



RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES

DATE: SEPTEMBER 23, 2024

GENERAL MANAGER'S REPORT

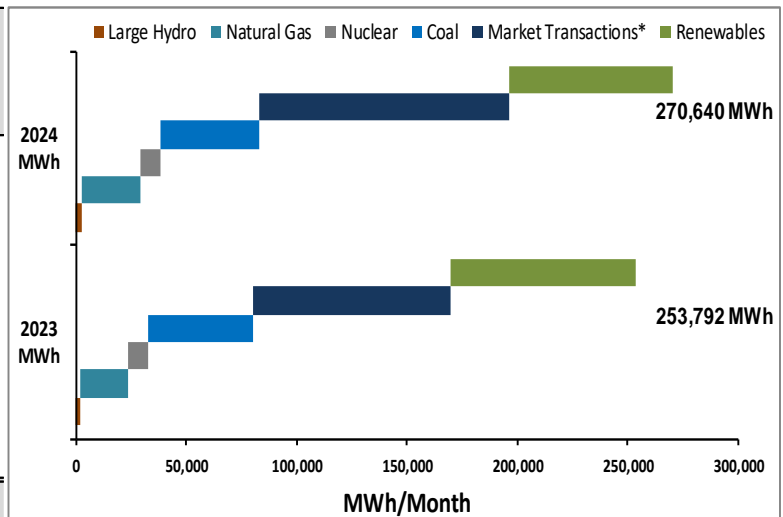
SUBJECT: MONTHLY POWER SUPPLY REPORT – JULY 31, 2024

Monthly Power Usage:

The wholesale load (Vista Substation) for July was 270,640 MWh, an increase of 16,848 MWh compared to the same month in the previous year. Renewable generation served 27.41% or 74,171 MWh of Riverside's wholesale load. Coal generation served 16.50% or 44,649 MWh of the wholesale load. Nuclear energy covered 3.44% or 9,312 MWh. In July, internal natural gas generation served 9.85% or 26,670 MWh of wholesale load. Hydro generation represents 0.92% or 2,488 MWh of Riverside's wholesale load. Finally, the balance for July was covered by Market Transactions, which represented 41.88% or 113,350 MWh of the load.

Wholesale Resource Mix - July 2023 vs 2024

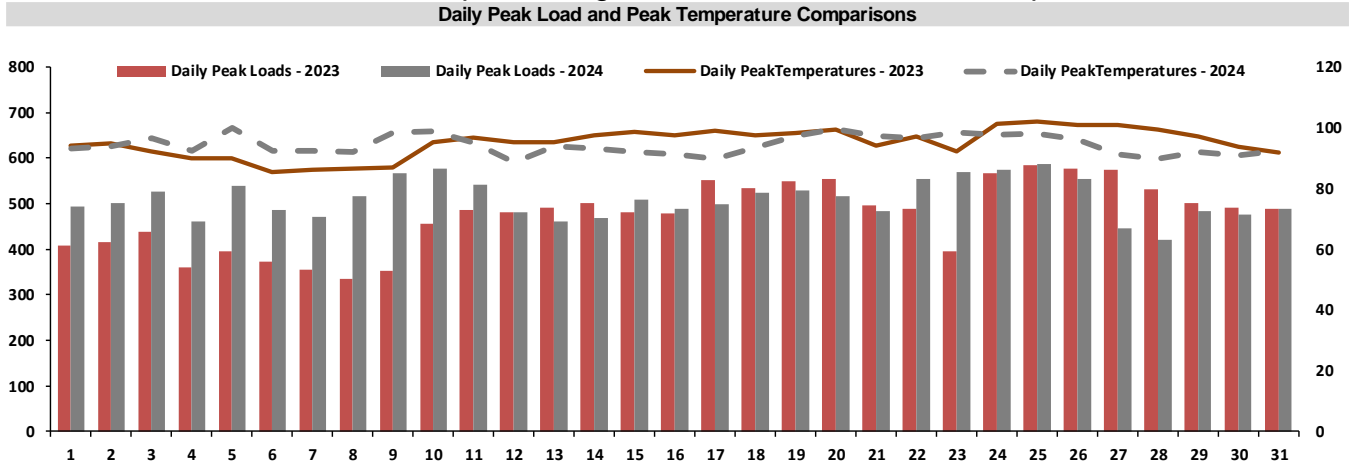
Energy	2023 MWh	2024 MWh	% Δ
Large Hydro	2,252	2,488	10.48%
Natural Gas	21,512	26,670	23.98%
Nuclear	9,096	9,312	2.37%
Coal	47,531	44,649	-6.06%
Market Transactions*	89,340	113,350	26.87%
Renewables	84,061	74,171	-11.77%
Wholesale Load (Vista)	253,792	270,640	6.64%



