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WECC

ADS Approach—Core Data

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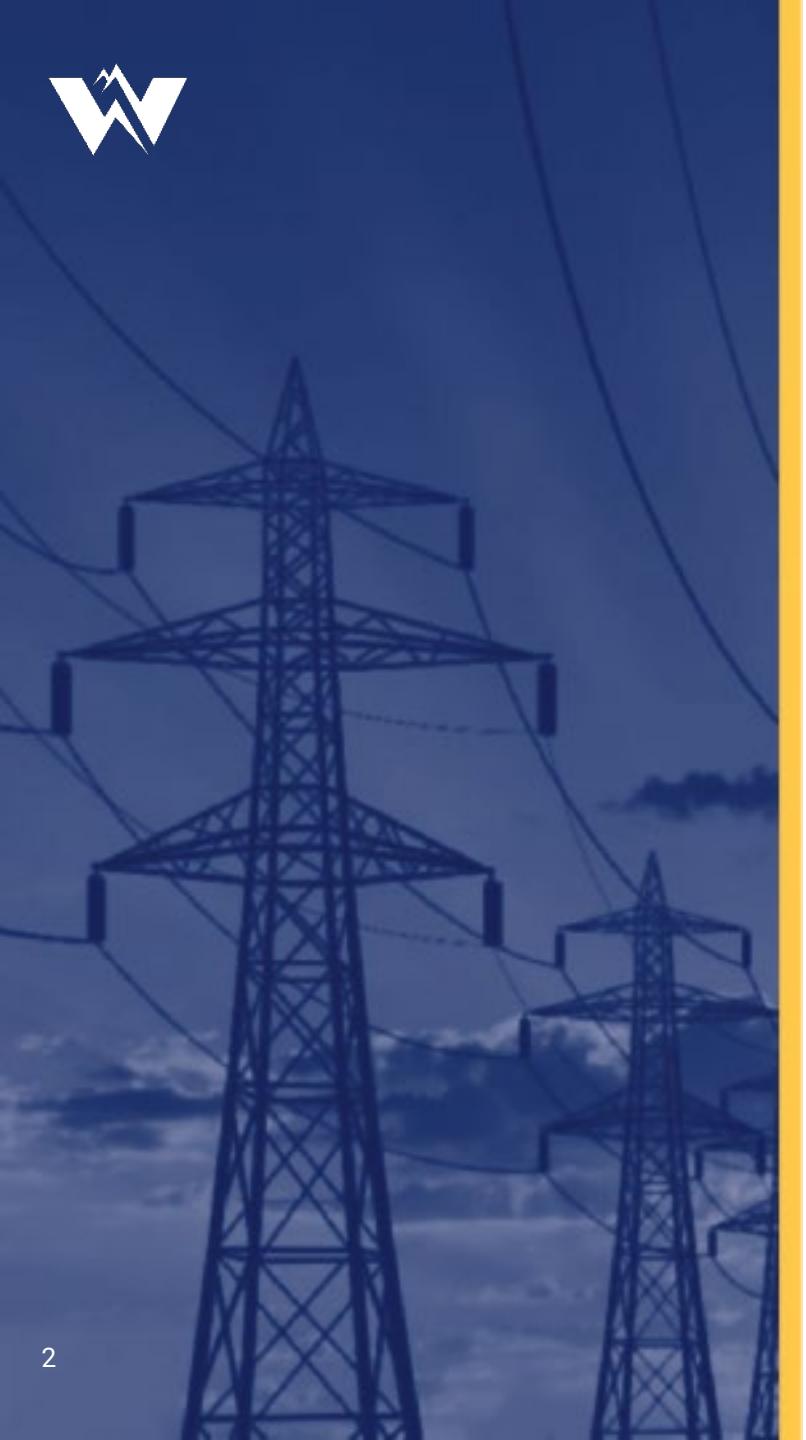
**Electric Reliability
& Security for the West**

December 3, 2025

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The question:
What should the source of data be for the ADS, PF/DPM or PCM/L&R?

