

Capacity Market Cost Allocation Analysis (CCAA) Working Group Update

John Martin, Working Group Chair

February 7, 2019 — Tariff Design Advisory Group, Calgary

Working group will continue to use “count of hours above EUE threshold” approach

- Working group reviewed expected unserved energy (EUE) data based on “sum of EUE” approach
- Results from “sum of EUE” approach were similar to results from “count of hours above EUE threshold” approach
 - No changes to bookend time blocks resulted from review
- Working group will continue to use “count of hours above EUE threshold” approach when reviewing EUE data from analysis of time block bookend scenarios
 - “Count of hours above EUE threshold” approach aligns with *Capacity Market Regulation* requirement that time blocks consist of hours that are “reasonably similar” with respect to anticipated contribution to amount of capacity needed
 - “Count of hours above EUE threshold” approach is somewhat simpler to interpret

How will impacts of reduced demand over time be reflected in RAM?

- Load forecast used in resource adequacy model (RAM) methodology is based on five years of historical load data
 - Most recent years are given greatest weight
 - Load forecast will be updated to use most recent five years of historical load data prior to calculating procurement volume for each base and rebalancing auction for future obligation periods
- Changes to load in response to capacity market cost allocation will be reflected in overall load patterns and, as a result, will be incorporated into load forecast over time
 - For example, changes to load in 2021-2022 obligation period will be included in historical data used for load forecast for rebalancing auction for the 2024-2025 obligation period three years later

How will impacts of reduced demand over time be reflected in RAM? (cont'd)

- As incentives for load behavior change in future, including through capacity market cost allocation, any impacts will affect load behavior
 - As load forecast is updated, it will incorporate those changes and account for new impacts
- If expected changes to load behaviour in response to capacity market cost allocation can be relied on with reasonable confidence, AESO may also consider adjusting load forecast beyond incorporation of changes through inclusion in historical data over time

Working group has continued examination of EUE distribution and bookend scenarios

- Working group met with AESO on February 1 to review EUE from base RAM analysis
 - AESO responded to questions about anomalies in EUE distribution in base RAM analysis
 - RAM modelling was validated and tuned for annual aggregate results; examination of hourly distribution of EUE was not its expected purpose
 - Working group will give consideration to factors other than EUE distribution to adjust time blocks and weights
- RAM analysis has been re-run using bookend scenarios to adjust load
 - Results are being reviewed and validated within AESO
 - Results expected to be shared with working group next week (February 11-15) for further discussion

Working group is developing capacity market cost allocation rate design criteria

- Working group has reviewed *Capacity Market Regulation* and “Bonbright principles” to develop criteria for cost allocation rate design
 - “Bonbright principles” are traditionally used by Alberta Utilities Commission and other regulators to assess justness and reasonableness of utility rates
 - Overall these are expected to be sufficient to evaluate rate design
- Additional detail was identified for two Bonbright principles: “provision of appropriate price signals” and “practicality”
 - Additional detail reflects considerations specific to the capacity market cost allocation rate
 - Some criteria are constrained by requirement of *Regulation*

Working group is on track to complete capacity market cost allocation analysis

- Working group will review results from RAM re-running with bookend scenarios next week (February 11-15)
 - Meeting with AESO to discuss results on February 15
- Will use results from RAM re-running and other considerations to develop time period and weight recommendations
 - Final time block and weight recommendations will inform development of proposed cost allocation rate
- Rate design criteria will be used to assess cost allocation rate

Questions?