



2021 RTP Economic Analysis – Initial Results

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Transmission Planning Assessment

Aug 17, 2021

2021 RTP Stability Limit Summary

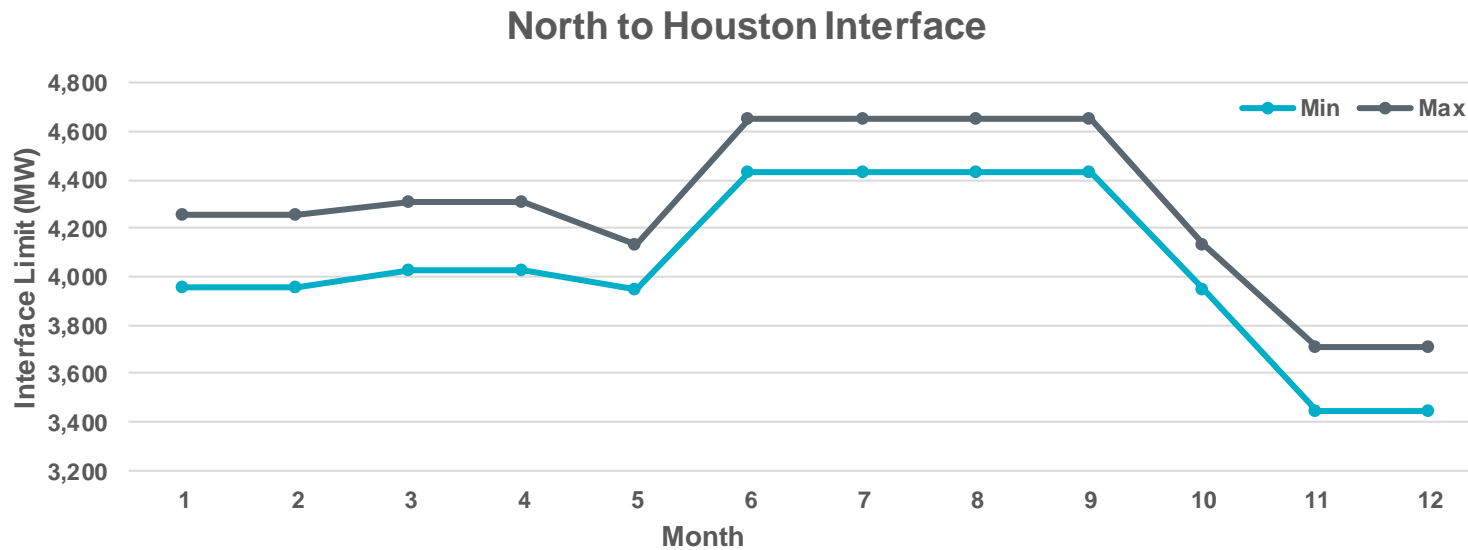
Stability Interface	2021 RTP Stability Limit	Notes
West Texas	11,016 MW	Based on preliminary Long-Term West Texas Export Special Study results.
North to Houston	Hourly Profile	Hourly limit profile based on analysis of historical values.
Rio Grande Valley Import	Hourly Profile	Hourly limit profile based on analysis of historical values.
South Texas Export	3,436 MW	Based on preliminary South Texas Stability Assessment Study results.
Nelson Sharpe – Rio Hondo	888 MW	Based on the most recent GTC Methodology.
North Edinburg – Lobo	1,541 MW	Based on the most recent GTC Methodology.

* All limits are enforced with a reliability margin consistent with the ERCOT Transmission and Security Operating Procedure found at <http://www.ercot.com/mktrules/guides/procedures>.

North-to-Houston Interface

- N-H interface use hourly data profile based on system operation historical data and analysis

