



**Report on the Capacity, Demand and Reserves
(CDR) in the ERCOT Region, 2024-2033**

May 3, 2023

Table of Contents

<u>Tab</u>	<u>Notes</u>
<u>Disclaimer</u>	Please read
<u>Changes from previous CDR</u>	List of significant changes relative to the last CDR, published November 2022
<u>Definitions</u>	List of definitions
<u>Executive Summary</u>	Synopsis of considerations for this report
<u>SummerSummary</u>	Shows load forecast, resource capacity and reserve margin for Summer 2024 through Summer 2033
<u>SummerCapacities</u>	List of registered resources and capabilities used in determining the capacity contribution for Summer Peak Season
<u>Peak v High Net Load Hour 2024</u>	Presents a scenario comparison of the summer 2024 summary tab with a version based on load, wind and solar values for the Net Peak hour, assumed to be hour-ending 8:00 PM
<u>Planned Resources Scenarios</u>	Condensed versions of the Summer Summary tab for 2024-2028 under different sets of planned project inclusion criteria
<u>WinterSummary</u>	Shows load forecast, resource capacity and reserve margin for Winter 2024/2025 through Winter 2033/2034
<u>WinterCapacities</u>	List of registered resources and capabilities used in determining the capacity contribution for Winter Peak Season
<u>Fuel Type Capacity Mix</u>	Lists generation fuel types by MW and by percentage for Summer 2024 through Summer 2033 and Winter 2024/25 through Winter 2033/2034
<u>Unconfirmed Retirement Capacity</u>	A list of units for which public retirement announcements have been made but no formal retirement notices have been provided to ERCOT ("Unconfirmed" planned retirements)

Disclaimer

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Notes on Changes Relative to the Last CDR Report, Published November 2022

1 The following Planned Resources have finalized the necessary agreements and permits to be added to the CDR report:

Project Name	GENERATION INTERCONNECTION PROJECT CODE	County	Fuel	Zone	Year of Projected Commercial Operations ^(a)	Summer Capacity MW	Summer Capacity Contribution %	Summer Peak Ave. Capacity Contribution MW
BROTMAN POWER STATION (U1 - U2)	23INR0613	BRAZORIA	GAS-GT	COASTAL	2024	89 MW	100%	89 MW
BROTMAN II POWER STATION (U7- U8)	23INR0551	BRAZORIA	GAS-GT	COASTAL	2023	89 MW	100%	89 MW
REMY JADE II POWER STATION	24INR0382	HARRIS	GAS-GT	HOUSTON	2024	104 MW	100%	104 MW
SKY SEALY	21INR0500	AUSTIN	GAS-IC	SOUTH	2025	129 MW	100%	129 MW
TECO GTG2	23INR0408	HARRIS	GAS-GT	HOUSTON	2024	50 MW	100%	50 MW
ALILA SOLAR	23INR0093	SAN PATRICIO	SOLAR	COASTAL	2024	257 MW	79%	203 MW
ASH CREEK SOLAR	21INR0379	HILL	SOLAR	NORTH	2024	409 MW	79%	323 MW
COMPADRE SOLAR	24INR0023	HILL	SOLAR	NORTH	2024	405 MW	79%	320 MW
CRADLE SOLAR	23INR0150	BRAZORIA	SOLAR	COASTAL	2025	225 MW	79%	178 MW
DESERT VINE SOLAR	22INR0307	ZAPATA	SOLAR	SOUTH	2024	121 MW	79%	96 MW
DORI BQ SOLAR	23INR0040	HARRIS	SOLAR	HOUSTON	2024	50 MW	79%	40 MW
ORIANA SOLAR	24INR0093	VICTORIA	SOLAR	SOUTH	2024	201 MW	79%	159 MW
SP JAGUAR SOLAR	24INR0038	MCLENNAN	SOLAR	NORTH	2024	300 MW	79%	237 MW
AEP N ALAMO LD02(SMT ALAMO)	23INR0477	HIDALGO	STORAGE	SOUTH	2023	10 MW	0%	0 MW
AL PASTOR BESS	24INR0273	DAWSON	STORAGE	WEST	2024	101 MW	0%	0 MW
BOCO BESS	23INR0470	BORDEN	STORAGE	WEST	2024	153 MW	0%	0 MW
BRP AVILA BESS	23INR0287	PECOS	STORAGE	WEST	2024	165 MW	0%	0 MW
BRP ZEYA BESS	23INR0290	GALVESTON	STORAGE	HOUSTON	2024	257 MW	0%	0 MW
CONNOLLY STORAGE	23INR0403	WISE	STORAGE	NORTH	2024	131 MW	0%	0 MW
DAMON STORAGE	23INR0523	BRAZORIA	STORAGE	COASTAL	2023	5 MW	0%	0 MW
FERDINAND GRID BESS	22INR0422	BEXAR	STORAGE	SOUTH	2025	203 MW	0%	0 MW
FIVE WELLS STORAGE	23INR0159	BELL	STORAGE	NORTH	2023	221 MW	0%	0 MW
FORT DUNCAN BESS	23INR0350	MAVERICK	STORAGE	SOUTH	2025	106 MW	0%	0 MW
IRON BELT ENERGY STORAGE	25INR0208	DAWSON	STORAGE	WEST	2025	402 MW	0%	0 MW
MYRTLE STORAGE	21INR0442	BRAZORIA	STORAGE	COASTAL	2023	155 MW	0%	0 MW
ORIANA BESS	24INR0109	VICTORIA	STORAGE	SOUTH	2024	61 MW	0%	0 MW
PLATINUM STORAGE	22INR0554	FANNIN	STORAGE	NORTH	2024	304 MW	0%	0 MW
SMT ALAMO (DGR)	23INR0477	HIDALGO	STORAGE	SOUTH	2023	10 MW	0%	0 MW
SMT LOS FRESNOS (DGR)	23INR0508	CAMERON	STORAGE	COASTAL	2023	10 MW	0%	0 MW
SMT MISSION (DGR)	23INR0511	CAMERON	STORAGE	COASTAL	2023	10 MW	0%	0 MW
SMT RIO GRANDE (DGR)	23INR0509	STARR	STORAGE	SOUTH	2023	10 MW	0%	0 MW
SMT RIO GRANDE II (DGR)	23INR0510	STARR	STORAGE	SOUTH	2023	10 MW	0%	0 MW
SOHO BESS	23INR0419	BRAZORIA	STORAGE	COASTAL	2024	206 MW	0%	0 MW
SP JAGUAR BESS	24INR0039	MCLENNAN	STORAGE	NORTH	2024	300 MW	0%	0 MW
ST. GALL I ENERGY STORAGE	22INR0524	PECOS	STORAGE	WEST	2023	103 MW	0%	0 MW
SUN VALLEY BESS	22INR0429	HILL	STORAGE	NORTH	2023	101 MW	0%	0 MW
TALITHA BESS	23INR0331	JIM WELLS	STORAGE	SOUTH	2024	61 MW	0%	0 MW
TOTAL						5,525 MW		2,016 MW

(a) This date is based on the projected Commercial Operations Date (COD) reported by the project developer. In contrast, a unit's first summer CDR forecast year (reported in the SummerCapacities sheet) is defined as the first year in which the capacity is available for the entire summer Peak Load Season. (The summer Peak Load Season constitutes the months of June, July, August and September.) For example, if a unit has a projected COD of July 1, 2022, the first summer CDR forecast year would be 2022.

Planned projects with (DGR) suffix are Distributed Generation Resources (DGRs).

Definitions

Available Mothballed Capacity based on Owner's Return Probability

Mothballed capacity with a return-to-service probability of 50% or greater for a given season of the year, as provided by its owner, constitutes available mothballed generation. Return probabilities for individual units are considered protected information under the ERCOT Protocols and therefore are not included in this report.

Capacity Pending Retirement

Announced retired capacity that is undergoing ERCOT grid reliability reviews pursuant to Nodal Protocol Section 3.14.1.2

Decommissioned Generation Resource

A Generation Resource for which a Resource Entity has submitted a Notification of Suspension of Operations (NSO) or a Notification of Change of Generation Resource Designation (NCGRD), for which ERCOT has declined to execute a Reliability Must-Run (RMR) Agreement, and which has been decommissioned and permanently retired.

Distribution Resource Types:

Settlement Only Distribution Generator (SODG)

A generator that is connected to the Distribution System with a rating of:

- (1) One MW or less that chooses to register as an SODG; or
- (2) Greater than one and up to ten MW that is capable of providing a net export to the ERCOT System and does not register as a Distribution Generation Resource (DGR).

SODGs are settled for exported energy only, but may not participate in the Ancillary Services market, Reliability Unit Commitment (RUC), Security-Constrained Economic Dispatch (SCED), or make energy offers.

SODGs are listed in the SummerCapacities and WinterCapacities with a DG_ prefix in the UNIT CODE column

Distribution Generation Resource (DGR)

A Generation Resource connected to the Distribution System that is either:

- (1) Greater than ten MW and not registered with the Public Utility Commission of Texas (PUCT) as a self-generator; or
- (2) Ten MW or less that chooses to register as a Generation Resource to participate in the ERCOT markets.

DGRs must be registered with ERCOT in accordance with Planning Guide Section 6.8.2, Resource Registration Process, and will be modeled in ERCOT systems in accordance with Section 3.10.7.2, Modeling of Resources and Transmission Loads.

DGRs are listed in the SummerCapacities and WinterCapacities tabs with a (DGR) suffix in the UNIT NAME column

Emergency Response Service

ERCOT uses the methodology specified in Protocol Section 3.2.6.2.1, Peak Load Estimate, to derive the ERS capacity forecast for future years. The Current Year for the calculations is defined as the latest year for which ERS has been procured. The ERS capacity amounts are grossed up by 2% to reflect avoided transmission line losses.

Energy Efficiency Program Savings Forecast

ERCOT's energy efficiency forecast uses the PUCT's annual verified energy efficiency program savings estimates as the starting point. (See the definition for verified energy efficiency program savings below.) Savings from TDSP standard offer load management programs are not included in the ERCOT energy efficiency forecast. ERCOT computes the historical average annual verified savings, but excludes 2017 from the calculation due to Hurricane Harvey load impacts. (For prior forecasts, ERCOT used a formula based on the State energy efficiency goals in Utilities Code Section 39.905. Since the impacts of the goals were assumed to accumulate for just seven years from the time that the goals must be first met (2013), ERCOT no longer uses the goal-based forecasting approach.)

Finally, ERCOT incorporates annual energy efficiency estimates from municipal utilities and electric cooperatives provided to the State Energy Conservation Office (SECO). Annual SECO report submission by these entities is required under S.B. No. 924. If annual reports for the previous calendar year are not available at the time the CDR is prepared, ERCOT incorporates report data for the most recently available reporting year.

The energy efficiency capacity amounts are grossed up by a factor representing avoided transmission and distribution line losses. The factor is currently 1.076, reflecting 2% for avoided transmission losses and 5.6% for avoided distribution losses. The loss percentages are based on transmission and distribution loss factors posted to ERCOT's MIS website.

Energy Emergency Alert (EEA)

An ERCOT EEA declaration is made when operating reserves and system frequency drop below established severity levels (Levels 1, 2 and 3) and reserves are not projected to recover within 30 minutes unless certain actions are taken. An EEA declaration initiates an orderly, predetermined procedure for maximizing the use of available Resources, including the use of voluntary load reduction programs that are only available under EEA operations. Only under the most severe EEA level, would ERCOT direct Transmission and Distribution Service Providers to start shedding Load on a rotating basis in order to maintain system reliability and integrity. See Nodal Protocol Section 6.5.9.4, Energy Emergency Alert, for more details.

Forecast Zone

The CDR report uses Forecast Zones to identify the geographical location of generation resources. Forecast Zones generally have the same boundaries as the 2003 Congestion Management Zones with the following exceptions: A) Panhandle Zone for resources in the Texas Panhandle counties and outside the 2003 Congestion Management Zones, and B) Coastal Zone for resources in 11 counties along the Texas Gulf Coast and formerly in the South Zone of the 2003 Congestion Management Zones. There are six Forecast Zones: Coastal, Houston, North, Panhandle, South, and West.

Note that the CDR Forecast Zones are only used for resource adequacy reporting and are distinct from other ERCOT geographical reporting schemes used for planning, operational, or data reporting purposes.

Full Interconnection Study (FIS)

The set of studies conducted by a Transmission Service Provider (TSP) for the purpose of identifying any electric system improvements or enhancements required to reliably interconnect a new All-Inclusive Generation Resource consistent with the provisions of Planning Guide Section 5, Generation Resource Interconnection or Change Request. These studies may include steady-state studies, system protection (short-circuit) studies, dynamic and transient stability studies, facility studies, and sub-synchronous oscillation studies.

Inactive Projects

Per Planning Guide Section 5.7.6, a proposed Resource shall be given the status of "Inactive" if the Resource has not met the conditions for inclusion in the ERCOT planning models, as specified in Section 6.9, Addition of Proposed Generation to the Planning Models, within two years of the date on which ERCOT posts the final FIS studies for the Resource to the MIS Secure Area. A developer may also elect Inactive status and stop any interconnection studies in process at its own discretion. When an Inactive Resource subsequently meets the requirements of Section 6.9, it shall be added to the planning models and the status changed back to Planned. If a Resource has been Inactive for five years, ERCOT may cancel the project pursuant to Planning Guide Section 5.7.7, Cancellation of a Project Due to Failure to Comply with Requirements.

According to ERCOT Nodal Protocol rules (NPRR980), Inactive planned projects are excluded from the CDR's reserve margin calculations.

Installed Capacity Rating

The installed capacity rating is the maximum power that a generating unit can produce during normal sustained operating conditions as specified by the equipment manufacturer. ERCOT uses Real Power Ratings that reflect the continuous flow of power to loads (as opposed to reactive power, which is the power that flows back and forth between the power source and loads, and doesn't perform useful work.)

Mothballed Unit

A generation resource for which a generation entity has submitted a Notification of Suspension of Operations, for which ERCOT has declined to execute an RMR agreement, and for which the generation entity has not announced retirement of the generation resource. A seasonal mothballed unit is one in which the generation entity requests a seasonal operation period that must include the summer Peak Load Season, June 1 through September 30.

LRs (Load Resources)

Load capable of reducing or increasing the need for electrical energy or providing Ancillary Services to the ERCOT System, as described in the ERCOT Protocols, Section 6, Ancillary Services. These Resources may provide the following Ancillary Services: Responsive Reserve Service, Non-Spinning Reserve Service, Replacement Reserve Service, and Regulation Service. The Resources must be registered and qualified by ERCOT and will be scheduled by a Qualified Scheduling Entity (QSE). LR capacity has been grossed up by 2% to reflect avoided transmission line losses.

Mothballed Capacity

Capacity that is designated as mothballed by a generating unit's owner as described above, and which is not available for operations during the summer Peak Load Season (June, July, August and September) or winter Peak Load Season (December, January and February).

Peak Load Seasons

Summer months are June, July, August, and September; winter months are December, January, and February.