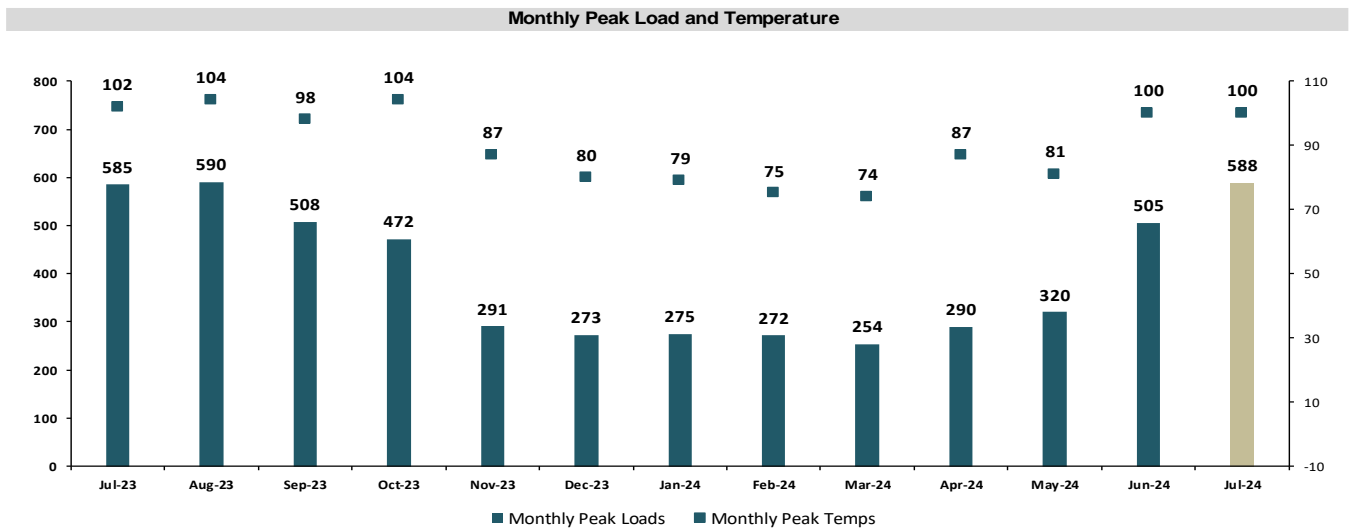
* The Market Transaction category comprises bilateral power contracts and purchases(sales) from(to) the CAISO.

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 July 2024, average daily peak temperatures oscillated around 94 degrees, while in July 2023, they oscillated around 95 degrees. The monthly peak temperature in July 2024 was 100 degrees, while for comparison, the monthly peak temperature in July 2023 was 102 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.



