LCRA Assumptions on BESS Studies

BESS Modeling & Dispatch in FIS

By

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ENERGY • WATER • COMMUNITY SERVICES

Steady State

- Use current SSWG Case based on BESS COD
- Use Summer Peak case
- Use High Wind Low Load (HWLL) Off Peak case
- Model BESS as a Generator with voltage control capability for charging scenario
- Model BESS as a Generator with voltage control capability for discharging scenario

Steady State Study Scenarios

Study Scenario	Plant Dispatch	ERCOT SSWG Case
Charging	-100 MW	21SSWG_2024_SUM1_U2_Final_06232021
Charging	-100 MW	21SSWG_2025_HWLL_U2_Final_06232021
Discharging	100 MW	21SSWG_2024_SUM1_U2_Final_06232021
Discharging	100 MW	21SSWG_2025_HWLL_U2_Final_06232021

Stability Studies

- Use DWG Sumer Peak case
- DWG High Wind Low Load (HWLL) for Off Peak case
- Utilize dynamic model data from RIOO, e.g .dyr, .dll, .raw
- Model BESS as a Generator for charging scenario at Pmin (-MW)
- Model BESS as a Generator for discharging scenario at Pmax

BESS Stability Studies

Study Scenario	Plant Dispatch	ERCOT DWG Case	ERCOT SSWG Topology
Charging	-100 MW	2024 Summer Peak	21SSWG_2024_SUM1_U2_Final_06232021
Charging	-100 MW	2025 High Wind Low Load	21SSWG_2024_SUM1_U2_Final_06232021
Discharging	100 MW	2024 Summer Peak	21SSWG_2024_SUM1_U2_Final_06232021
Discharging	100 MW	2025 High Wind Low Load	21SSWG_2024_SUM1_U2_Final_06232021

Questions?