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Current Process

Power Flow/DPM, 10-year base case

Production Cost/L&R

ADS

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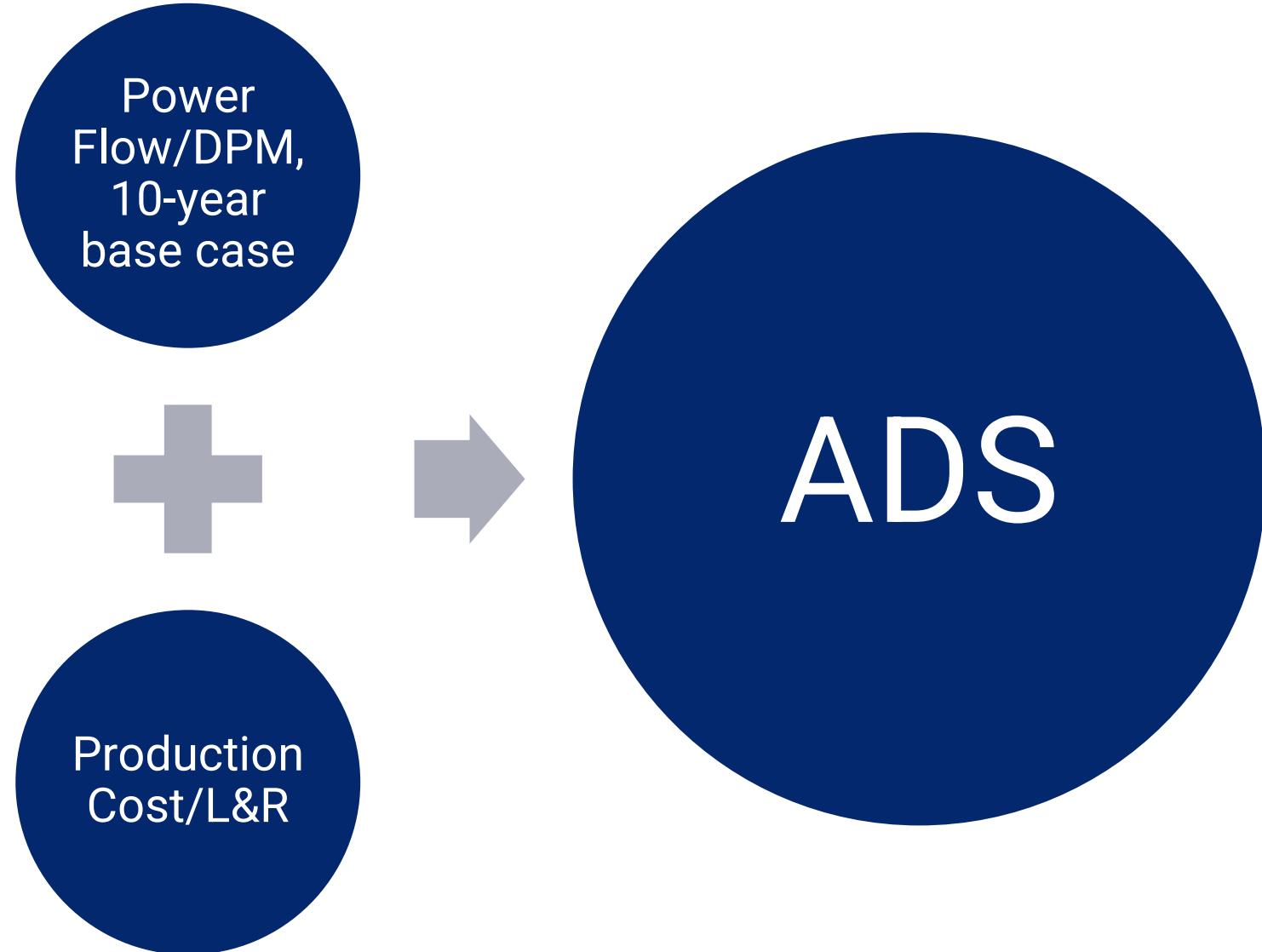
Complication: Generally, DPM data ≠ L&R data*

DPM/Power Flow

- Used for 1-, 5-, and 10-year reliability planning

- Rigid representation of generators

  - Transient stability 1-, 5-year cases

- Load represented as fixed point

L&R/Production Cost

- Used for 10-year production cost modeling

- Loose representation of generators

  - Tiers 1, 2, and 3

- Load profile varies over the year

*Except in utilities that have integrated transmission and generation planning.

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Technical Consideration: Round-Trip

PCM to PF

Run the 8760 hourly PCM

Choose representative hour

Transform that PCM-hour into a solve-able PF base case

Input
- "Seed" power flow base case

Modifications to gens and loads
- Representation (L&R influence)
- Dispatch

Output
- Modified power flow base case
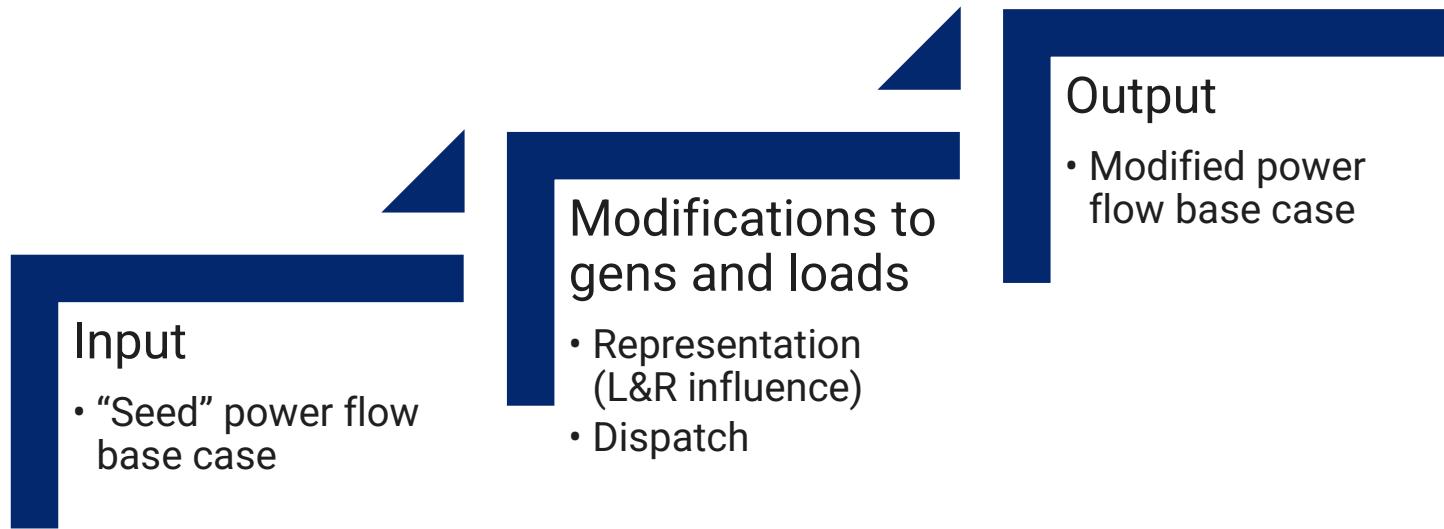
**Topological differences introduced by deltas between the DPM and L&R data need to be explained

