



# RIVERSIDE PUBLIC UTILITIES

## Board Memorandum

BOARD OF PUBLIC UTILITIES

DATE: AUGUST 25, 2025

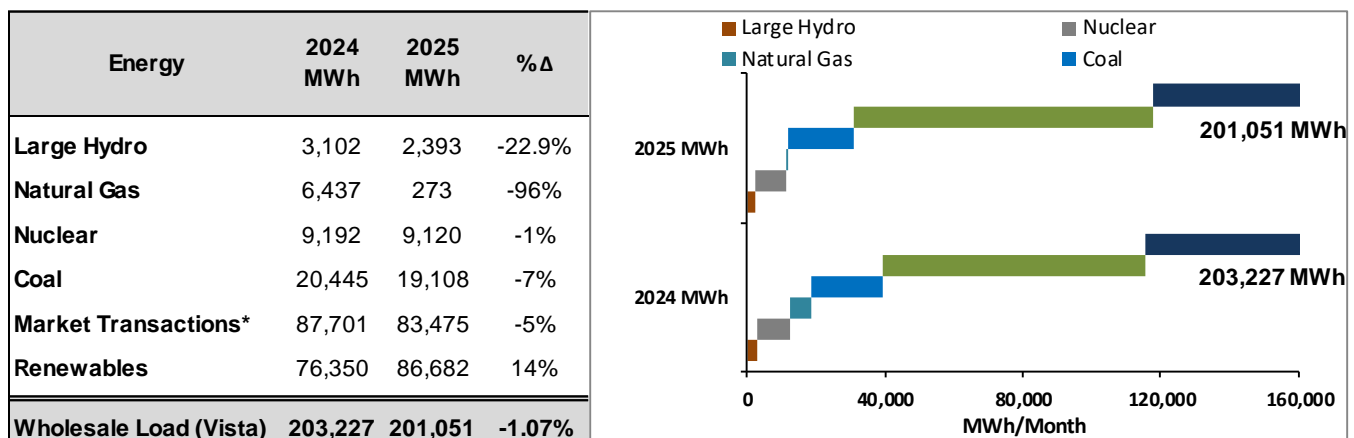
### GENERAL MANAGER'S REPORT

**SUBJECT:** MONTHLY POWER SUPPLY REPORT – JUNE 30, 2025

#### Monthly Power Usage:

Total wholesale load at the Vista Substation for June 2025 was 201,051 MWh, reflecting a 1.07% decrease compared to June 2024 (203,227 MWh). Although overall demand declined slightly, the composition of energy supply experienced shifts, most notably an increase in renewable energy output and a reduction in natural gas. Renewables increased by 14%, a rise from 76,350 MWh to 86,682 MWh, accounting for the majority of the year-over-year supply growth. Coal generation decreased by 7%, from 20,445 MWh to 19,108 MWh. Market transactions decreased by 5%, suggesting a reduced dependence on energy purchases, largely due to more favorable renewable output and lower demand. Natural gas generation decreased by 96%, falling from 6,437 MWh to 273 MWh. Nuclear output decreased slightly by 1% (9,120 MWh vs. 9,192 in 2024). Hydro output decreased by 22.9% (2,393 MWh vs. 3,102 MWh in 2024).

