



RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES

DATE: NOVEMBER 18, 2024

GENERAL MANAGER'S REPORT

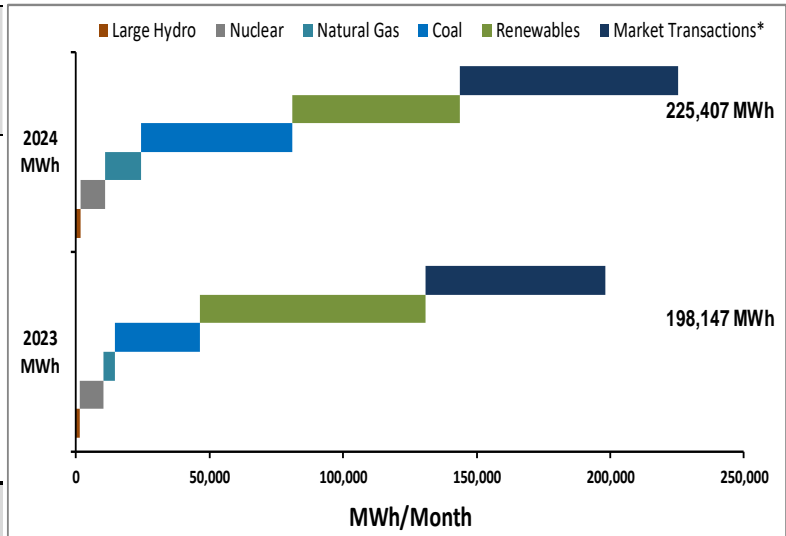
SUBJECT: MONTHLY POWER SUPPLY REPORT – SEPTEMBER 30, 2024

Monthly Power Usage:

The wholesale load (Vista Substation) for September was 225,407 MWh, an increase of 27,260 MWh compared to the same month in the previous year. Renewable generation served 27.85% or 62,776 MWh of wholesale load. Coal generation served 25.02% or 56,391 MWh of wholesale load. Nuclear energy served 4.05% or 9,120 MWh. Internal natural gas generation served 6.07% or 13,687 MWh of wholesale load. Hydro generation served 0.74% or 1,660 MWh of wholesale load. Finally, the balance for September was covered by Market Transactions, which served 36.28% or 81,773 MWh of the load.

Wholesale Resource Mix - September 2023 vs 2024

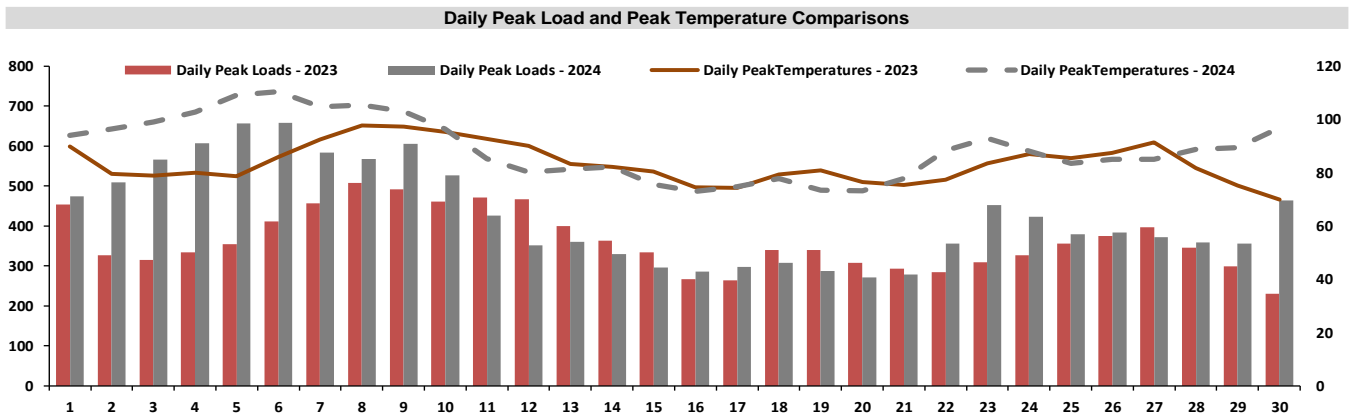
Energy	2023 MWh	2024 MWh	% Δ
Large Hydro	1,382	1,660	20.12%
Natural Gas	4,381	13,687	212.41%
Nuclear	8,976	9,120	1.60%
Coal	31,578	56,391	78.58%
Market Transactions*	67,226	81,773	21.64%
Renewables	84,604	62,776	-25.80%
Wholesale Load (Vista)	198,147	225,407	13.76%



