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Platts Market Center

News : Tight Texas power market generates quadruple-digit real-time prices near sunset

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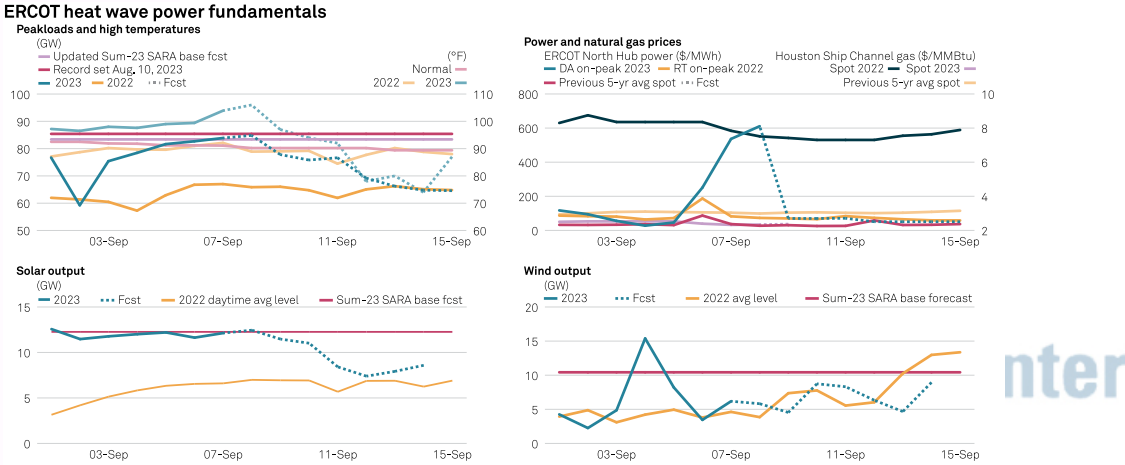
- Another September record peak expected
- Over 10.8 GW of thermal resources offline

The Electric Reliability Council of Texas market faced tight conditions for the third consecutive day Sept. 7, with real-time prices in quadruple digits for 2.5 hours before sunset. Heavy heat-related demand, light wind output, and larger thermal generation outages likely exacerbated tight supplies, which may recur Sept. 8.

ERCOT had previously requested Texans to conserve power demand from 5 pm to 9 pm CT on Sept. 7, but as of 2:30 pm CT, it had not issued another such conservation appeal for Sept. 8. At 12:30 pm CT, ERCOT forecast load to peak at almost 84.9 GW on Sept. 8, which would be the fifth new September record set in as many days.

ERCOT heat wave power fundamentals



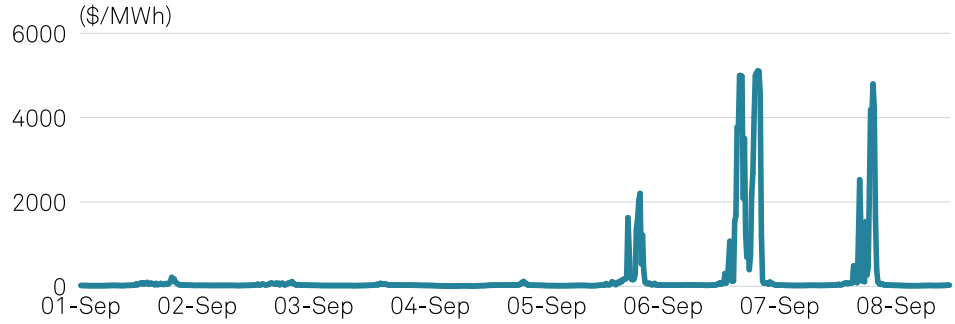
Notes: Peakload forecast was issued 12:30 pm CT Sept. 8. SARA is Seasonal Assessment of Resource Adequacy. Updated SARA is based on latest weather forecast.
High temperature forecast for 2023 is for the Dallas-Fort Worth area. Actual high temperatures for 2022-23 and normal highs are population-weighted for the ERCOT market region.
Renewable output actual and forecast levels are for hour ending at 5 pm CT, as of the noon CT Sept. 8 forecast.
Renewable output levels for 2022 are daytime averages for solar and 24-hour averages for wind. Summer SARA renewable forecasts are for production during seasonal peak hour.
Sources: ERCOT, CustomWeather, S&P Global Commodity Insights

ERCOT Sept. 5 issued a weather watch for Sept. 6-8 "due to forecasted higher temperatures, higher electrical demand, and the potential for lower reserves."