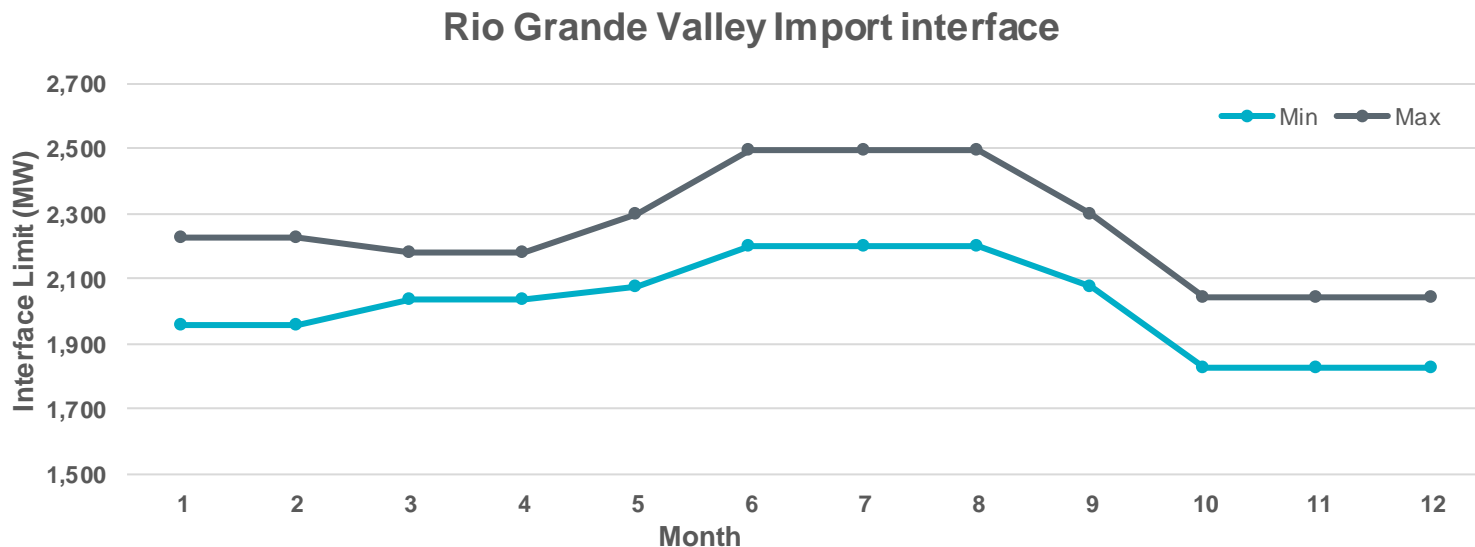
Interface Limit	Jan - Feb	Mar - Apr	May&Oct	Jun - Sep	Nov - Dec
Min	3956	4031	3945	4430	3444
Max	4254	4312	4136	4653	3706



Rio Grande Valley Import Interface

- N-H interface use hourly data profile based on system operation historical data and analysis

Interface Limit	Jan - Feb	Mar - Apr	May&Sep	Jun - Aug	Oct - Dec
Min	1959	2035	2077	2198	1827
Max	2224	2178	2300	2496	2042