Private Use Networks

An electric network connected to the ERCOT transmission grid that contains load that is not directly metered by ERCOT (i.e., load that is typically netted with internal generation).

Non-Synchronous Tie

Any non-synchronous transmission interconnection between ERCOT and non-ERCOT electric power systems.

Reliability Must-Run (RMR) Unit

A generation resource unit operated under the terms of an agreement with ERCOT that would not otherwise be operated except that they are necessary to provide voltage support, stability or management of localized transmission constraints under first contingency criteria.

Signed SGIA (Standard Generation Interconnection Agreement)

An agreement that sets forth requirements for physical connection between an eligible transmission service customer and a transmission or distribution service provider.

Switchable Generation Resource (SWGR)

A generation resource that can be connected to either the ERCOT transmission grid or a grid outside the ERCOT Region.

Synchronized but not Approved for Commercial Operations Capacity

These units have met requirements to Energize Equipment (Part 1 of Generator Commissioning Checklist): provided latest model data, verified Voltage Ride-Through capability and communication capabilities specified by ERCOT Operating Guides are in place. Output for these resources is not limited once they have passed a curtailment test and the project developer has submitted an attestation for the following plant controls: Automatic Voltage Regulator (AVR), Primary Frequency Response (PFR), Voltage Support Service (VSS), and Power System Stabilizer (PSS).

A Synchronized unit get approved for Commercial Operations after the plant controls have been verified by ERCOT.

More information on Synchronized units can be found in the Resource Interconnection Handbook pages 24 – 33.
http://www.ercot.com/content/wcm/lists/168284/Resource_Interconnection_Handbook_v1.91_01082021.docx

TDSP Standard Offer Load Management Programs

For the May releases of the CDR report, ERCOT uses the megawatt amount of verified peak load capacity reductions, adjusted for avoided transmission losses, due to TDSP Standard Offer load management programs that are reported by electric utilities in the ERCOT Region to the Public Utility Commission of Texas. The reported amounts are for the most current reporting year, which is the calendar year prior to the year during which the May CDR is prepared. (For example, the May 2019 CDR report used verified program savings for the 2018 reporting year.)

For the December CDR releases, ERCOT uses TDSP data received for the current load management program year, which is more timely than the verified savings estimates provided to the PUCT. The data obtained from the TDSPs reflect verified program performance for the summer based on testing, and is adjusted for avoided transmission losses.

Unconfirmed Retirement

A Generation Resource for which a public announcement of the intent to permanently shut the unit down has been released, but a Notice of Suspension of Operations for the unit has not been received by ERCOT. This is an informal definition that is not currently included in the Nodal Protocols or Other Binding Documents.

The criteria for classifying a Generation Resource as an Unconfirmed Retirement include the following:

- a. A specific retirement date is cited in the announcement, or other timing information is given that indicates the unit will be unavailable as of June 1 of a CDR Reporting Year.
- b. The announcement, with follow-up inquiry by ERCOT, does not indicate that retirement timing is highly speculative.

Verified Energy Efficiency Program Savings

The total megawatt (MW) amount of verified peak load capacity reductions due to residential and commercial sector energy efficiency incentive programs that are reported by electric utilities in the ERCOT Region to the Public Utility Commission of Texas. See Utilities Code Section 39.905. Note that savings from TDSP standard offer load management programs are not included in the ERCOT energy efficiency forecast, but rather handled as a separate reporting line item.

Wind Peak Average Capacity Contribution

The seasonal net capacity rating of wind resources multiplied by the Seasonal Peak Average Capacity Percentage for the Coastal, Panhandle and Other CDR reporting regions.

Wind Seasonal Peak Average Capacity Percentage

The average wind capacity available for the summer and winter Peak Load Seasons for a CDR reporting region (Coastal, Panhandle, Other) divided by the installed capacity for the region, expressed as a percentage. Details for the derivation of the percentages are outlined in ERCOT Protocol Section 3.2.6.2.2 (see http://www.ercot.com/content/wcm/current_guides/53528/03-110119_Nodal.docx).

Wind Regions: Coastal, Panhandle, and Other

Wind Generation Resources (WGRs) are classified into regions based on the county that contains their Point of Interconnection (POI). The Coastal region is defined as the following counties along the Gulf Coast: Aransas, Brazoria, Calhoun, Cameron, Kenedy, Kleberg, Matagorda, Nueces, Refugio, San Patricio, and Willacy. The Panhandle region is defined as the following counties: Armstrong, Bailey, Briscoe, Carson, Castro, Childress, Cochran, Collingsworth, Crosby, Dallam, Deaf Smith, Dickens, Donley, Floyd, Gray, Hale, Hall, Hansford, Hartley, Hemphill, Hockley, Hutchinson, Lamb, Lipscomb, Lubbock, Moore, Motley, Ochiltree, Oldham, Parmer, Potter, Randall, Roberts, Sherman, Swisher, and Wheeler. The "Other" Wind Region consists of all other counties in the ERCOT Region.

The assigned Wind Region for each WGR is indicated as "WIND-C," "WIND-P," or "WIND-O" in the Fuel columns of the summer/winter Capacities tabs.

CDR Report - Executive Summary

CDR Report Background

The main purpose of the CDR report is to provide forecasted Planning Reserve Margins for the ERCOT summer and winter Peak Load Seasons (June through September, and December through February, respectively). The Planning Reserve Margin represents the percentage of resource capacity, in excess of firm electricity demand, available to cover uncertainty in future demand, generator availability and new resource supply. Firm demand accounts for load reductions available through interruptible load programs controlled by ERCOT as well as incremental load reductions from rooftop solar systems not accounted for in the load forecast model. The methodologies used to develop Planning Reserve Margins and other elements of the CDR report are outlined in the ERCOT Nodal Protocols, Section 3.2.6 (https://www.ercot.com/files/docs/2023/03/31/03-040123_Nodal.docx). ERCOT's load forecasts are based on normal weather conditions and determined by the methodologies described in the 2023 Long-Term Load Forecast Report posted on ERCOT's Load Forecast webpage in late December (<https://www.ercot.com/files/docs/2023/01/18/2023-LTLF-Report.pdf>).

Resource data comes from generation capacity developers and owners as reported in ERCOT's Resource Integration and Ongoing Operations (RIOO) system, as well as other data collection mechanisms described in the ERCOT Protocols.

Note that the CDR is not intended for characterizing the risk of capacity scarcity conditions from a real-time operations perspective.

Highlights

The forecasted peak demand for summer 2024 is 85,029 MW, while the firm peak demand (which includes the impact of curtailable load programs) is 81,643 MW. The winter 2024-25 peak demand forecast is 71,547 MW and firm peak demand forecast is 68,835 MW.

The peak demand forecast incorporates expected load increases during the seasonal peak demand hours due to the interconnection of Large Loads (such as crypto-mining facilities) to Transmission Service Provider networks. For this report, that forecast utilizes an assumption that LFLs are only consuming 10% of their total load. There are also Large Loads, totalling approximately 760 MW, that have been connected directly to co-located generation plants. For this CDR report, such co-located Large Loads are not netted against the generation capacities and are thus assumed to be fully curtailable if needed by ERCOT when reserve capacity is tight. This is an interim CDR planning assumption to be used until ERCOT implements a forecast methodology for addressing Large Loads in Reserve Margins. Note that this is different from the SARA which utilizes an interim short term forecast based on historical prices during tight grid conditions. ERCOT has also adopted the policy of not identifying the generating units with co-located Large Loads in the CDR and SARA until formal reporting rules have been adopted.

The Planning Reserve Margin for summer 2024 is forecasted to be 33.9%, representing a 6.0 percentage point decrease relative to the 39.9% margin reported in the November 2022 CDR report. This decrease is due mainly to delays of planned projects that were previously expected to be in service by July 1, 2024. The Reserve Margin rises to 44.2% for summer 2025, largely reflecting solar capacity additions, much of which represents project delays from prior years. The 'Planned Resource Scenarios' tab provides smaller planned resource amounts and lower Reserve Margins based on more stringent eligibility criteria for including planned resources in the CDR.

Planned resource capacity expected by July 2024 totals 26,230 MW, and of this total, 14,038 MW are expected to be available during peak load periods. This includes 1,335 MW of summer-rated gas-fired resources, 542 MW of wind resources, and 12,161 MW of solar resources. These amounts of solar and wind capacity are what ERCOT expects to be available on an average basis during seasonal peak demand hours (the peak-average capacity contribution). Since the November 2022 CDR was released, two new gas-fired resources (totaling 233 MW) have qualified to be included in this CDR.

ERCOT also forecasts 10,340 MW of installed battery storage capacity by July 2024. ERCOT protocols currently don't include a methodology for determining the peak-average capacity contribution of battery storage, so the contribution in this CDR is officially reported as zero MW. ERCOT developed an interim capacity contribution methodology for the SARA reports. The summer 2023 capacity contribution percentage is 17.9% based on the interim method. Applying this percentage to the summer 2024 installed capacity yields a capacity contribution of 1,851 MW. ERCOT is developing a capacity contribution methodology for future CDR reports.

Pending U.S. Environmental Protection Agency Rulemakings

ERCOT and thermal generation owners are closely monitoring the potential impacts of the U.S. Environmental Protection Agency's March 15th approval of its "Good Neighbor Plan" for reducing cross-state emissions of ozone-forming nitrogen oxides (NOx). The Plan imposes NOx budgets for Texas for the 2023 through 2029 summer ozone seasons, with the budgets significantly decreasing over the next several years. (Ozone seasons start May 1 and end September 30.) On May 1, 2023, the Fifth Circuit court granted a stay of the EPA's denial of the Texas State Implementation Plan (SIP) in response to a motion filed by Texas, Louisiana, and other parties claiming irreparable harm starting as early as the 2023 ozone season. The stay halts the Good Neighbor Plan until after the SIP denial is reviewed.

In addition to the Good Neighbor Plan, the EPA also recently proposed new standards for mercury and other toxic air emissions (MATS). Other pending rulemakings include Coal Combustion Residuals (CCRs, or coal ash) standards and guidelines for wastewater discharge. The full implications of these rulemakings are still being studied by generation owners, and there is uncertainty regarding the timing impacts due to pending and possible future litigation efforts. Nevertheless, it is likely that a several coal- and gas-fired generation units in the ERCOT region will retire during the next several years due to compliance costs. The 'Unconfirmed Retirement Capacity' tab lists units for which a public retirement announcement has been made and confirmed by the generation owners. As retirement plans for units impacted by these regulatory actions become known, ERCOT will update the unconfirmed planned unit retirement list accordingly.

New "Peak Load Hour vs. High Net Load Hour" Scenario Tab

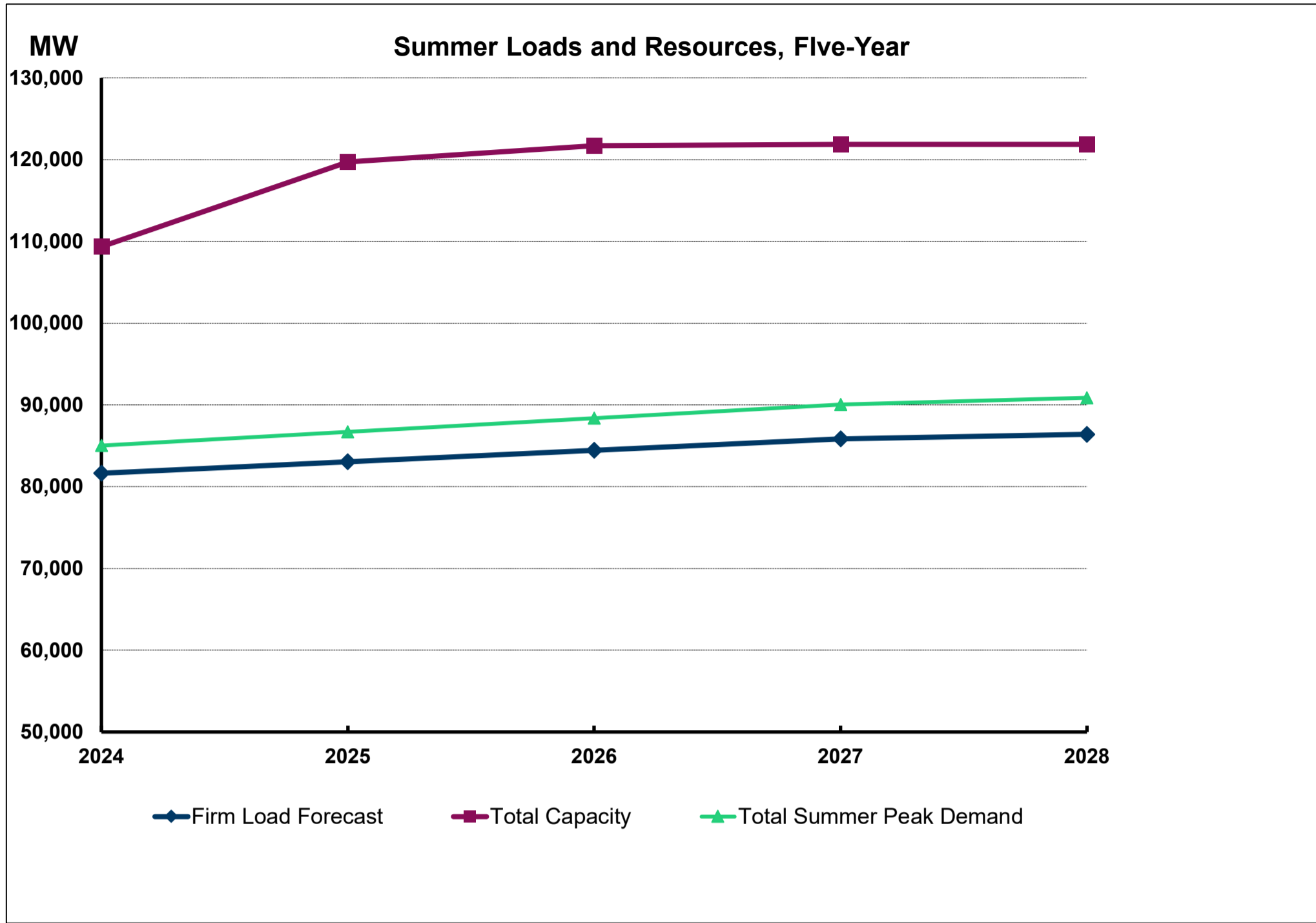
A new scenario tab has been added (Peak v High Net Peak 2024) that compares the summer 2024 summary tab column with a version based on load, wind and solar capacity values for a high Net Peak hour, hour-ending 8:00 PM. This comparison is intended to show reserve capacity availability during the evening hour that typically experiences the largest drop-off in solar production. This tab also shows the reserve margin impact of including an energy storage capacity contribution based on the interim methodology used for the Summer 2023 Assessment of Resource Adequacy (SARA).

