Vermont System Planning Committee
Forecasting Subcommittee
June 20, 2013
VPPSA (Waterbury)
Meeting Summary

In Attendance:

Mike Leach, BED
Andrew Quint, GMP
Rip Kirby, GMP (phone)
TJ Poor, PSD
Carole Hakstian, VEIC
Michael Wickenden, VEIC
Hantz Presume, VELCO
Jared Kaplan, VPPSA

- Review report from 5/14/13
    - No comments on previous meeting's notes. Any comments due by Tuesday, June 25. If no additional comments, the meeting's minutes would be posted to the VSPC website.

- Follow-Up Decay discussion
    - TJ started out by suggesting that the group define decay for the purposes of having a common understanding. Regulatory decay is the shortening of a measure's life therefore reducing savings due to future changes in codes and standards or other market effects. Engineering decay is the end of the physical useful life of the efficient equipment. There was some question and discussion as to whether engineering decay really occurs – that is, at the end of the useful life the product may be replaced by an equally efficient product.

    - TJ mentioned the importance of understanding the magnitude of decayed savings to decide how much time to spend researching this issue. Hantz asked about the tolerance for "noise", that is, how large decay would have to be to continue analyzing.
        - Mike W commented that there are two reasons why we SHOULD explore decay:
            - Lighting standard change in 2020 results in a significant reduction in savings
            - With decay, EVT's and BED's bids into the FCM would need to be revised and associated dollar claims would also be adjusted.
        - Rip asked what effect on load decay has if measures are being replaced by more efficient measures. In other words, is there really any decay to measure?

- Over the short term, the effect of engineering decay on savings is small but over the long term, decay does prove to have significant savings impacts.
- The group agreed that it makes sense to include efficiency measure engineering decay in the VEIC forecast because either the consumer's replacement at the end of the engineering life will be incorporated in an efficiency program in the year of replacement, or the baseline codes and standards at the time of the end of the engineering useful life will account for impacts on load.

- The subcommittee concluded that ultimately, there is a mismatch between economic modeling and engineering modeling of efficiency measure useful life. When new codes and standards are enacted, the economic life of an efficiency measure changes however, the engineering measure life does not change. It was suggested that one solution to mitigate effects of this mismatch would be for Energy Efficiency Utilities to forecast the savings based on the engineering useful life for application within the VELCO (and other utility) load forecasts.
  - TJ asked if EVT could calculate the engineering savings that would apply to load under the following circumstances. In other words, what would savings be through the end of a measure's life had there not been a code and standard change for these technologies:
    - 2020 lighting standard change
    - 2012 T-12 replacement
    - Snowmaking
    - All other measures

- Mike L suggested there is value in end-use load forecasting. The SAE report provides some information but Mike L warned of the lack of precision in these end-use values.

- There was general consensus that it would be beneficial for Eric Fox to meet with the subcommittee to discuss his forecast modeling and how efficiency measure decay is treated in relation to expected implementation of codes and standards. Hantz will contact Eric. We may also want to discuss how he treats net metering and how it fits into the larger state framework.

- GMP Sales Forecast
  - Andrew Quint presented the ITRON forecast. 'North' and 'South' analysis results were discussed. Andrew pointed out that the Residential and Commercial forecasts were model-driven using a Statistically Adjusted End-Use (SAE) modeling framework whereas the industrial forecast is a hybrid: part-model, part-GMP obtaining information from customers.

- Andrew noted that there is not as much distributed generation (DG) in the forecast as GMP would like. It was identified that better resolution and understanding of DG forecasting assumptions is needed and is a good agenda topic for a future Committee meeting.

- According to the model, load increased after SmartGrid meters were installed reflecting better measurement and lower losses.

- GMP is in the process of updating their forecast which will be included in a filing due to be submitted at the end of June/beginning of July 2013.

- Next meeting **Thursday, August 1, 2013 at GMP's Middlebury office (Please identify if the Middlebury location is problematic for attending in person – discussion is enhanced by stakeholders being in person).**

    - Overview of Vermont historical load data (Mike Leach).

    - VELCO/Itron approach for treating regulatory and engineering decay relative to incorporation of effects from future codes and standards.

    - Review decay and engineering measure life savings results provided by EVT and BED.