RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES **DATE: JANUARY 13, 2024**

GENERAL MANAGER'S REPORT

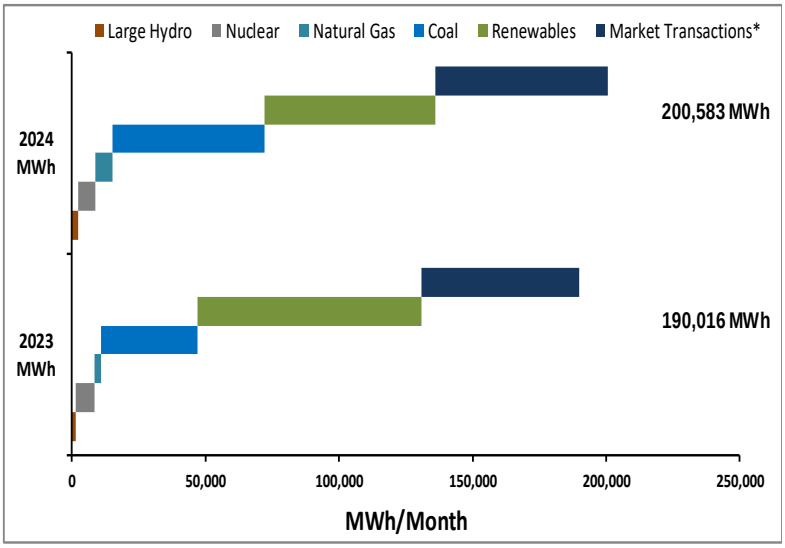
SUBJECT: MONTHLY POWER SUPPLY REPORT – OCTOBER 31, 2024

Monthly Power Usage:

The wholesale load (Vista Substation) for October was 200,584 MWh, an increase of 10,567 MWh compared to the same month in the previous year. Renewable generation served 31.75% or 63,678 MWh of wholesale load. Coal generation served 28.36% or 56,894 MWh of wholesale load. Nuclear energy served 3.31% or 6,648 MWh. Internal natural gas generation served 3.22% or 6,460 MWh of wholesale load. Hydro generation served 1.11% or 2,221 MWh of wholesale load. Finally, the balance for October was covered by Market Transactions, which served 32.25% or 64,682 MWh of the load.

Wholesale Resource Mix - October 2023 vs 2024

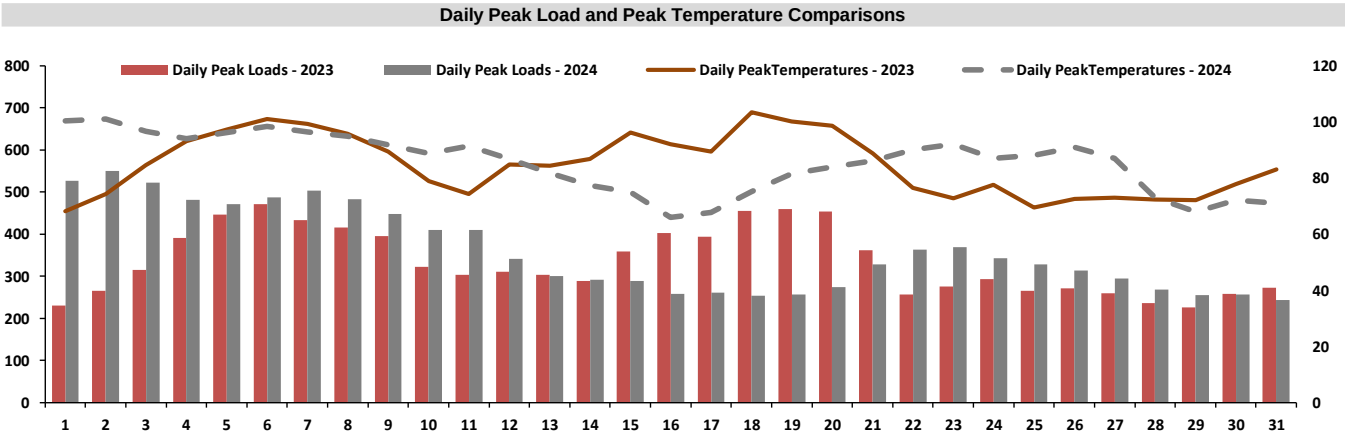
Energy	2023 MWh	2024 MWh	% Δ
Large Hydro	1,485	2,221	49.56%
Natural Gas	2,468	6,460	161.73%
Nuclear	6,912	6,648	-3.82%
Coal	36,018	56,894	57.96%
Market Transactions*	59,213	64,682	9.24%
Renewables	83,920	63,678	-24.12%
Wholesale Load (Vista)	**190,016**	**200,583**	**5.56%**



