

Item 11.1: Approval of Methodology for Calculating Maximum Daily Resource Planned Outage Capacity – ERCOT Recommendation

*Woody Rickerson* Vice President of System Planning and Weatherization

**Board of Directors Meeting** 

ERCOT Public June 21, 2022

## Current Inputs for the Maximum Daily Resource Planned Outage Capacity Calculation

Components included in the Maximum Daily Resource Planned Outage Capacity Calculation	Spring	Summer	Fall	Winter	
installed thermal Generation Resource seasonal capacity is consistent with the calculation used in the Protocol					
Section 3.2.6.2.2 for the applicable seasons excluding IRRs, Generation Resources in industrial generation facilities,	66124	64152	GAGEE	67022	
ESRs, and DGR/DESRs, and peak average capacity of hydroelectric Generation Resources is consistent with the	00134	04155	04055	07955	
calculation used in the Protocol Section 3.2.6.2.2 for the applicable seasons					
Switchable Generation Resource (SWGR) capacity available to ERCOT is consistent with the calculation used in the	2122	2056	2001	2204	
Protocol Section 3.2.6.2.2 for the applicable seasons	5155	3030	2001	3234	
available mothballed capacity is consistent with the calculation used in the Protocol Section 3.2.6.2.2 for the	279	588	0	0	
applicable seasons	578	200	0	0	
capacity from private use network (PUN) is consistent with the calculation used in the Protocol Section 3.2.6.2.2 for	2875	2210	27/2	25/10	
the applicable season	2075	5210	2745	5549	
Tie capacity is consistent with the calculation used in the Protocol Section 3.2.6.2.2 for the application seasons		850	720	720	
targeted reserve level is consistent with the Outage Adjustment Evaluation (OAE) in the Advance Action Notice	6500	6500	6500	6500	
(AAN) process described in the Protocol Section 3.1.6.9	0300	0500	0300	0300	
installed IRR capacity is determined based on the 10th percentile of hourly historical wind and solar output for the	0402	1883	6000	1200	
peak load hours of the same season for the previous three years	9402	4005	0990	4233	
capacity of planned thermal Generation Resources is determined based on the thermal Generation Resources that					
meet the requirements of Planning Guide Section 6.9, the associated maximum sustainable capacity and the planned	reference: Monthly Generator				
in-service date for each Resource identified in the unit registration process	Interconnection Status Report,				
capacity of planned IRRs is determined based on the installed capacity of those IRRs that meet Planning Guide	https://www.ercot.com/misapp/Get				
Section 6.9, the planned in-service date for each IRR identified in the unit registration process, and the IRR's	Reports.do?reportTypeId=15933				
expected power production for the relevant season					
the forecasted Demand reduction provided by price-responsive Demand is consistent with the Outage Adjustment	1500	1500	1500	1500	
Evaluation (OAE) in the Advance Action Notice (AAN) process described in the Protocol Section 3.1.6.9	1500	1500	1300	1300	
unplanned outage capacity for thermal Generation Resources is calculated based on 99th percentile of unplanned	12567	8216	1126/	10226	
outages for the same seasons of preceding 3 years	13307	0310	11504	10220	
long term Load forecast is determined for the study years based on the 50th percentile of the historical load profile,	reference: Long-Term Load Forecast				
smoothed using a rolling 7-day average.	Report,				
	https://www.ercot.com/files/docs/2				
	022/02/10/2022_LTLF_Hourly.xlsx				

Item 11.1 **ERCOT Public** 

## ERCOT Maximum Daily Resource Planned Outage Capacity (MDRPOC)

- The methodology proposed by ERCOT provides at least a 22% margin for Non-IRR and Non-PUN resources to schedule their Planned Outages through 2026 when 2021 actual Planned Outages are used as the baseline.
- ERCOT will review the proposed methodology at least annually and work with stakeholders to adjust as necessary to maintain grid reliability while accommodating the needs of Resources to schedule their Planned Outages.

	Y2022	Y2023	Y2024	Y2025	Y2026
Outage Margin Compared to 2021 Actual Planned Outage (Maximum Capacity-Actual 2021 Outage Capacity)/Actual 2021 Outage Capacity	38%	51%	40%	30%	22%



## **Methodology Review and Revision Process**

- NPRR1108 ERCOT Shall Approve or Deny All Resource Planned Outage Requests was approved on May 12, 2022
  - ERCOT shall post on the ERCOT website the methodology it uses to calculate the Maximum Daily Resource Planned Outage Capacity (MDRPOC).
  - ERCOT shall issue a Market Notice and provide at least 14 days for stakeholder comment when changes are to be made to the methodology.
  - The methodology and any future revisions shall be submitted to the ERCOT Board of Directors for approval.
  - ERCOT shall post the revised methodology on the ERCOT website and issue a Market Notice announcing the posting.
- Timeline of stakeholder comments for the MDRPOC being considered today.



Item 11.1 ERCOT Public