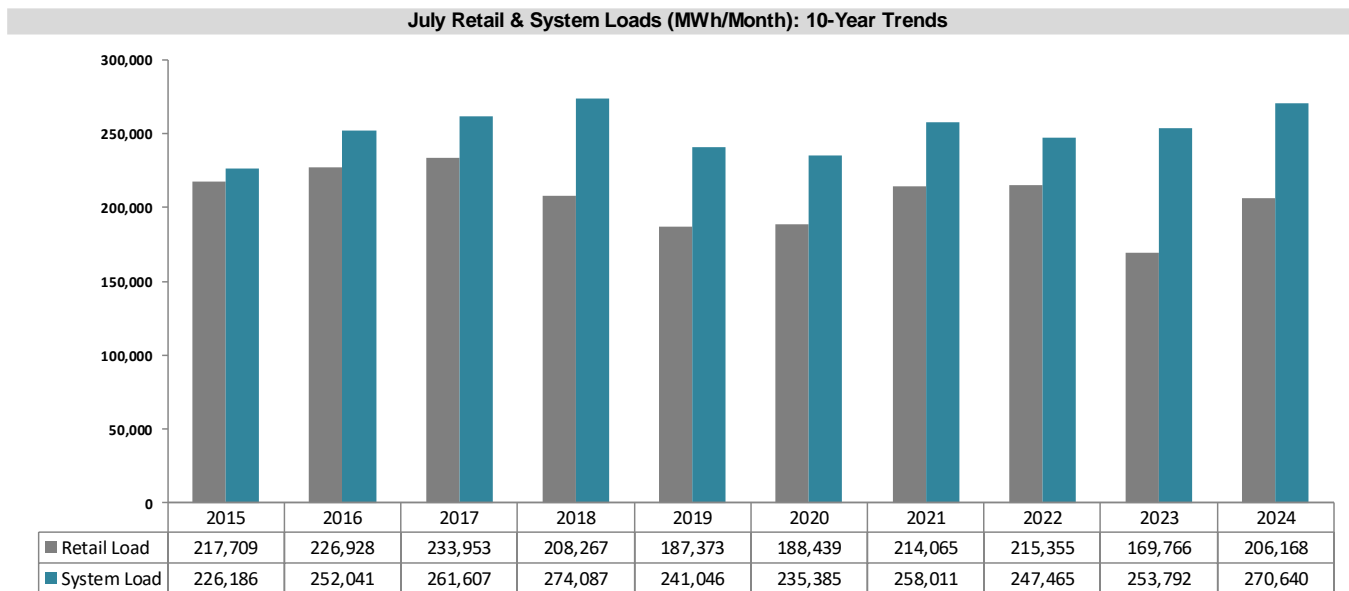
Weather patterns were similar in July 2024 to those in July 2023, without any significant differences throughout the month. In July 2024, the average daily peak load was 510 MW, with the monthly peak load reaching 588 MW. The average daily peak load in July 2023 was 474 MW, with the monthly peak load reaching 584 MW. For the most part, the effect of prolonged warmer temperatures contributed to higher load patterns and had a significant impact on the average load – pointing to much warmer conditions for July 2024.



Hourly demand peaked at 588 MW on 07/25/24 HE 17, an increase of 4 MW compared to a peak of 584 MW the same month last year. Riverside's resources covered 89% of the hourly peak demand on 07/25/24.

