



RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES

DATE: SEPTEMBER 22, 2025

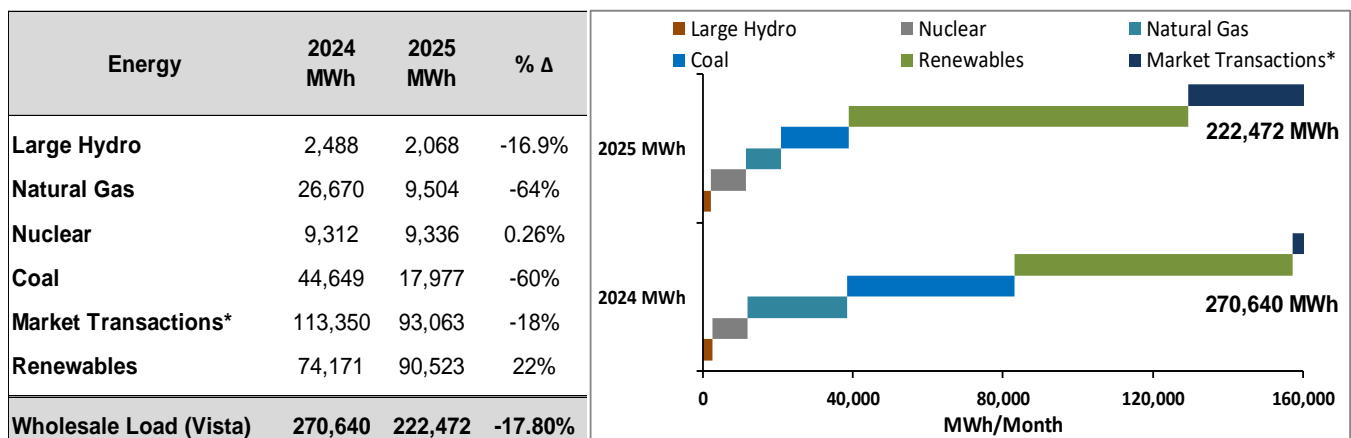
GENERAL MANAGER'S REPORT

SUBJECT: MONTHLY POWER SUPPLY REPORT – JULY 31, 2025

Monthly Power Usage:

Total wholesale load at the Vista Substation for July 2025 was 222,472 MWh, reflecting a 17.80% decrease compared to July 2024 (270,640 MWh). Although overall demand declined considerably, the composition of energy supply experienced shifts, most notably an increase in renewable energy output and a reduction in natural gas, large hydro, and coal. Renewables increased by 22%, a rise from 74,171 MWh to 90,523 MWh, accounting for the majority of the year-over-year supply growth. Coal generation decreased by 60%, from 44,649 MWh to 17,977 MWh. Market transactions decreased by 18%, suggesting a reduced dependence on energy purchases, largely due to more favorable renewable output and lower demand. Natural gas generation decreased by 64%, falling from 26,670 MWh to 9,504 MWh. Nuclear output increased slightly by .26% (9,336 MWh vs. 9,312 in 2024). Hydro output decreased by 16.9% (2,068 MWh vs. 2,488 MWh in 2024).

