



RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES

DATE: SEPTEMBER 9, 2024

GENERAL MANAGER'S REPORT

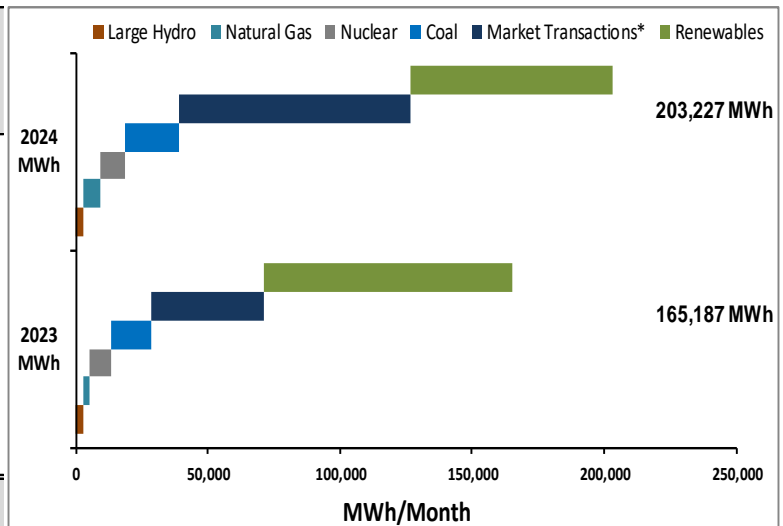
SUBJECT: MONTHLY POWER SUPPLY REPORT – JUNE 30, 2024

Monthly Power Usage:

The wholesale load (Vista Substation) for June was 203,227 MWh, an increase of 38,040 MWh compared to the same month in the previous year. Renewable generation served 37.57% or 76,350 MWh of Riverside's wholesale load. Coal generation served 10.06% or 20,445 MWh of the wholesale load. Nuclear energy covered 4.52% or 9,192 MWh. In June, internal natural gas generation served 3.17% or 6,437 MWh of wholesale load. Hydro generation represents 1.53% or 3,102 MWh of Riverside's wholesale load. Finally, the balance for June was covered by Market Transactions, which represented 43.17% or 87,726 MWh of the load.

Wholesale Resource Mix - June 2023 vs 2024

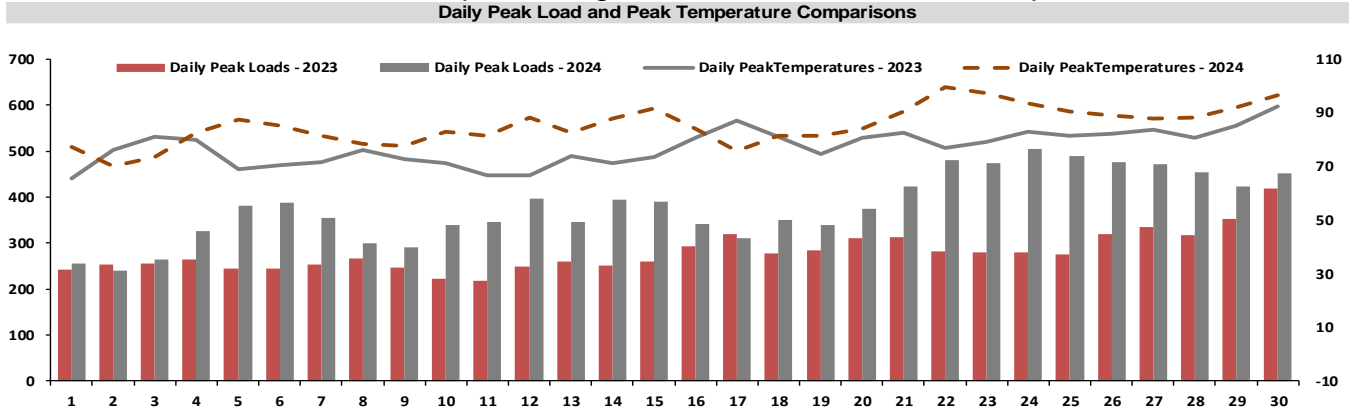
Energy	2023 MWh	2024 MWh	% Δ
Large Hydro	2,661	3,102	16.57%
Natural Gas	2,288	6,437	181.37%
Nuclear	8,297	9,192	10.79%
Coal	15,412	20,445	32.66%
Market Transactions*	42,554	87,701	106.09%
Renewables	93,975	76,350	-18.76%
Wholesale Load (Vista)	165,187	203,227	23.03%