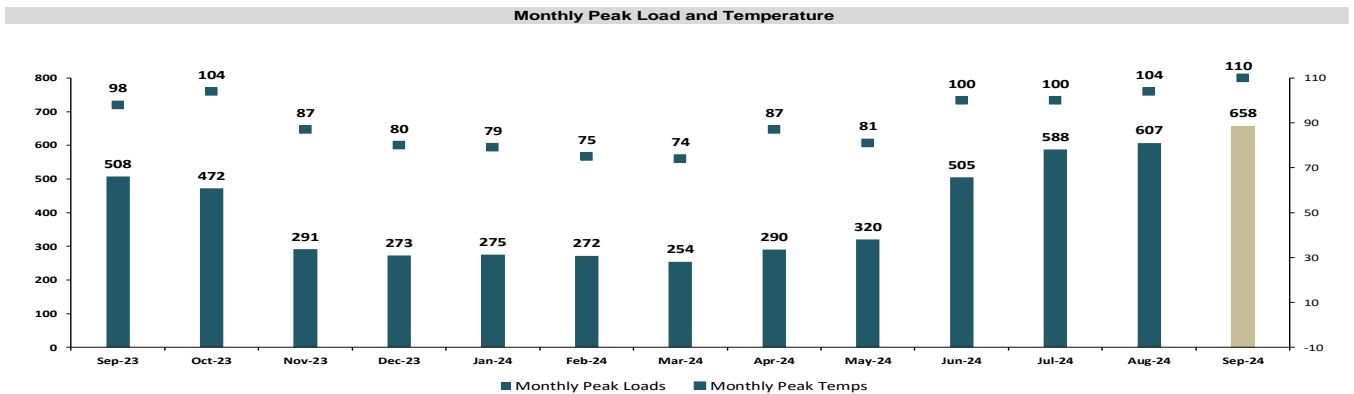
* The Market Transaction category comprises bilateral power contracts and purchases(sales) from(to) the CAISO.

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 September 2024, average daily peak temperatures oscillated around 89 degrees. In September 2023, average daily peak temperatures similarly oscillated around 83 degrees. The monthly peak temperature in September 2024 was 110 degrees, while the monthly peak temperature in September 2023 was 98 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 warmer in September 2024 to those in September 2023. It is worth noting that the number of days with temperatures between 100 and 111 degrees was much higher in September 2024 (by 6 days). In September 2024, the average daily peak load was 427 MW, with the monthly peak load reaching 658 MW. The average daily peak load in September 2023 was 363 MW, with the monthly peak load reaching 508 MW. Prolonged warmer temperatures over consecutive days and elevated residual heat contributed to higher total system load and higher average load patterns compared to the same month last year. Lastly, the prolonged heat mainly occurred during weekdays, further contributing to the higher loads.