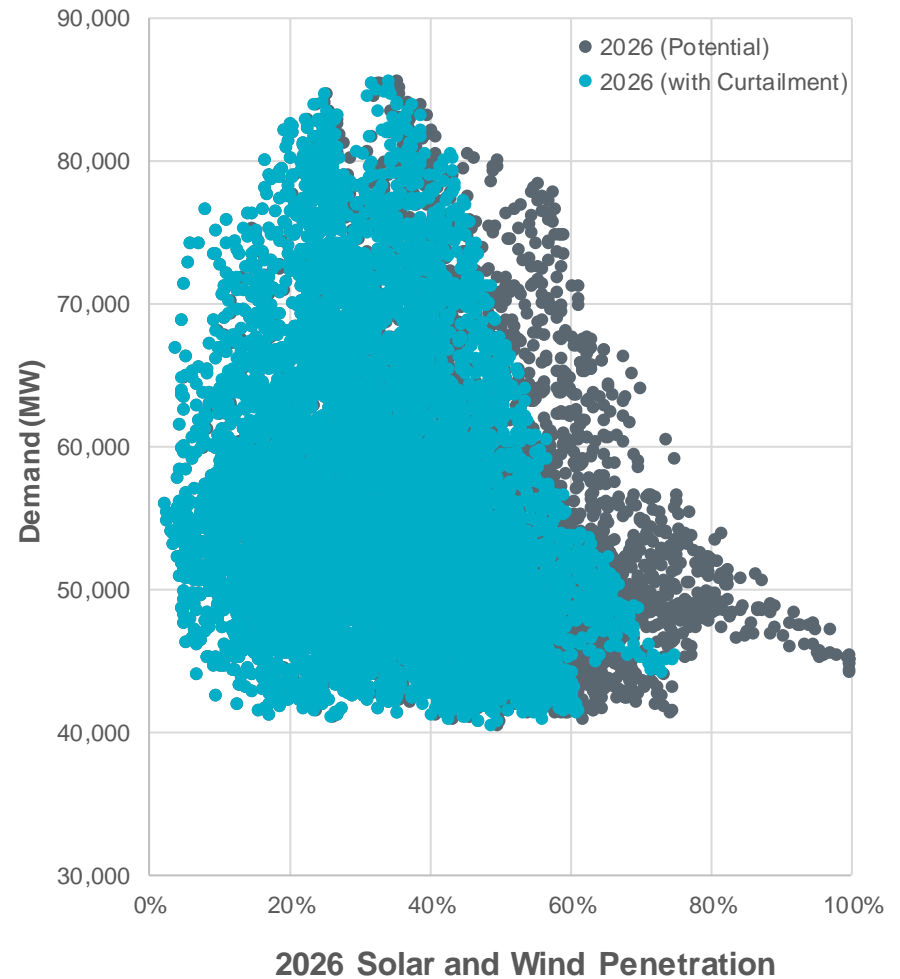
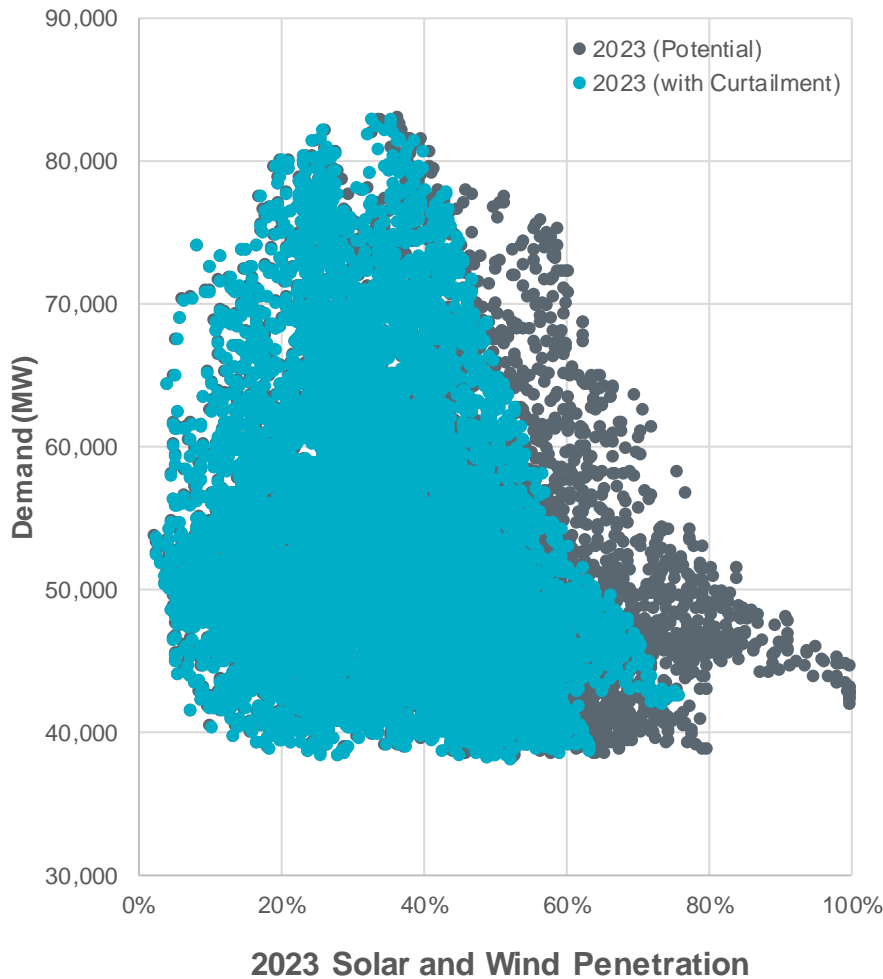


2021 RTP: System Summary

Description	Unit	2023 ^a	2026 ^a
Coincident Peak Load	MW	82,966	85,490
Peak Net Load ^b	MW	67,965	70,493
Minimum Net Load ^b	MW	10,348	11,422
Annual Served Load	GWh	464,695	488,349
Annual Storage Charging	GWh	330	398
Annual Transmission Losses	GWh	13,297	13,459
Annual Generation	GWh	478,321	502,205
Load-Weighted Average LMP	\$/MWh	23.16	25.35