Wholesale Resource Mix - July 2024 vs 2025

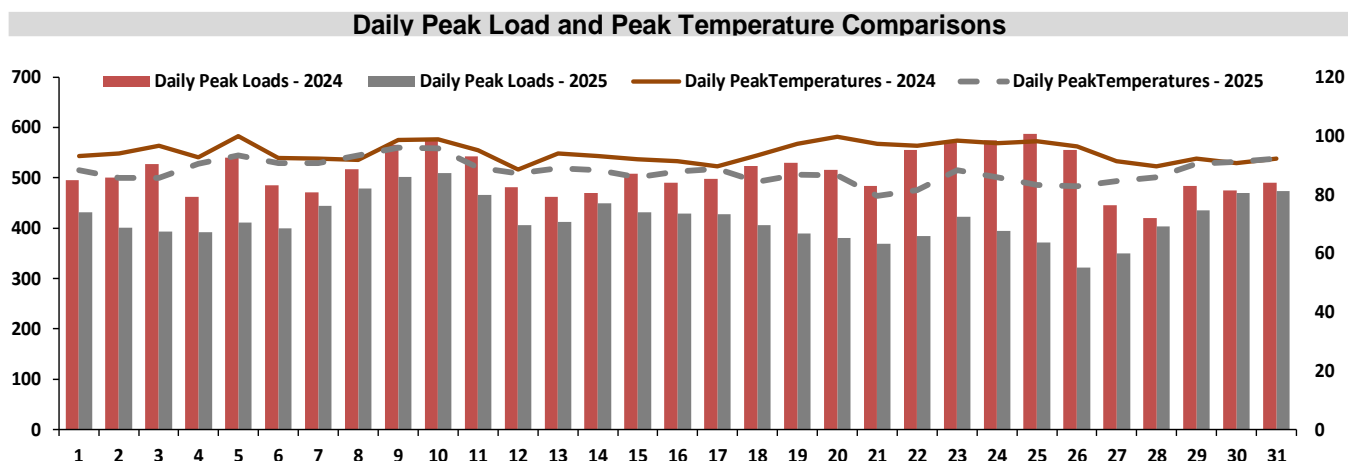


* The Market Transaction category comprises bilateral power contracts and purchases(sales) from(to) the CAISO.

Daily & Monthly Load & Temperature Trends

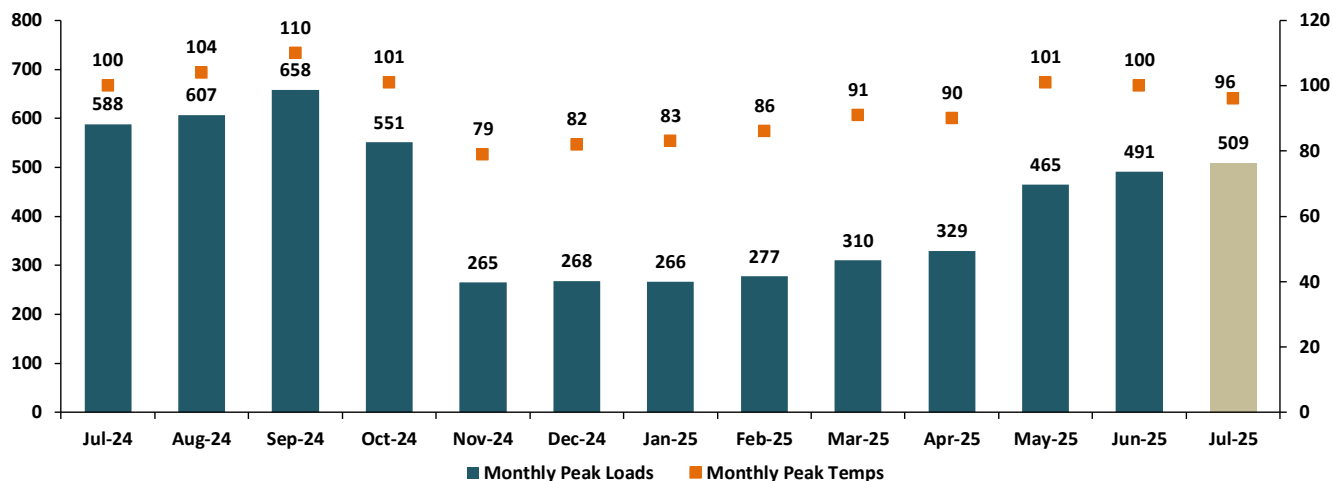
Weather, especially the variable temperature, significantly impacts electricity demand. Typically, as temperatures increase, electricity demand will also increase, and vice versa. The charts below graphically extrapolate the correlation between weather and electricity demand. However, this temperature peak was not sustained, with cooler conditions following shortly thereafter, which helped prevent prolonged increases in load.

