



## **Item 11: Proposed Maximum Daily Resource Planned Outage Capacity Methodology (Related to NPRR1108)**

*Shun Hsien (Fred) Huang*  
Director, Operations Support

Technical Advisory Committee Meeting

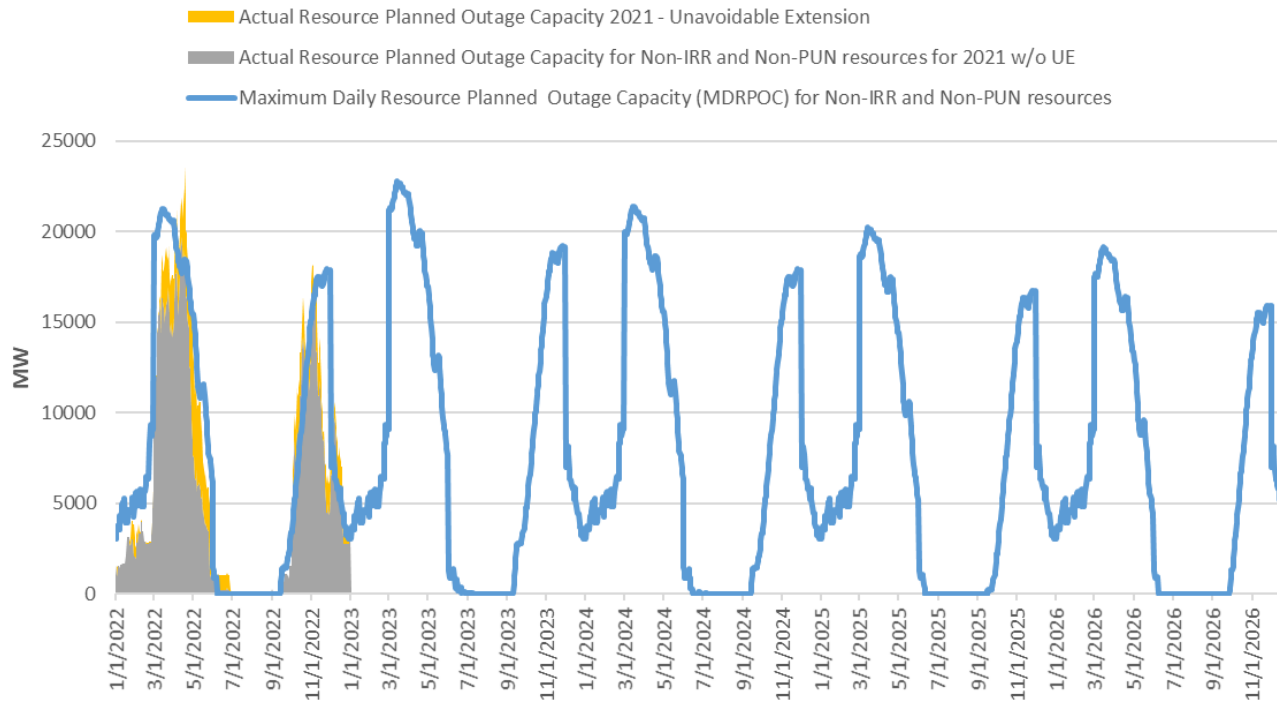
ERCOT Public  
May 25, 2022

## Status Update

- ERCOT issued a Market Notice on May 10 soliciting stakeholder comments on the proposed Maximum Daily Resource Planned Outage Capacity methodology by May 23.
- ERCOT issued a second Market Notice to clarify that all the received comments will be posted on the May TAC meeting webpage,  
<https://www.ercot.com/calendar/event?id=1620841636253>
- Three sets of comments were submitted by Market Participants. ERCOT has reviewed these comments and made changes to the draft methodology.

# Maximum Daily Resource Planned Outage Capacity

- Using 2021 actual planned outages (which were highest outages since 2019), the calculated maximum outage capacity under ERCOT's proposed methodology provides at least 20% additional margin for 2022-2026\*
- Use of the proposed methodology would require some outages to be moved a little earlier in the spring and a little later in the fall.