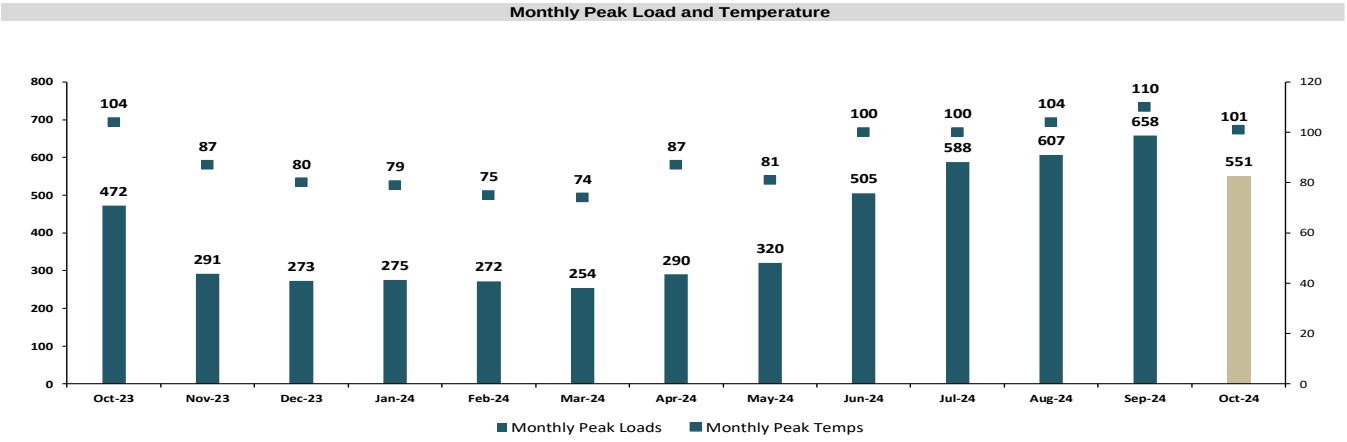
* The Market Transaction category comprises bilateral power contracts and purchases(sales) from(to) the CAISO.

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 October 2024, average daily peak temperatures oscillated around 87 degrees. In October 2023, average daily peak temperatures similarly oscillated around 86 degrees. The monthly peak temperature in October 2024 was 101 degrees, while the monthly peak temperature in October 2023 was 104 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.



Average weather patterns were warmer in October 2023 than in October 2024. In October 2024, the average daily peak load was 320 MW, with the monthly peak load reaching 551 MW. The average daily peak load in October 2023 was 316 MW, with the monthly peak load reaching 472 MW. Residual heat from September's late heatwave contributed to a higher total system load and higher average load patterns compared to the same month last year. Lastly, the prolonged heat, at the beginning of the month, mainly occurred on weekdays, further contributing to the higher loads.

