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Public Utility Commission of Texas

Memorandum

TO: Interested Parties

FROM: Werner Roth, Senior Market Economist

Market Analysis Division

DATE: March 31, 2025

RE: Project No. 39870 – Estimate of Installed Generation Capacity in ERCOT

The attached Excel spreadsheet provides Staff's estimate of the installed generation capacity in the Electric Reliability Council of Texas (ERCOT) power region, as of March 2025.

As required by Texas Administrative Code (TAC) § 25.401(e), the total installed generation capacity will consist of installed generation capacity that is located in, or capable of delivering electricity to, ERCOT. This will include all potentially marketable electric generation capacity, including generating facilities connected with either the transmission or distribution system, generating facilities used to generate electricity for consumption by the party that owns the facility, generating facilities that will be interconnected and operating within the next 12 months, and any generating facilities that are located on the boundary between ERCOT and another power region.

The new capacity value for the 20% limit on installed generation capacity established in Public Utility Regulatory Act (PURA)¹ § 39.154 is 136,423 MW (up from the 118,651 MW that Staff reported in its January 2024 Estimate of Installed Generation Capacity in ERCOT filing).² The new capacity value for the five percent wholesale market power exemption established in 16 TAC § 25.504(c) is 98,702 MW (up from 88,179 MW).

These values differ from one another because the five percent market power exemption excludes uncontrollable renewable resources and does not factor in import capability. The Summary tab of the spreadsheet provides the calculation for each of these values.

<u>Updates to the 2025 Methodology</u>

Synchronized Units not Approved for Commercial Operations

Historically, Staff has included generation facilities that have completed their synchronization with ERCOT but have not yet been approved for commercial operations in the New Capacity

¹ Public Utility Regulatory Act, Tex. Util. Code Ann. §§ 11.001-66.016 (PURA).

² In determining the market share of a power generation company pursuant to an application submitted under PURA § 39.158, Staff may apply capacity estimates different from those reflected in the attachment to this memorandum to account for system capacity present at the time of the determination, which may have changed since the time of this filing.

tab. In recent years, some of these generation facilities have begun appearing in the EIA Form 860 data, and Staff has removed these to avoid double-counting. As the number of these generation facilities appearing in the EIA Form 860 data continues to increase, Staff has changed how they account for them. For 2025, Staff has included these facilities (designated as "Oper-Syn" in the CDR) in the Current Capacity tab and removed duplicate entries from the ERCOT Generator Interconnection Study report used to fill out the New Capacity tab. This change will not impact the final results of the installed generation capacity calculation, but it will shift capacity that would have been included in the "new capacity" category into the "current capacity" category.

Capacity Credit Values for Wind/Solar

As part of the changes that were approved as part of NPRR 1219, the ERCOT Capacity, Demand, and Reserves (CDR) Report now uses Effective Load Carrying Capability (ELCC) for wind and solar resources instead of peak average capacity contributions. For the purpose of calculating the installed generation capacity in ERCOT, Staff views the peak average capacity contribution methodology as better aligning with 16 TAC § 25.91(f), and ERCOT has provided updated percentages based on new operational data from the most recent summer peak:

- The capacity credit for wind facilities located in counties in the Coastal Wind Region is now 55% of the nameplate capacity (decreased from 60% reported in 2024).
- The capacity credit for wind facilities located in counties in the Panhandle Wind Region is now 28% of the nameplate capacity (decreased from 29% reported in 2024).
- The capacity credit for Other wind facilities (not located in the Coastal or Panhandle Wind Regions) is 21% of the nameplate capacity (decreased from 22% reported in 2024).
- The capacity credit for solar facilities is now 71% of nameplate capacity (decreased from 76% reported in 2024).

Adjustments to Generation Unit Capacity

Several generation units are included on the Adjustments tab of the spreadsheet. Reasons for these units having their reported capacity adjusted are noted below (a more thorough explanation is provided on the Adjustments tab of the attached spreadsheet).

- The capacity for switchable generation facilities is reduced in accordance with 16 TAC § 25.401(e)(1)(D), which states that installed generation will include:
 - "...generating facilities that are located on the boundary between two power regions and are able to deliver electricity directly into either power region, except that the capacity of such facility shall be allocated between the power regions based on the share of its total electric energy that the facility sold in each power region during the preceding year." [Emphasis added]

• The capacity for generating facilities with a nameplate rating of 1 MW or less is removed, consistent with 16 TAC § 25.401(e)(2), which states that "Installed generation capacity will not include generating facilities that have a nameplate rating equal to or less than 1 megawatt (MW)."

Note: The values provided in the attached spreadsheet should **not** be used for purposes of resource adequacy. The definition of installed generation capacity includes capacity that is not currently available to the ERCOT market but could be potentially marketable, such as mothballed capacity and behind-the-meter generation.

The following files are not convertible:

IGC_CDRDec2024-EIA2023 Final.xlsx
CDR-Summer2024-

WindAndSolarCapacityPercentages.xlsx

Please see the ZIP file for this Filing on the PUC Interchange in order to access these files.

Contact centralrecords@puc.texas.gov if you have any questions.