

**ERCOT Responses to Questions and Comments Concerning ERCOT's
April 6, 2021 Preliminary Report on Causes of Outages and Derates**
April 27, 2021

CPS

1. Can the report expand the date range to February 9, 2021 through February 20, 2021?

ERCOT plans to produce an additional report with an expanded timeframe using information from the second RFI that ERCOT sent to all NERC-registered Generator Operators based on the template from the FERC RFI. Due to the large amount of data that would need to be processed to expand the timeframe of the outage analysis in the April 6 preliminary report, ERCOT's April 27 update to the preliminary report does not include data from this expanded timeframe.

2. Is the latest wind or solar forecast for each unit that went on outage available? This information can be used to make an aggregated wind and solar forecast and then compare the outage data.

ERCOT's April 27 update to the preliminary report includes additional outage MW data based on estimates of wind and solar production that would have occurred but for the outages. Please refer to slide 13 for an explanation of how those values were derived.

Calpine

3. ERCOT could request that generators supplement their RFI responses now that time has passed allowing for more progress in generators' own investigations.

ERCOT will produce an additional report based on responses to ERCOT's second RFI and other information ERCOT has received. ERCOT invites Market Participants to update their RFI responses if they have more accurate information to report.

Naman, Howell, Smith & Lee, PLLC

4. Regarding reference information (QSE RFI responses) that was used to compile the *ERCOT Report on Winter Storm 4-9-2021.pdf*, which transmission providers' facilities were mentioned as a contributing factor to the 1259MW of generation unavailability due to transmission losses as stated in the *ERCOT Report on Winter Storm 4-9-2021.pdf*?

ERCOT reads this question to refer to its April 6 preliminary report on outage causes. The Transmission Service Providers whose facilities were identified as contributing to generator outages were AEP, CenterPoint, LCRA, Oncor, and WETT.

5. Did Rattlesnake Wind or Tenaska (Neils Bohr) mention any transmission outages as reasons for generator unavailability? If so, which transmission provider?

ERCOT will not disclose Resource-specific outage cause information in this document.

6. Will there be a formal platform through ERCOT to dispute any reasoning of generation unavailability given by QSEs in both their ERCOT RFI responses as well as ERCOT Outage Scheduler submittals/updates that occurred during the 2021 Winter Storm?

ERCOT does not anticipate providing a formal platform for Market Participants to dispute the causes of outages identified by QSEs.

Texas Solar Power Association

7. Regarding the graph on page 4 of the April 6 preliminary report, Net Generator Outages and Derates by Cause (MW), would it be possible to produce a graph that further distinguishes what is now termed "weather related" outages?

In its April 27 update to the preliminary report, ERCOT identifies the various sub-causes of outages and derates assigned to the "weather related" and "fuel limitations" categories. Please refer to slide 23 of the update.

8. For solar, it is important to distinguish between any reduction in output due to cloud cover from plant damage or unavailability due to the storm in particular.

In its April 27 update to the preliminary report, ERCOT provides additional data on slide 15 showing expected solar output if there had been no outages. This output information considers the effect that cloud cover would have on solar output. The Outage Scheduler and RFI outage cause information reported by solar generation should not include the effects of cloud cover, but would include outages or derates due to storm damage.

9. Also, if any congestion or curtailment prevented a solar plant from delivering some amount of power that would have otherwise been available, it would be important to distinguish that as well if it isn't already included in the "Transmission Loss" category.

The April 6 report was focused on the impact of generation outages. Congestion on the transmission system may result in the curtailment of generation, but does not result in a generation outage. Consequently, ERCOT did not include congestion impacts in the calculation of outaged and derated MW due to transmission losses.

10. Here and anywhere else that February 14-19 generator performance is illustrated, it would be much more precise to show solar output relative to what was forecast in the Winter SARA report or day-ahead solar forecast from prior to any storm-related damage. To get clear on the question, "what was unavailable that we were counting on?", those forecasts are the relevant comparisons and not nameplate capacity. Doing this for both solar and wind should give a clearer picture of the storm impact.

ERCOT's April 27 update to the preliminary report provides additional graphs that estimate lost solar and wind MW based on expected solar and wind output if there had been no outages. Please refer to slide 13 for an explanation of how those values were derived. ERCOT believes this approach provides a more accurate indication of the "but for" impact of the solar and wind outages.

McCullough Research

11. For this data, were all resources counted by their nameplate capacity and nothing else?

Yes. In ERCOT's April 6 preliminary report, only the installed capacity (nameplate) values of the Resources reporting outages were used.

12. Was there any sort of adjustment for the reduced expected capacity that wind and solar produce, seeing as they are considered an "intermittent" resource?

ERCOT's April 6 preliminary report made no adjustment for the intermittent nature of solar and wind resources. That report used only the installed capacity as a measure of the MW unavailable due to reported outages and derates. In ERCOT's April 27 update to the preliminary report, it provided additional information showing outage and derate MW values based on expected MW that would have been available from solar and wind but for the outages.

13. For this report, were wind and solar counted at their full nameplate capacity for all times through the event?

Yes. In ERCOT's April 6 preliminary report, wind and solar were counted at their full installed capacity (nameplate) for all times throughout the event.