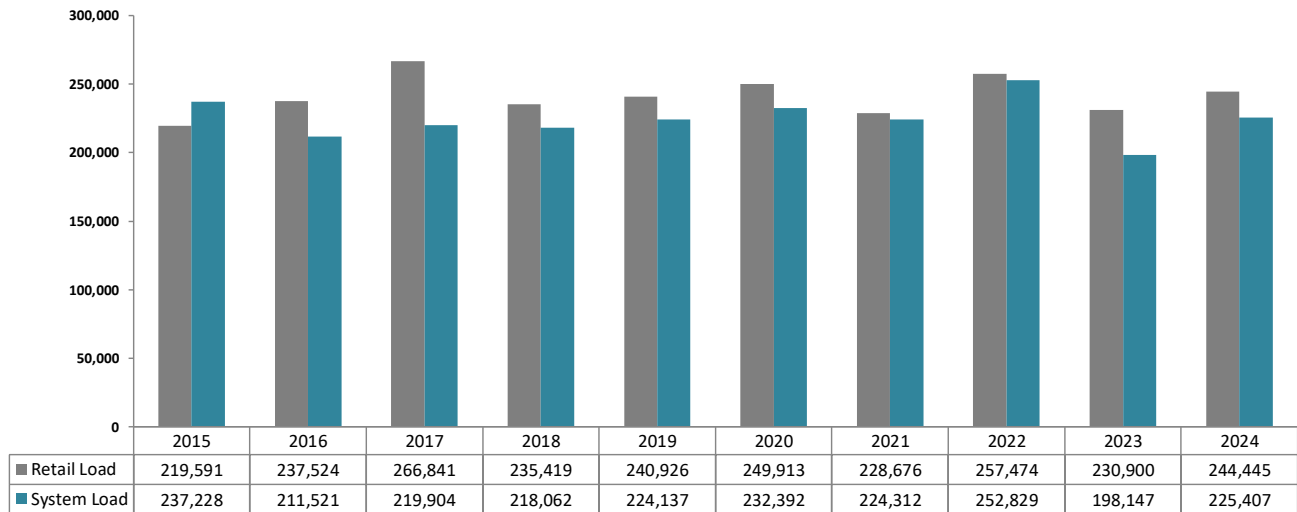


Hourly demand peaked at 658 MW on 09/06/24 HE 17, an increase of 150 MW compared to a peak of 508 MW the same month last year. Riverside's resources covered 85% of the hourly peak demand on 09/06/24. The hourly peak demand of 658 MW reached in September 2024 sets a record for Riverside high hourly demand, the previous record high hourly peak demand was 648 MW set in September 2022.

10-Year Retail Load Trends

The retail load for September 2024 was 244,445 MWh, an increase of 13,545 MWh from the previous year's reading of 230,900 MWh. The System load for September 2024 was 225,407 MWh, an increase of 27,260 MWh from the prior year's reading of 198,147 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.

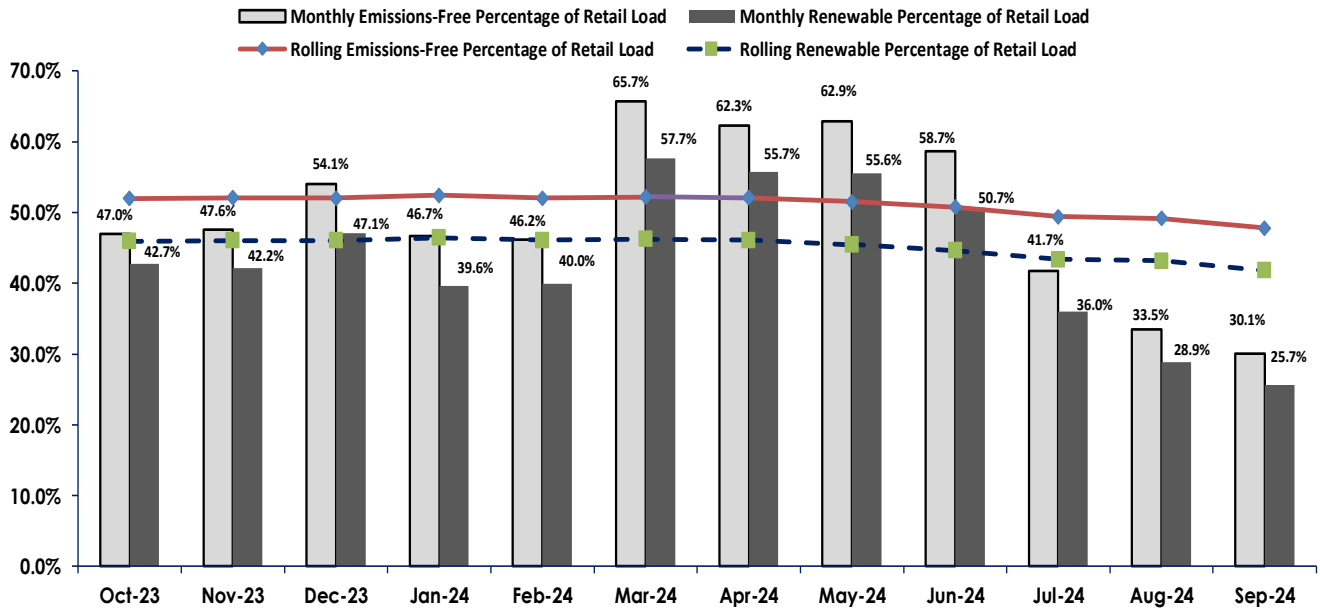
September Retail & System Loads (MWh/Month): 10-Year Trends



