

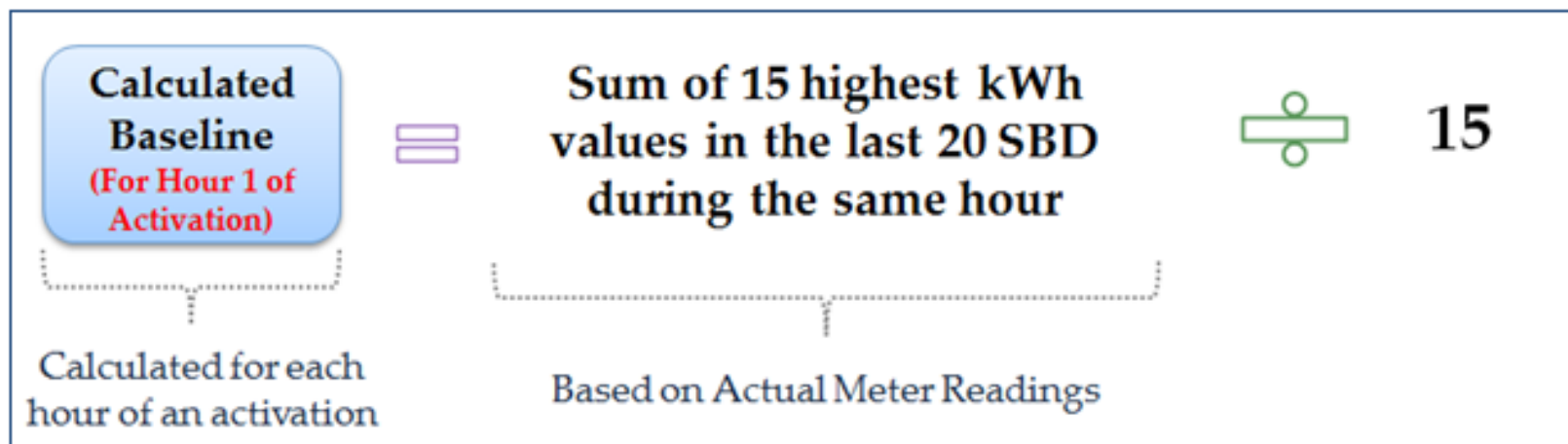
# Baseline Methodology for Transitional Market Rules

Demand Response Public Session #2  
July 9, 2014



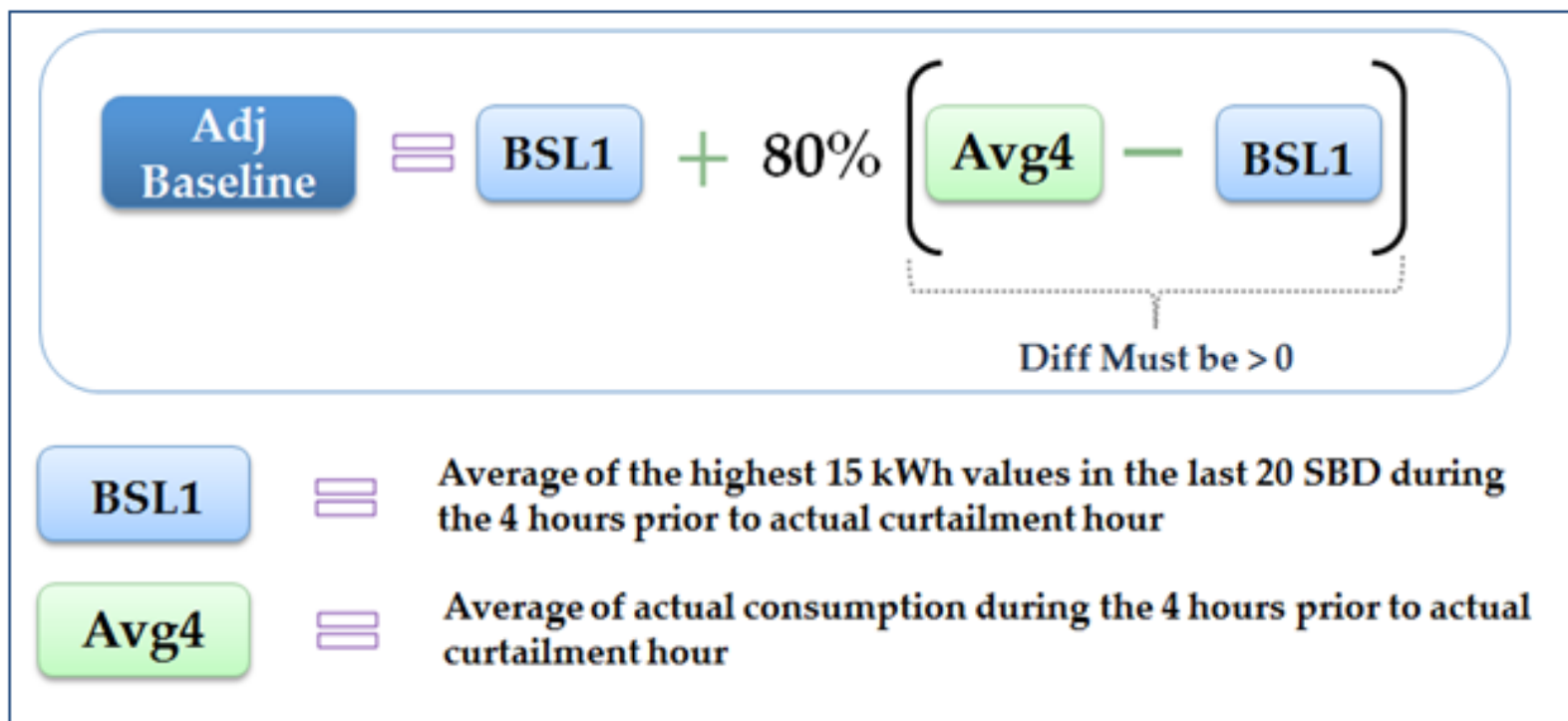
- The Current Baseline
- Analysis & Feedback
  - DR Working Group
  - Research & IESO Discussion
- Proposed Solution
- Calculating the In-Day Adjustment
- Future Considerations