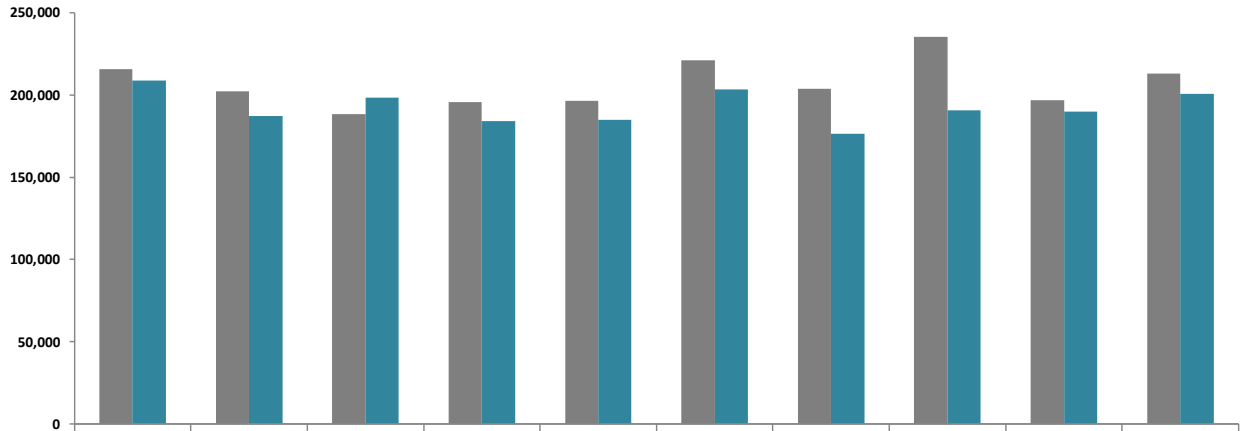


Hourly demand peaked at 551 MW on 10/02/24 HE 17, an increase of 79 MW compared to a peak of 472 MW the same month last year. Riverside's resources covered 85% of the hourly peak demand on 10/02/24.

10-Year Retail Load Trends

The retail load for October 2024 was 212,981 MWh, an increase of 16,092 MWh from the previous year's reading of 196,890 MWh. The System load for October 2024 was 200,583 MWh, an increase of 10,567 MWh from the prior year's reading of 190,016 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.

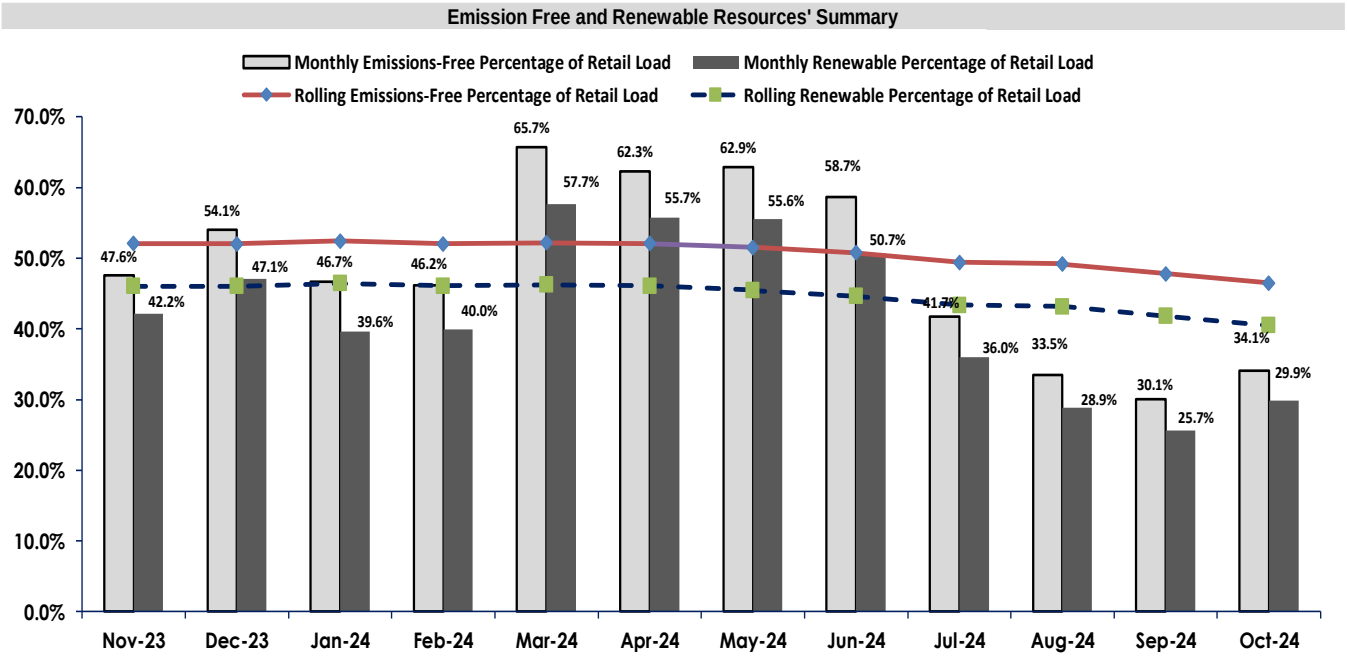
October Retail & System Loads (MWh/Month): 10-Year Trends