#### Wholesale Resource Mix - June 2024 vs 2025



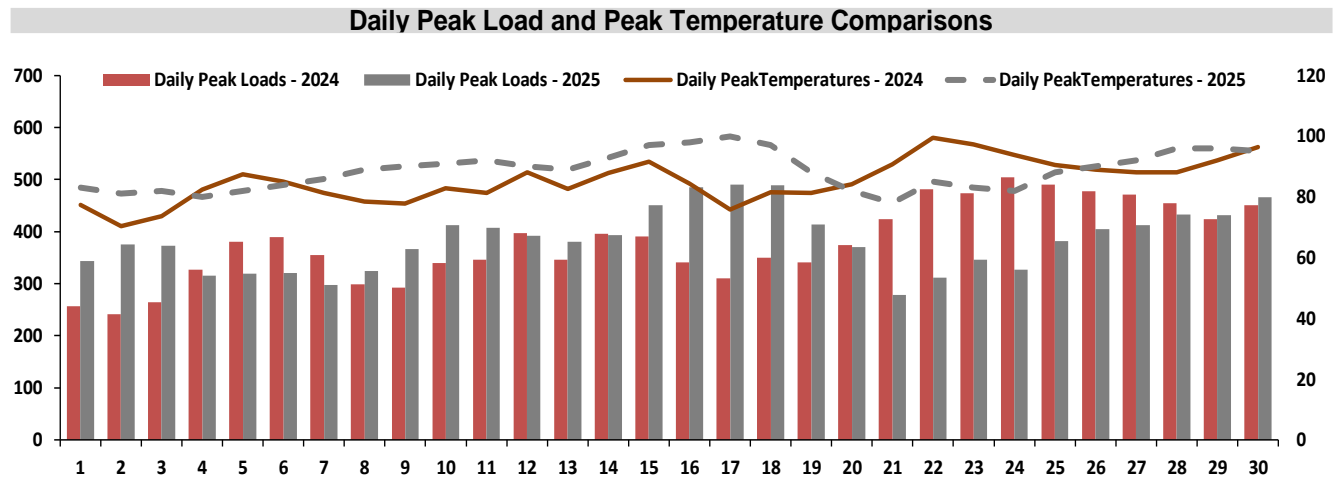
\* The Market Transaction category comprises bilateral power contracts and purchases(sales) from(to) the CAISO.

#### 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,

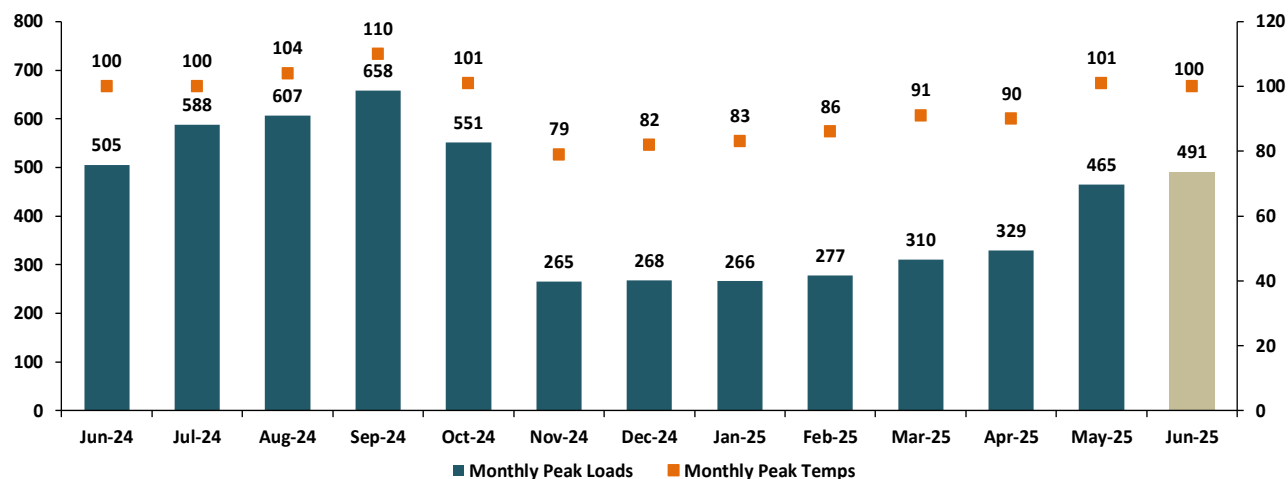
this temperature peak was not sustained, with cooler conditions following shortly thereafter, which helped prevent prolonged increases in load.

In June 2025, average daily peak temperatures oscillated around 89°F, slightly higher than the 85°F average recorded in June 2024. The monthly peak temperature reached 100°F in 2025, matching the peak recorded in 2024. While both years share similar average peak temperatures, 2025 experienced more days above 80°F. In June 2025, Riverside experienced 29 days of peak temperatures at or above 80°F. In contrast, in June 2024, Riverside experienced 24 days of peak temperatures at or above 80°F. However, the 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 warmer in June 2025 compared to June 2024. In June 2025, the average daily peak load was 384 MW, slightly higher than the 380 MW average in 2024. The monthly peak load, however, was marginally lower in 2025 at 491 MW, compared to 505 MW in the previous year. The data suggest that June 2025 was similar compared to the previous year, both in average and load and temperature, and the brief nature of the heat spikes limited their sustained impact, keeping average load levels relatively close 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

