Update on Class Definition Considerations, Delta Method, and Model Inputs

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- After implementing the Delta method, PJM believes it is feasible to use in the PJM model.

- The Delta method offers several more desirable features relative to the "simple method".
    - <u>Given the same resource mix</u>, the "simple method" results are sensitive to defining many small classes vs. a few large classes, while the Delta method results are insensitive to that.
    - The Delta method has a more intuitive explanation:
        - The First-In ELCC values correspond to an estimate of the reliability value of each class in the absence of other limited/variable resources
        - This First-In ELCC values are then adjusted up or down based on how well/poorly each class interacts with the rest of the classes, which is measured by the Last-In ELCC
    - Therefore, the Delta method better accounts for complementary, antagonistic, and neutral interactions among classes.

- PJM plans to provide background data at the February 18 CCSTF meeting.

- After implementing the Delta method, PJM has not encountered any undesirable artifacts associated with separating the fixed and tracking solar classes.

  - The main impediment PJM had identified to separate fixed from tracking solar was related to the diverging penetration levels expected for these two classes (and their "similar" performance)

  - The Delta Method addresses this impediment

- PJM expects this finding to extend to onshore wind and offshore as well.

Updates on Model Inputs Relative to 2020's Draft Results

1. PJM rolled in data from Delivery Year 2019/20.

2. PJM is now using the most recent versions of the Reserve Requirement Study (2020) and Load Forecast (2021).

3. PJM is now using an updated resource mix forecast (from Nov. 2020).

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