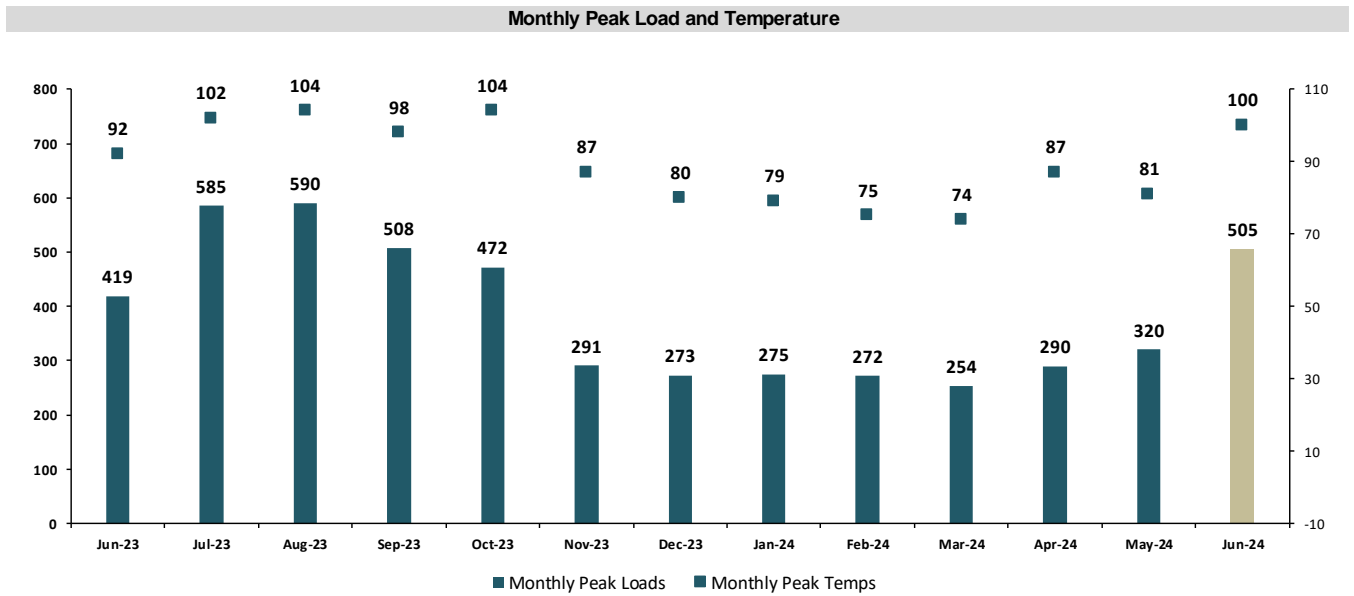
* The Market Transaction category comprises bilateral power contracts and purchases(sales) from(to) the CAISO.

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. In June 2024, average daily peak temperatures oscillated around 85 degrees, while in June 2023, they oscillated around 77 degrees. The monthly peak temperature in June 2024 was 100 degrees, while for comparison, the monthly peak temperature in June 2023 was 92 degrees. Differences in the graphical representation of average temperatures may be due to differences in the day of the week and/or weather trends presenting themselves in earlier or later parts of the month.



Weather patterns were hotter in June 2024 than those in June 2023, with significant differences throughout the month. In June 2024, the average daily peak load was 380 MW, with the monthly peak load reaching 505 MW. The average daily peak load in June 2023 was 280 MW, with the monthly peak load reaching 419 MW. For the most part, the effect of warmer temperatures contributed to higher load patterns and had a significant impact on the average load – pointing to much warmer conditions for June 2024.