Renewable Generation Trends

In September 2024, nuclear generation experienced a 1.6% decrease in production compared to August 2024 and an increase of 1.6% compared to September 2023. Total hydroelectric generation experienced a 13.0% decrease compared to August 2024 and an increase of 20.1% compared to September 2023. In September 2024, wind generation experienced a 12.7% increase in production compared to August 2024 and about an increase of 52% compared to September 2023. In September 2024, solar generation experienced a decrease of 17.0% in production compared to August 2024 and an increase of 11% in production compared to September 2023. In September 2024, geothermal generation experienced a 7.7% decrease in production compared to August 2024 and a 40.0% decrease in production compared to September 2023. In September 2024, renewable generation, as a percentage of retail load, decreased by about 3.0 percentage points from August 2024 and decreased by about 12 percentage points compared to September 2023. Lastly, in September 2024, Emissions-Free generation, as a percentage of retail load, decreased by about 3.2 percentage points from August 2024 and decreased 12 percentage points compared to September 2023. The driving factor for the decreased percentages in September 2024, compared to September 2023, are attributed to slight decreases in geothermal, wind, and solar hydro output combined with increases in total load over the month. The Emissions Free and Renewable Resources summary graph reflects a rolling 12-month trend line.

Emission Free and Renewable Resources' Summary



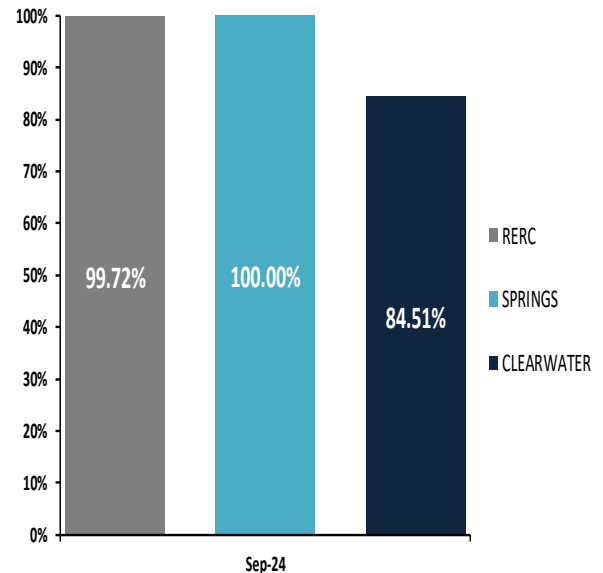
*Riverside's emissions free resources are composed of renewables plus hydro and nuclear
 *Riverside's renewable resources are composed of solar, wind and geothermal.