Report on the Capacity, Demand and Reserves in the ERCOT Region

Summer Summary: 2024-2033

		<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>
							These columns indicate the impact of not adding any new resources during the latter half of the CDR forecast period. Project developers typically submit interconnection requests no more than two to four years before the facilities are expected to enter commercial operations.				
Load Forecast, MW:											
Summer Peak Demand (based on normal weather)		85,029	86,715	88,378	90,036	90,879	91,685	92,452	93,167	93,853	94,530
plus: Energy Efficiency Program Savings Forecast		3,311	3,687	4,064	4,441	4,818	5,195	5,572	5,949	6,326	6,703
Total Summer Peak Demand (before Reductions from Energy Efficiency Programs)		88,340	90,403	92,442	94,477	95,698	96,880	98,024	99,116	100,179	101,233
less: Incremental Rooftop PV Forecast		-704	-975	-1,246	-1,518	-1,790	-2,061	-2,332	-2,604	-2,876	-3,147
less: Load Resources providing Responsive Reserves		-1,410	-1,410	-1,410	-1,410	-1,410	-1,410	-1,410	-1,410	-1,410	-1,410
less: Load Resources providing Non-Spinning Reserves		-48	-48	-48	-48	-48	-48	-48	-48	-48	-48
less: Emergency Response Service (10- and 30-min ramp products)		-894	-894	-894	-894	-894	-894	-894	-894	-894	-894
less: TDSP Standard Offer Load Management Programs		-330	-330	-330	-330	-330	-330	-330	-330	-330	-330
less: Energy Efficiency Program Savings Forecast		-3,311	-3,687	-4,064	-4,441	-4,818	-5,195	-5,572	-5,949	-6,326	-6,703
Firm Peak Demand, MW		81,643	83,058	84,449	85,836	86,408	86,942	87,438	87,881	88,296	88,701
Resources, MW:											
		Expected Capacity Available for Summer Peak Demands									
	Cumulative Installed Capacity Ratings by 2027 (see Note)	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>
Installed Summer-rated Capacity, Thermal	73,239	65,091	65,091	65,091	65,091	65,091	65,091	65,091	65,091	65,091	65,091
Hydroelectric, Peak Average Capacity Contribution (84% of installed capacity)	563	475	475	475	475	475	475	475	475	475	475
Switchable Capacity	3,840	3,490	3,490	3,490	3,490	3,490	3,490	3,490	3,490	3,490	3,490
less: Switchable Capacity Unavailable to ERCOT	-572	-542	-542	-542	-542	-542	-542	-542	-542	-542	-542
Available Mothballed Capacity	713	704	704	704	704	704	704	704	704	704	704
Capacity from Private Use Networks	9,575	2,869	2,869	2,869	2,864	2,864	2,864	2,864	2,864	2,864	2,864
Coastal Wind, Peak Average Capacity Contribution (60% of installed capacity)	4,962	2,950	2,951	2,951	2,951	2,951	2,951	2,951	2,951	2,951	2,951
Panhandle Wind, Peak Average Capacity Contribution (30% of installed capacity)	4,410	1,322	1,322	1,322	1,322	1,322	1,322	1,322	1,322	1,322	1,322
Other Wind, Peak Average Capacity Contribution (21% of installed capacity)	27,896	5,847	5,847	5,847	5,847	5,847	5,847	5,847	5,847	5,847	5,847
Solar Utility-Scale, Peak Average Capacity Contribution (79% of installed capacity)	15,659	12,264	12,264	12,264	12,264	12,264	12,264	12,264	12,264	12,264	12,264
Storage, Peak Average Capacity Contribution	3,286	0	0	0	0	0	0	0	0	0	0
RMR Capacity to be under Contract	0	0	0	0	0	0	0	0	0	0	0
Capacity Pending Retirement	0	0	0	0	0	0	0	0	0	0	0
Operational Generation Capacity, MW	143,572	94,470	94,471	94,471	94,466	94,466	94,466	94,466	94,466	94,466	94,466
Non-Synchronous Ties (Based on average net import contribution during summer 2019 EEA events)	1,220	850	850	850	850	850	850	850	850	850	850
Planned Resources (not wind, solar or storage) with Signed IA, Air Permits and Adequate Water Supplies	1,684	1,335	1,568	1,568	1,568	1,568	1,568	1,568	1,568	1,568	1,568
Planned Coastal Wind with Signed IA, Peak Average Capacity Contribution (60% of installed capacity)	462	0	277	277	277	277	277	277	277	277	277
Planned Panhandle Wind with Signed IA, Peak Average Capacity Contribution (30% of installed capacity)	697	159	209	209	209	209	209	209	209	209	209
Planned Other Wind with Signed IA, Peak Average Capacity Contribution (21% of installed capacity)	2,948	383	619	619	619	619	619	619	619	619	619
Planned Solar Utility-Scale, Peak Average Capacity Contribution (79% of installed capacity)	30,233	12,161	21,749	23,726	23,884	23,884	23,884	23,884	23,884	23,884	23,884
Planned Storage, Peak Average Capacity Contribution	10,788	0	0	0	0	0	0	0	0	0	0
Planned Generation Capacity, MW	46,811	14,038	24,422	26,399	26,557	26,557	26,557	26,557	26,557	26,557	26,557
Total Capacity, MW	191,603	109,357	119,743	121,720	121,873	121,873	121,873	121,873	121,873	121,873	121,873
		<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>
Reserve Margin		33.9%	44.2%	44.1%	42.0%	41.0%	40.2%	39.4%	38.7%	38.0%	37.4%
(Total Resources - Firm Load Forecast) / Firm Load Forecast											

Note on Installed Capacities: Installed capacity ratings are based on the maximum power that a generating unit can produce during normal sustained operating conditions as specified by the equipment manufacturer.



Unit Megawatt Capacities - Summer

SUMMER CAPACITY (MW)

Table with columns: UNIT NAME, INR, UNIT CODE, COUNTY, FUEL, ZONE, IN SERVICE, INSTALLED CAPACITY RATING (MW), 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033. Rows include units like BRP CARINA BESS, BRP DICKENS BESS, etc., with capacity values for each year.

Capacity changes due to planned repower/upgrade projects are reflected in the operational units' ratings upon receipt and ERCOT approval of updated resource registration system information.

Although seasonal capacity ratings for battery energy storage systems are reported above, the ratings are not included in the operational/planned capacity formulae. These resources are assumed to provide Ancillary Services rather than sustained capacity available to meet system peak loads.

The capacities of planned projects that have been approved for Initial Synchronization at the time of report creation are assumed to be available for the season regardless of their projected Commercial Operations Dates.

Planned projects for which maximum seasonal sustained capacity ratings have been provided are used in lieu of capacities entered into the online Resource Integration and Ongoing Operations - Interconnection Services (RIOO-IS) system.

Installed capacity ratings are based on the maximum power that a generating unit can produce during normal sustained operating conditions as specified by the equipment manufacturer. These ratings reflect the latest information in the Resource Integration and Ongoing Operations - Resources Services (RIOO-RS) system.

Load Forecast, MW [1]	Summer 2024		
	Peak Load Hour (Hour-ending 5:00 PM)	High Net Load Hour (Hour-ending 8:00 PM)	MW Difference, 5:00 to 8:00 PM
Summer Peak Demand (based on normal weather)	85,029	79,104	(5,925)
plus: Energy Efficiency Program Savings Forecast	3,311	3,311	-
Total Summer Peak Demand (before Reductions from Energy Efficiency Programs)	88,340	82,415	(5,925)
less: Incremental Rooftop PV Forecast	(704)	(208)	495
less: Load Resources providing Responsive Reserves	(1,410)	(1,410)	-
less: Load Resources providing Non-Spinning Reserves	(48)	(48)	-
less: Emergency Response Service (10- and 30-min ramp products)	(894)	(994)	(100)
less: TDSP Standard Offer Load Management Programs	(330)	(330)	0
less: Energy Efficiency Program Savings Forecast	(3,311)	(3,311)	-
Firm Peak Demand, MW	81,643	76,115	(5,529)

Resources, MW [2]	Peak Load Hour (Hour-ending 5:00 PM)	High Net Load Hour (Hour-ending 8:00 PM)	MW Change, 5:00 to 8:00 PM
Installed Summer-rated Capacity, Thermal	65,091	65,091	-
Hydroelectric, Peak Average Capacity Contribution (84% of installed capacity)	475	475	-
Switchable Capacity	3,490	3,490	-
less: Switchable Capacity Unavailable to ERCOT	(542)	(542)	-
Available Mothballed Capacity	704	704	-
Capacity from Private Use Networks	2,869	2,869	-
Coastal Wind, Peak Average Capacity Contribution	2,950	3,799	850
Panhandle Wind, Peak Average Capacity Contribution	1,322	1,703	381
Other Wind, Peak Average Capacity Contribution	5,847	7,530	1,684
Solar Utility-Scale, Peak Average Capacity Contribution	12,264	3,630	(8,634)
Storage, Peak Average Capacity Contribution	0	0	-
RMR Capacity to be under Contract	0	0	-
Capacity Pending Retirement	0	0	-
Operational Generation Capacity, MW	94,470	88,750	(5,720)
Non-Synchronous Ties (Based on average net import contribution during summer 2019 EEA events)	850	850	-
Planned Resources (not wind, solar or storage) with Signed IA, Air Permits and Adequate Water Supplies	1,335	1,335	-
Planned Coastal Wind with Signed IA, Peak Average Capacity Contribution	0	0	-
Planned Panhandle Wind with Signed IA, Peak Average Capacity Contribution	159	205	46
Planned Other Wind with Signed IA, Peak Average Capacity Contribution	383	493	110
Planned Solar Utility-Scale, Peak Average Capacity Contribution	12,161	3,600	(8,561)
Planned Storage, Peak Average Capacity Contribution	0	0	-
Planned Generation Capacity, MW	14,038	5,633	(8,405)
Total Capacity, MW	109,357	95,233	(14,125)

			Percentage Point Difference
Reserve Margin	33.9%	25.1%	(8.8)
(Total Resources - Firm Load Forecast) / Firm Load Forecast			
Reserve Margin including a battery storage capacity contribution (2,099 MW) [3]	36.5%	27.9%	(8.6)

NOTES:

[1] Derivation of the Hourly Load Forecasts

The load forecasts for hours-ending 5:00 and 8:00 PM come from ERCOT's official Long Term Load Forecast, and assume that the summer peak load day occurs on August 4th.

[2] Derivation of Net Peak Load Wind and Solar Capacities

Hour-ending 8:00 PM wind and solar capacities are the original CDR values multiplied by a ratio of 50th-percentile values taken from synthetic profiles values representing the range of potential values for the 5:00 and 8:00 PM summer hours. Specifically, the wind and solar ratios are the 50th percentile (P50) values for 8:00 PM divided by the P50 values for 5:00 PM. The wind and solar ratios are 1.288 and 0.296, respectively. These ratios reflect the ramp-up of wind and ramp-down of solar in the evening hours.

[3] Reserve Margin with a Battery Storage Capacity Contribution

The 2,099 MW contribution is based on the amount of battery storage capability assumed to be available for dispatch prior to the highest summer net load hours for August 2024. The capacity contribution percentage is 0.203, and is multiplied by the forecasted installed capacity of operational plus planned units in the CDR for July 2024 (10,340 MW). The capacity contribution percentage is based on analysis of battery State-of-Charge available for energy, and accounting for Ancillary Service obligations, during hours-ending 4:00 PM through 7:00 PM for August 2022. Further analysis is needed to resolve contribution differences on an hourly basis. This methodology is used for the Summer 2023 Seasonal Assessment of Resource Adequacy (SARA), and is an interim methodology for use until a formal capacity contribution method is adopted for future resource adequacy reports.

Planned Resources Scenarios, Summer

The tables below show condensed versions of the Summer Summary tab for 2024-2028 under different sets of planned project inclusion criteria.

Table 1 shows the line items under the current CDR-eligibility criteria (signed IA and air permits/proof of adequate water supplies for fossil-fuel projects). Tables 2, 3, and 4 show the line items under more selective sets of criteria for including planned projects: Table 2 - Meets All Planning Guide Section 6.9(1) Requirements, Table 3 - Meets All Planning Guide Section 6.9 Requirements, Table 4 - meets Quarterly Stability Assessment prerequisites. Table 5 compares the Planning Reserve Margins across the four sets of CDR planned project inclusion criteria.

An abbreviated summary of the Planning Guide criteria are listed below the data tables. See Planning Guide Sections 5.9 and 6.9 for the full text.

Planned Projects data comes from generation capacity developers and owners as reported in ERCOT's Resource Integration and Ongoing Operations (RIOO) system and other data collection mechanisms described in the ERCOT Protocols.

Table 1: Summer Summary - CDR Eligibility Criteria for Planned Projects

	2024	2025	2026	2027	2028
Firm Peak Load, MW	81,643	83,058	84,449	85,836	86,408
Operational Generation Capacity and Non-Synchronous Ties, MW	95,320	95,321	95,321	95,316	95,316
<i>Planned Project Capacity, MW</i>					
Planned Thermal (not wind, solar or storage)	1,335	1,568	1,568	1,568	1,568
Planned Wind	542	1,105	1,105	1,105	1,105
Planned Solar	12,161	21,749	23,726	23,884	23,884
Planning Reserve Margin	33.9%	44.2%	44.1%	42.0%	41.0%

Table 2: Summer Summary - Planned Projects that Meet All Planning Guide 6.9(1) Requirements

	2024	2025	2026	2027	2028
Firm Peak Load, MW	81,643	83,058	84,449	85,836	86,408
Operational Generation Capacity and Non-Synchronous Ties, MW	95,320	95,321	95,321	95,316	95,316
<i>Planned Project Capacity, MW</i>					
Planned Thermal (not wind, solar or storage)	1,285	1,285	1,285	1,285	1,285
Planned Wind	147	226	226	226	226
Planned Solar	8,325	12,516	13,887	13,887	13,887
Planning Reserve Margin	28.7%	31.7%	31.1%	29.0%	28.1%

Table 3: Summer Summary - Planned Projects Meeting All Planning Guide 6.9 Requirements

	2024	2025	2026	2027	2028
Firm Peak Load, MW	81,643	83,058	84,449	85,836	86,408
Operational Generation Capacity and Non-Synchronous Ties, MW	95,320	95,321	95,321	95,316	95,316
<i>Planned Project Capacity, MW</i>					
Planned Thermal (not wind, solar or storage)	1,285	1,285	1,285	1,285	1,285
Planned Wind	55	55	55	55	55
Planned Solar	6,095	6,377	6,377	6,377	6,377
Planning Reserve Margin	25.9%	24.1%	22.0%	20.0%	19.2%

Table 4: Summer Summary - Planned Projects Meeting Quarterly Stability (QSA) Study Prerequisites

	2024	2025	2026	2027	2028
Firm Peak Load, MW	81,643	83,058	84,449	85,836	86,408
Operational Generation Capacity and Non-Synchronous Ties, MW	95,320	95,321	95,321	95,316	95,316
<i>Planned Project Capacity, MW</i>					
Planned Thermal (not wind, solar or storage)	877	877	877	877	877
Planned Wind	55	55	55	55	55
Planned Solar	5,915	5,915	5,915	5,915	5,915
Planning Reserve Margin	25.1%	23.0%	21.0%	19.0%	18.2%

Table 5: Summer Planning Reserve Margin Comparison Based on Different Planned Project Inclusion Criteria

	2024	2025	2026	2027	2028
Planning Reserve Margin—Current CDR-eligible criteria	33.9%	44.2%	44.1%	42.0%	41.0%
Planning Reserve Margin—Section 6.9(1) Requirements	28.7%	31.7%	31.1%	29.0%	28.1%
Planning Reserve Margin—Section 6.9 Requirements	25.9%	24.1%	22.0%	20.0%	19.2%
Planning Reserve Margin—QSA Study Requirements	25.1%	23.0%	21.0%	19.0%	18.2%

Planning Guide Section 6.9(1) Requirements

1. The Interconnecting Entity (IE) provides all data required for the Security Screening Study and Full Interconnection Study (FIS).
2. ERCOT determines that the IE has received all necessary Texas Commission on Environmental Quality (TCEQ)-approved air permits or that no such permits are required.
3. The IE submits a completed Declaration of Adequate Water Supplies. (Wind, solar and battery storage projects are exempted.)
4. ERCOT receives a signed Standard Generation Interconnection Agreement (SGIA) or other financially binding agreement from the Transmission Service Provider (TSP) and IE, and a written notice from the TSP that the IE has provided:
 - (A) A notice to proceed with the construction of the interconnection and;
 - (B) The financial security required to fund the interconnection facilities.or, a letter from an authorized official from a Municipally Owned Utility (MOU) or Electric Cooperative (EC) confirming the Entity's intent to construct, interconnect and operate the resource.