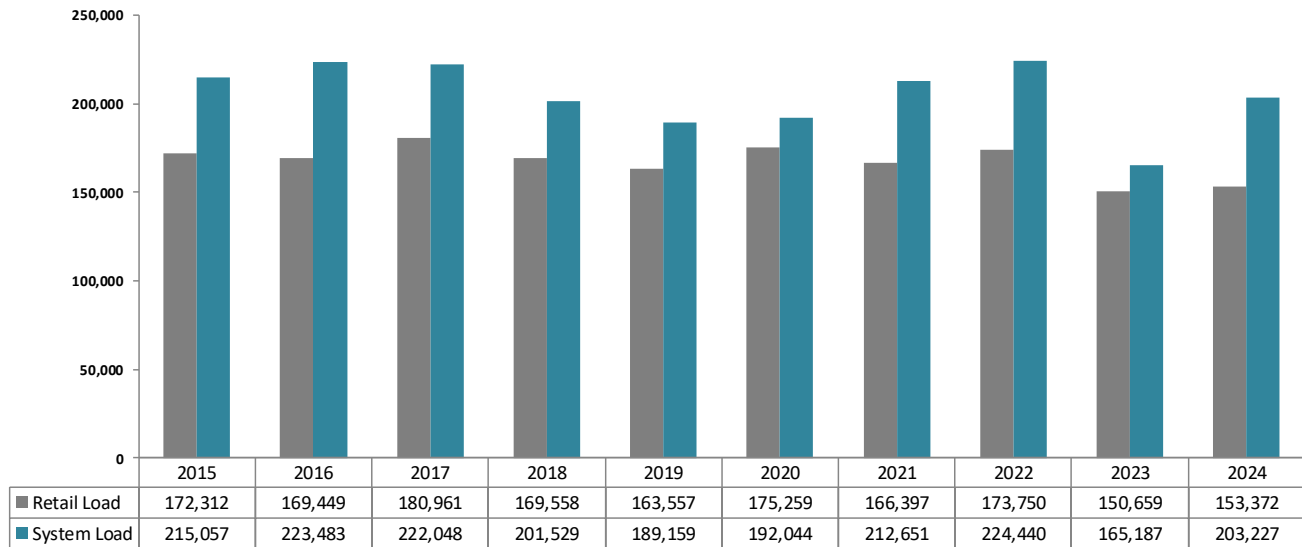


Hourly demand peaked at 505 MW on 06/24/24 HE 17, an increase of 86 MW compared to a peak of 419 MW the same month last year. Riverside's resources covered 87% of the hourly peak demand on 06/24/24.

10-Year Retail Load Trends

The retail load for June 2024 was 153,372 MWh, an increase of 2,713 MWh from the previous year's reading of 150,659 MWh. The System load for June 2024 was 203,227 MWh, an increase of 38,040 MWh from the prior year's reading of 165,187 MWh. Retail load values can be impacted by the significant adoption of residential PV solar, efficiency programs, adoption of energy-efficient appliances, available meter data, etc.

