

# WECC

#### 901 Milestone 3 Industry Workshop Takeaways

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## Day 1 Takeaways

- High-level observations
  - 300+ GW of planned resources, mostly IBRs
    - Synchronous generators provide reliability services
    - IBRs are programmed to provide the same services
  - Modeling IBRs accurately is growing in importance
- Does it make sense to make IBRs act like synchronous generators?
- NERC Alert Essential Action IBR Performance and Modeling
  - Summary report likely available in the next couple of months

## Day 1 Takeaways

- Panel of OEMs
  - Vestas stated—standard library models cannot accurately represent our equipment
    - Is this unique?
  - With clear requirements, needs can be met
    - Requires that industry knows the need
- Panel of GOs
  - Majority don't have software to do anything with the models
  - Discussion about need for a business case for high-quality models

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## Day 1 Takeaways

- GO panel continued
  - Car analogy
    - 2005 car vs. 2025 car
      - Could they both have the same features?—Yes
      - Should they?
  - ERCOT requires essential reliability services
    - Follow up after events to verify performance



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#### **Possible Flowchart**





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#### Day 2 Takeaways

- TP/PC panel
  - Discussion of User Defined Models, Standard Library Models, and EMT models
    - $\circ$  EMT = IBR
    - Discussion about different models needed for different types of studies
    - FERC Order No. 2023 vs Order No. 901
      - Most Accurate vs. Standard Library models
  - Timing
    - NERC Standards don't apply until units are in service
    - Tuning happens at commissioning

## Day 2 Takeaways

- Interconnection-wide System Model Developers
  - Potential lack of authority to enforce quality of the data and models
  - Standard library models are sufficient for interconnection wide cases
  - Use cases of interconnection-side cases
    - NERC Standard assessments (TPL, GMD, PRC...)
    - WECC interconnection-wide assessments
    - Development of other models such as Anchor Data Set
  - Identifying data issues
    - WECC SADD
    - NERC Case Quality Metrics

#### Suggestions

- Suggestions to enhance what we have
  - Change timestep in stability simulations from 4 ms to 1 ms.
  - Reduce the availability of "default parameters."
  - Should WECC's processes move away from Area Coordinators toward PCs?
  - Need generator test reports to flow from GO to TP to PC to WECC.
  - Explore ways to give the interconnection-wide case builder authority to get data corrections and updates.





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