In July 2025, average daily peak temperatures oscillated around 88°F, lower than the 93°F average recorded in July 2024. The monthly peak temperature reached 96°F in 2025, lower than the peak of 100°F recorded in 2024. July 2025 experienced much cooler temperatures compared to July 2024. In July 2025, Riverside experienced 10 days of peak temperatures at or above 90°F. In contrast, in July 2024, Riverside experienced 28 days of peak temperatures at or above 90°F. Heat in 2025 was not continuously sustained, and temperatures dropped quickly in the subsequent days, reducing the potential for multi-day load buildup. Differences in the graphical representation of average temperatures may be due to variations in day-of-week effects or operational behaviors such as weekday versus weekend demand profiles.



Average load patterns were cooler in July 2025 compared to July 2024. In July 2025, the average daily peak load was 418 MW, considerably lower than the 510 MW average in 2024. The monthly peak load was also lower in 2025 at 509 MW, compared to 588 MW in the previous year. The data suggest that July 2025 was much cooler compared to the previous year, in terms of both average and peak temperatures, and the brief nature of the heat spikes limited their sustained impact, keeping average load levels relatively lower year-over-year. Variations in load profiles may also reflect operational behaviors and calendar effects, such as differences between weekday and weekend demand.

Monthly Peak Load and Temperature

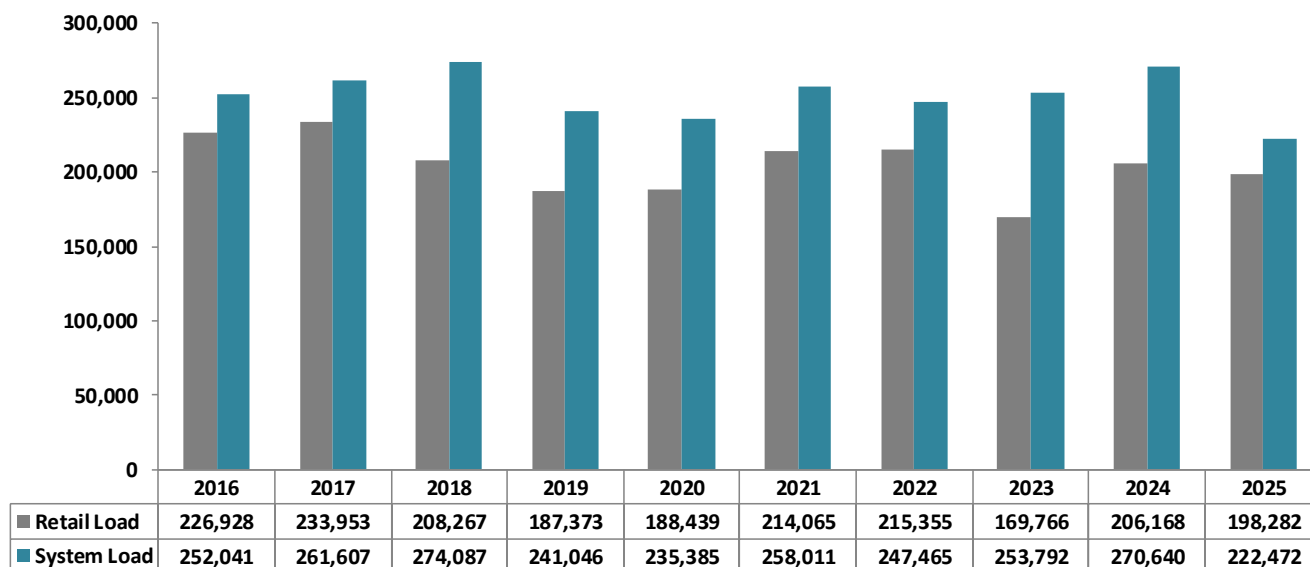


Hourly demand peaked at 509 MW on 07/10/25 HE 17, a decrease of 79 MW compared to a peak of 588 MW the same month last year. Riverside's resources covered 75% of the hourly peak demand on 07/10/25.