Planning Guide Section 6.9 Requirements

1. The requirements for Section 6.9(1).
2. The IE shall provide within 60 days the remaining required data as specified in the Resource Registration Glossary using the applicable Resource Registration process.

Quarterly Stability Assessment Prerequisites from Planning Guide Section 5.9

1. All requirements under Planning Guide Section 6.9 have been met.
2. The IE has provided all dynamic model data to ERCOT.
3. The Full Interconnection Study has been completed.
4. The Reactive Power Study has been completed.
5. Completion of required system improvements or mitigation plans identified in these studies.

Report on the Capacity, Demand and Reserves in the ERCOT Region

Winter Summary: 2024/2025 through 2033/2034

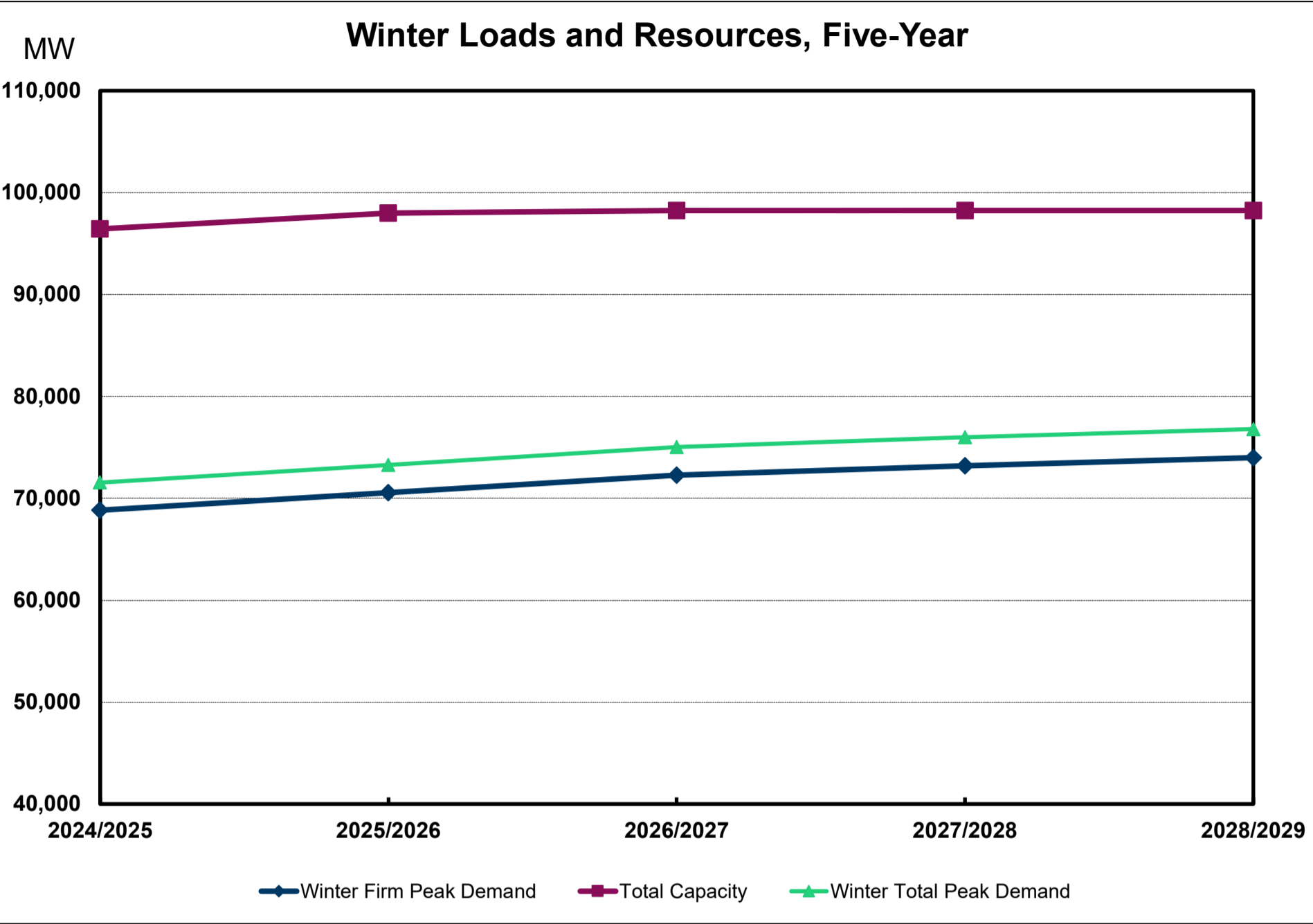
These columns indicate the impact of not adding any new resources during the latter half of the CDR forecast period. Project developers typically submit interconnection requests no more than two to four years before the facilities are expected to enter commercial operations.

Load Forecast, MW:	<u>2024/2025</u>	<u>2025/2026</u>	<u>2026/2027</u>	<u>2027/2028</u>	<u>2028/2029</u>	<u>2029/2030</u>	<u>2030/2031</u>	<u>2031/2032</u>	<u>2032/2033</u>	<u>2033/2034</u>
Winter Peak Demand (based on normal weather)	71,547	73,286	75,019	75,985	76,800	77,586	78,329	79,030	79,715	80,374
plus: Energy Efficiency Program Savings Forecast	3,311	3,687	4,064	4,441	4,818	5,195	5,572	5,949	6,326	6,703
Total Winter Peak Demand (before Reductions from Energy Efficiency Programs)	74,857	76,973	79,083	80,426	81,618	82,781	83,901	84,979	86,041	87,077
less: Incremental Rooftop PV Forecast	-72	-95	-119	-142	-166	-189	-212	-236	-259	-282
less: Load Resources providing Responsive Reserves	-1,481	-1,481	-1,481	-1,481	-1,481	-1,481	-1,481	-1,481	-1,481	-1,481
less: Load Resources providing Non-Spinning Reserves	-48	-48	-48	-48	-48	-48	-48	-48	-48	-48
less: Emergency Response Service (10- and 30-min ramp products)	-1,040	-1,040	-1,040	-1,040	-1,040	-1,040	-1,040	-1,040	-1,040	-1,040
less: TDSP Standard Offer Load Management Programs	-70	-70	-70	-70	-70	-70	-70	-70	-70	-70
less: Energy Efficiency Program Savings Forecast	-3,311	-3,687	-4,064	-4,441	-4,818	-5,195	-5,572	-5,949	-6,326	-6,703
Firm Peak Demand, MW	68,835	70,551	72,261	73,203	73,995	74,757	75,478	76,155	76,817	77,453

Resources, MW:	Expected Capacity Available for Winter Peak Demands										
	Cumulative Installed Capacity Ratings by 2027 (see Note)	<u>2024/2025</u>	<u>2025/2026</u>	<u>2026/2027</u>	<u>2027/2028</u>	<u>2028/2029</u>	<u>2029/2030</u>	<u>2030/2031</u>	<u>2031/2032</u>	<u>2032/2033</u>	<u>2033/2034</u>
Installed Winter-rated Capacity, Thermal	73,239	68,795	68,795	68,795	68,795	68,795	68,795	68,795	68,795	68,795	68,795
Hydroelectric, Peak Average Capacity Contribution (73% of installed capacity)	563	415	415	415	415	415	415	415	415	415	415
Switchable Capacity	3,840	3,816	3,816	3,816	3,816	3,816	3,816	3,816	3,816	3,816	3,816
less: Switchable Capacity Unavailable to ERCOT	0	0	0	0	0	0	0	0	0	0	0
Available Mothballed Capacity	0	0	0	0	0	0	0	0	0	0	0
Capacity from Private Use Networks	9,575	3,579	3,579	3,579	3,574	3,574	3,574	3,574	3,574	3,574	3,574
Coastal Wind, Peak Average Capacity Contribution (56% of installed capacity)	4,962	2,751	2,751	2,751	2,751	2,751	2,751	2,751	2,751	2,751	2,751
Panhandle Wind, Peak Average Capacity Contribution (37% of installed capacity)	4,410	1,631	1,631	1,631	1,631	1,631	1,631	1,631	1,631	1,631	1,631
Other Wind, Peak Average Capacity Contribution (26% of installed capacity)	27,896	7,239	7,239	7,239	7,239	7,239	7,239	7,239	7,239	7,239	7,239
Solar Utility-Scale, Peak Average Capacity Contribution (14% of installed capacity)	15,659	2,169	2,169	2,169	2,169	2,169	2,169	2,169	2,169	2,169	2,169
Storage, Peak Average Capacity Contribution	3,286	0	0	0	0	0	0	0	0	0	0
RMR Capacity to be under Contract	0	0	0	0	0	0	0	0	0	0	0
Capacity Pending Retirement	0	0	0	0	0	0	0	0	0	0	0
Operational Generation Capacity, MW	143,431	90,394	90,394	90,394	90,389	90,389	90,389	90,389	90,389	90,389	90,389
Non-Synchronous Ties (Based on average net import contribution during winter 2020/21 EEA events)	1,220	720	720	720	720	720	720	720	720	720	720
Planned Resources (not wind, solar or storage) with Signed IA, Air Permits and Adequate Water Supplies	1,684	1,470	1,619	1,619	1,619	1,619	1,619	1,619	1,619	1,619	1,619
Planned Coastal Wind with Signed IA, Peak Average Capacity Contribution (56% of installed capacity)	462	0	259	259	259	259	259	259	259	259	259
Planned Panhandle Wind with Signed IA, Peak Average Capacity Contribution (37% of installed capacity)	697	258	258	258	258	258	258	258	258	258	258
Planned Other Wind with Signed IA, Peak Average Capacity Contribution (26% of installed capacity)	2,948	675	766	766	766	766	766	766	766	766	766
Planned Solar Utility-Scale, Peak Average Capacity Contribution (14% of installed capacity)	30,233	2,920	3,975	4,205	4,233	4,233	4,233	4,233	4,233	4,233	4,233
Planned Storage, Peak Average Capacity Contribution	10,788	0	0	0	0	0	0	0	0	0	0
Planned Generation Capacity, MW	46,811	5,323	6,878	7,107	7,135	7,135	7,135	7,135	7,135	7,135	7,135
Total Capacity, MW	191,462	96,437	97,992	98,221	98,244	98,244	98,244	98,244	98,244	98,244	98,244

	<u>2024/2025</u>	<u>2025/2026</u>	<u>2026/2027</u>	<u>2027/2028</u>	<u>2028/2029</u>	<u>2029/2030</u>	<u>2030/2031</u>	<u>2031/2032</u>	<u>2032/2033</u>	<u>2033/2034</u>
Reserve Margin	40.1%	38.9%	35.9%	34.2%	32.8%	31.4%	30.2%	29.0%	27.9%	26.8%
(Total Resources - Firm Load Forecast) / Firm Load Forecast										

Note on Installed Capacities: Installed capacity ratings are based on the maximum power that a generating unit can produce during normal sustained operating conditions as specified by the equipment manufacturer.



Unit Megawatt Capacities - Winter

WINTER CAPACITY (MW)

UNIT NAME	INR	UNIT CODE	COUNTY	FUEL	ZONE	IN SERVICE	INSTALLED CAPACITY RATING (MW)	WINTER CAPACITY (MW)											
								2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030	2030/2031	2031/2032	2032/2033	2033/2034		
825 LACY CREEK WIND U4	18INR0043	LACY_CRK_UNIT4	GLASSCOCK	WIND-O	WEST	2023	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	
826 LAS MAJADAS WIND U1	17INR0035	LMAJADAS_UNIT1	WILLACY	WIND-C	COASTAL	2023	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0	
827 LAS MAJADAS WIND U2	17INR0035	LMAJADAS_UNIT2	WILLACY	WIND-C	COASTAL	2023	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	
828 LAS MAJADAS WIND U3	17INR0035	LMAJADAS_UNIT3	WILLACY	WIND-C	COASTAL	2023	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	138.6	
829 MARYNEAL WINDPOWER	18INR0031	MARYNEAL_UNIT1	NOLAN	WIND-O	WEST	2023	182.4	182.4	182.4	182.4	182.4	182.4	182.4	182.4	182.4	182.4	182.4	182.4	
830 MESTENO WIND	16INR0081	MESTENO_UNIT_1	STARR	WIND-O	SOUTH	2023	201.6	201.6	201.6	201.6	201.6	201.6	201.6	201.6	201.6	201.6	201.6	201.6	
831 PRAIRIE HILL WIND U1	19INR0100	PHILLWIND_UNIT1	LIMESTONE	WIND-O	NORTH	2023	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	
832 PRAIRIE HILL WIND U2	19INR0100	PHILLWIND_UNIT2	LIMESTONE	WIND-O	NORTH	2023	147.0	147.0	147.0	147.0	147.0	147.0	147.0	147.0	147.0	147.0	147.0	147.0	
833 PRIDDY WIND U1	16INR0085	PRIDDY_UNIT1	MILLS	WIND-O	NORTH	2023	187.2	187.2	187.2	187.2	187.2	187.2	187.2	187.2	187.2	187.2	187.2	187.2	
834 PRIDDY WIND U2	16INR0085	PRIDDY_UNIT2	MILLS	WIND-O	NORTH	2023	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	
835 VORTEX WIND U1	20INR0120	VORTEX_WIND1	THROCKMORTON	WIND-O	WEST	2023	153.6	153.6	153.6	153.6	153.6	153.6	153.6	153.6	153.6	153.6	153.6	153.6	
836 VORTEX WIND U2	20INR0120	VORTEX_WIND2	THROCKMORTON	WIND-O	WEST	2023	24.2	24.2	24.2	24.2	24.2	24.2	24.2	24.2	24.2	24.2	24.2	24.2	
837 VORTEX WIND U3	20INR0120	VORTEX_WIND3	THROCKMORTON	WIND-O	WEST	2023	158.4	158.4	158.4	158.4	158.4	158.4	158.4	158.4	158.4	158.4	158.4	158.4	
838 VORTEX WIND U4	20INR0120	VORTEX_WIND4	THROCKMORTON	WIND-O	WEST	2023	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	
839 WHITEHORSE WIND U1	19INR0080	WH_WIND_UNIT1	FISHER	WIND-O	WEST	2023	209.4	209.4	209.4	209.4	209.4	209.4	209.4	209.4	209.4	209.4	209.4	209.4	
840 WHITEHORSE WIND U2	19INR0080	WH_WIND_UNIT2	FISHER	WIND-O	WEST	2023	209.5	209.5	209.5	209.5	209.5	209.5	209.5	209.5	209.5	209.5	209.5	209.5	
841 WILDWIND U1	20INR0033	WILDWIND_UNIT1	COOKE	WIND-O	NORTH	2023	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	

Summer Fuel Types - ERCOT

Fuel type is based on the primary fuel. Capacity contribution of the wind resources is included at 60% for Coastal counties, 30% for Panhandle counties, and 21% for all other counties, while the solar capacity contribution is 79%. Private Use Network, and Hydro are included based on the three-year average historical capability for each Summer Season's 20 peak load hours. Non-Synchronous Tie resources import forecast is based on flows seen during Energy Emergency Alert (EEA) periods in the most recent summer of occurrence. Non-Synchronous Tie resources are categorized as Other. Mothballed resource capacity is excluded except for Available Mothball Capacity based on a Seasonal Availability Schedule or Owner's reported Return Probability. Private Use Network generator capacity is categorized as gas.