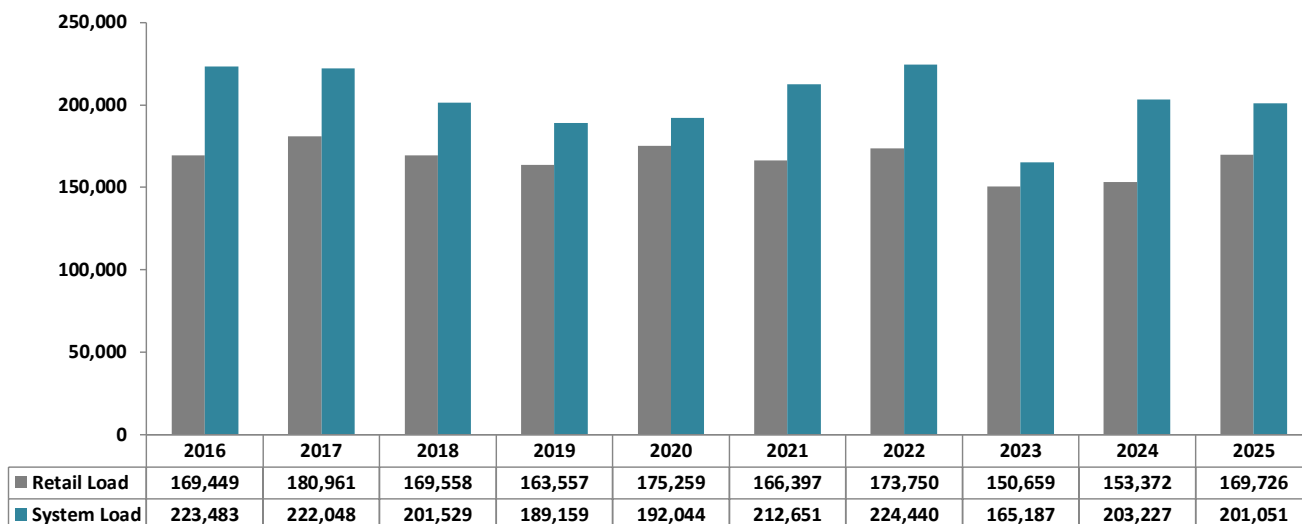


Hourly demand peaked at 491 MW on 06/17/25 HE 16, a decrease of 14 MW compared to a peak of 505 MW the same month last year. Riverside's resources covered 56% of the hourly peak demand on 06/17/25.

### 10-Year Retail Load Trends

The retail load for June 2025 was 169,726 MWh, an increase of 16,354 MWh from the previous year's reading of 153,372 MWh. This marks a year-over-year increase and brings retail consumption closer to historical averages observed earlier in the decade. The System load for June 2025 was 201,051 MWh, a decrease of 2,176 MWh from the prior year's reading of 203,227 MWh. The 10-year trend reflects a long-term flattening or slight decline 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.

