



RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES

DATE: FEBRUARY 26, 2024

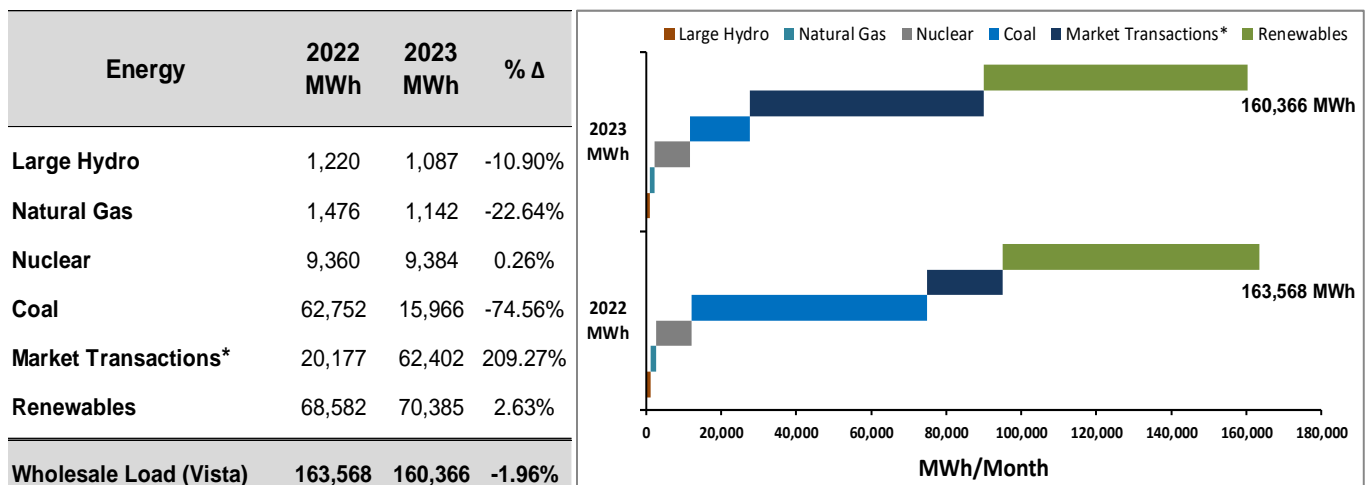
GENERAL MANAGER'S REPORT

SUBJECT: MONTHLY POWER SUPPLY REPORT – DECEMBER 31, 2023

Monthly Power Usage:

The wholesale load (Vista Substation) for December was 160,366 MWh, a decrease of 3,202 MWh compared to the same month in the previous year. Renewable generation served 43.89% or 70,385 MWh of Riverside's wholesale load. Coal generation served 9.96% or 15,966 MWh of the wholesale load. Nuclear energy covered 5.85% or 9,384 MWh. Internal natural gas generation served 0.71% or 1,142 MWh of wholesale load in December. Hydro generation represents 0.68% or 1,087 MWh of Riverside's wholesale load. Riverside's emissions free and renewable resources utilization increased slightly in December 2023 compared to December 2022. Finally, the balance for December was covered by Market Transactions, which represented 38.91% or 62,402 MWh of the load.