September 2024 Resource Availability - Internal Generation

- RERC's availability for the month was 99.72%.
- Spring's availability for the month was 100.00%.
- Clearwater's availability for the month was 84.51%.

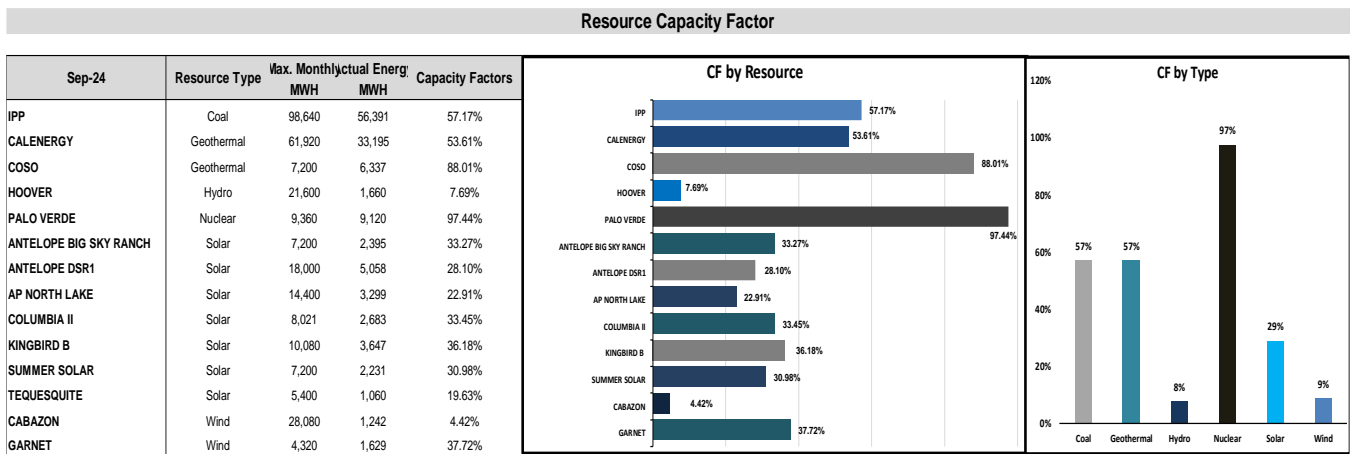
Resource Availability

Sep-24	Total Outage Hours	Total Monthly Hrs.	Actual Available Hrs.	Availability %
RERC1	2.00	720.00	718.00	99.72%
RERC2	4.25	720.00	715.75	99.41%
RERC3	1.00	720.00	719.00	99.86%
RERC4	0.75	720.00	719.25	99.90%
RERC	8.00	2880.00	2872.00	99.72%
Sep-24	Total Outage Hours	Total Monthly Hrs.	Actual Available Hrs.	Availability %
SPRINGS	0	2880	2880	100.00%
Sep-24	Total Outage Hrs.	Total Monthly Hrs.	Actual Available Hrs.	Availability %
CLEARWATER	111.5	720	608.5	84.51%



September 2024 Resource Availability – External Resources

Solar resources had capacity factors ranging from 19.63% to 36.18%. Wind resources had capacity factors ranging from 4.42% to 37.72%. Riverside's Palo-Verde nuclear share had steady production with a capacity factor of 97.44%. Hoover is an energy-limited resource and continues to be affected by lake-level restrictions. The resource maintained an 7.69% capacity factor for the month. Riverside's monthly IPP coal resource maintained a capacity factor of 57.17%. Riverside's geothermal resources had capacity factors ranging from 53.61% to 88.01%, 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 SCR inspection
 - RERC Unit 2 gas alarm detector repair and replace power supply
 - RERC Unit 3 IGB issues
 - RERC Unit 4 vibration card replacement

- SPRINGS
 - NONE

- CLEARWATER
 - Economizer water tube leak