

DE 17-136
Lost Base Revenue (LBR) Working Group
May 16, 2018
Key Takeaways

Calculation of Lost Revenue – kW component:

The Working Group discussed the methodology for the calculation of kW component of lost revenues. Miles Ingram presented Eversource's methodology to calculate Lost Revenue (ref. Utilities 5-16-2018 Draft LBR Report, found in Appendix B "LBR Template, Eversource – May 16"). He mentioned that the methodology was developed for planning purposes – i.e., to be used for EERS Proposals, with reported results based on actual projects/measures installed. Staff discussed some refinements to the Utilities methodology. OCA discussed some possible refinements to the calculation of kW demand expected to occur at customer peak. Following is a summary:

- **Methodology:**

- Planned annual kWh savings are adjusted to reflect "installed measures": Installed kWh are assumed to reflect the half-year convention – i.e., that approximately 50% of the kWh are installed by the end of the first year and the remainder are installed during the second year.
- kWh savings associated with installed measures are accumulated for purposes of calculating lost revenue.
- Accumulated kWh savings are further adjusted to reflect measures expected to be "in-use", based on the data provided in the 2015 DNV-GL study (Table 19, page 30). There was a question as to how this data should be interpreted and Unitil (Deb Jarvis) offered to review this adjustment to ensure that the accurate interpretation is reflected.
- The "in-use" kWh savings are adjusted to reflect any savings degradation (currently under review).
- The net adjusted kWh savings from above are then converted to kW savings based on maximum demand factor (MDF) – i.e., net adjusted kWh savings (above) are multiplied by MDF to convert to kW savings. Eversource used "entered values based on 2016 actual data to develop MDF for planning purposes; and, other Utilities used their respective MDF formula to convert kWh to kW as well.
- kW savings are then adjusted to reflect "customer peak" hours based on Utility-specific load shapes by customer class coupled with EPRI end-use load shapes. For example, for Eversource, the average peak hour for Eversource Rate GV customers is the hour ending at 11:00 a.m., during which commercial facilities in the Northeast region are typically operating at less than 1% of maximum cooling load. OCA (Brian Buckley) asked whether the underlying 8760 load reduction data from the 2015 Large C&I Impact Evaluation, performed by DNV-GL, is available in sufficient detail so as to provide a possible check of the EPRI-based model proposed for use by the utilities. The Utilities offered to review this point and will furnish any refinements to the EPRI data, as appropriate.

- Other adjustments, as appropriate are applied to reflect:
 - ✓ “% Net-to-Gross” adjustment (not applicable at this time in NH)
 - ✓ “% In-Service” Rate adjustment (based on EM&V Studies)
 - ✓ “% Realization Rate” adjustment (based on EM&V Studies)
 - ✓ “Ratchet” adjustment (awaiting Liberty ratchet analysis)
 - ✓ “Retirement” adjustment (Staff suggests “retrospective” adjustment in the next triennium)
- The kW value resulting from the above is multiplied by the overall average distribution rate (ADR) per kW to calculate lost revenues. For example, for Eversource, the ADR is \$6.40 per kW.
- **Monthly Calculations:**
 - Utilities will use monthly format. This avoids annualizing adjustments; instead, monthly kW demand reduction values are summed up for each month.
- **Utilities Updated LBR Template:**
 - Utilities will provide updated Template reflecting the above
- **Staff’s Updated LBR Template**
 - Staff’s updated template is attached. This is a work-in-progress, based on discussion at the 5/16/2018 Working Group Meeting
- **Other - Supporting documentation - Maximum Demand Factor (MDF):** This factor is used to convert kWh to maximum load reduction kW. Eversource illustrated supporting documentation for kW and kWh used in the calculation of MDF. Documentation included discrete kW and kWh results by project and by measure, in support of the MDF calculation. Staff indicated that the data is detailed and provides adequate supporting documentation; and, suggested it might be helpful if the Utilities could create a one-page summary of the highlights of these details and include it in the 6-13-2018 Draft LBR Report, perhaps in the Appendix.
- **Other - Customer Peak kW:** A factor is used to convert maximum kW load reduction to customer peak kW load reduction. Specifically, Utility load curve data by rate class is used in conjunction with EPRI load shapes by end use to calculate kW demand reduction at customer peak.
- **Other – Ratchets:** Utilities discussed ratchets, responded to questions, etc. Although still under review, it appears that there is little impact for Eversource and Unitil. Liberty will provide its ratchet analysis prior to next LBR Working Group meeting. Also, for each Utility, it would be helpful if these analyses could be included in the 6-13-2018 Draft LBR Report, along with a paragraph explaining these analyses.