Wholesale Resource Mix - December 2022 vs 2023

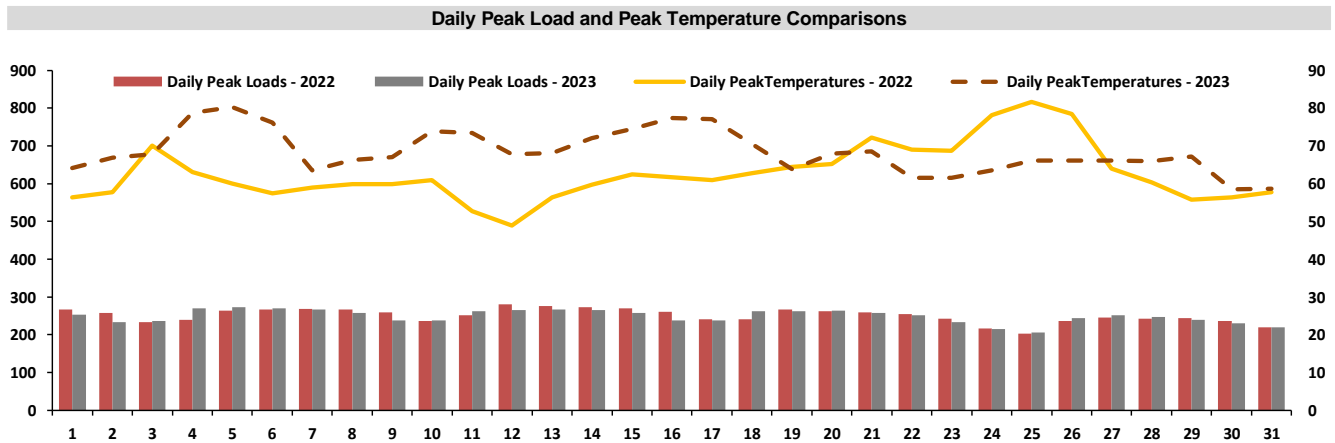


* The Market Transaction category comprises bilateral power contracts and purchases(sales) from(to) the CAISO.

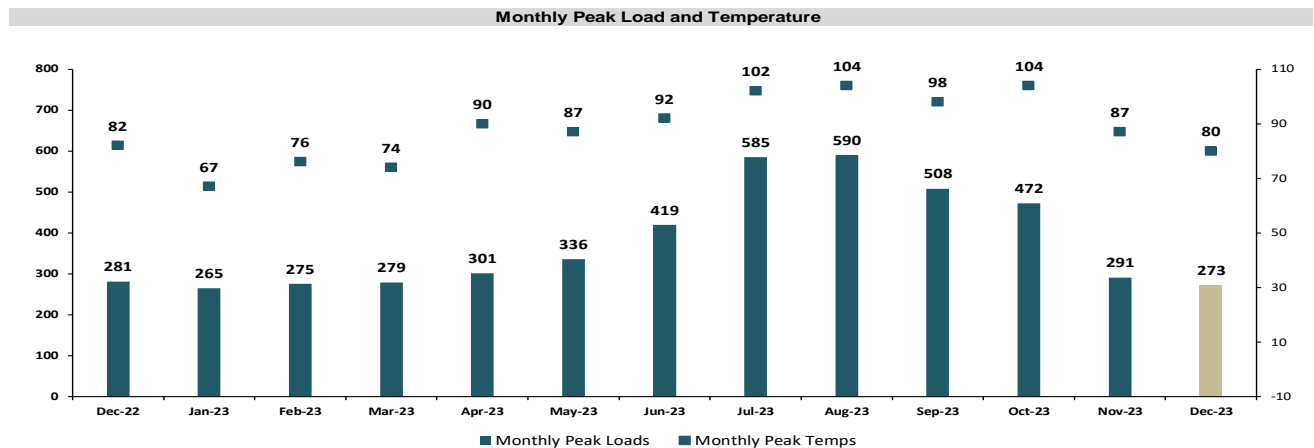
Daily & Monthly Load & Temperature Trends

Weather has a significant impact on electricity demand, especially the variable temperature. Typically, as temperatures increase, electricity demand will also increase, and vice versa. The charts below graphically extrapolate the correlation between weather and electricity demand. December 2023 was warmer than the previous year during the first half of the month. The

average daily peak temperatures consistently remain around 68 degrees. Meanwhile, in December 2022, average daily peak temperatures were in the range of 63 degrees. The monthly peak temperature in December 2023 was 80 degrees. For comparison, the monthly peak temperature in December 2022 was 82 degrees.



December 2022 experienced relatively consistent temperatures, with a slight upward trend toward the end of the month. On the other hand, December 2023 experienced higher temperatures in the first half of the month and a downward trend toward the end of the month. The average daily peak load in December 2022 was 251 MW, with daily peak loads of 260 MW or greater on 12 out of the 31 days. With a higher average peak temperature of 68 degrees in December 2023, the average daily peak load was 249 MW, with daily peak loads of 260 MW or greater on 11 out of the 31 days.