In MW											
Fuel_Type	Capacity_Pct	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Biomass	100%	163	163	163	163	163	163	163	163	163	163
Coal	100%	13,568	13,568	13,568	13,568	13,568	13,568	13,568	13,568	13,568	13,568
Gas	100%	54,243	54,476	54,476	54,471	54,471	54,471	54,471	54,471	54,471	54,471
Nuclear	100%	4,973	4,973	4,973	4,973	4,973	4,973	4,973	4,973	4,973	4,973
Other	70%	850	850	850	850	850	850	850	850	850	850
Hydro	84%	475	475	475	475	475	475	475	475	475	475
Wind-C	60%	2,950	3,229	3,229	3,229	3,229	3,229	3,229	3,229	3,229	3,229
Wind-P	30%	1,482	1,531	1,531	1,531	1,531	1,531	1,531	1,531	1,531	1,531
Wind-O	21%	6,229	6,466	6,466	6,466	6,466	6,466	6,466	6,466	6,466	6,466
Solar	79%	24,424	34,013	35,990	36,148	36,148	36,148	36,148	36,148	36,148	36,148
Storage	0%	-	-	-	-	-	-	-	-	-	-
Total		109,357	119,743	121,720	121,873	121,873	121,873	121,873	121,873	121,873	121,873

In Percentages											
Fuel_Type		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Biomass		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Coal		12%	11%	11%	11%	11%	11%	11%	11%	11%	11%
Natural Gas		50%	45%	45%	45%	45%	45%	45%	45%	45%	45%
Nuclear		5%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Other		1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Hydro		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wind-C		3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Wind-P		1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Wind-O		6%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Solar		22%	28%	30%	30%	30%	30%	30%	30%	30%	30%
Storage		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Winter Fuel Types - ERCOT

Fuel type is based on the primary fuel. Capacity contribution of the wind resources is included at 56% for Coastal counties, 37% for Panhandle counties, and 26% for all other counties, while the solar capacity contribution is 14%. Private Use Network, and Hydro are included based on the three-year average historical capability for each Winter Season's 20 peak load hours. Non-Synchronous Tie resources import forecast is based on flows seen during Energy Emergency Alert (EEA) periods in the most recent winter of occurrence. Non-Synchronous Tie resources are categorized as Other. Mothballed resource capacity is excluded except for Available Mothball Capacity based on a Seasonal Availability Schedule or Owner's reported Return Probability. Private Use Network generator capacity is categorized as gas.

In MW											
Fuel_Type	Capacity_Pct	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030	2030/2031	2031/2032	2032/2033	2033/2034
Biomass	100%	163	163	163	163	163	163	163	163	163	163
Coal	100%	13,630	13,630	13,630	13,630	13,630	13,630	13,630	13,630	13,630	13,630
Gas	100%	58,714	58,864	58,864	58,859	58,859	58,859	58,859	58,859	58,859	58,859
Nuclear	100%	5,153	5,153	5,153	5,153	5,153	5,153	5,153	5,153	5,153	5,153
Other	59%	720	720	720	720	720	720	720	720	720	720
Hydro	73%	415	415	415	415	415	415	415	415	415	415
Wind-C	56%	2,751	3,009	3,009	3,009	3,009	3,009	3,009	3,009	3,009	3,009
Wind-P	37%	1,889	1,889	1,889	1,889	1,889	1,889	1,889	1,889	1,889	1,889
Wind-O	26%	7,914	8,005	8,005	8,005	8,005	8,005	8,005	8,005	8,005	8,005
Solar	14%	5,089	6,144	6,374	6,402	6,402	6,402	6,402	6,402	6,402	6,402
Storage	0%	-	-	-	-	-	-	-	-	-	-
Total		96,437	97,992	98,221	98,244	98,244	98,244	98,244	98,244	98,244	98,244

In Percentages											
Fuel_Type		2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030	2030/2031	2031/2032	2032/2033	2033/2034
Biomass		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Coal		14%	14%	14%	14%	14%	14%	14%	14%	14%	14%
Natural Gas		61%	60%	60%	60%	60%	60%	60%	60%	60%	60%
Nuclear		5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Other		1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Hydro		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wind-C		3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Wind-P		2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Wind-O		8%	8%	8%	8%	8%	8%	8%	8%	8%	8%
Solar		5%	6%	6%	7%	7%	7%	7%	7%	7%	7%
Storage		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Unconfirmed Retirement Capacity

Unit Name	Cumulative Summer-Rated Capacity Contribution (in MW) of U Retirements Not Available as of July 1 of the Reporting				
	2024	2025	2026	2027	2028
V H BRAUNIG STG 1	-	217	217	217	217
V H BRAUNIG STG 2	-	230	230	230	230
V H BRAUNIG STG 3	-	412	412	412	412
COLETO CREEK *	-	-	-	655	655
O W SOMMERS STG 1	-	-	-	420	420
O W SOMMERS STG 2	-	-	-	-	-
J K SPRUCE U1	-	-	-	-	-
J K SPRUCE U2**	-	-	-	-	785
TOTAL	-	859	859	1,934	2,719
Reserve Margin Excluding Unconfirmed Retirement Capacity	33.9%	44.2%	44.1%	42.0%	41.0%
Reserve Margin Including Unconfirmed Retirement Capacity	33.9%	43.1%	43.1%	39.7%	37.9%
Difference	0.0%	-1.0%	-1.0%	-2.3%	-3.1%

Notes:

(1) An "Unconfirmed Retirement" is defined as a generation unit for which a public announcement of the intent to permanently shut the unit down has been released, but a Notice of S Operations for the unit has not been received by ERCOT.

(2) The criteria for listing a unit as an Unconfirmed Retirement include the following:

- a. A specific retirement date is cited in the announcement, or other timing information is given that indicates the unit will be unavailable as of June 1 of a CDR Reporting Year.
- b. The announcement, with follow-up inquiry by ERCOT, does not indicate that retirement timing is highly speculative.

* Vistra notified the U.S. Environmental Protection Agency on November 20, 2020 that Coletto Creek's Primary Ash Pond will be closed to meet requirements of EPA's coal combustic (CCR) rule, and that boiler operations will cease no later than July 17, 2027. The notification is available on Vistra's public website, <https://www.luminant.com/ccr/>.

**CPS Energy is expecting to covert the J K SPRUCE unit 2 from coal-fired to natural gas-fired.

Fossil Fuel Settlement Only Distributed Generator (SODG) Capacities

The following is a list of operating fossil fuel Settlement Only Distribution Generators (SODGs) being provided for informational purposes. (The reported capacities are not included in the reserve margin calculations.) As of 4/1/23, there are 627.2 MW of fossil fuel SODG capacity (255.0 MW fired by diesel fuel and 372.24 MW by natural gas). These resources have not been included in past CDR reports due to the difficulty in determining their capacity contributions during peak load periods, and because many are intended as emergency standby generators and are not available to ERCOT for dispatch when needed to address capacity scarcity conditions. Another complication is that such standby generators may be used to reduce on-site loads in order to participate in Demand Response programs such as "4 Coincident Peak" (4CP) and Emergency Response Service (ERS). As a result, historical load reduction impacts would be accounted for in the peak demand forecast, while the capacity of SODGs participating in ERS would already be accounted for in the CDR's ERS line items.

The formal incorporation of fossil-fueled SODGs into future CDR reports has been a discussion topic at Supply Analysis Working Group meetings. Since SODG capacity accounting is not currently addressed in the ERCOT Nodal Protocols, a Nodal Protocol Revision Request (NPRR) is needed to address capacity double-counting, peak average capacity contributions, and other Distribution Generator (DG) accounting issues.

UNIT NAME	UNIT CODE	COUNTY	FUEL	ZONE	IN-SERVICE DATE	MW CAPACITY
NFG WATER AUTH AB	NFBWAB_CLODINE	FORT BEND	GAS	HOUSTON	3/1/2023	0.80
NFG WATER AUTH AC	NFBWAC_CLODINE	FORT BEND	GAS	HOUSTON	3/1/2023	0.80
BROOKSHIRES GROCERY	BRKSHR_G1	SMITH	DIESEL	NORTH	2/1/2023	5.40
SUNRIDER1	SUNRIDE1_VENSW	ELLIS	GAS	NORTH	2/1/2023	2.00
SUNRIDER2	SUNRIDE2_VENSW	ELLIS	GAS	NORTH	2/1/2023	2.00
SUNRIDER3	SUNRIDE3_VENSW	ELLIS	GAS	NORTH	2/1/2023	0.80
TRADITION BUFFALO SPEEDWAY	TRADBUFF_BRAYS	HARRIS	GAS	HOUSTON	1/5/2023	1.20
WAL STORE 7361	WAL7361_SOUT7361	BRAZORIA	GAS	COASTAL	12/14/2022	0.40
WAL STORE 5959	WAL5959_HEIG5959	HARRIS	GAS	HOUSTON	12/14/2022	1.20
WAL STORE 3296	WAL3296_WEST3296	HARRIS	GAS	HOUSTON	12/14/2022	1.20
WAL STORE 5246	WAL5246_WHAR5246	WHARTON	GAS	SOUTH	12/14/2022	0.80
WAL STORE 5045	WAL504_MOOD504	GALVESTON	GAS	HOUSTON	12/1/2022	1.20
HEB STORE 767	HEB00767_PINEHU	MONTGOMERY	GAS	HOUSTON	12/1/2022	1.20
WAL STORE 5147	WAL5147_WEST5147	DALLAS	GAS	NORTH	12/1/2022	1.20
WAL STORE 791	WAL791_STAD791	JIM WELLS	GAS	SOUTH	12/1/2022	1.20
RCM TANGLEWOOD	RCMTANGL_ULRICH	HARRIS	GAS	HOUSTON	11/9/2022	0.80
NFG WATER AUTH A	NFBWA_CLODINE	FORT BEND	GAS	HOUSTON	11/2/2022	2.40
RAVEN CHEMICAL	RAVECHEM_JORDAN	HARRIS	GAS	HOUSTON	11/2/2022	3.20
TRADITION SENIOR LIVING CLEARFORK	TRADCF_TRADSLCF	TARRANT	GAS	NORTH	11/2/2022	1.20
WAL STORE 5479	WAL5479_PFLU5479	TRAVIS	GAS	SOUTH	11/2/2022	1.20
WAL STORE 561	WAL561_EAST561	EASTLAND	GAS	NORTH	10/5/2022	1.30
WAL STORE 565	WAL565_CORS565	NAVARRO	GAS	NORTH	9/28/2022	1.20
WAL STORE 5080	WAL5080_SMIT5080	TARRANT	GAS	NORTH	9/28/2022	1.20
WAL STORE 407	WAL407_KILL407	BELL	GAS	NORTH	9/28/2022	1.20
WAL STORE 3406	WAL3406_KNOL3406	DALLAS	GAS	NORTH	9/28/2022	1.20
WAL STORE 2765	WAL2765_LOSF2765	CAMERON	GAS	COASTAL	9/28/2022	0.80
WAL STORE 896	WAL896_MAYF896	TARRANT	GAS	NORTH	9/21/2022	1.20
WAL STORE 456	WAL456_OLMI456	CAMERON	GAS	COASTAL	9/21/2022	1.20
WAL STORE 2980	WAL2980_KELL2980	TARRANT	GAS	NORTH	9/21/2022	1.20
WAL STORE 266	WAL266_KIMB266	TARRANT	GAS	NORTH	9/21/2022	1.20
WAL STORE 5312	WAL5312_SPRI5312	TARRANT	GAS	NORTH	9/14/2022	1.20
WAL STORE 452	WAL452_NORT452	HIDALGO	GAS	SOUTH	9/14/2022	1.20
WAL STORE 447	WAL447_DELR447	VAL VERDE	GAS	WEST	9/14/2022	1.20
WAL STORE 2883	WAL2883_MCDE2883	COLLIN	GAS	NORTH	9/14/2022	1.60
WAL STORE 5713	WAL5713_UNIV5713	WEBB	GAS	SOUTH	9/1/2022	1.20
WAL STORE 536	WAL536_ABIL536	TAYLOR	GAS	WEST	9/1/2022	1.20
WAL STORE 3518	WAL3518_GATE3518	WEBB	GAS	SOUTH	9/1/2022	1.20
WAL STORE 344	WAL344_ELCA344	WHARTON	GAS	SOUTH	9/1/2022	0.80
WAL STORE 3224	WAL3224_MESQ3224	DALLAS	GAS	NORTH	7/13/2022	1.20
WAL STORE 1062	WAL1062_PILG1062	HARRIS	GAS	HOUSTON	7/13/2022	1.20
WAL STORE 5480	WAL5480_HUTT5480	WILLIAMSON	GAS	SOUTH	6/2/2022	1.20
WAL STORE 3432	WAL3432_PARK3432	DALLAS	GAS	NORTH	6/2/2022	1.20
WAL STORE 3285	WAL3285_CEDA3285	DALLAS	GAS	NORTH	6/2/2022	1.20
WAL STORE 2993	WAL2993_IMPE2993	FORT BEND	GAS	HOUSTON	6/2/2022	1.20
CITY OF VICTORIA - SURFACE WATER TREATMENT	SWTP_1_SWTP_1	VICTORIA	DIESEL	SOUTH	5/25/2022	1.25
WAL STORE 3584	WAL3584_BELL3584	HARRIS	GAS	HOUSTON	5/25/2022	1.20
WAL STORE 284	WAL284_MANS284	TARRANT	GAS	NORTH	5/25/2022	1.20
WAL STORE 5612	WAL5612_UNIV5612	HARRIS	GAS	HOUSTON	5/18/2022	1.20
WAL STORE 4526	WAL4526_AIRL4526	HARRIS	GAS	HOUSTON	5/18/2022	1.20
WAL STORE 4298	WAL4298_LOCK4298	HARRIS	GAS	HOUSTON	5/18/2022	1.20
WAL STORE 3500	WAL3500_UVAL3500	HARRIS	GAS	HOUSTON	5/11/2022	1.20
WAL STORE 3425	WAL3425_SOUT3425	HARRIS	GAS	HOUSTON	5/11/2022	1.20
WAL STORE 2257	WAL2257_FAIR2257	HARRIS	GAS	HOUSTON	5/11/2022	1.20
WAL STORE 772	WAL772_BARK772	HARRIS	GAS	HOUSTON	5/4/2022	1.20
HEB STORE 769	HEB769_ELDOR769	GALVESTON	GAS	HOUSTON	12/16/2021	1.20

