



## 2022 RTP Winter Peak Sensitivity Analysis Assumptions

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# Introduction

- ❑ NERC Reliability Standard TPL-001-5.1 requires sensitivity analysis to be performed
  
- ❑ 2022 RTP on-peak sensitivity analysis
  - 2024 and 2027 90<sup>th</sup> percentile winter coincident peak conditions
  
- ❑ Assumptions and methodology
  - Starting cases and case development
  - Generation and load

# Starting Cases and case development

- ❑ 2022 RTP 2024 summer peak case and 2027 summer peak case topologies
- ❑ Adjustment needed to incorporate differences between summer and winter topologies and system conditions

# Load Assumption

- ERCOT 90<sup>th</sup> percentile coincidental winter peak load forecast with adjustment<sup>1,2</sup> (MW)

Year	Coast	East	Far West	North	North Central	South Central	Southern	West	Total CP <sup>3</sup>
2024	22,159	2,913	10,789	4,305	26,035	12,932	7,417	2,467	89,017
2027	22,766	2,965	12,017	4,365	27,069	13,602	7,779	2,585	93,149

1: Adjustment includes approved large load addition, IHS load forecast, etc.

[https://www.ercot.com/files/docs/2022/03/11/2022 RTP Load Review Update March 2022 RPG.pdf](https://www.ercot.com/files/docs/2022/03/11/2022_RTP_Load_Review_Update_March_2022_RPG.pdf)

2: Self serve load in Oct 2021 SSWG 2023 winter peak case adopted for both years

3: CP: Coincident Peak

- Load distribution profile from October 2021 SSWG 2023 winter peak case will be incorporated

# Generation Assumption

## ☐ Solar and Wind Capacity Factors\*

- Average of top 10 uncurtailed solar and wind capacity hours based on 60 top load hours of 2018-2020 winter

<i>Solar</i>	<i>Wind-Coastal</i>	<i>Wind-Other</i>	<i>Wind-Panhandle</i>
4%	15%	52%	68%

## ☐ Battery modeling assumption same as in summer peak cases

\* Assumed solar and wind capacity factors are different from CDR report



# Questions?

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