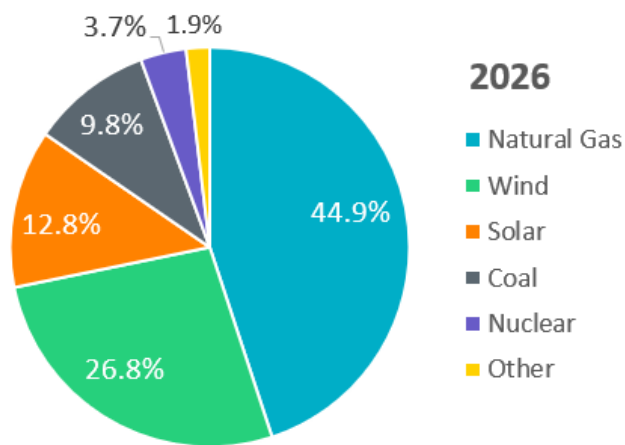
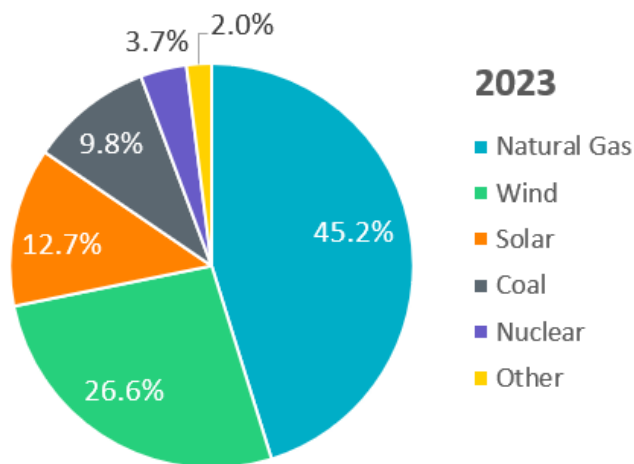
- a. All results are based on the 2013 historical weather year.
- b. Hourly Net Load = Hourly Load Forecast – Hourly Wind Output – Hourly Solar Output

Renewable Generation Penetration

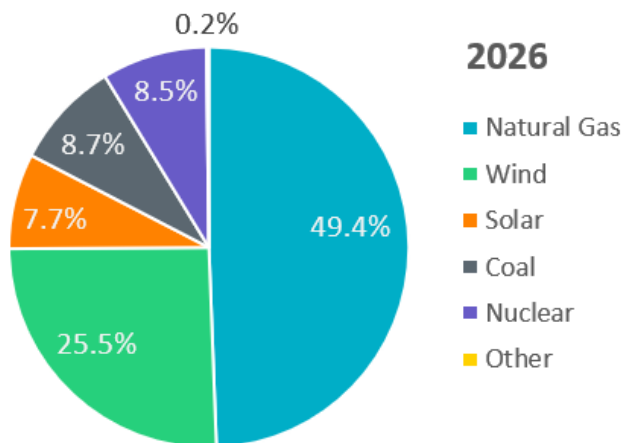
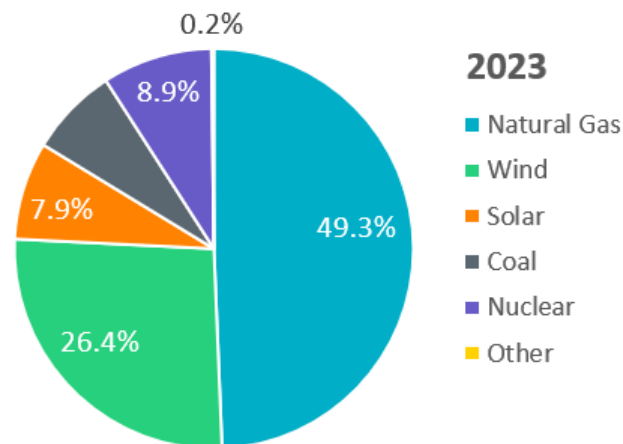