WAL STORE 5165	WAL5165_NORT5165	HIDALGO	GAS	SOUTH	9/17/2021	1.20
WAL STORE 3320	WAL3320_PALM3320	HIDALGO	GAS	SOUTH	9/17/2021	1.20
WAL STORE 3886	WAL3886_MCCO3886	HIDALGO	GAS	SOUTH	9/3/2021	1.20
WAL STORE 461	WAL461_ESCO461	MAVERICK	GAS	SOUTH	7/29/2021	1.20
WAL STORE 1494	WAL1494_SOUT1494	NUECES	GAS	COASTAL	7/12/2021	1.30
HEB SA DC	HEBDC2_ADDICDCB	HARRIS	GAS	HOUSTON	7/7/2021	4.80
WAL STORE 490	WAL490_NAVA490	NUECES	GAS	COASTAL	6/14/2021	1.30
WAL STORE 3225	WAL3225_ROWL3225	DALLAS	GAS	NORTH	6/1/2021	1.20
WAL STORE 3284	WAL3284_KENN3284	TARRANT	GAS	NORTH	5/25/2021	1.20
HEB STORE 419	HEB419_EPASS419	MAVERICK	GAS	SOUTH	5/19/2021	0.80
HEB STORE 418	HEB418_DELRI418	VAL VERDE	GAS	WEST	5/14/2021	0.80
WAL STORE 414	WAL414_SIKE414	WICHITA	GAS	WEST	5/6/2021	1.20
HEB DISTRIBUTION CENTER 1	HEBDC1_ADDICDCA	HARRIS	GAS	HOUSTON	5/6/2021	8.00
WAL STORE 5764	WAL5764_JOHN5764	TARRANT	GAS	NORTH	4/30/2021	1.20
WAL STORE 1272	WAL1272_DEEP1272	SCURRY	GAS	WEST	4/28/2021	1.20
WAL STORE 5460	WAL5460_GREG5460	SAN PATRICIO	GAS	COASTAL	4/21/2021	1.30
WAL STORE 4194	WAL4194_VICT4194	VICTORIA	GAS	SOUTH	4/21/2021	1.30
WAL STORE 440	WAL440_FULT440	ARANSAS	GAS	COASTAL	4/16/2021	1.30
WAL STORE 463	WAL463_BEEV463	BEE	GAS	SOUTH	4/14/2021	1.30
FT BEND LID 2 B	FTBL2B_IMPERIAL	HARRIS	GAS	HOUSTON	4/13/2021	5.60
FT BEND LID 2 A	FTBL2A_IMPERIAL	HARRIS	GAS	HOUSTON	4/13/2021	5.60
HEB STORE 441	HEB441_UVALD441	HIDALGO	GAS	SOUTH	4/8/2021	0.80
WAL STORE 897	WAL897_AIR897	PECOS	GAS	WEST	4/1/2021	1.30
HEB STORE 696	HEB696_HUTTO696	WILLIAMSON	GAS	SOUTH	2/1/2021	1.20
WAL STORE 1249	WAL1249_LAKE1249	TOM GREEN	GAS	WEST	1/29/2021	1.30
WAL STORE 601	WAL601_BLUF601	TOM GREEN	GAS	WEST	1/28/2021	1.30
WAL STORE 5311	WAL5311_ROCK5311	COLLIN	DIESEL	NORTH	12/31/2020	1.25
WAL STORE 4509	WAL4509_BENB4509	TARRANT	GAS	NORTH	11/23/2020	1.20
WAL STORE 6929	WAL6929_TEMP6929	BELL	GAS	NORTH	10/22/2020	1.20
WAL STORE 972	WAL972_ROSE972	TARRANT	GAS	NORTH	10/15/2020	1.20
WAL STORE 947	WAL947_SHER947	GRAYSON	GAS	NORTH	10/15/2020	1.20
WAL STORE 940	WAL940_CALM940	TARRANT	GAS	NORTH	10/15/2020	1.20
WAL STORE 5316	WAL5316_WAGL5316	TARRANT	GAS	NORTH	10/15/2020	1.20
LAKESIDE COUNTRY CLUB	LKSDECC_HAYESLCC	HARRIS	GAS	HOUSTON	10/7/2020	1.20
HEB STORE 771	CHEB771_DG_V3_1	BEXAR	GAS	SOUTH	10/7/2020	1.20
HEB STORE 713	HEB713_CLELK713	HARRIS	GAS	HOUSTON	10/1/2020	0.80
HEB STORE 732	CHEB732_DG_SK_1	BEXAR	GAS	SOUTH	10/1/2020	1.20
WAL STORE 1232	WAL1232_BELT1232	BELL	GAS	NORTH	9/29/2020	1.20
WAL STORE 3773	WAL3773_WEST3773	TARRANT	GAS	NORTH	9/11/2020	1.20
WAL STORE 3631	WAL3631_SYCA3631	TARRANT	GAS	NORTH	9/11/2020	1.20
WAL STORE 849	WAL849_SPRG849	HARRIS	GAS	HOUSTON	9/1/2020	1.20
WAL STORE 752	WAL752_CARD752	HARRIS	GAS	HOUSTON	9/1/2020	1.20
HEB STORE 711	HEB711_ODNTH711	ECTOR	GAS	WEST	8/21/2020	0.80
HEB STORE 717	HEB717_MDESA717	MIDLAND	GAS	WEST	8/19/2020	1.20
HEB STORE 674	HEB674_PALMH674	HIDALGO	GAS	SOUTH	8/12/2020	0.80
WAL STORE 3298	WAL3298_KEMA3298	GALVESTON	GAS	HOUSTON	8/11/2020	1.20
WAL STORE 4512	WAL4512_FRAN4512	HARRIS	GAS	HOUSTON	8/10/2020	1.20
WAL STORE 5045	WAL5045_KLEI5045	HARRIS	GAS	HOUSTON	8/6/2020	1.20
TRADITION WOODWAY	TRDWDY_ULRICHTW	HARRIS	GAS	HOUSTON	8/6/2020	1.20
WAL STORE 522	WAL522_NEWP522	HARRIS	GAS	HOUSTON	8/5/2020	1.20
HEB STORE 593	HEB593_TLRWT593	WILLIAMSON	GAS	SOUTH	8/4/2020	0.80
WAL STORE 602	WAL602_RAYF602	MONTGOMERY	GAS	HOUSTON	8/3/2020	1.20
HEB STORE 725	HEB725_KLEIN725	HARRIS	GAS	HOUSTON	8/3/2020	0.80
WAL STORE 2439	WAL2439_MT_B2439	CHAMBERS	GAS	HOUSTON	7/30/2020	1.20
HEB STORE 444	CHEB444_DG_V2_1	BEXAR	GAS	SOUTH	7/30/2020	1.20
WAL STORE 3297	WAL3297_SATS3297	HARRIS	GAS	HOUSTON	7/29/2020	1.20
WAL STORE 872	WAL872_TELP872	BRAZORIA	GAS	COASTAL	7/24/2020	1.20
WAL STORE 744	WAL744_HUMB744	HARRIS	GAS	HOUSTON	7/22/2020	1.20
WAL STORE 546	WAL546_READ546	FORT BEND	GAS	HOUSTON	7/22/2020	1.20
HEB STORE 749	HEB749_FLEWE749	FORT BEND	GAS	HOUSTON	7/22/2020	1.20
WAL STORE 5287	WAL5287_KUYD5287	HARRIS	GAS	HOUSTON	7/21/2020	1.20
WAL STORE 3390	WAL3390_TOMB3390	MONTGOMERY	GAS	HOUSTON	7/21/2020	1.20
WAL STORE 5091	WAL5091_CYFA5091	HARRIS	GAS	HOUSTON	7/17/2020	1.20
WAL STORE 3827	WAL3827_FLEW3827	FORT BEND	GAS	HOUSTON	7/14/2020	1.20
WAL STORE 194	WAL194_GART194	HARRIS	GAS	HOUSTON	7/14/2020	1.20
WAL STORE 5116	WAL5116_FAIR5116	HARRIS	GAS	HOUSTON	7/13/2020	1.20
WAL STORE 2724	WAL2724_PASD2724	HARRIS	GAS	HOUSTON	7/13/2020	1.20
HEB STORE 715	HEB715_FRMNT715	HARRIS	GAS	HOUSTON	7/13/2020	0.80
CNP CYPRESS STATION	CNPMUD_WESFDMUD	HARRIS	GAS	HOUSTON	7/10/2020	0.80
HEB STORE 016	HEB016_CRWLY016	JOHNSON	GAS	NORTH	6/18/2020	0.80
HEB STORE 756	HEB756_BLGET756	HARRIS	GAS	HOUSTON	6/9/2020	1.20
HEB STORE 475	HEB475_ELGIN475	BASTROP	GAS	SOUTH	6/9/2020	0.80
HEB STORE 745	HEB745_SHARP745	HARRIS	GAS	HOUSTON	6/8/2020	1.20
HEB STORE 485	HEB485_WESLA485	HIDALGO	GAS	SOUTH	5/19/2020	0.80
HEB STORE 434	HEB434_BRKHL434	CALHOUN	GAS	COASTAL	5/13/2020	0.80