**Typically, the engineers behind DPM are not those behind L&R, introducing potential for error

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Drivers for PCM Modeling

FERC 1000
- Round-trip
- Continued

FERC 1920
- Round-trip
- New

Energy Assessment Standard
- New NERC standard, Project 2024-02

Utility
- Round-trip
- Continued

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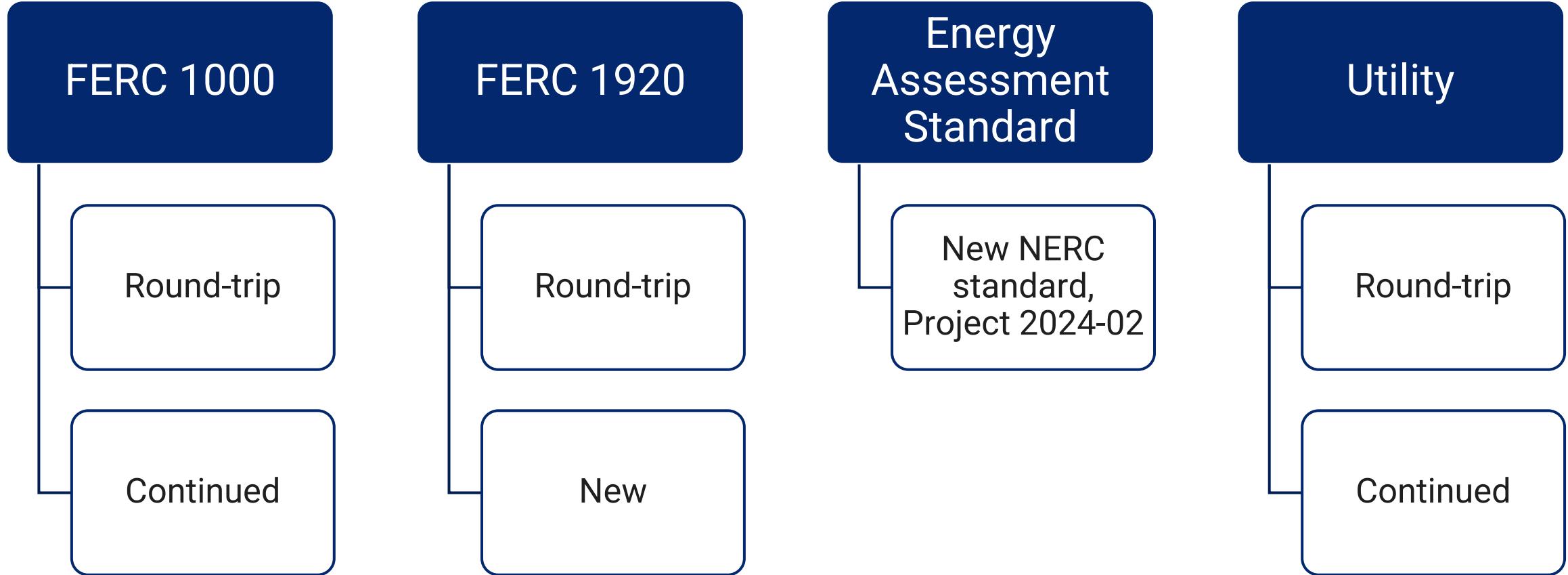
Consideration, Using PF as Source for ADS

Generation Placement

- Area Coordinators determine location of generators through PF
  - SRS may include tiered generators in update to DPM

Round-Trip capability

- Consistent representation of the system in the before and after PF cases

L&R as Supplement: Unserved load in PF

- Gaps in PF data can be supplemented with L&R data

Potential for other Horizons

- 5-year, 1-year, and even operating cases can be converted to PCM

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2036 ADS Discussion

- Suggestion
  - Use power flow (PF) as the data source for the 2036 ADS PCM