2021 RTP: Generation Mix

Capacity by Resource Type

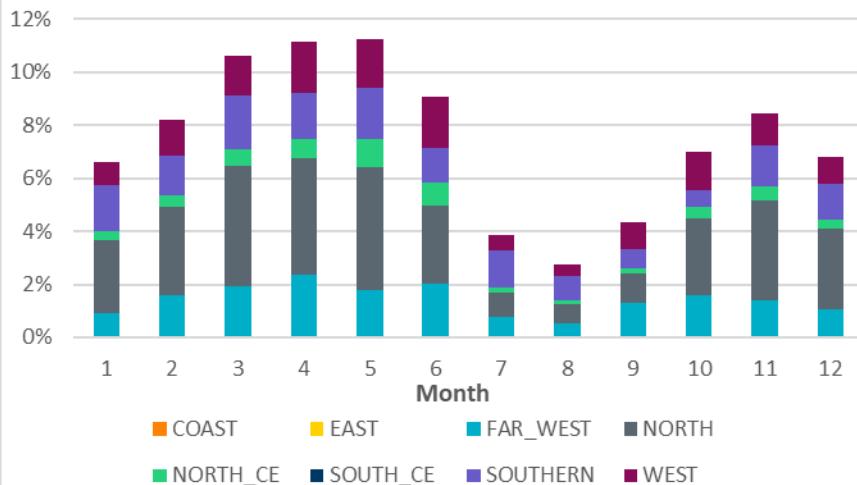


Generation by Resource Type

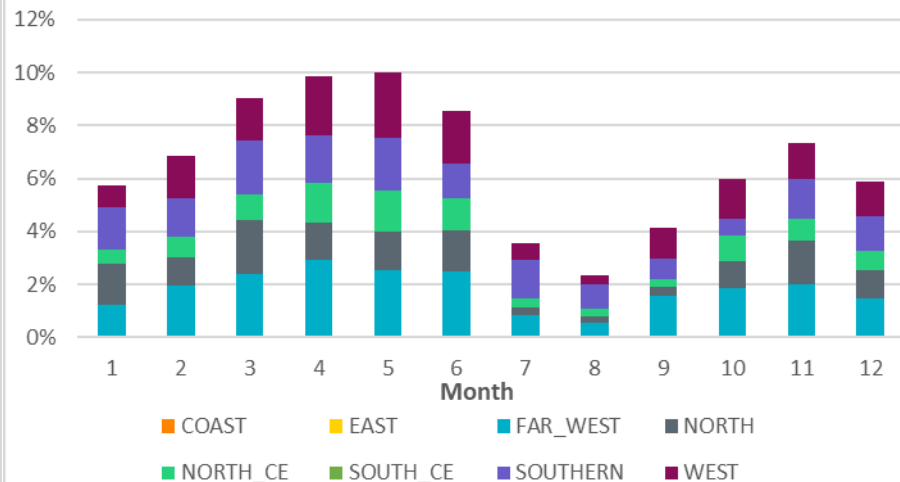