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

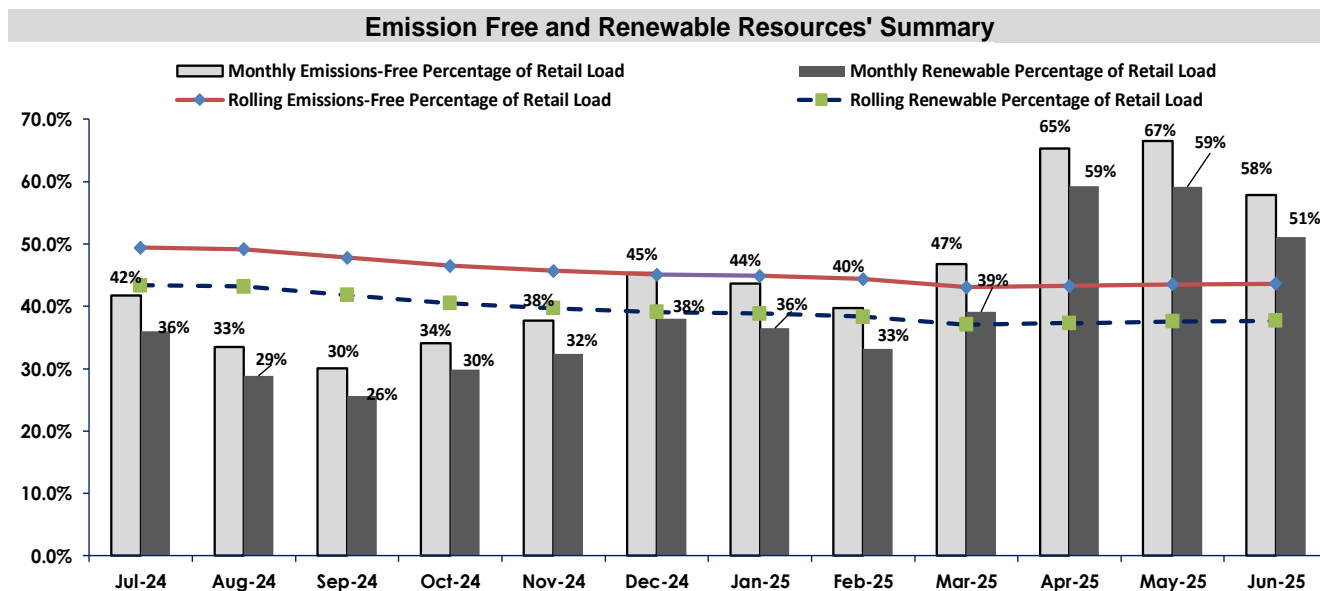


## Renewable Generation Trends

In June 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 9,120 MWh, an 11% increase from May 2025 (8,208 MWh), but a slight 0.8% decrease compared to June 2024 (9,192 MWh). Hydroelectric output declined significantly, falling to 2,393 MWh, a 21% drop from May and a 22.9% decrease year-over-year, likely due to changing hydrologic conditions. Wind generation experienced the most significant drop, totaling 1,756 MWh, which represents a 31.6% decrease from May 2025 (2,570 MWh) and a 28% decline from June 2024 (2,426 MWh). These reductions reflect less than ideal wind conditions during the month. Solar generation reached a seasonal high of 27,665 MWh, up 4.4% from May 2025 and 4.8% from June 2024, driven by longer daylight hours. Geothermal output reached 57,260 MWh, a 6.4% decrease from May, but a strong 17% increase over June 2024.

In June 2025, renewable generation, as a percentage of retail load, decreased by about 8 percentage points from May 2025 and increased by about 0.4 percentage points compared to June 2024. This decline in renewables from May 2025 to June 2025 reflects a combination of lower wind output, seasonal variation in hydro, and modest shifts in retail load. Lastly, in June 2025, Emissions-Free generation, as a percentage of retail load, decreased by about 9 percentage points from May 2025 and decreased by 1 percentage point compared to June 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.

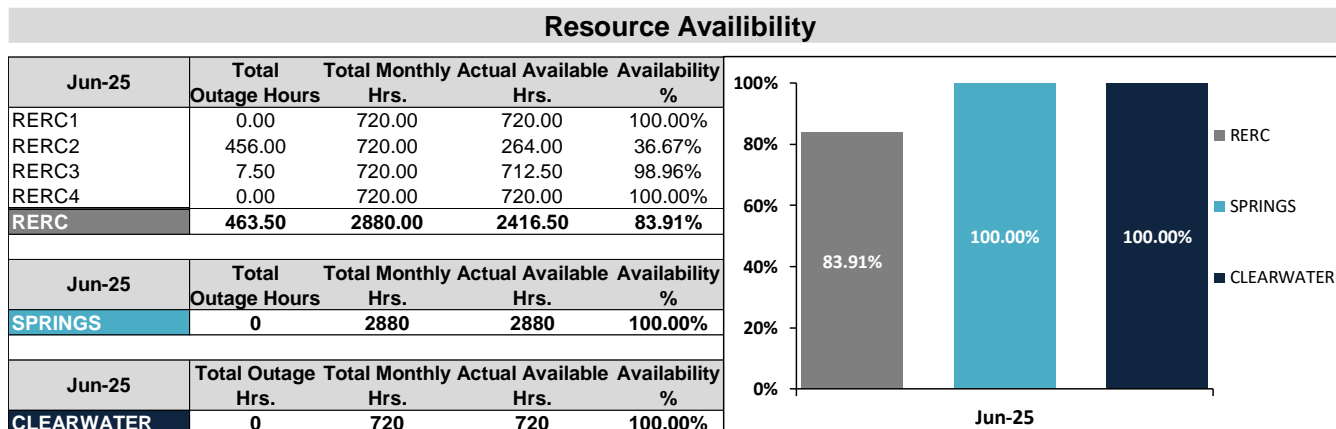


\*Riverside's emissions free resources are composed of renewables plus hydro and nuclear

\*Riverside's renewable resources are composed of solar, wind and geothermal.