- The High 15 of 20 baseline methodology takes an average of a participant's highest 15 consumption values during the same hours as those of the Activation, in the last 20 Suitable Business Days prior:



- The High 15 of 20 is categorized as “Baseline Type-I” by NAESB Standards which is the most widely used standard across ISO’s and is seen as best practice for both capacity DR and energy DR

- All participants are currently settled on the High 15 of 20 method except those that have been approved as 'weather sensitive loads'. The Weather Sensitive Baseline is calculated as follows:



- **DRWG Feedback**

- Three critical factors to balance: Accuracy, Simplicity, Integrity
- The High 15 of 20 Baseline allows customers to continue business as usual – it prevents the 5 lowest consumption hours from influencing their baseline
  - Most X of Y methodologies in other markets have at least 1 exclusion day (e.g. High 4 of 5, High 15 of 20)
  - Allows for participation in the Industrial Conservation Initiative
    - Consumption on these days is not an accurate representation of normal baseline profile and should be left out of baseline measurement

- **Research & IESO discussion:**
  - LTEP goal is to use DR to meet 10% of system peak by 2025
    - IESO goal = incentivize participation while employing as accurate a baseline as needed for overall system reliability
  - Every baseline has some degree of inaccuracy – no perfect solution
  - Adjusted baselines outperform unadjusted baselines (*Summary of Baseline Assessment Studies posted on DRWG page*)
  - **The Current 15 of 20 baseline with an In-Day Adjustment can deliver the accuracy needed for system reliability while maintaining the flexibility, simplicity and incentive that participants desire**

The following changes are applicable to contracts that expire before the delivery date of the first DR Auction or DR3 contract holders entering into the IESO's Market Rules.

- Continue with the High 15 of 20 Baseline methodology and introduce the application of an In-Day Adjustment (see next slide)
- Remove the Weather Sensitive Additive Adjustment and subject all participants to day of event conditions instead (with In-Day Adjustment)
  - Weather Sensitivity will be captured by the In-Day Adjustment

# Calculating The In-Day Adjustment

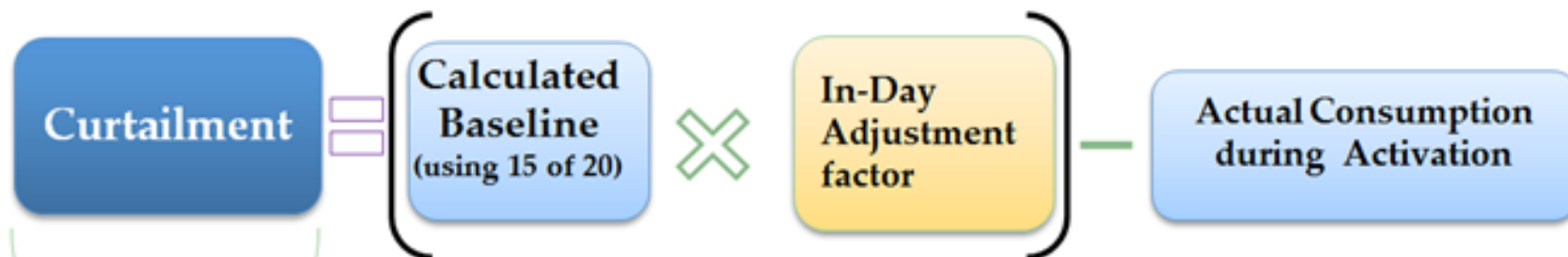
## Calculating the In-Day Adjustment:

- The 3 hour window occurring an hour before the Activation event is the **Adjustment Window**

**A Value** = Average actual consumption during Adjustment Window hours in the past 15 Suitable Business Days (SBD)

**B Value** = Average actual consumption during Adjustment Window hours on the actual Activation day

**In-Day Adjustment factor** =  $\frac{\text{B Value}}{\text{A Value}}$  \* Min=0.8  
Max=1.2



Calculated for each hour of an activation