2021 RTP: Wind and Solar Curtailment

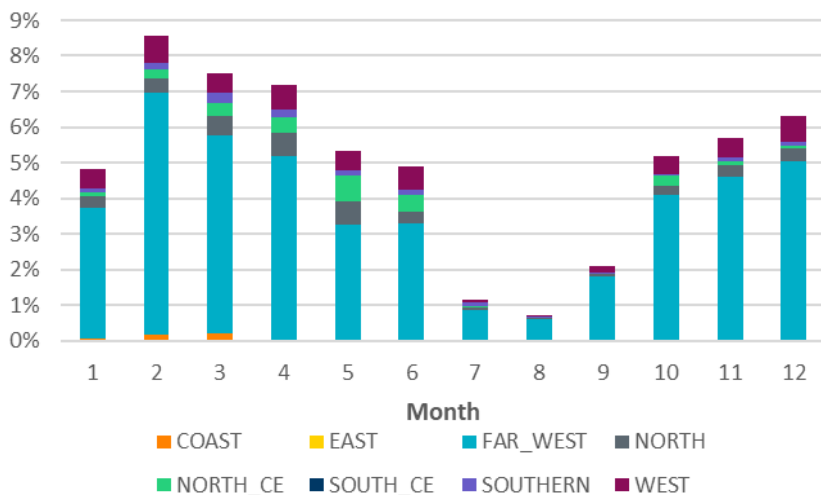
Wind - 2023



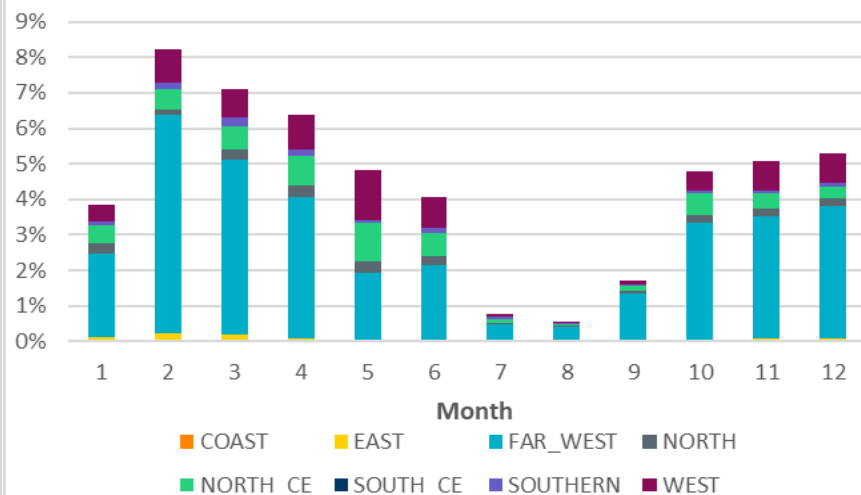
Wind - 2026



Solar - 2023