10-Year Retail Load Trends

The retail load for July 2025 was 198,282 MWh, a decrease of 7,886 MWh from the previous year's reading of 206,168 MWh. The System load for July 2025 was 222,472 MWh, a decrease of 48,169 MWh from the prior year's reading of 270,640 MWh. The 10-year trend reflects a long-term flattening in electricity demand, both at the retail and system levels, with occasional rebounds that could be attributed to weather and/or economic conditions. Retail load values can be impacted by the significant adoption of residential PV solar, efficiency programs, available meter data, losses, non-retail obligations, etc.

July Retail & System Loads (MWh/Month): 10-Year Trends

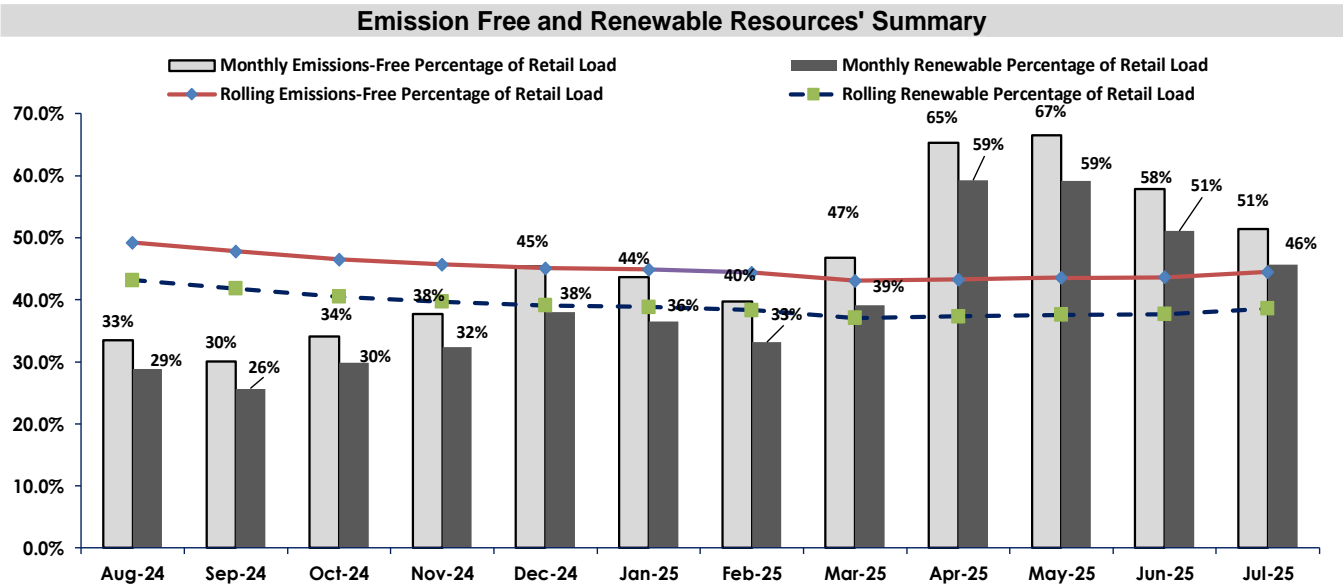


Renewable Generation Trends

In July 2025, emissions-free and renewable energy generation exhibited mixed performance compared to both the prior month and the same period in the previous year. Nuclear generation totaled 9,336 MWh, a 2.4% increase from June 2025 (9,120 MWh), and a slight 0.3% increase compared to July 2024 (9,312 MWh). Hydroelectric output declined significantly, falling to 2,068 MWh, a 14% drop from June and a 16.9% decrease year-over-year, likely due to changing hydrologic conditions. Wind generation totaling 3,437 MWh, represents a 95.7% increase from June 2025 (1,756 MWh) and a 146% increase from July 2024 (1,400 MWh). These increases reflect strong wind conditions during the month. Solar generation reached a seasonal high of 28,668 MWh, up 3.6% from June 2025 and 14.2% from July 2024, driven by longer daylight hours. Geothermal output reached 58,418 MWh, a 2.0% increase from June, but a strong 23% increase over July 2024.