	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Retail Load	215,666	202,114	188,549	195,669	196,482	221,080	203,864	235,374	196,890	212,981
System Load	208,666	187,390	198,228	184,291	184,919	203,228	176,351	190,752	190,016	200,583

Renewable Generation Trends

In October 2024, nuclear generation experienced a 27.1% decrease in production compared to September 2024 and a decrease of 15.1% compared to October 2023. Total hydroelectric generation experienced an increase of 34.0% compared to September 2024 and an increase of 35.9% compared to October 2023. In October 2024, wind generation experienced a 54.4% decrease in production compared to September 2024 and about an increase of 45% compared to October 2023. In October 2024, solar generation experienced a decrease of 13.0% in production compared to September 2024 and an increase of 46% in production compared to October 2023. In October 2024, geothermal generation experienced an increase of 12.9% in production compared to September 2024 and a 26.0% decrease in production compared to October 2023. In October 2024, renewable generation, as a percentage of retail load, increased by about 4 percentage points from September 2024 and decreased by about 14 percentage points compared to October 2023. Lastly, in October 2024, Emissions-Free generation, as a percentage of retail load, increased by about 4 percentage points from September 2024 and decreased by 12 percentage points compared to October 2023. The driving factors for the decreased percentages in October 2024, compared to October 2023, are attributed to slight decreases in geothermal and solar 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.



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

October 2024 Resource Availability - Internal Generation

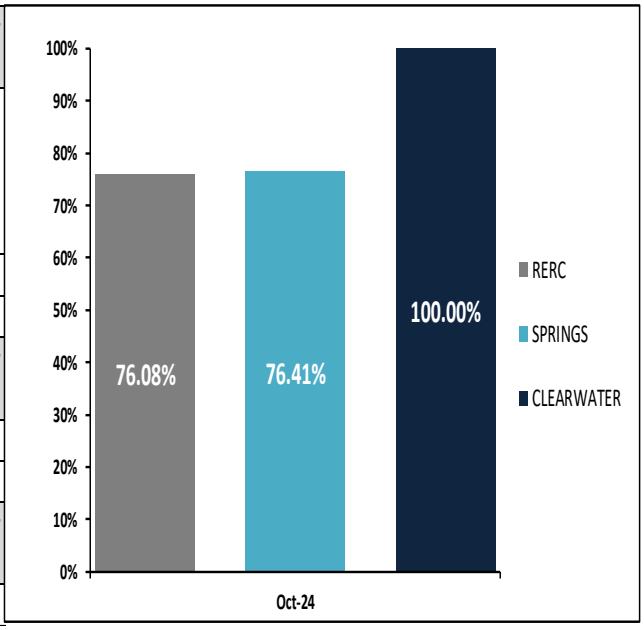
- RERC's availability for the month was 76.08%.
- Spring's availability for the month was 76.41%.
- Clearwater's availability for the month was 100.00%.

