



## 2023 RTP Reliability Study Assumptions Update

Regional Transmission Planning  
May 16, 2023

# Agenda

- Generation Resources Unavailable in Planning Studies Prior to NSO
- Battery Energy Storage Modeling Assumptions
- Stability Interfaces

# Generation Resources Unavailable in Planning Studies Prior to NSO

Generation Resource	Capacity	Planned Retirement or Mothballed Date	Notes
<b>Braunig Unit #1, #2, and #3</b>	217 MW 230 MW 412 MW	March 2025	Based on CPS Energy's public announcement <sup>[1]</sup> <a href="https://www.cpsenergy.com/content/dam/corporate/en/Documents/Trustees/Resolution-Approving-Generation-Planning-Portfolio.pdf">https://www.cpsenergy.com/content/dam/corporate/en/Documents/Trustees/Resolution-Approving-Generation-Planning-Portfolio.pdf</a>
<b>Sommers Unit #1</b>	420 MW	March 2027	Based on CPS Energy's public announcement <a href="https://www.cpsenergy.com/content/dam/corporate/en/Documents/Trustees/Resolution-Approving-Generation-Planning-Portfolio.pdf">https://www.cpsenergy.com/content/dam/corporate/en/Documents/Trustees/Resolution-Approving-Generation-Planning-Portfolio.pdf</a>
<b>Coletto Creek</b>	655 MW	No later than July 17, 2027	Based on Luminant's public announcement <a href="https://www.luminant.com/documents/ccr/Texas/Coletto-Creek/2021/2021-Coletto%20Creek-Part%20A%20Annual%20Progress%20Report-Primary%20Ash%20Pond.pdf">https://www.luminant.com/documents/ccr/Texas/Coletto-Creek/2021/2021-Coletto%20Creek-Part%20A%20Annual%20Progress%20Report-Primary%20Ash%20Pond.pdf</a>
<b>Spruce Unit #1</b>	560 MW	End of 2028	Based on CPS Energy's public announcement <a href="https://www.cpsenergy.com/content/dam/corporate/en/Documents/Trustees/Resolution-Approving-Generation-Planning-Portfolio.pdf">https://www.cpsenergy.com/content/dam/corporate/en/Documents/Trustees/Resolution-Approving-Generation-Planning-Portfolio.pdf</a>
<b>Sommers Unit #2</b>	410 MW	March 2029	Based on CPS Energy's public announcement <a href="https://www.cpsenergy.com/content/dam/corporate/en/Documents/Trustees/Resolution-Approving-Generation-Planning-Portfolio.pdf">https://www.cpsenergy.com/content/dam/corporate/en/Documents/Trustees/Resolution-Approving-Generation-Planning-Portfolio.pdf</a>

[1] Released at the January 23, 2023, CPS Board Meeting (<https://www.cpsenergy.com/en/about-us/who-we-are/board-meetings.html>)

# Battery Energy Storage Modeling Assumptions

- Battery energy storage will be modeled using data provided in response to the following requests for information (RFI) in addition to that available in RIOO  
<http://www.ercot.com/services/rq/integration>
- For battery energy storage for which RFI responses are not received or no model is in RIOO, an energy to power ratio (E/P) of 1.0 and a round-trip efficiency of 88% will be assumed

# Stability Interfaces – Reliability Analysis

GTC	Location	Limit Type <sup>[2]</sup>	Reliability Limit <sup>[3][4]</sup>		
			2025-26 SUM	2026 MIN	2028-29 SUM
Nelson Sharpe – Rio Hondo <sup>[1]</sup>	Valley	Static	972	972	-
North Edinburg – Lobo <sup>[1]</sup>	Valley	Static	1,377	1,377	-
Valley Export <sup>[1]</sup>	Valley	Static	635	635	-
Valley Import <sup>[1]</sup>	Valley	VSAT	2,540 <sup>[2a]</sup>	2,585 <sup>[2b]</sup>	-
North to Houston	Houston	VSAT	5,204 <sup>[2a]</sup>	4,354 <sup>[2b]</sup>	5,204 <sup>[2a]</sup>
McCamey	West Texas	Static	2,889	2,889	2,889
West Texas Export	West Texas	Static	11,016	11,016	11,016

[1] Lower Rio Grande Valley project included in case. Limits reflect the expectation that the constraints would not be binding in the planning timeframe based on recent planning studies. Future changes in generation and/or topology could change that expectation.

[2] GTCs with real-time VSAT will utilize the economic analysis UPLAN hourly profiles using historical data. Periods and hours selected consistent with top and bottom load hours analysis presented at April 2023 RPG.

[2a] Summer peak RTP reliability limits will take the average of hours 15-19 from the June-September period of hourly profiles used in the economic analysis.

[2b] Min case RTP reliability limits will take the average of hours 3-6 from the March-April period of hourly profiles used in the economic analysis.

[3] Limits used in reliability analysis, like economic analysis, will be 90% of calculated stability limits to be consistent with the [ERCOT Transmission and Security Operating Procedure](#).

[4] Limits are for no prior outages.

# Questions / Comments

- Please send questions and/or comments to:
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