In July 2025, renewable generation, as a percentage of retail load, decreased by about 5 percentage points from June 2025 and increased by about 9.7 percentage points compared to July 2024. This decline in renewables from June 2025 to July 2025 reflects a combination of wind output, seasonal variation in hydro, and in the increased levels of retail load. Lastly, in July 2025, Emissions-Free generation, as a percentage of retail load, decreased by about 6 percentage points from June 2025 and increased by 10 percentage points compared to July 2024.

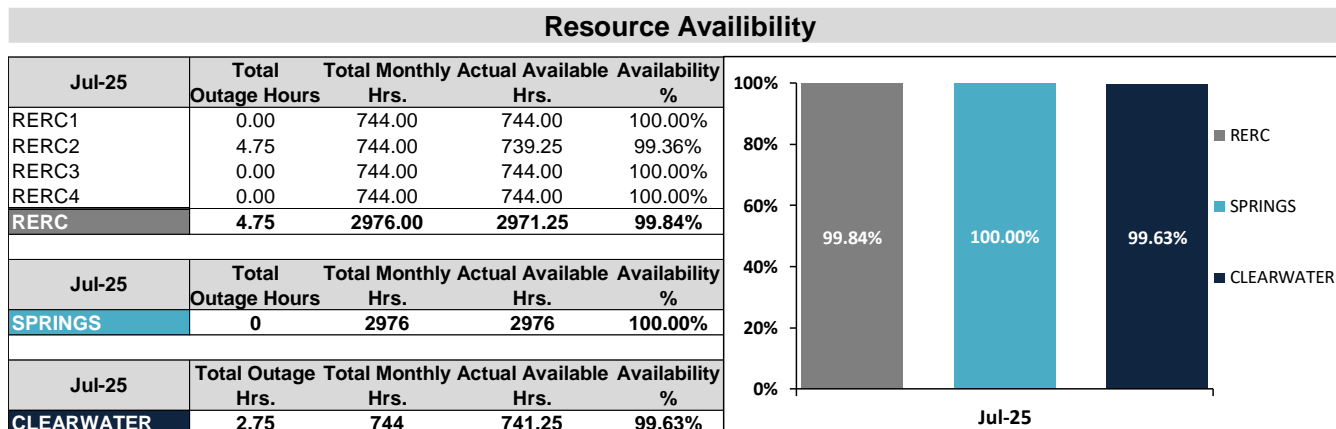
The accompanying emissions-free and renewable resource summary chart below reflects values within the context of a rolling 12-month trend. While month-to-month variability is expected, the long-term trends remain supportive of emissions-free resource development, with nuclear and geothermal continuing to provide consistent baseload support.



*Riverside's emissions free resources are composed of renewables plus hydro and nuclear
*Riverside's renewable resources are composed of solar, wind and geothermal.

July 2025 Resource Availability - Internal Generation

- RERC's availability for the month was 99.84%.
- Spring's availability for the month was 100.00%.
- Clearwater's availability for the month was 99.63%.