Resource Availibility

Oct-24	Total Outage Hours	Total Monthly Hrs.	Actual Available Hrs.	Availability %
RERC1	178.00	744.00	566.00	76.08%
RERC2	178.00	744.00	566.00	76.08%
RERC3	178.00	744.00	566.00	76.08%
RERC4	178.00	744.00	566.00	76.08%
RERC	**712.00**	**2976.00**	**2264.00**	**76.08%**

Oct-24	Total Outage Hours	Total Monthly Hrs.	Actual Available Hrs.	Availability %
SPRINGS	**702**	**2976**	**2274**	**76.41%**

Oct-24	Total Outage Hrs.	Total Monthly Hrs.	Actual Available Hrs.	Availability %
CLEARWATER	**0**	**744**	**744**	**100.00%**

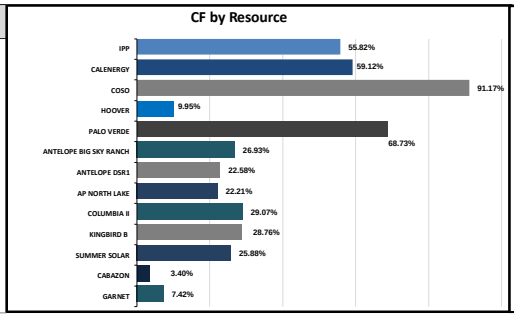


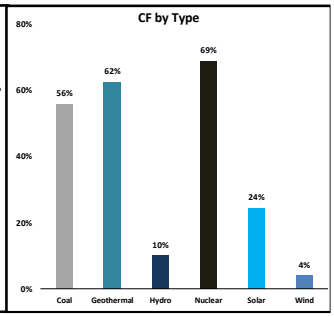
October 2024 Resource Availability – External Resources

Solar resources had capacity factors ranging from 16.30% to 29.07%. Wind resources had capacity factors ranging from 3.40% to 7.42%. Riverside's Palo-Verde nuclear share had steady production with a capacity factor of 68.73%. Hoover is an energy-limited resource and continues to be affected by lake-level restrictions. The resource maintained a 9.95% capacity factor for the month. Riverside's monthly IPP coal resource maintained a capacity factor of 55.82%. Riverside's geothermal resources had capacity factors ranging from 59.12% to 91.17%, 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 Capacity Factor

Oct-24	Resource Type	Max. Monthly Energy MWH	Actual Energy MWH	Capacity Factors
IPP	Coal	101,928	56,894	55.82%
CALENERGY	Geothermal	63,984	37,830	59.12%
COSO	Geothermal	7,440	6,783	91.17%
HOOVER	Hydro	22,320	2,221	9.95%
PALO VERDE	Nuclear	9,672	6,648	68.73%
ANTELOPE BIG SKY RANCH	Solar	7,440	2,004	26.93%
ANTELOPE DSR1	Solar	18,600	4,199	22.58%
AP NORTH LAKE	Solar	14,880	3,304	22.21%
COLUMBIA II	Solar	8,288	2,409	29.07%
KINGBIRD B	Solar	10,416	2,996	28.76%
SUMMER SOLAR	Solar	7,440	1,926	25.88%
TEQUESQUITE	Solar	5,580	910	16.30%
CABAZON	Wind	29,016	986	3.40%
GARNET	Wind	4,464	331	7.42%





Resource Outages and Transmission Constraints

- RERC
  - RERC Unit 1 SCR inspection – Plant Outage (2.5 hour)
  - RERC Unit 1 SoCalGas Emergency Repair gas line 2001 (10/25/24 -10/31/24)
  - RERC Unit 2 SCR inspection – Plant Outage (2.5 hour)
  - RERC Unit 2 SoCalGas Emergency Repair gas line 2001 (10/25/24 -10/31/24)
  - RERC Unit 3 SCR inspection – Plant Outage (2.5 hour)
  - RERC Unit 3 SoCalGas Emergency Repair gas line 2001 (10/25/24 -10/31/24)
  - RERC Unit 4 SCR inspection – Plant Outage (2.5 hour)
  - RERC Unit 4 SoCalGas Emergency Repair gas line 2001 (10/25/24 -10/31/24)

- SPRINGS
  - SoCalGas Emergency Repair gas line 2001 – Plant Outage (10/25/24 -10/31/24)