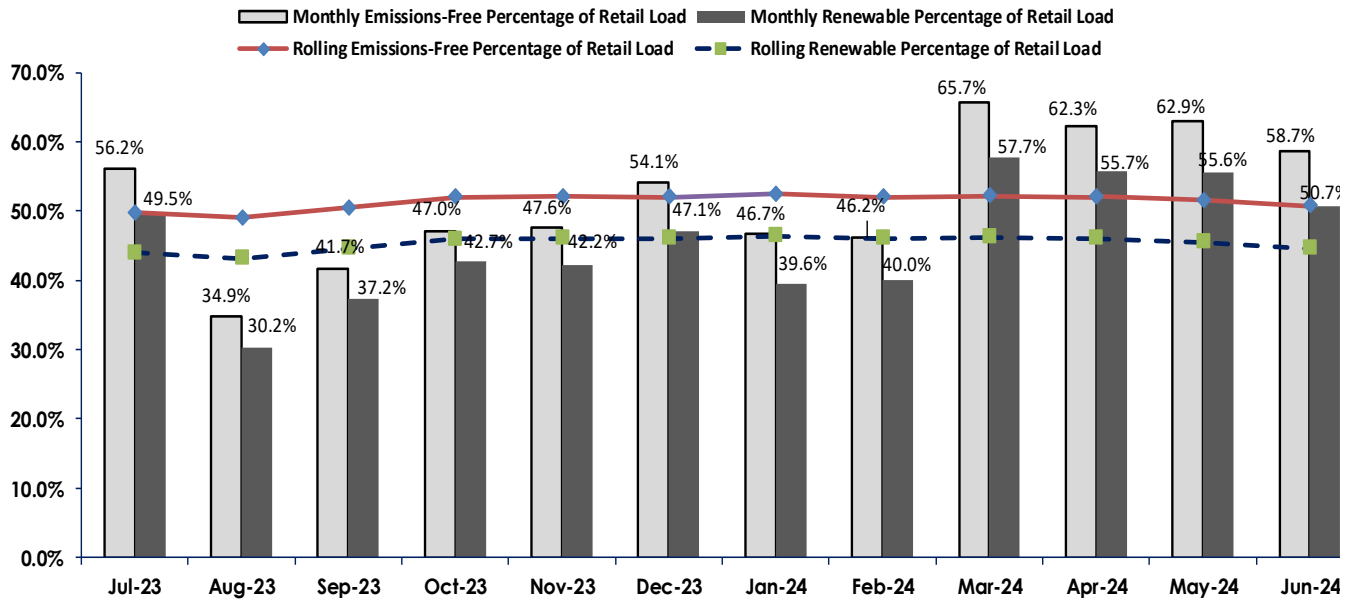
June Retail & System Loads (MWh/Month): 10-Year Trends



Renewable Generation Trends

In June 2024, nuclear generation experienced a 15.7% increase in production compared to May 2024 and an increase of 14.8% compared to June 2023. Total hydroelectric generation experienced a 2.0% decrease compared to May 2024 and an increase of 16.6% compared to June 2023. June 2024 wind generation experienced a 34.1% decrease in production compared to May 2024 and about a decrease of 21% compared to June 2023. June 2024 solar generation experienced a decrease of 8.0% in production compared to May 2024 and an increase of 10% in production compared to June 2023. Lastly, in June 2024, geothermal generation experienced a decrease in production of 8.2% compared to May 2024 and a reduction of 28.0% of output compared to June 2023. In June 2024, renewable generation, as a percentage of retail load, decreased by about 4.0% percentage points from May 2024 and decreased by about 11% percentage points compared to June 2023. Lastly, in June 2024, Emissions-Free generation, as a percentage of retail load, decreased by about 4.9% percentage points from May 2024 and 12% change in percentage points compared to June 2023. The driving factor for the decreased percentages in June 2024, compared to June 2023, are attributed to decreased geothermal, wind, solar, and hydro output. The Emissions Free and Renewable Resources summary graph reflects a rolling 12-month trend line.

Emission Free and Renewable Resources' Summary



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

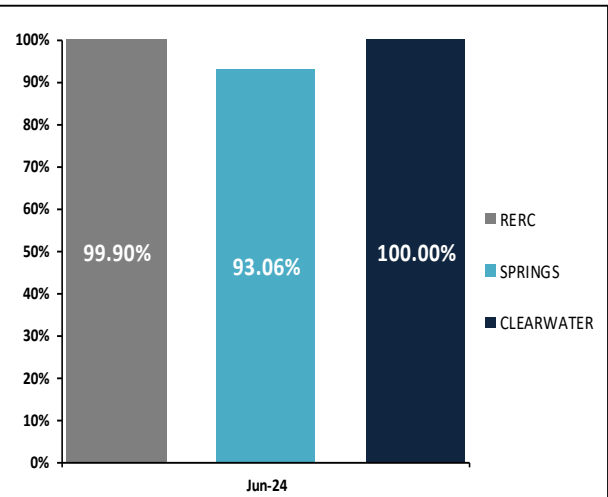
*Riverside's renewable resources are composed of solar, wind and geothermal.