10-Year Retail Load Trends

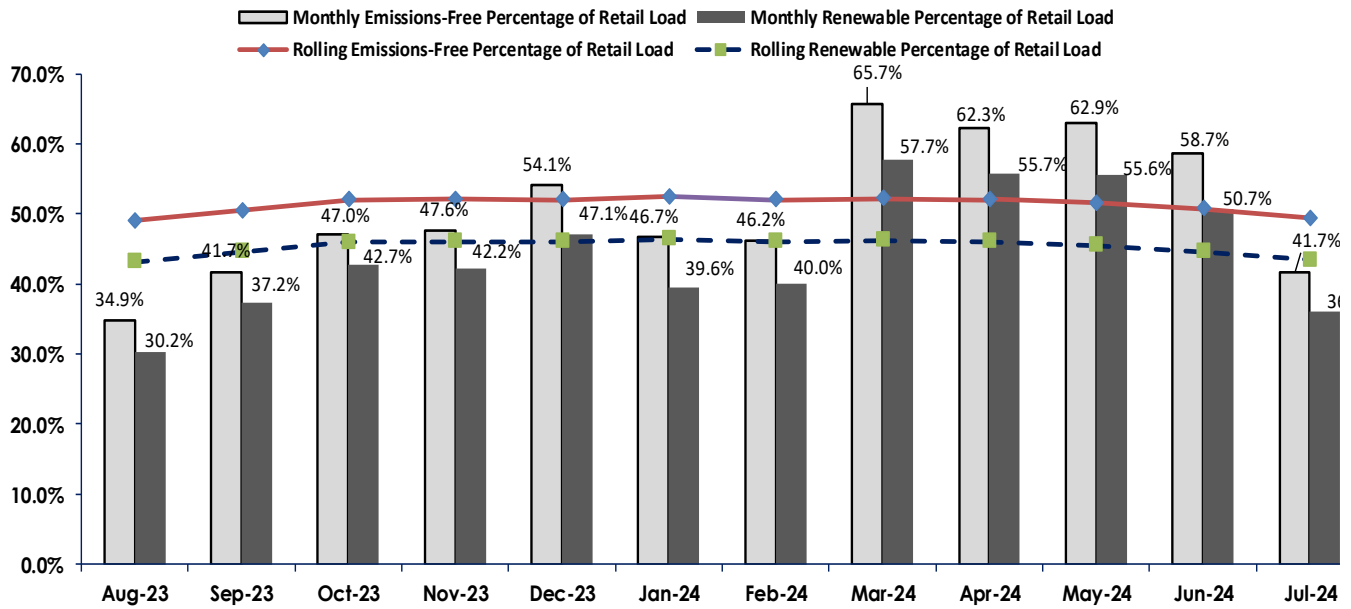
The retail load for July 2024 was 206,168 MWh, an increase of 36,402 MWh from the previous year's reading of 169,766 MWh. The System load for July 2024 was 270,640 MWh, an increase of 16,848 MWh from the prior year's reading of 253,792 MWh. Retail load values can be impacted by the significant adoption of residential PV solar, efficiency programs, adoption of energy-efficient appliances, available meter data, etc.



Renewable Generation Trends

In July 2024, nuclear generation experienced a 1.3% increase in production compared to June 2024 and an increase of 2.4% compared to July 2023. Total hydroelectric generation experienced a 20.0% decrease compared to June 2024 and an increase of 10.5% compared to July 2023. July 2024 wind generation experienced a 42.3% decrease in production compared to June 2024 and about a decrease of 12% compared to July 2023. July 2024 solar generation experienced a decrease of 5.0% in production compared to June 2024 and an increase of 11% in production compared to July 2023. Lastly, in July 2024, geothermal generation experienced a decrease in production of 2.6% compared to June 2024 and a reduction of 20.0% of output compared to July 2023. In July 2024, renewable generation, as a percentage of retail load, decreased by about 17% percentage points from June 2024 and decreased by about 15% percentage points compared to July 2023. Lastly, in July 2024, Emissions-Free generation, as a percentage of retail load, decreased by about 14.7% percentage points from June 2024 and 14% change in percentage points compared to July 2023. The driving factor for the decreased percentages in July 2024, compared to July 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



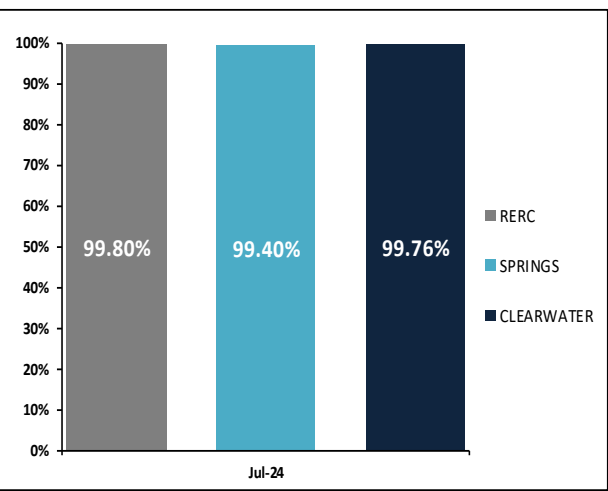
*Riverside's emissions free resources are composed of renewables plus hydro and nuclear
 *Riverside's renewable resources are composed of solar, wind and geothermal.