### June 2025 Resource Availability - Internal Generation

- RERC's availability for the month was 83.91%.
- Spring's availability for the month was 100.00%.
- Clearwater's availability for the month was 100.00%.



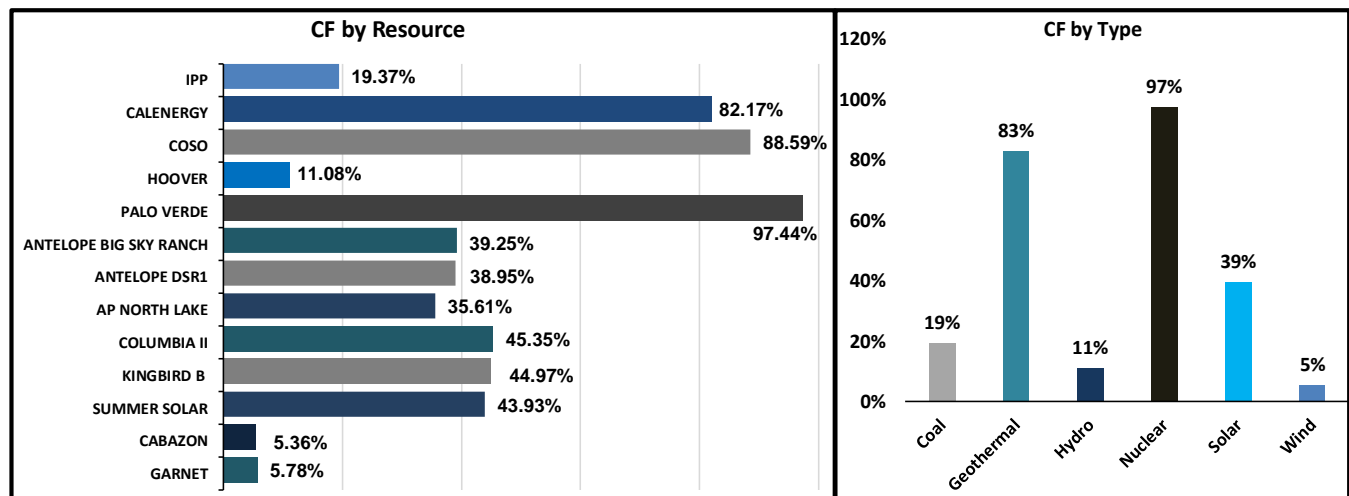
### June 2025 Resource Availability – External Resources

Solar resources in June 2025 exhibited capacity factors ranging from 25.32% to 45.35%, reflecting strong seasonal irradiance across most sites. Wind resources showed capacity factors varying from a low of 5.36% to a high of 5.78%. These values reflect average 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 97.44% capacity factor, indicative of reliable baseload generation. Hoover, a hydroelectric resource constrained by lake-level limitations, operated at a 11.08% capacity factor, consistent with its status as an energy-limited asset. IPP, Riverside's coal-based resource, maintained a 19.37% capacity factor due to coal availability limitations. Geothermal resources provided output with capacity factors ranging from 82.17% to 88.59%. 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

Jun-25	Resource Type	Max. Monthly Actual Energy MWH	Capacity Factors
IPP	Coal	98,640	19.37%
CALENERGY	Geothermal	61,920	82.17%
COSO	Geothermal	7,200	88.59%
HOOVER	Hydro	21,600	11.08%
PALO VERDE	Nuclear	9,360	97.44%
ANTELOPE BIG SKY RANCH	Solar	7,200	39.25%
ANTELOPE DSR1	Solar	18,000	38.95%
AP NORTH LAKE	Solar	14,400	35.61%
COLUMBIA II	Solar	8,021	45.35%
KINGBIRD B	Solar	10,080	44.97%
SUMMER SOLAR	Solar	7,200	43.93%
TEQUESQUITE	Solar	5,400	25.32%
CABAZON	Wind	28,080	5.36%
GARNET	Wind	4,320	5.78%

## Resource Capacity Factor Charts



## Resource Outages and Transmission Constraints

- RERC
  - Unit 2 LPT change out
  - Unit 3 Replace power feeder breaker on CEMS 3
- SPRINGS
  - None
- CLEARWATER
  - None