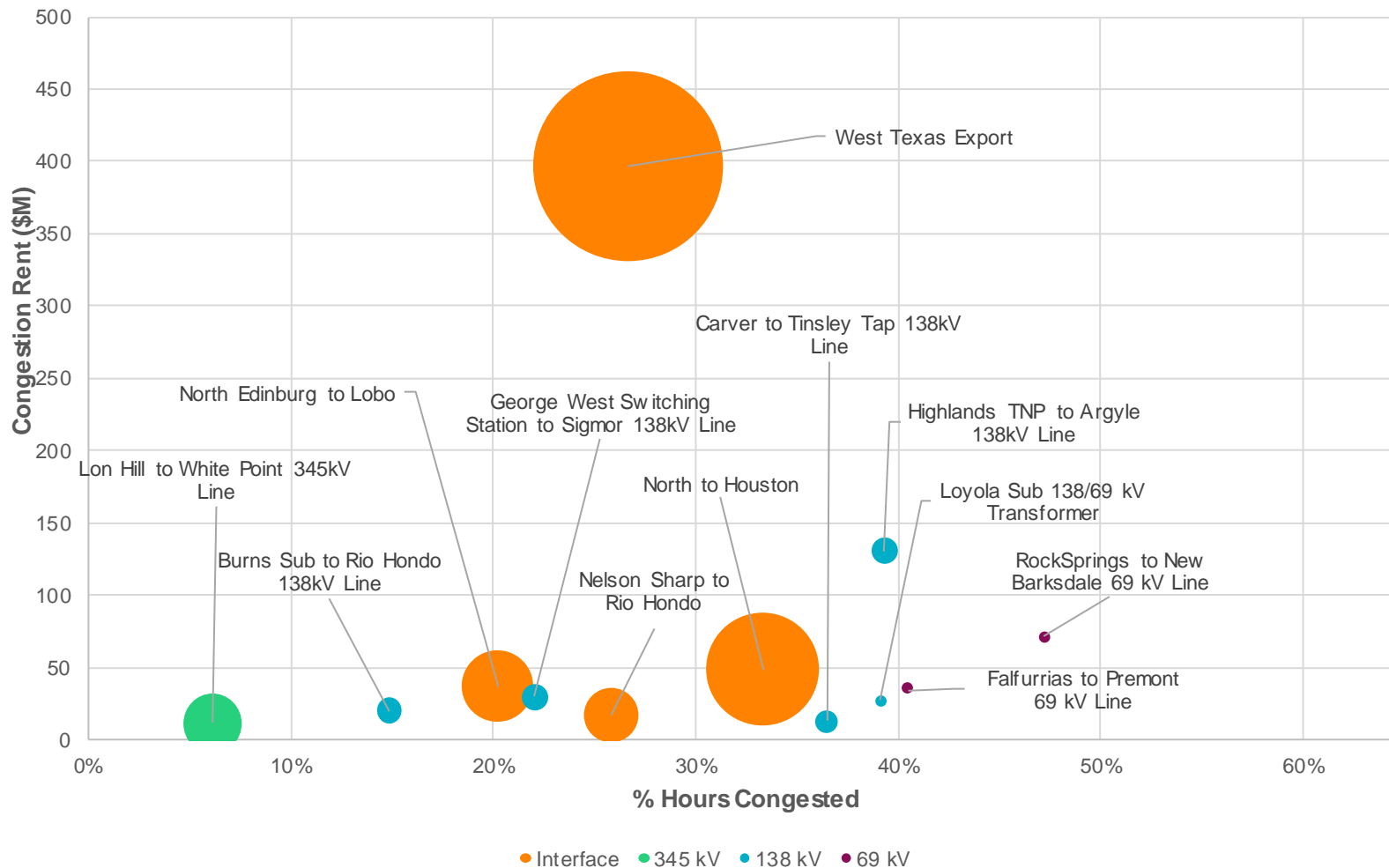


Solar - 2026

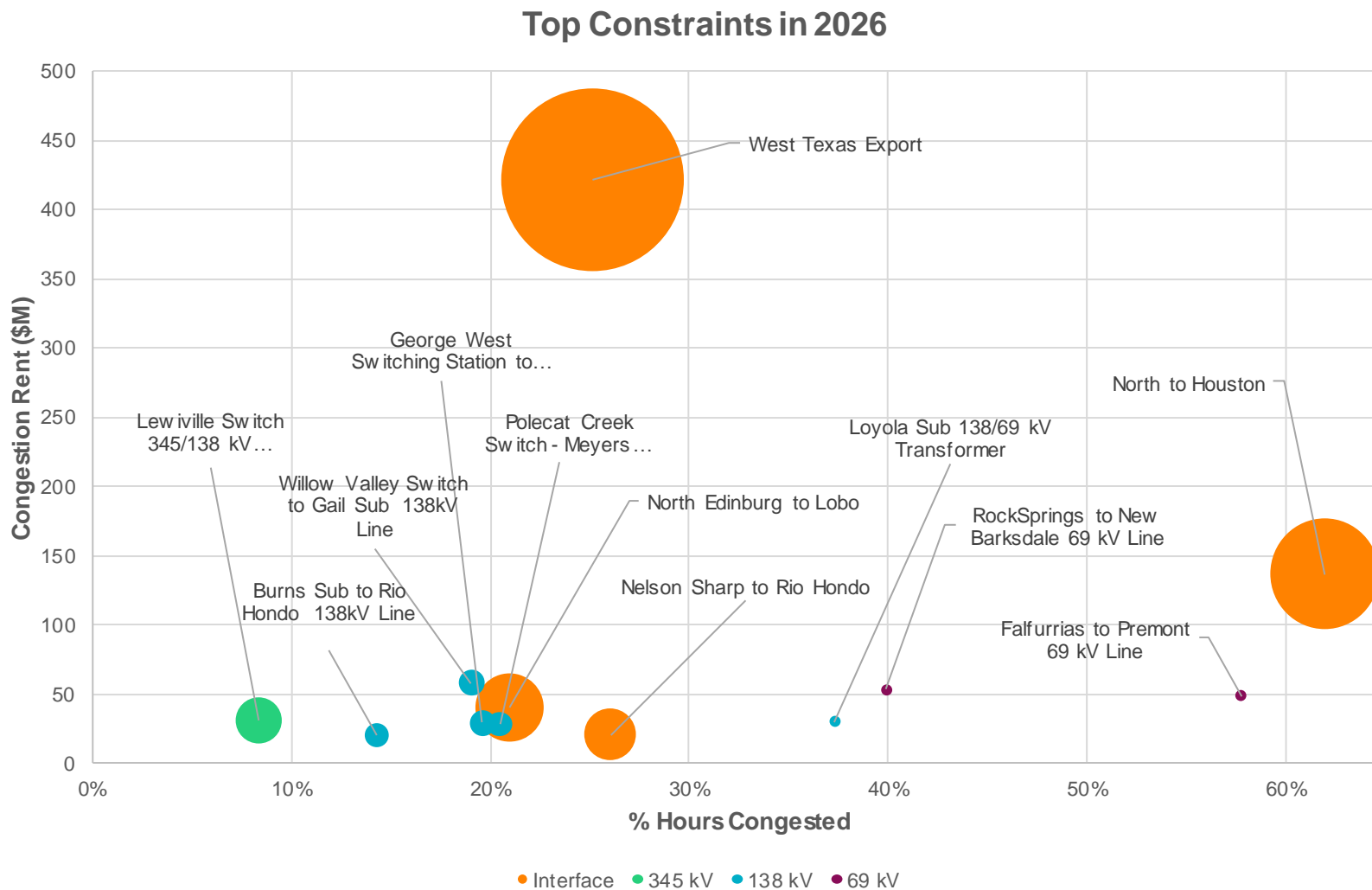


2021 RTP: Top Constraints (2023)

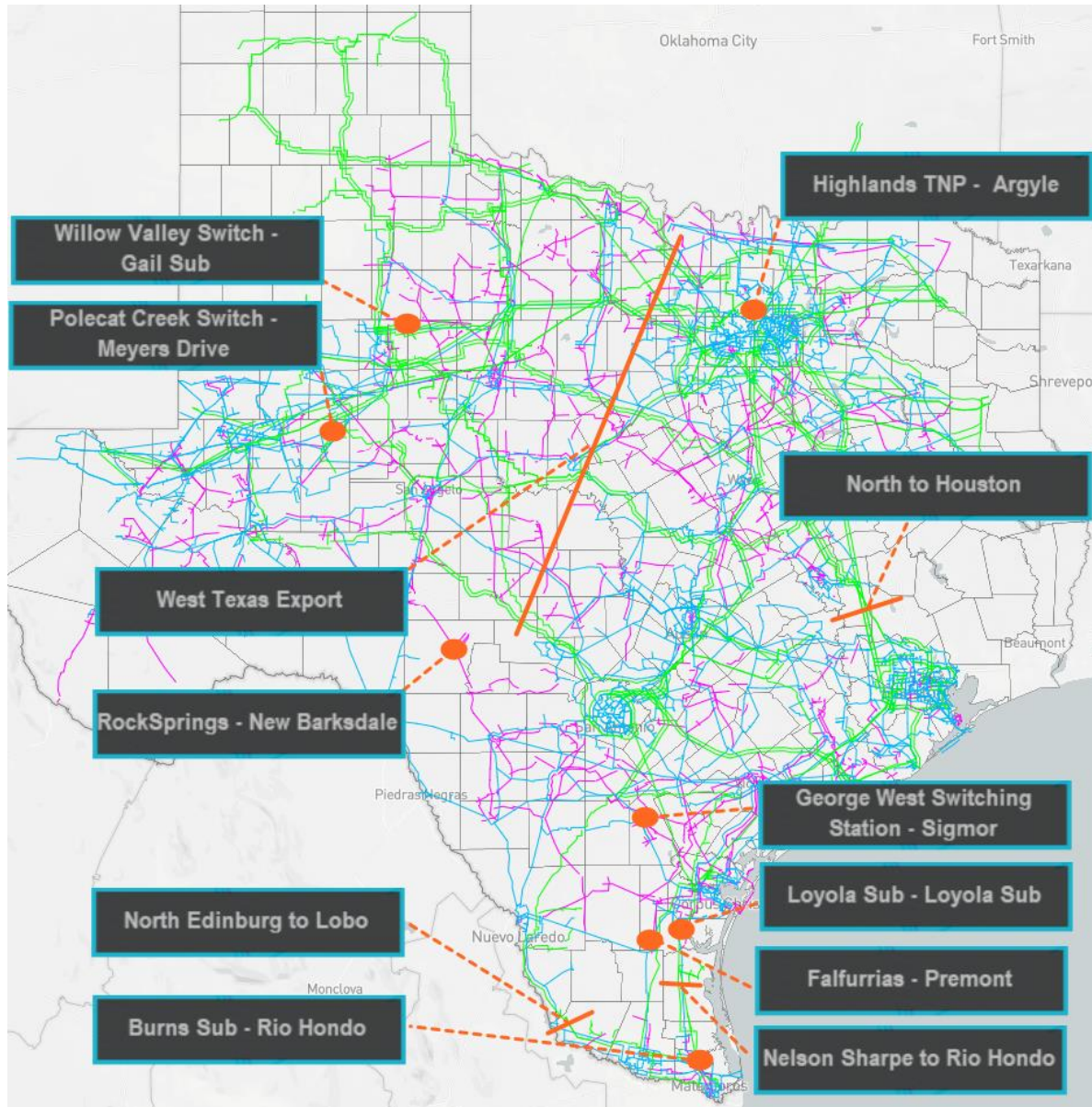
Top Constraints in 2023



2021 RTP: Top Constraints (2026)



2021 RTP: Top Constraints (2023 + 2026)



Questions and Comments?

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