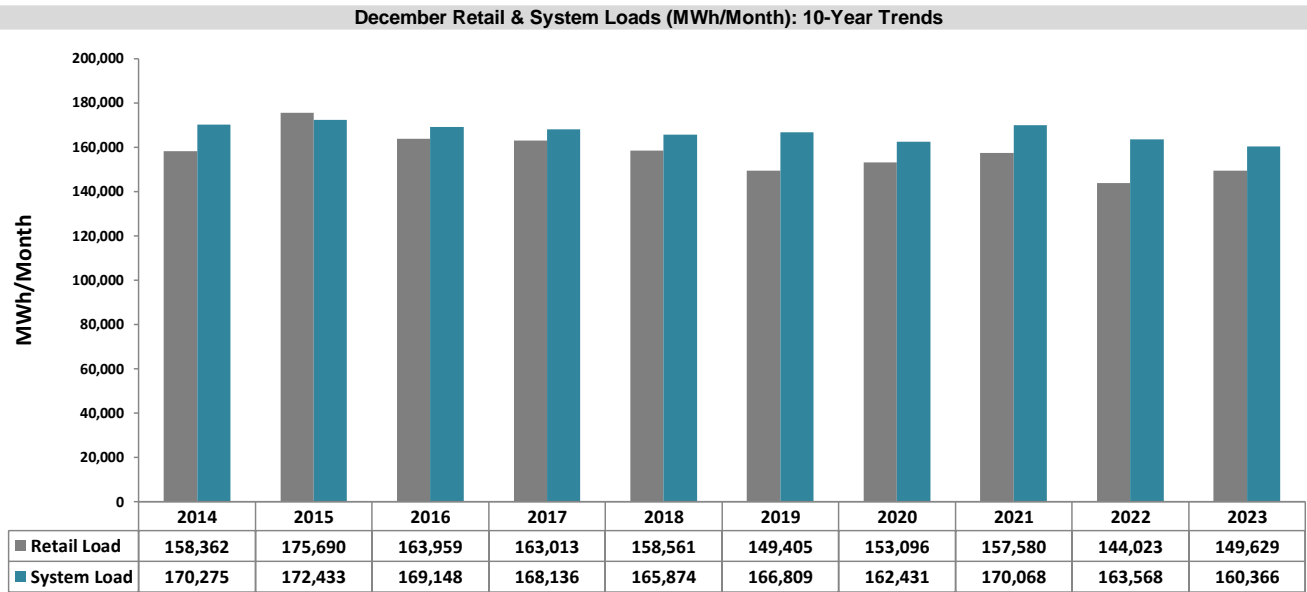


Riverside experienced a lower monthly peak temperature in December 2023, thus putting slight downward pressure on the monthly peak load. Hourly demand peaked at 273 MW on 12/5/23 HE 16, a decrease of 8 MW compared to a peak of 281 MW the same month last year. Riverside's resources covered 96% of the hourly peak demand on 12/5/23.

10-Year Retail Load Trends

The retail load for December 2023 was 149,629 MWh, an increase of 5,606 MWh from the previous year's reading of 144,023 MWh. The System load for December 2023 was 160,366 MWh, a decrease of 3,202 MWh from the prior year's reading of 163,568 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.