HEB STORE 172	HEB172_SEDNB172	HIDALGO	GAS	SOUTH	5/6/2020	0.80
WAL STORE 5388	WAL5388_LEA5388	GALVESTON	GAS	HOUSTON	5/1/2020	1.30
WAL STORE 529	WAL529_LAM529	GALVESTON	GAS	HOUSTON	5/1/2020	1.30
WAL STORE 0462	WAL462_ALV462	BRAZORIA	GAS	COASTAL	5/1/2020	1.30
HEB STORE 448	HEB448_PLMVW448	HIDALGO	GAS	SOUTH	4/30/2020	0.80
CITIZENS MEDICAL CENTER	CTZSMC_NVICTCTZ	VICTORIA	GAS	SOUTH	4/26/2020	2.80
HEB STORE 747	HEB747_LKMNT747	DALLAS	GAS	NORTH	3/27/2020	0.80
HEB STORE 383	HEB383_CAUSE383	CAMERON	GAS	COASTAL	3/11/2020	0.80
HEB SA DC	CHEBDC_DG_L2_1	BEXAR	GAS	SOUTH	3/3/2020	6.40
HEB STORE 084	CHEB084_DG_J0_1	BEXAR	GAS	SOUTH	2/26/2020	1.20
WAL STORE 3510	WAL3510_PRL3510	BRAZORIA	GAS	COASTAL	2/25/2020	1.30
WAL STORE 5211	WAL5211_CRAI5211	COLLIN	DIESEL	NORTH	1/31/2020	1.25
WAL STORE 3777	WAL3777_PANT3777	DENTON	DIESEL	NORTH	1/31/2020	1.25
HEB STORE 026	CHEB026_DG_Q5_1	COMAL	GAS	SOUTH	12/19/2019	1.20
HEB STORE 658	CHEB658_DG_V5_1	BEXAR	GAS	SOUTH	12/10/2019	1.20
WAL STORE 768	WAL768_FRAN768	HARRIS	GAS	HOUSTON	12/2/2019	1.20
STANDARD MEAT	ST_MEAT_CKRHLSTM	DALLAS	GAS	NORTH	11/30/2019	1.20
HEB STORE 545	HEB545_FARON545	TARRANT	GAS	NORTH	11/30/2019	1.20
BUC-EES STORE 048	BUC048_ENSSO048	ELLIS	GAS	NORTH	11/30/2019	1.20
HEB STORE 552	HEB552_GAVSW552	DALLAS	GAS	NORTH	10/30/2019	1.20
WAL STORE 3226	WAL3226_KTY3226	HARRIS	GAS	HOUSTON	10/7/2019	1.20
WAL STORE 1040	WAL1040_GERT1040	HARRIS	GAS	HOUSTON	9/20/2019	1.20
WAL STORE 1103	WAL1103_BAM1103	HARRIS	GAS	HOUSTON	9/10/2019	1.20
HEB CC BAKERY	HEBCCB_HWY9CCB	NUECES	GAS	COASTAL	9/10/2019	3.20
SILVER EAGLE	TBFY_U1	HARRIS	DIESEL	HOUSTON	8/27/2019	1.50
WAL STORE 4538	WAL4538_FRAN4538	HARRIS	GAS	HOUSTON	8/21/2019	1.20
HEB STORE 085	CHEB085_DG_P5_1	BEXAR	GAS	SOUTH	8/20/2019	1.60
HEB STORE 574	HEB574_TOMBA574	HARRIS	GAS	HOUSTON	7/11/2019	1.20
HEB STORE 559	HEB559_BLUER559	HARRIS	GAS	HOUSTON	7/10/2019	0.80
HEB STORE 564	HEB564_RAFRD564	MONTGOMERY	GAS	HOUSTON	7/3/2019	0.80
POWERSECURE NORBORD TEXAS INC 2	NOR2_NORBORD_2	NACOGDOCHES	DIESEL	NORTH	4/9/2019	2.50
POWERSECURE NORBORD TEXAS INC 1	NOR1_NORBORD_1	NACOGDOCHES	DIESEL	NORTH	4/9/2019	5.00
HEB SNACK PLANT	HEBSP_TANNERSP	HARRIS	GAS	HOUSTON	4/5/2019	1.60
HEB STORE 586	HEB586_STNIO586	WEBB	GAS	SOUTH	3/28/2019	1.20
HEB STORE 752	HEB752_LGVST752	PARKER	GAS	NORTH	2/11/2019	1.20
BUC-EES STORE 044	BUC044_ANASE044	COLLIN	GAS	NORTH	2/11/2019	1.20
BUC-EES STORE 038	BUC038_RYSSW038	ROCKWALL	GAS	NORTH	2/11/2019	1.20
HEB STORE 563	HEB563_CRABB563	FORT BEND	GAS	HOUSTON	1/22/2019	1.20
HEB STORE 737	HEB737_WHTOK737	HARRIS	GAS	HOUSTON	12/31/2018	1.20
HEB STORE 753	HEB753_DRPRK753	HARRIS	GAS	HOUSTON	12/18/2018	0.80
HEB STORE 070	HEB070_MCMRY070	TAYLOR	GAS	WEST	11/28/2018	1.20
HEB STORE 546	HEB546_RENSW546	COLLIN	GAS	NORTH	11/19/2018	1.20
HEB STORE 540	HEB540_GGATE540	HARRIS	GAS	HOUSTON	11/1/2018	1.13
HEB STORE 562	HEB562_FULTN562	ARANSAS	GAS	COASTAL	10/31/2018	0.80
HEB STORE 473	HEB473_CARDF473	HARRIS	GAS	HOUSTON	10/31/2018	1.20
HEB STORE 738	HEB738_SHPTN738	HARRIS	GAS	HOUSTON	10/4/2018	1.20
HEB STORE 449	HEB449_DELMA449	WEBB	GAS	SOUTH	9/27/2018	0.80
HEB STORE 095	HEB095_MILOA095	WEBB	GAS	SOUTH	9/27/2018	1.60
HEB STORE 054	HEB054_HALL054	HARRIS	GAS	HOUSTON	9/27/2018	1.20
HEB STORE 599	HEB599_KIRBY599	HARRIS	GAS	HOUSTON	9/26/2018	1.20
HEB STORE 553	HEB553_GRTIE553	HARRIS	GAS	HOUSTON	9/25/2018	0.80
HEB STORE 581	HEB581_KLELM581	BELL	GAS	NORTH	8/24/2018	1.20
HEB STORE 381	HEB381_HKHTS381	BELL	GAS	NORTH	8/24/2018	1.20
HEB STORE 488	HEB488_PTLND488	SAN PATRICIO	GAS	COASTAL	8/21/2018	0.80
HEB STORE 721	HEB721_KLNSO721	BELL	GAS	NORTH	8/10/2018	1.20
HEB STORE 672	HEB672_WSOth672	MCLENNAN	GAS	NORTH	8/10/2018	1.20
HEB STORE 668	HEB668_COVEE668	CORYELL	GAS	NORTH	8/10/2018	1.20
HEB STORE 426	HEB426_WXNTH426	ELLIS	GAS	NORTH	8/10/2018	1.20
HEB STORE 423	HEB423_WNTHW423	MCLENNAN	GAS	NORTH	8/10/2018	0.80
HEB STORE 236	HEB236_RDRSE236	TRAVIS	GAS	SOUTH	8/10/2018	0.80
HEB STORE 182	HEB182_TMSTH182	BELL	GAS	NORTH	8/10/2018	1.20
HEB STORE 495	HEB495_RDRSE495	WILLIAMSON	GAS	SOUTH	7/17/2018	0.80
HEB STORE 640	HEB640_UVLDE640	HARRIS	GAS	HOUSTON	6/20/2018	0.80
HEB STORE 491	HEB491_SNFLP491	HARRIS	GAS	HOUSTON	6/19/2018	1.13
HEB STORE 109	HEB109_ECHO109	HARRIS	GAS	HOUSTON	6/15/2018	1.13
HEB STORE 667	HEB667_FNDRN667	HARRIS	GAS	HOUSTON	6/12/2018	0.80
RELLIS CAMPUS	TAMURE_RELLISAM	BRAZOS	GAS	NORTH	6/1/2018	9.60
HEB STORE 255	HEB255_ZACAT255	WEBB	GAS	SOUTH	5/31/2018	1.20
HEB STORE 675	HEB675_MARCK675	BRAZORIA	GAS	COASTAL	5/24/2018	1.13
HEB STORE 720	HEB720_KNGWD720	HARRIS	GAS	HOUSTON	5/22/2018	1.13
HEB STORE 709	HEB709_FRYRD709	HARRIS	GAS	HOUSTON	5/22/2018	1.20
HEB STORE 748	HEB748_LOUET748	HARRIS	GAS	HOUSTON	5/21/2018	0.80
HEB STORE 596	HEB596_FLWEN596	FORT BEND	GAS	HOUSTON	5/8/2018	1.13
HEB STORE 707	HEB707_LKJCK707	BRAZORIA	GAS	COASTAL	5/2/2018	1.13
HEB STORE 649	HEB649_LTTYK649	HARRIS	GAS	HOUSTON	4/27/2018	0.80

HEB STORE 498	HEB498_HUMBL498	HARRIS	GAS	HOUSTON	4/27/2018	1.13
HEB STORE 038	HEB038_PHARR038	HIDALGO	GAS	SOUTH	4/26/2018	1.20
HEB STORE 741	HEB741_MTBEL741	CHAMBERS	GAS	HOUSTON	4/24/2018	0.80
HEB STORE 648	HEB648_BERRY648	HARRIS	GAS	HOUSTON	4/20/2018	1.13
HEB STORE 591	HEB591_RRNES591	WILLIAMSON	GAS	SOUTH	4/11/2018	1.60
HEB STORE 479	HEB479_PFLGV479	TRAVIS	GAS	SOUTH	4/11/2018	0.80
HEB STORE 401	HEB401_KNGVL401	KLEBERG	GAS	COASTAL	4/11/2018	0.80
HEB STORE 373	HEB373_RNDRK373	WILLIAMSON	GAS	SOUTH	4/11/2018	0.80
HEB STORE 223	HEB223_STCSW223	JIM WELLS	GAS	SOUTH	4/11/2018	1.20
BUC-EES STORE 035	BUC035_TMINTH035	BELL	GAS	NORTH	4/11/2018	1.13
HEB STORE 727	HEB727_CRBRR727	FORT BEND	GAS	HOUSTON	4/9/2018	1.20
HEB STORE 736	HEB736_FLWEN736	FORT BEND	GAS	HOUSTON	4/6/2018	1.20
HEB STORE 742	HEB742_HNYRT742	HARRIS	GAS	HOUSTON	4/3/2018	1.20
HEB STORE 642	HEB642_HAACR642	HIDALGO	GAS	SOUTH	3/22/2018	1.20
HEB STORE 431	HEB431_MCOLL431	HIDALGO	GAS	SOUTH	3/21/2018	1.20
HEB STORE 554	HEB554_NVICT554	VICTORIA	GAS	SOUTH	3/14/2018	1.20
HEB STORE 615	HEB615_KATY615	FORT BEND	GAS	HOUSTON	3/8/2018	1.13
HEB STORE 334	HEB334_WMCAL334	HIDALGO	GAS	SOUTH	2/28/2018	1.20
HEB STORE 212	HEB212_PLKAV212	HIDALGO	GAS	SOUTH	2/28/2018	0.80
HEB STORE 231	HEB231_WESLA231	HIDALGO	GAS	SOUTH	2/8/2018	0.80
JRABTUD	JKRBT_JRB	HARRIS	DIESEL	HOUSTON	2/1/2018	1.08
HEB STORE 092	HEB092_LEALN092	VICTORIA	GAS	SOUTH	1/17/2018	1.60
HEB STORE 291	HEB291_WHRLG291	CAMERON	GAS	COASTAL	1/11/2018	1.20
HEB STORE 558	HEB558_FRDSW558	GALVESTON	GAS	HOUSTON	1/8/2018	1.13
HEB STORE 136	HEB136_EHRSN136	CAMERON	GAS	COASTAL	1/4/2018	0.80
HEB STORE 462	HEB462_ARCIA462	NUECES	GAS	COASTAL	12/14/2017	1.20
HEB STORE 270	HEB270_ARLN270	NUECES	GAS	COASTAL	12/8/2017	0.80
TERRANOVA WEST MUD	LU_1UNIT	HARRIS	DIESEL	HOUSTON	12/1/2017	0.32
LANGHAM CREEK	ADK_1UNIT	HARRIS	DIESEL	HOUSTON	43070	0.54
HEB STORE 210	HEB210_SOUSD210	NUECES	GAS	COASTAL	12/1/2017	0.80
HOLLY HALL	HH2000_HOLMESH	HARRIS	GAS	HOUSTON	11/3/2017	1.20
HEB STORE 139	HEB139_HOLLY139	NUECES	GAS	COASTAL	11/1/2017	0.80
HEB STORE 069	HEB069_AIRLN069	NUECES	GAS	COASTAL	10/25/2017	1.60
HEB STORE 57	HEB057_LAGUN057	NUECES	GAS	COASTAL	10/10/2017	1.20
HEB STORE 734	HEB734_BLFFS734	TOM GREEN	GAS	WEST	9/27/2017	1.20
HEB STORE 724	HEB724_OBRN724	FORT BEND	GAS	HOUSTON	9/18/2017	1.13
HEB STORE 722	HEB722_PINHU722	MONTGOMERY	GAS	HOUSTON	8/23/2017	1.13
UTMB WEST PLANT	UTMBWEST_CT1	GALVESTON	GAS	HOUSTON	8/2/2017	5.40
HEB STORE 697	HEB697_SOUSH697	GALVESTON	GAS	HOUSTON	7/27/2017	1.13
OAKBEND MEDICAL CENTER	READNG_1UNIT	HARRIS	DIESEL	HOUSTON	7/12/2017	1.62
HEB STORE 610	HEB610_LOU610	HARRIS	GAS	HOUSTON	7/3/2017	1.13
HEB STORE 110	HEB110_SIEN110	FORT BEND	GAS	HOUSTON	7/3/2017	1.13
HEB STORE 20	HEB020_CYFR020	HARRIS	GAS	HOUSTON	7/3/2017	1.51
HEB STORE 28	HEB028_LGCTY028	GALVESTON	GAS	HOUSTON	6/28/2017	1.13
BUC-EES STORE 033	BUC033_TXCTY033	GALVESTON	GAS	HOUSTON	6/5/2017	1.13
HEB STORE 645	HEB645_CDRBY645	HARRIS	GAS	HOUSTON	6/1/2017	0.75
HEB STORE 576	HEB576_KLEIN576	HARRIS	GAS	HOUSTON	6/1/2017	1.13
HEB STORE 575	HEB575_BRKER575	HARRIS	GAS	HOUSTON	6/1/2017	1.13
HEB STORE 551	HEB551_WSTCS551	HARRIS	GAS	HOUSTON	6/1/2017	1.13
HEB STORE 474	HEB474_DWLT474	FORT BEND	GAS	HOUSTON	6/1/2017	1.13
BUC-EES STORE 040	BUC040_KATY040	FORT BEND	GAS	HOUSTON	5/31/2017	1.13
BUC-EES STORE 030	BUC030_WHRTN030	WHARTON	GAS	SOUTH	5/16/2017	0.75
PEPPERL FUCHS	PEPF01_WALLER01	WALLER	GAS	HOUSTON	5/5/2017	1.13
HEB STORE 627	HEB627_IMPRL627	FORT BEND	GAS	HOUSTON	5/1/2017	1.13
HEB STORE 497	HEB497_MASRD497	HARRIS	GAS	HOUSTON	5/1/2017	1.13
HEB STORE 99	HEB099_KLEIN099	HARRIS	GAS	HOUSTON	5/1/2017	1.13
BUC-EES STORE 034	BUC034_BYTWN034	HARRIS	GAS	HOUSTON	5/1/2017	1.13
BUC-EES STORE 003	BUC003_BRZIA003	BRAZORIA	GAS	COASTAL	4/25/2017	0.38
HEB STORE 731	HEB731_WSFLD731	HARRIS	GAS	HOUSTON	4/6/2017	0.75
HEB STORE 698	HEB698_KLUGE698	HARRIS	GAS	HOUSTON	4/3/2017	1.13
HEB STORE 614	HEB614_KING614	HARRIS	GAS	HOUSTON	4/3/2017	1.13
BUC-EES STORE 018	BUC018_WALLR018	WALLER	GAS	HOUSTON	4/3/2017	1.13
WINDFERN FOREST UD	FR_1UNIT	HARRIS	DIESEL	HOUSTON	3/31/2017	0.54
REMINGTON MUD 001	CYFAIR_1UNIT	HARRIS	DIESEL	HOUSTON	3/31/2017	0.54
HARRIS COUNTY WCID 109	BA_1UNIT	HARRIS	DIESEL	HOUSTON	3/29/2017	0.32
HARRIS COUNTY MUD #36	WF_1UNIT	HARRIS	DIESEL	HOUSTON	3/24/2017	0.54
NORTHAMPTON MUD	KDL_1UNIT	HARRIS	DIESEL	HOUSTON	3/22/2017	0.32
HARRIS COUNTY MUD 536	KT_1UNIT	HARRIS	DIESEL	HOUSTON	3/7/2017	0.54
HEB STORE 705	HEB705_SPRWD705	MONTGOMERY	GAS	HOUSTON	3/1/2017	1.13
PLANET FORD I45	PFI45_PFORDI45	HARRIS	GAS	HOUSTON	2/1/2017	1.13
HEB STORE 686	HEB686_KUYKL686	HARRIS	GAS	HOUSTON	2/1/2017	1.13
PANTHER PLANT	PAPL_DG1	UPTON	GAS	WEST	1/13/2017	8.28
SATSUMA	SATSUM_1UNIT	HARRIS	DIESEL	HOUSTON	1/4/2017	0.63
HEB STORE 616	HEB616_BAML616	HARRIS	GAS	HOUSTON	1/3/2017	0.75
HEB STORE 292	HEB292_BYCTY292	MATAGORDA	GAS	COASTAL	12/5/2016	1.13