June 2024 Resource Availability - Internal Generation

- RERC's availability for the month was 99.90%.
- Spring's availability for the month was 93.60%.
- Clearwater's availability for the month was 100.00%.

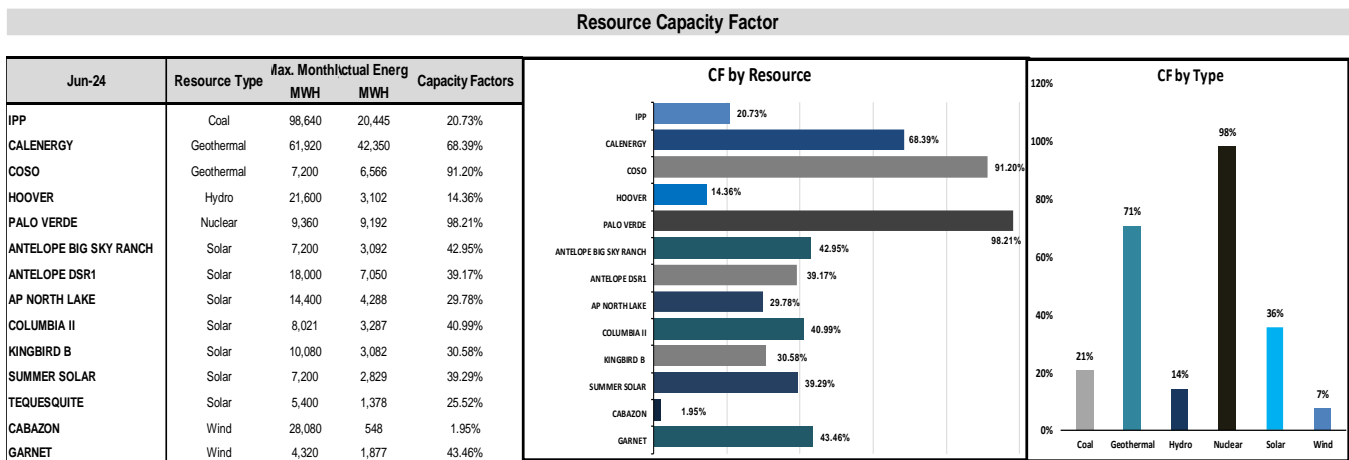
Resource Availability

Jun-24	Total Outage Hours	Total Monthly Hrs.	Actual Available Hrs.	Availability %
RERC1	2.10	720.00	717.90	99.71%
RERC2	0.75	720.00	719.25	99.90%
RERC3	0.00	720.00	720.00	100.00%
RERC4	0.00	720.00	720.00	100.00%
RERC	2.85	2880.00	2877.15	99.90%
Jun-24	Total Outage Hours	Total Monthly Hrs.	Actual Available Hrs.	Availability %
SPRINGS	200	2880	2680	93.06%
Jun-24	Total Outage Hrs.	Total Monthly Hrs.	Actual Available Hrs.	Availability %
CLEARWATER	0	720	720	100.00%



June 2024 Resource Availability – External Resources

Solar resources had capacity factors ranging from 25.52% to 42.95%. Wind resources had capacity factors ranging from 2.21% to 68.08%. Riverside's Palo-Verde nuclear share had steady production with a capacity factor of 82.13%. Hoover is an energy-limited resource and continues to be affected by lake-level restrictions. The resource maintained a 14.19% capacity factor for the month. An undersupply of coal currently impacts IPP, restricting generation output; thus, its capacity factor was 15.36%. Riverside's geothermal resources had capacity factors ranging from 72.33% to 93.86%, affected slightly by under generation. It is worth noting that intermittent renewable resources, including wind and solar, have capacity factors that are affected by natural factors such as cloud cover, blowing wind, etc.



Resource Outages and Transmission Constraints

- RERC
 - RERC Unit 1 gas leak/instrumentation issues
 - RERC Unit 2 gas leak/ins
- SPRINGS
 - SOCAL gas curtailment for line inspection and maintenance
- CLEARWATER
 - None