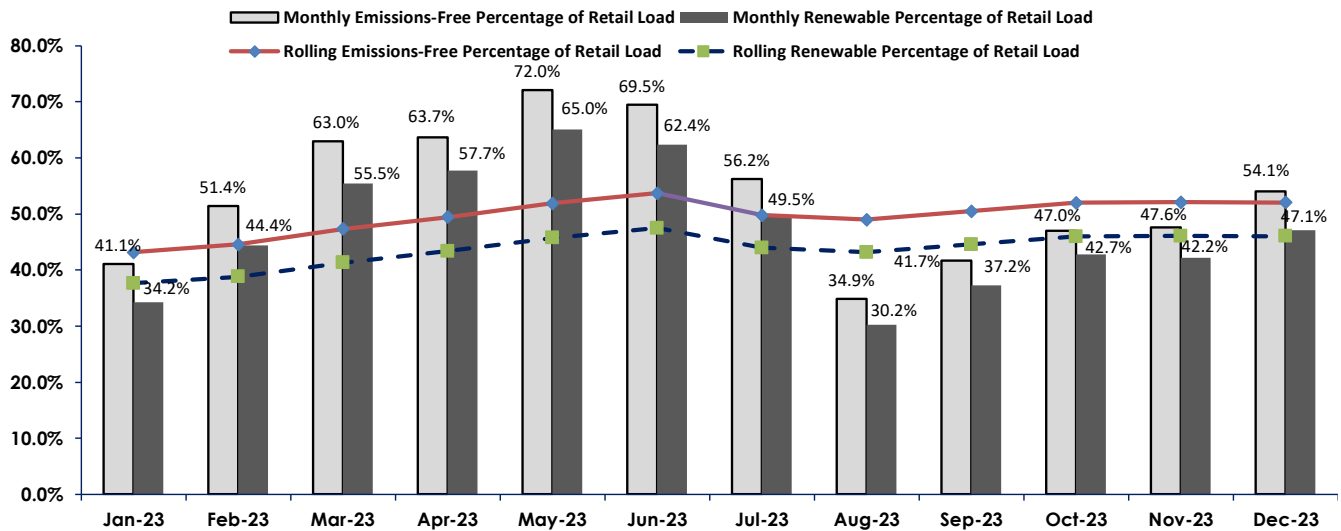


Renewable Generation Trends

In December 2023, nuclear generation experienced a 19.8% increase in production compared to November 2023 and an increase of 0.3% compared to December 2022. Hydroelectric generation experienced a reduction of 33% compared to November 2023 and a reduction of 10.9% compared to December 2022. December 2023 wind generation experienced a reduction of 32.1% output compared to November 2023 and about a 65% reduction compared to December 2022. December 2023 solar generation experienced a 19% reduction compared to November 2023 and an 11 increase in production compared to December 2022. Lastly, in December 2023, geothermal generation experienced a reduction of 0.9% in output compared to November 2023 and a 4% increase in output compared to December 2022.

In December 2023, renewable generation, as a percentage of retail load, increased about six percentage points from November 2023 and decreased by one percentage point compared to December 2022. Lastly, in December 2023, Emissions-Free generation, as a percentage of retail load, increased by about five percentage points from November 2023 and decreased by about one percentage point compared to December 2022. The driving factors for the decreased percentages in December 2023, compared to December 2022, are steady geothermal, steady solar generation, and lower retail load patterns. 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.

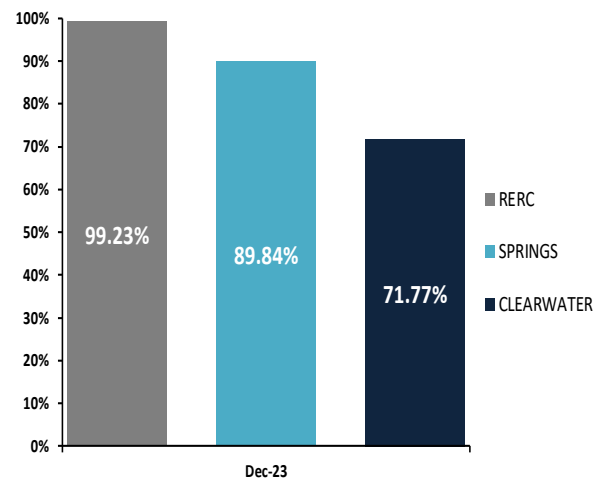
Notes: * CAISO Market Purchases are calculated as CAISO metered system load ("MLAP_RVSD_RVSD") minus sum of all energy purchases.