July 2024 Resource Availability - Internal Generation

- RERC's availability for the month was 99.80%.
- Spring's availability for the month was 99.40%.
- Clearwater's availability for the month was 99.76%.

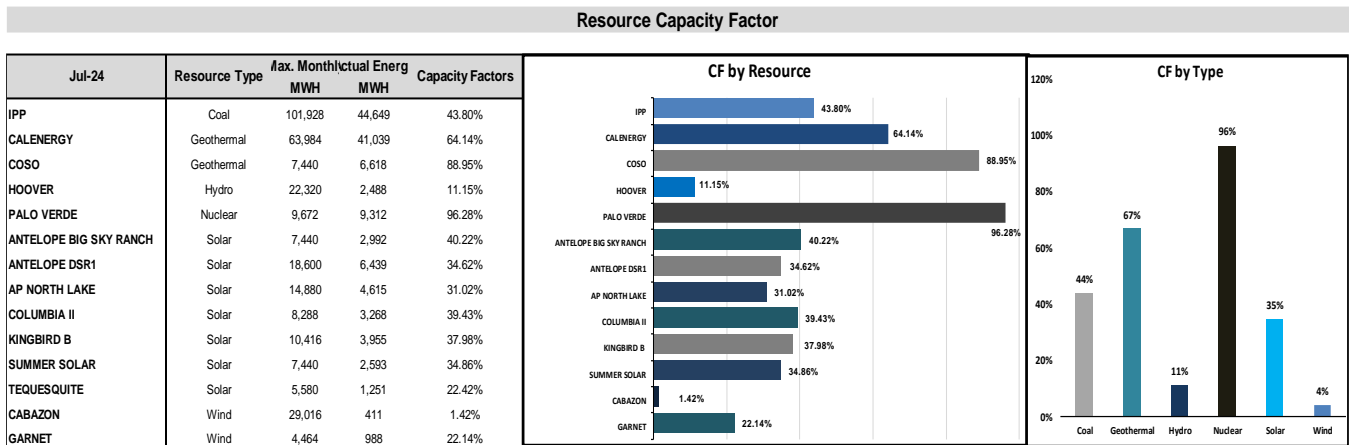
Resource Availability

Jul-24	Total Outage Hours	Total Monthly Hrs.	Actual Available Hrs.	Availability %
RERC1	0.00	744.00	744.00	100.00%
RERC2	4.50	744.00	739.50	99.40%
RERC3	0.00	744.00	744.00	100.00%
RERC4	1.50	744.00	742.50	99.80%
RERC	6.00	2976.00	2970.00	99.80%
Jul-24	Total Outage Hours	Total Monthly Hrs.	Actual Available Hrs.	Availability %
SPRINGS	18	2976	2958	99.40%
Jul-24	Total Outage Hrs.	Total Monthly Hrs.	Actual Available Hrs.	Availability %
CLEARWATER	1.75	744	742.25	99.76%



July 2024 Resource Availability – External Resources

Solar resources had capacity factors ranging from 22.42% to 40.22%. Wind resources had capacity factors ranging from 1.42% to 22.14%. Riverside's Palo-Verde nuclear share had steady production with a capacity factor of 88.95%. Hoover is an energy-limited resource and continues to be affected by lake-level restrictions. The resource maintained a 11.15% capacity factor for the month. An undersupply of coal currently impacts IPP, restricting generation output; thus, its capacity factor was 43.80%. Riverside's geothermal resources had capacity factors ranging from 64.14% to 88.95%, 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 2 VSV activator repair and test
 - RERC Unit 4 repair gas leak

- SPRINGS
 - Ammonia Flow Control Valve replacement
 - Combustion Air Driver fault

- CLEARWATER
 - Cooling Tower Fan B failure