# Preliminary Evaluation of the Proposed Methodology

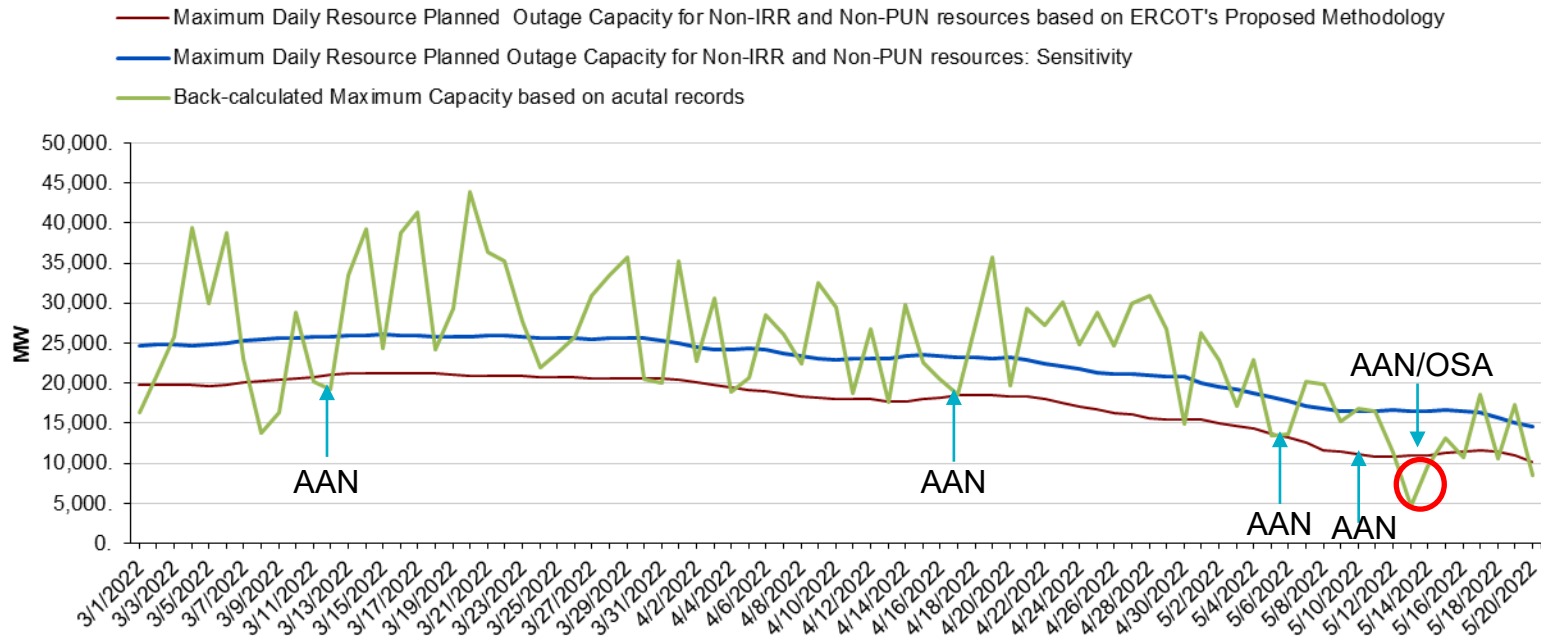
- Approach:
  - Back-calculated maximum outage capacity from January 1 to May 20, 2022 following the formula in the proposed methodology, but with the actual load, actual IRR power production, and actual thermal resource unplanned outage, and assuming all thermal units without an outage or derate are available at their full capacity.
  - Compare maximum outage capacity based on (1) ERCOT's proposed methodology and (2) sensitivity based on stakeholders' comments.

	ERCOT's Proposal	Sensitivity
IRR Capacity Contribution <sup>(1)</sup>	10 <sup>th</sup> percentile	25 <sup>th</sup> percentile
Unplanned Outage Capacity <sup>(2)</sup>	99 <sup>th</sup> percentile	75 <sup>th</sup> percentile

(1). xth percentile of hourly historical wind and solar output for the peak load hours of the same season for the previous three years

(2). unplanned outage capacity for thermal Generation Resources is calculated based on xth percentile of unplanned outages for the same seasons of preceding 3 years

# Preliminary Evaluation of the Proposed Methodology for March 1- May 20, 2022\*



- Back-calculated values blue or red curves indicate potential need of advanced action notice (AAN) to request for additional resource capacity
- In this evaluation, ERCOT's methodology would have required 3~5 AANs with ~2000 MW of additional capacity for duration of 1 or 2 days
- The sensitivity would require > 20 AANs with ~4500MW of additional capacity for duration of few days to weeks



# Question