December 2023 Resource Availability - Internal Generation

- RERC's availability for the month was 99.23%.
- Springs's availability for the month was 89.84%.
- Clearwater's availability for the month was 71.77%.

Resource Availability

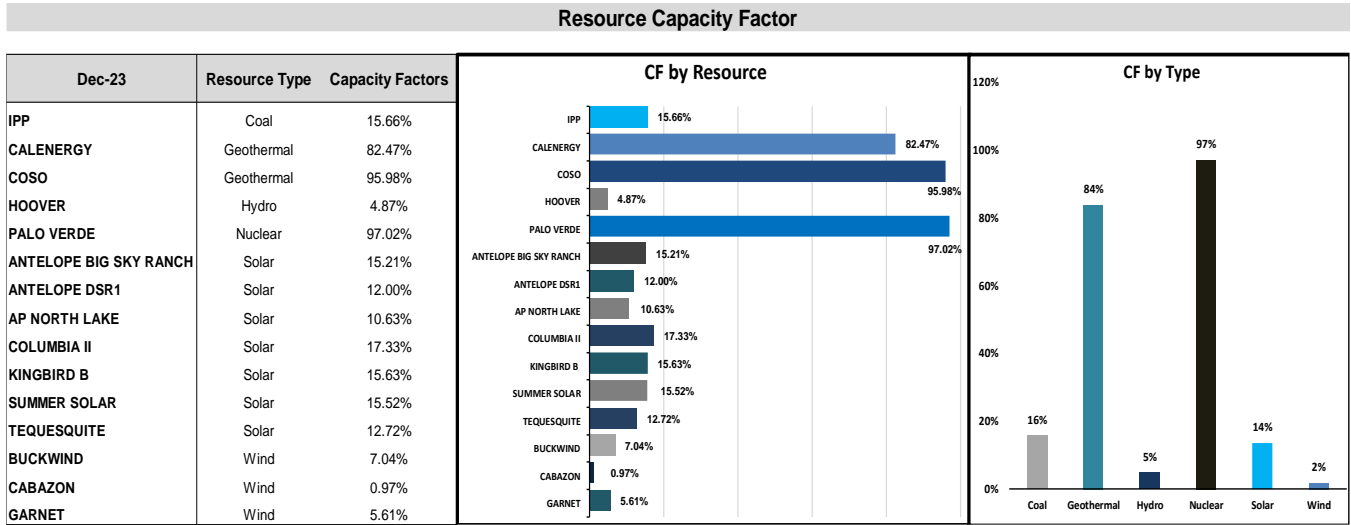
Dec-23	Total Outage Hours	Total Monthly Hrs.	Actual Available Hrs.	Availability %
RERC1	0.00	744.00	744.00	100.00%
RERC2	0.00	744.00	744.00	100.00%
RERC3	23.00	744.00	721.00	96.91%
RERC4	0.00	744.00	744.00	100.00%
RERC	23.00	2976.00	2953.00	99.23%
Dec-23	Total Outage Hours	Total Monthly Hrs.	Actual Available Hrs.	Availability %
SPRINGS	302.5	2976	2673.5	89.84%
Dec-23	Total Outage Hrs.	Total Monthly Hrs.	Actual Available Hrs.	Availability %
CLEARWATER	210	744	534	71.77%



December 2023 Resource Availability – External Resources

Solar resources had capacity factors ranging from 10.63% to 17.33%. Wind resources had capacity factors ranging from 0.97% to 7.04%. Riverside's Palo-Verde nuclear share had steady production with a capacity factor of 97.02%. Hoover is an energy-limited resource and continues to be affected by lake-level restrictions. The resource maintained a 4.87% capacity factor for the month. An undersupply of coal is currently impacting IPP, restricting generation output; thus, its capacity factor was 15.66%. Riverside's geothermal resources had capacity factors ranging from

82.47% to 95.98%, 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 plant availability decreased due to Unit 3 breaker issues.
- SPRINGS
 - Fall maintenance.
- CLEARWATER
 - Fall maintenance.