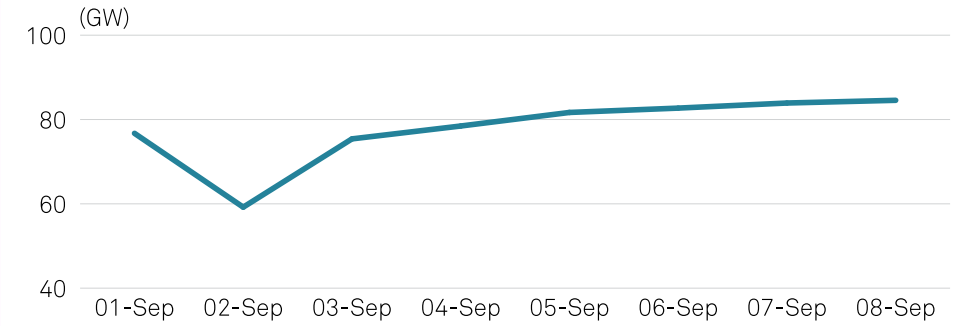
The National Weather Service had virtually all of the major metro areas in the eastern half of Texas under excessive heat warnings Sept. 8. CustomWeather forecast highs ranging from 102 degrees Fahrenheit in Houston to 106 F in Dallas, for example. The weather service forecast Houston's heat index to reach 113 F.

ERCOT real-time prices, peakloads, renewable generation

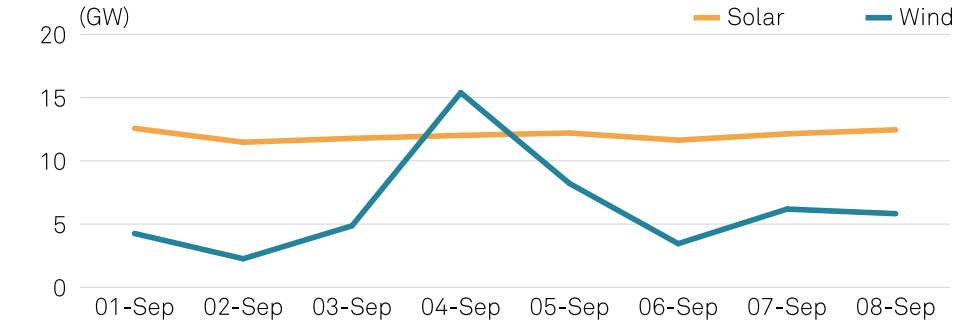
Price



Peakload



Renewable output at peak hour



Prices are real-time systemwide hub. Renewable generation is for peak hour ending at 5 pm CT.
Peakload and renewable forecasts were issued at 11:30 am and noon CT, respectively, Sept. 8.

Source: ERCOT

Around 4:15 pm CT Sept. 7, real-time systemwide hub prices topped $1,155/MWh, and did so again for another 2.25 hours between 4:30 pm and 8 pm, as ERCOT's solar output diminished at nightfall without a commensurate increase in wind output. From 4 pm to 8 pm CT, ERCOT reported its wind fleet produced an average of 7.2 GW.

In its 2023 summer Seasonal Assessment of Resource Adequacy, ERCOT modeled the wind fleet to be producing an average of 10.4 GW at the seasonal peak hour. In ERCOT's noon wind output forecast, wind was expected to be producing at an average level of almost 7.4 GW from 4 pm to 8 pm CT.