HEB STORE 656	HEB656_HOKLE656	HARRIS	GAS	HOUSTON	11/30/2016	1.13
HEB STORE 492	HEB492_FRANZ492	HARRIS	GAS	HOUSTON	11/30/2016	1.13
HEB STORE 63	HEB063_SOWIK063	BRAZORIA	GAS	COASTAL	11/30/2016	1.51
HEB STORE 541	HEB541_ROARK541	HARRIS	GAS	HOUSTON	11/22/2016	1.13
HEB STORE 687	HEB687_ULRIC687	HARRIS	GAS	HOUSTON	11/18/2016	1.13
UTMB East Plant	UTMBEAST_CT1	GALVESTON	GAS	HOUSTON	3/15/2016	7.56
TOTAL ENERGY SOLUTIONS 2	TES2_DGGROUPB	BRAZORIA	DIESEL	COASTAL	6/1/2015	5.40
TOTAL ENERGY SOLUTIONS 1	TES1_DGDROUPA	BRAZORIA	DIESEL	COASTAL	6/1/2015	7.20
TPC POWER STATION	TPC_6UNITS	SMITH	DIESEL	NORTH	5/31/2015	9.93
DGSP2 BIGCAT	ABEC2_3UNIT	TAYLOR	DIESEL	WEST	42019	9.77
DGSP2 PLAZA	ABEC_2UNIT	TAYLOR	DIESEL	WEST	41967	9.77
GCWAMUNI	GCWAMUNI_4UNITS	GALVESTON	DIESEL	HOUSTON	10/1/2014	2.50
GCWA IPS	INTRCITY_8UNITS	GALVESTON	DIESEL	HOUSTON	8/6/2014	5.00
DGS 5 POINTS	DG_ABEC_1UNIT	TAYLOR	DIESEL	WEST	1/10/2014	9.77
POWER DEPOT - MCKEEVER	DGWAP_15UNITS	FORT BEND	DIESEL	HOUSTON	10/25/2013	9.38
DGS PALO PINTO	MNWLL_1UNIT	PALO PINTO	DIESEL	NORTH	7/2/2013	9.77
POWER DEPOT - WESTOVER	WOVER_15UNITS	ECTOR	DIESEL	WEST	6/15/2013	9.38
POWER DEPOT - ADDICKS	WO_15UNITS	HARRIS	DIESEL	HOUSTON	6/15/2013	9.38
POWER DEPOT - VILLA CAVASOS	VCAVASOS_15UNITS	CAMERON	DIESEL	COASTAL	6/15/2013	9.38
POWER DEPOT - S. SANTA ROSA	S_SNROSA_15UNITS	CAMERON	DIESEL	COASTAL	6/15/2013	9.38
POWER DEPOT - HAINE	HAINE_DR_15UNITS	CAMERON	DIESEL	COASTAL	6/15/2013	9.38
POWER DEPOT - GOLDSMITH	GSMTH_15UNITS	ECTOR	DIESEL	WEST	6/15/2013	9.38
POWER DEPOT - KATY	FL_15UNITS	WALLER	DIESEL	HOUSTON	6/15/2013	9.38
POWER DEPOT - FRANKEL CITY	FKLCY_15UNITS	ANDREWS	DIESEL	WEST	6/15/2013	9.38
POWER DEPOT EL GATO	ELGATO_15UNITS	HIDALGO	DIESEL	SOUTH	6/15/2013	9.38
POWER DEPOT - HILMONT	ECTHM_15UNITS	ECTOR	DIESEL	WEST	6/15/2013	9.38
POWER DEPOT - E HARRISON	E_HARRIS_15UNITS	CAMERON	DIESEL	COASTAL	6/15/2013	9.38
POWER DEPOT - TH WHARTON	DGTHW_15UNITS	HARRIS	DIESEL	HOUSTON	6/15/2013	9.38
POWER DEPOT - SOUTHWICK	DGHOC_15UNITS	HARRIS	DIESEL	HOUSTON	6/15/2013	9.38
POWER DEPOT - CITRUS CITY	CITRUSCY_15UNITS	HIDALGO	DIESEL	SOUTH	6/15/2013	9.38
POWER DEPOT - BAKKE	BAKKE_15UNITS	ANDREWS	DIESEL	WEST	6/15/2013	9.38
POWER DEPOT - ANDREWS	ANDNR_15UNITS	ANDREWS	DIESEL	WEST	6/15/2013	9.38
ROBERT MUELLER ENERGY CENTER	RMEC_CT1	TRAVIS	GAS	SOUTH	9/23/2011	5.80
RHODIA HOUSTON PLANT	DG_HG_2UNITS	HARRIS	GAS	HOUSTON	1/1/1970	8.20

Decommissioned Generation Resources

The following is a list of Decommissioned Generation Resources dating back to 2004. A Decommissioned Generation Resource is a Generation Resource for which a Resource Entity has submitted a Notification of Suspension of Operations (NSO) or a Notification of Change of Generation Resource Designation (NCGRD), for which ERCOT has declined to execute a Reliability Must-Run (RMR) Agreement, and which has been decommissioned and permanently retired. The information in the table below was provided in the NSO and/or NCGRD forms for each decommissioned resource. When a unit's NSO/NCGRD form did not list a capacity, the capacity was taken from past CDR reports. Except for rare exceptions, the list does not include any planned unit retirements listed in the Capacities tabs or other sections of the report. Unit codes that are listed as retired in this tab but also appear in the operational sections of the CDR represent units that were repowered; for example, retired gas turbines may be repowered into new combined cycle plants.

Treatment of Private Use Network (PUN) generators: PUN generators are included, but were not individually listed in past CDR reports when operational. PUN generators with zero MW capacity listed indicate that the unit was not available during the summer.

Treatment of Settlement Only Generators (SOGs): The list does not include decommissioned or retired SOGs because there is currently no NSO/NCGRD process for this generator type.

Unit Name	Unit Code	Fuel	Summer Capacity (MW)	Retirement Effective Date
TIDAL ROAD COGEN	TJG401	GAS-CC	100	2/1/2004
HOLLY STREET 1	HOLLY_HPG1	GAS-ST	102.5	12/31/2004
HOLLY STREET 2	HOLLY_HPG2	GAS-ST	102.5	12/31/2004
C.E. NEWMAN 1	NEWMAN_NEWMA_1	GAS-ST	8	5/1/2005
C.E. NEWMAN 2	NEWMAN_NEWMA_2	GAS-ST	8	5/1/2005
C.E. NEWMAN 3	NEWMAN_NEWMA_3	GAS-ST	18	5/1/2005
C.E. NEWMAN 4	NEWMAN_NEWMA_4	GAS-ST	17	5/1/2005
SPENCER 3	SPNCER_SPNCE_3	GAS-ST	27	5/1/2005
CHANEL 2	CHLGT-2	GAS-GT	0	7/20/2005
VICTORIA 4	VICTORIA_VICTORG4	GAS-ST	69	10/9/2005
VICTORIA 5	VICTORIA_VICTORG5	GAS-ST	172	10/9/2005
VICTORIA 6	VICTORIA_VICTORG6	GAS-ST	250	10/9/2005
CHANEL 1	CHLGT-1	GAS-GT	0	1/2/2006
W B TUTTLE 2	TUTTLE_WBT2G2	GAS-ST	100	1/25/2007
FT. PHANTOM 1	FTPP_G1	GAS-ST	158	2/14/2008
FT. PHANTOM 2	FTPP_G2	GAS-ST	202	2/14/2008
HANDLEY 1	HLSES_UNIT1	GAS-ST	42	3/1/2009
HANDLEY 2	HLSES_UNIT2	GAS-ST	80	3/1/2009
MOUNTAIN CREEK 2	MCSES_UNIT2	GAS-ST	33	3/1/2009
MOUNTAIN CREEK 3	MCSES_UNIT3	GAS-ST	70	3/1/2009
SAM BERTRON T1	SRB_SRBGT_1	GAS-GT	20	4/10/2009
NORTH LAKE 1	NLSES_UNIT1	GAS-ST	163	5/5/2009
NORTH LAKE 2	NLSES_UNIT2	GAS-ST	175	5/5/2009
NORTH LAKE 3	NLSES_UNIT3	GAS-ST	312	5/5/2009
MORGAN CREEK 5	MGSES_UNIT5	GAS-ST	180	5/6/2009
MORGAN CREEK 6	MGSES_UNIT6	GAS-ST	518	5/6/2009
PERMIAN BASIN 5	PB5SES_UNIT5	GAS-ST	112	5/6/2009
SWEETWATER GENERATION PLANT 1	SWCOG_CT1	GAS-CC	29	5/6/2009
SWEETWATER GENERATION PLANT 2	SWCOG_CT2	GAS-CC	69	5/6/2009
SWEETWATER GENERATION PLANT 3	SWCOG_CT3	GAS-CC	69	5/6/2009
SWEETWATER GENERATION PLANT 4	SWCOG_UNIT1	GAS-CC	61	5/6/2009
TRADINGHOUSE 1	THSES_UNIT1	GAS-ST	563	5/6/2009
P H ROBINSON 1	PHR_PHR_G1	GAS-ST	444	9/30/2009
P H ROBINSON 2	PHR_PHR_G2A	GAS-ST	459	9/30/2009
P H ROBINSON 3	PHR_PHR_G3	GAS-ST	551	9/30/2009
P H ROBINSON 4	PHR_PHR_G4	GAS-ST	733	9/30/2009
NORTH CARBIDE G4	NCARBIDE_NCARBIG4	GAS-GT	0	1/10/2010
COASTAL STATES (W) 1	COASTAL_COASTAG1	GAS-GT	0	6/30/2010
COASTAL STATES (W) 2	COASTAL_COASTAG2	GAS-GT	0	6/30/2010
COLLIN 1	CNSES_UNIT1	GAS-ST	147	12/31/2010
EAGLE MOUNTAIN 1	EMSES_UNIT1	GAS-ST	118	12/31/2010
EAGLE MOUNTAIN 2	EMSES_UNIT2	GAS-ST	100	12/31/2010
EAGLE MOUNTAIN 3	EMSES_UNIT3	GAS-ST	390	12/31/2010
TRADINGHOUSE 2	THSES_UNIT2	GAS-ST	787	12/31/2010
DOW G62	DOWGEN_DOW_G62	GAS-GT	0	2/1/2011
C E NEWMAN 5	NEWMAN_NEWMA_5	GAS-ST	38	2/14/2011
W B TUTTLE 1	TUTTLE_WBT1G1	GAS-ST	60	3/1/2011
W B TUTTLE 3	TUTTLE_WBT3G3	GAS-ST	100	3/1/2011
W B TUTTLE 4	TUTTLE_WBT4G4	GAS-ST	160	3/1/2011
RAYBURN 3	RAYBURN_RAYBURG3	GAS-ST	24	6/1/2012
LEON CREEK 3	LEON_CRK_LCP3G3	GAS-ST	70	4/1/2013
LEON CREEK 4	LEON_CRK_LCP4G4	GAS-ST	95	4/1/2013
THOMAS C FERGUSON 1	FERGUS_FERGUSG1	GAS-ST	354	9/30/2013
AES DEEPWATER	APD_APD_PS1	STORAGE	1	12/27/2013

ATKINS CTG 3	ATKINS_ATKINSG3	GAS-ST	12	6/1/2014
ATKINS CTG 4	ATKINS_ATKINSG4	GAS-ST	22	6/1/2014
ATKINS CTG 5	ATKINS_ATKINSG5	GAS-ST	25	6/1/2014
ATKINS CTG 6	ATKINS_ATKINSG6	GAS-ST	50	6/1/2014
APPLIED ENERGY	APD_APD_G1	COAL	138	7/23/2014
DELAWARE MOUNTAIN WIND FARM	KUNITZ_WIND_NWP	WIND-O	29	8/7/2014
KUNITZ WIND	KUNITZ_WIND_LGE	WIND-O	40	8/7/2014
NORTH TEXAS CTG 1	NTX_NTX_1	GAS-ST	18	6/3/2015
NORTH TEXAS CTG 2	NTX_NTX_2	GAS-ST	18	6/3/2015
NORTH TEXAS CTG 3	NTX_NTX_3	GAS-ST	40	6/3/2015
PERMIAN BASIN SES U6	PBSES_UNIT6	GAS-ST	515	6/3/2015
VALLEY SES U1	VLSES_UNIT1	GAS-ST	174	6/3/2015
VALLEY SES U2	VLSES_UNIT2	GAS-ST	520	6/3/2015
VALLEY SES U3	VLSES_UNIT3	GAS-ST	375	6/3/2015
SILAS RAY CTG 5	SILASRAY_SILAS_5	GAS-ST	10	4/6/2016
FRONTERA GENERATION CTG 1	FRONTERA_FRONTG1	GAS-CC	170	9/30/2016
FRONTERA GENERATION CTG 2	FRONTERA_FRONTG2	GAS-CC	170	9/30/2016
FRONTERA GENERATION STG	FRONTERA_FRONTG3	GAS-CC	184	9/30/2016
CAPITAL COGEN GT 102	CTL_GT_102	GAS-CC	75	2/1/2017
CAPITAL COGEN GT 103	CTL_GT_103	GAS-CC	75	2/1/2017
CAPITAL COGEN GT 104	CTL_GT_104	GAS-CC	75	2/1/2017
CAPITAL COGEN ST 101	CTL_ST_101	GAS-CC	44	2/1/2017
CAPITAL COGEN ST 102	CTL_ST_102	GAS-CC	10	2/1/2017
LUFKIN BIOMASS	LFBIO_UNIT1	BIOMASS	45	2/6/2017
PEARSALL STG U1	PEARSALL_PEAR_S_1	GAS-ST	19	8/1/2017
PEARSALL STG U2	PEARSALL_PEAR_S_2	GAS-ST	22	8/1/2017
PEARSALL STG U3	PEARSALL_PEAR_S_3	GAS-ST	20	8/1/2017
UNION CARBIDE COGEN	UCC_COGN_UCC_C_1	GAS-GT	0	9/29/2017
GREENS BAYOU STG U5	GBY_GBY_5	GAS-ST	371	12/31/2017
S R BERTRON CTG 2	SRB_SRBGT_2	GAS-GT	13	12/31/2017
S R BERTRON U3	SRB_SRB_G3	GAS-ST	211	12/31/2017
S R BERTRON U4	SRB_SRB_G4	GAS-ST	211	12/31/2017
MONTICELLO U1	MNSES_UNIT1	COAL	535	1/4/2018
MONTICELLO U2	MNSES_UNIT2	COAL	535	1/4/2018
MONTICELLO U3	MNSES_UNIT3	COAL	795	1/4/2018
SANDOW U4	SDSES_UNIT4	COAL	600	1/11/2018
SANDOW U5	SD5SES_UNIT5	COAL	600	1/11/2018
BIG BROWN U1	BBSES_UNIT1	COAL	606	2/12/2018
BIG BROWN U2	BBSES_UNIT2	COAL	602	2/12/2018
S R BERTRON U1	SRB_SRB_G1	GAS-ST	112	1/23/2019
S R BERTRON U2	SRB_SRB_G2	GAS-ST	168	1/23/2019
GIBBONS CREEK U1	GIBCRK_GIB_CRG1	COAL	470	10/23/2019
WEST TEXAS WIND	SW_MESA_SW_MESA	WIND-O	80	11/15/2019
OKLAUNION U1	OKLA_OKLA_G1	COAL	650	10/1/2020
DECKER CREEK STG 1	DECKER_DPG1	GAS-ST	315	10/31/2020
SHERBINO 1 WIND	KEO_KEO_SM1	WIND-O	150	2/1/2021
SAM RAYBURN POWER CTG 1	RAYBURN_RAYBURG1	GAS-GT	11	2/28/2021
SAM RAYBURN POWER CTG 2	RAYBURN_RAYBURG2	GAS-GT	11	2/28/2021
SNYDER WIND	ENAS_ENA1	WIND-O	63	6/1/2021
DECKER CREEK STG 2	DECKER_DPG2	GAS-ST	420	3/31/2022
OCI ALAMO 1 (ASTRO)	OCI_ALM1_ASTRO1	STORAGE	1	11/17/2022