stakeholders to comment upon.

1. **How will Program Administrator ("PA") program incentives and budgets change now that savings below code can be valued?**

SoCalGas anticipates Program Administrators ("PAs") will re-examine incentive levels on a program and measure level basis; the incentives will increase to motivate customers to not only get to code, but more importantly above code. As code is becoming more stringent and more efficient, the cost for customers to get above code will become more expensive, which theoretically will entice them to repair rather than replace. As a result, utility program incentives would need to be increased to offset the effect of escalating costs. From an above code perspective, the rules around incentives and incremental measure costs are clear and most likely won't be changing for replace on burnout ("ROB") measures. More value will have to be placed on the to-code savings to motivate customers to act.

PAs will need to consider the effect of the incentive changes on a portfolio-wide basis to determine changes to budgets, which will continue to be linked with cost-effectiveness considerations. It is imperative that the energy savings associated with the below code portion are given the appropriate consideration so that the incentives, and associated budgets, can be set in harmony with benefits, and reflect the cost-effectiveness level.

Navigant's work to establish average existing baselines for measures will greatly help in setting appropriate incentive levels and caps for utility programs. Each measure and installation is unique on its own, but averages will support mass market program opportunities.

2. **Are there data sources the Navigant team is not currently leveraging that can provide information on existing conditions baseline?**

SoCalGas is not aware of any readily available data the Navigant team can leverage to gain additional information on existing conditions baseline. SoCalGas recommends that Navigant solicit information from trade professionals, vendors, and manufacturers to aid the technical analysis. See the response to Question #4 for data SoCalGas is attempting to collect.

3. **Which measure types are "repair eligible" (i.e. customers can extend the life of exiting equipment with low-cost repairs if it fails)?**

SoCalGas has reviewed the measures that are "repair eligible" and agree with Navigant's selections for the purposes of the 2018 Goals and Potential study. SoCalGas has also reviewed the measure type definitions and notes that Navigant and Commission Staff slightly differ on the description of retrofit replacement. For developing a methodology and forecasting existing baseline it may be appropriate to categorize based on Navigant's definitions, but SoCalGas would like to point out the differences. Commission Staff defines retrofit to be a program activity that induces accelerated equipment replacement, while Navigant describes it to be replacement of existing equipment that has not failed and is not compromising the use of the building.[1] [2] So where Navigant sees insulation and duct sealing as retrofit, Commission Staff view it as retrofit add-on ("REA"). Both Commission Staff and Navigant define REA as new equipment being installed onto an existing system where the add-on is not required to operating the existing equipment. The definitions and categorizations of measures should be aligned and consistent throughout the process from development of the Goals and Potential study to implementation, program design, energy savings calculations, and EM&V. Alignment in definitions will help to avoid disparities between the IOU goals and Commission energy savings calculations.

Another difference SoCalGas would like to point out is the baseline for retrofit add-on measures. Commission Staff has clarified that the baseline for retrofit add-on is what would apply to the underlying existing system during a normally occurring upgrade or replacement. During the workshop, Navigant presented the baseline for retrofit add-on as existing conditions. This difference is significant. With the establishment of AB 802, which requires the counting of all energy savings and energy usage reductions toward energy efficiency goals, retrofit add-on measure savings will need to measure all truly incremental savings (that is not currently reflected by codes and standards or other utility programs).

SoCalGas has reviewed the cost-effectiveness test inputs for the measure types but does not agree that repair eligible equipment should be treated as dual baseline early retirement. In the workshop, Navigant presented the cost effectiveness benefits for repair eligible equipment as:

- Savings relative to existing baseline for equipment RUL; and
- Above code energy savings for remaining EUL of efficient replacement

[1] Early Retirement Using Preponderance of Evidence v1.0, July 16, 2014, pp. 6-10.
[2] Navigant Existing Baseline Workshop Discussion Slides, November 6, 2015, pp.12.

This contradicts another section of the presentation where Navigant presents the definition of repair eligible equipment as measures that have reached the end of its effective useful life ("EUL") but is repairable. In essence, there is no remaining useful life ("RUL") period since the EUL has been exhausted. SoCalGas believes that the benefits should be based on the extended life of the equipment with one baseline set at the original state or at the existing baseline.

Determining the original state and where repairs bring equipment relative to code is a complex question in regards to forecasting potential. Are the eligible incremental savings for repairs typically more or less efficient than the original state, average existing baseline, or current code? SoCalGas understands that this brings another complexity to the existing baseline discussion and is outside the current cost-effectiveness framework. SoCalGas recommends that this topic be discussed in Phase III of the proceeding and Navigant's on-going exercise to determine existing baselines will be a good place to start.

4. Is there any data documenting the cost to a consumer to repair equipment vs. replace with new equipment?

SoGalGas has informally surveyed several manufacturers on the question of repair versus replacement for commercial boilers. Anecdotally, the manufacturers have expressed that customers tend to replace existing equipment when repair costs near 50% of the cost of a new boiler. Many customers that purchase boilers also receive and/or purchase service contracts that are used to repair boilers and extend their useful life. SoCalGas was unable to gather data, in the timeframe available to submit these comments, to support this input. However, SoCalGas will continue to pursue this data as part of its efforts in preparation for Phase III. The data will hopefully help to determine the following:

1. Number of customers that purchase service contracts
2. The average number of years that service contracts typically last, and how many are extended
3. Typical age of existing equipment when replaced by new equipment
4. Cost of repair that triggers replacement

In addition, SoCalGas' To-Code Pilot centered on replacing boilers will also seek to answer some of these questions. Preliminary data is expected in Q3, 2016, and final data is expected in Q3, 2017.