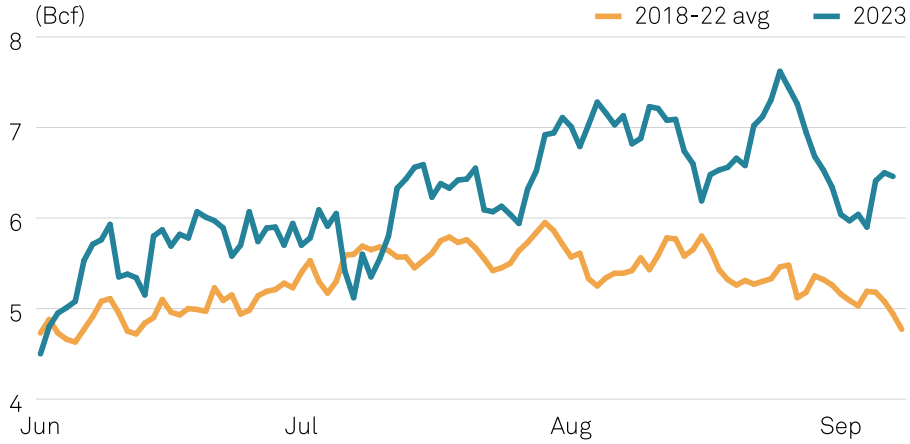
Thermal generation stressed

Reduced thermal generation availability may also factor into tight conditions. ERCOT's Unplanned Resource Outages Report for Sept. 5, the latest date available, shows more than 10.8 GW of thermal resources on unplanned outage status, including more than 7.5 GW of natural gas-fired generation and almost 3.3 GW of coal-fired generation. To minimize opportunities for anticompetitive behavior, ERCOT delays the release of unplanned outages for three days.

"If these abnormally high [temperatures] continue, we become increasingly exposed to potential unit outages," Randy Jones, a Texas energy market consultant, said Sept. 8. "It appears that unit owners have done a good job of maintaining their machines, but extreme heat will eventually take a toll in forced outages."

From June 1 through Sept. 6, ERCOT's gas-fired generation fleet has produced an average of 790.9 GWh/day, up 11.5% from 709.1 GWh/d for the same period of 2022 and up 18% from the 2019-2022 average of 670.1 GWh/d for those same dates. This data is collected by S&P Global Commodity Insights from the US Energy Information Administration.

ERCOT power burn



Source: S&P Global Commodity Insights

Power burn has been similarly robust, S&P Global data shows. For June 1 through Sept. 7, ERCOT's power burn has averaged more than 6.2 Bcf/d, up 900 MMcf/d, or 14.5%, from the 2018-2022 average of 5.3 Bcf/d for those dates.

However, the heat wave appears to be ready to break over the weekend, with highs at 97 F and 95 F in Dallas and Houston, respectively, Sept. 9, and highs in the 90s or lower in Dallas, Houston, and San Antonio starting Sept. 11, according to CustomWeather.

On the Intercontinental Exchange, ERCOT North Hub day-ahead on-peak power traded around $71/MWh for Sept. 11 delivery, and the balance-of-week on-peak package had bids and offers with a midpoint of $51/MWh for delivery Sept. 12-15.

Platts-assessed Houston Ship Channel gas priced around $2.37/MMBtu for Sept. 9-11 delivery, down an average of 22.2% from the 2017-2021 average of $3.045/MMBtu for those dates. In 2022, Houston Ship Channel gas averaged $7.343/MMBtu Sept. 9-11.

High temperatures/heat indexes* for Texas metro areas							
(degrees F)	Sun	Mon	Tue	Wed	Thu	Fri	Sat
	3-Sep	4-Sep	5-Sep	6-Sep	7-Sep	8-Sep	9-Sep
Dallas	99/100	99/103	103/107	103/107	107/109	106	97
Houston	100/105	95/106	100/109	101/111	102/110	102/113	95/105
San Antonio	99	101	102/106	101/104	101/105	103	101
	10-Sep	11-Sep	12-Sep	13-Sep	14-Sep	15-Sep	16-Sep
Dallas	94	92	78	80	74	87	90
Houston	94	96	95	91	80	86	87
San Antonio	102	97	96	94	82	90	89
*When available							
Sources: CustomWeather, National Weather Service							

High temperatures/heat indexes* for Texas metro areas(degrees F) DallasHoustonSan Antonio DallasHoustonSan Antonio*When availableSources: CustomWeather, National Weather Service