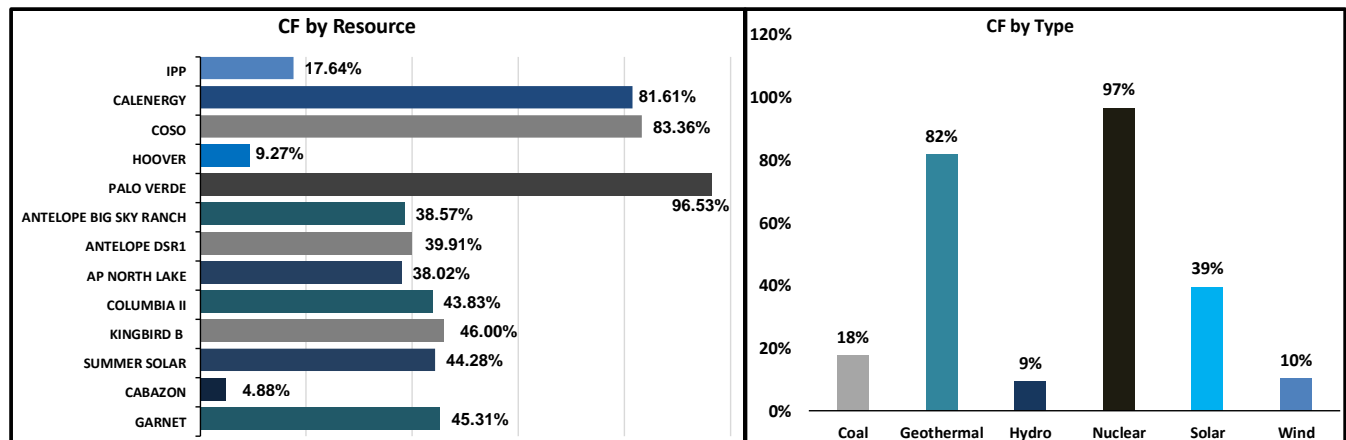
July 2025 Resource Availability – External Resources

Solar resources in July 2025 exhibited capacity factors ranging from 17.93% to 46.00%, reflecting strong seasonal irradiance across most sites. Wind resources showed capacity factors varying from a low of 4.88% to a high of 45.31%. These values reflect diverse wind conditions and further emphasize the intermittent nature of wind as a generation source. Riverside's share of Palo Verde nuclear output delivered steady performance, achieving a 96.53% capacity factor, indicative of reliable baseload generation. Hoover, a hydroelectric resource constrained by lake-level limitations, operated at a 9.27% capacity factor, consistent with its status as an energy-limited asset. IPP, Riverside's coal-based resource, maintained a 17.64% capacity factor due to coal availability limitations. Geothermal resources provided output with capacity factors ranging from 81.61% to 83.36%. It is worth reiterating that intermittent renewable resources, including wind and solar, have capacity factors influenced by natural factors such as cloud cover, blowing wind, etc.

Resource Capacity Factor Table

Jul-25	Resource Type	Max. Monthly MWH	Actual Energy MWH	Capacity Factors
IPP	Coal	101,928	17,977	17.64%
CALENERGY	Geothermal	63,984	52,216	81.61%
COSO	Geothermal	7,440	6,202	83.36%
HOOVER	Hydro	22,320	2,068	9.27%
PALO VERDE	Nuclear	9,672	9,336	96.53%
ANTELOPE BIG SKY RANCH	Solar	7,440	2,869	38.57%
ANTELOPE DSR1	Solar	18,600	7,423	39.91%
AP NORTH LAKE	Solar	14,880	5,657	38.02%
COLUMBIA II	Solar	8,288	3,632	43.83%
KINGBIRD B	Solar	10,416	4,792	46.00%
SUMMER SOLAR	Solar	7,440	3,294	44.28%
TEQUESQUITE	Solar	5,580	1,001	17.93%
CABAZON	Wind	29,016	1,415	4.88%
GARNET	Wind	4,464	2,022	45.31%

Resource Capacity Factor Charts



Resource Outages and Transmission Constraints

- RERC
 - Unit 2 inspection due to alarm
 - Unit 2 Replace faulty actuator
 - Unit 2 Replace an orifice
 - Unit 2 Install an orifice
- SPRINGS
 - None
- CLEARWATER
 - Replace oil filter