

Prioritized List of Power Flow Model Shortcomings

WECC staff's prioritized list of power flow model shortcomings for 2024 is:

- 1. Reduce the amount of generators dispatched at their reactive power limits.
- 2. Reduce the amount of generators above the modeling threshold without models.
- 3. Address natural gas generators whose summer Pmax value is equal to or greater than their winter Pmax values.
- 4. Address generators with inconsistent time constants.
- 5. Address generators with inconsistent speed damping coefficients.
- 6. Address generators with inconsistent DC exciter self-excitation parameters.

The targets for achieving the goal of 20% reduction are shown below.

| 24HS3b.sav | Metric |
|--|--------|
| Gens at reactive power limits | 113 |
| Gens without models | 320 |
| Natural gas gens Pmax summer/winter | 780 |
| Gens with inconsistent time constants | 241 |
| Gens with inconsistent speed damping coeffs. | 207 |
| Gens with inconsistent DC self-exciter params. | 26 |
| TOTAL | 1687 |
| 25HS3a.sav Goal | 1349 |