Homework Assignment (due 6/6/2018, a week before 6/13/2018 Working Group Meeting):

- Accumulated kWh savings are adjusted to reflect measures expected to be “in-use”, based on the data provided in the 2015 DNV-GL study (Table 19, page 30): There was a question as to how this data should be interpreted and Unitil (Deb Jarvis) offered to review this “in-use” adjustment to ensure that the accurate interpretation is reflected.
- Customer Peak Load Adjustment: kW savings are adjusted to reflect “customer peak” hours based on customer load shapes and EPRI end-use load shapes: For example, for Eversource, the average peak hour for Eversource Rate GV customers is the hour ending at 11:00 a.m., during which commercial facilities in the Northeast region are typically operating at less than 1% of maximum cooling load. OCA (Brian Buckley) asked whether the underlying 8760 load reduction data from the [2015 Large C&I Impact Evaluation](#), performed by DNV-GL, is available in sufficient detail so as to provide a possible check of the EPRI-based model proposed for use by the utilities. The Utilities offered to review this point and will furnish any refinements to the EPRI data, as appropriate.
- “Ratchet” adjustment (awaiting Liberty ratchet analysis). Also, for each Utility, it would be helpful if these analyses could be included in the 6-13-2018 Draft LBR Report, along with a paragraph explaining these analyses.
- “Retirement” adjustment: Staff suggests a placeholder for the next triennium to consider the adjustment for average service life such that any changed from EM&V studies pertaining to average service life be incorporated into the expiration date of measures for purposes of calculating retirement dates. Are the Utilities agreeable to such a placeholder for the next Triennium? Please explain.
- Average Distribution Rate (ADR): Staff Suggest a placeholder for the next triennium to consider the calculation of average distribution rates based on discrete ADRs – i.e., for instance Eversource would calculate ADR for its Rate G, Rate GV and Rate LG customer classes, rather than an overall rate for the combined classed. Are the Utilities agreeable to such a placeholder for the next Triennium? Please explain.
- OCA (Brian Buckley) Questions:
 - Please indicate whether Eversource plans on filing for decoupling in their next rate case.
 - If Eversource is not filing for decoupling in their next rate case, or is unable to indicate whether they are doing so:
 - ✓ Please look into whether the underlying 8760 load reduction data from the 2015 Large C&I Impact Evaluation is available as a check of the EPRI-based model proposed for use by the utilities.
 - ✓ If available, please furnish the customer specific and project specific data in live excel format.
 - ✓ If possible, please perform that comparative analysis for LED lighting and at least one seasonal measure. (This is something the OCA offered to have our consultant do, but if the utilities could perform this analysis, that would be extremely helpful).

- Eversource has cited this source containing the average C&I load shape profile (Rate GV and Rate LG?) as the other input for their LRAM analysis. Please provide the data by customer used to produce this average load profile.
- Question on Glossary: There appears to be an inconsistency in the definition of MDF – i.e., page 6 (top) vs. page 10. Page 10 looks correct. Please clarify.
- Utilities Updated LBR Template (Monthly format):
 - Utilities provide updated LBR Template, incorporating a monthly format, a week before the 6/13/2018 LBR Working Group meeting (i.e., 6/6/2018)
- Staff's Updated LBR Template:
 - Staff provides its updated LBR template (attached) reflecting discussions at the 5/16/2018 Working Group Meeting, still a work-in-progress.
 - Staff update includes a refinement for the “in-use” adjustment to reflect 100% of the 8760 annual hours reflected in the DNV-GL Evaluation (ref. Staff Template, Sch. 1, line 3). The Utilities (Deb Jarvis) offered to take an independent look at this “in-use” adjustment as well to ensure that we have the correct interpretation of the DNV-GL Evaluation.
- Other - Supporting documentation - Maximum Demand Factor (MDF): Staff indicated that the data is detailed and provides adequate supporting documentation; and, suggested it might be helpful if the Utilities could create a one-page summary of the highlights of these details. Please provide a schedule that shows this one-page summary. Also, please include it in the 6/13/2018 Draft LBR Report, perhaps in the Appendix.
- 6/13/2018 Draft LBR Report: The Utilities prepare an updated LBR Report incorporating the changes discussed above and any other changes it suggests. Utilities circulate a copy of the updated report a week before the 6/13/2018 LBR meeting (i.e., on 6/6/2018).

Posting to Commission Website:

Staff will update the Commission's LBR website for the 5/16/2018 documents as follows:

- Key Takeaways from 5/16/2018 meeting, including Homework Assignment for next meeting (due 6/6/2018)
- Q&A Responses provided at 5/16/2018 meeting
- 5/16/2018 Draft LBR Report
- LBR Template, Eversource – May 16
- LBR Template, Unitil – May 16
- Eversource Illustrative ADR
- Unitil Illustrative ADR
- Eversource Ratchet Analysis
- Unitil Ratchet Analysis
- Miles Ingrams' Slides
- Agenda for the 6-16-2018 LBR Working Group Meeting