RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES **DATE: APRIL 28, 2025**

GENERAL MANAGER'S REPORT

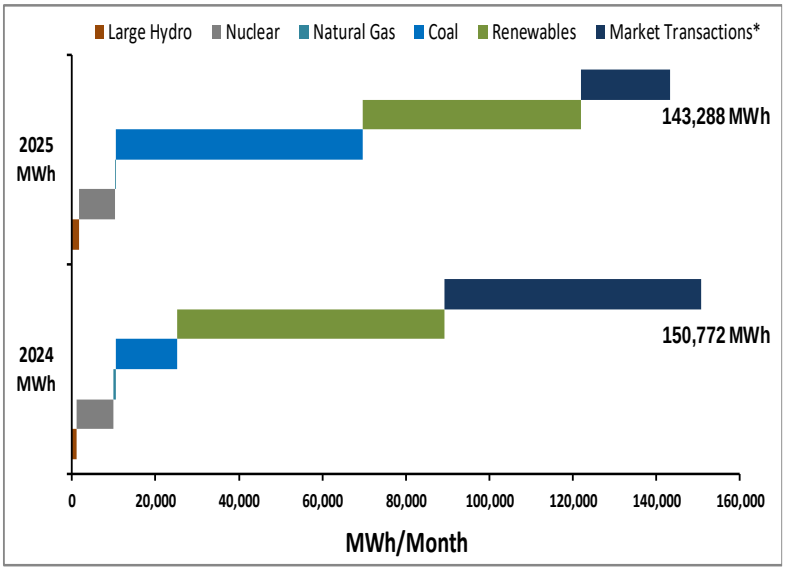
SUBJECT: MONTHLY POWER SUPPLY REPORT – FEBRUARY 28, 2025

Monthly Power Usage:

The wholesale load (Vista Substation) for February was 143,288 MWh, a decrease of 7,484 MWh compared to the same month in the previous year. Renewable generation served 36.39% or 52,141 MWh of wholesale load. Coal generation served 41.25% or 59,107 MWh of wholesale load. Nuclear energy served 6.03% or 8,640 MWh. Internal natural gas generation served 0.20% or 289 MWh of wholesale load. Hydro generation served 1.15% or 1,649 MWh of wholesale load. Finally, the balance for February was covered by Market Transactions, which served 14.98% or 21,463 MWh of the load.

Wholesale Resource Mix - February 2024 vs 2025

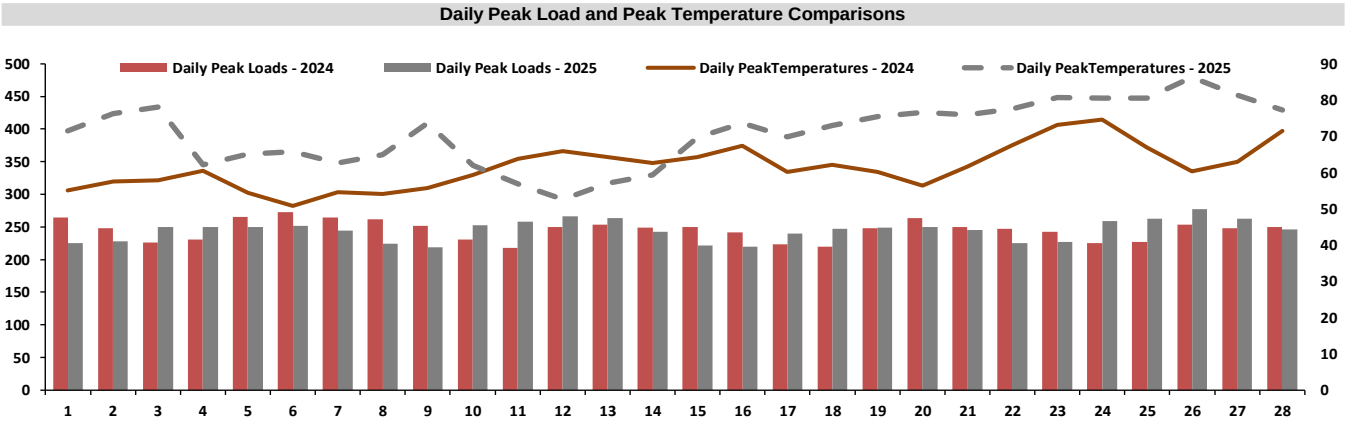
Energy	2024 MWh	2025 MWh	% Δ
Large Hydro	1,150	1,649	43.39%
Natural Gas	490	289	-41.04%
Nuclear	8,832	8,640	-2.17%
Coal	14,658	59,107	303.24%
Market Transactions*	61,539	21,463	-65.12%
Renewables	64,104	52,141	-18.66%
Wholesale Load (Vista)	**150,772**	**143,288**	**-4.96%**



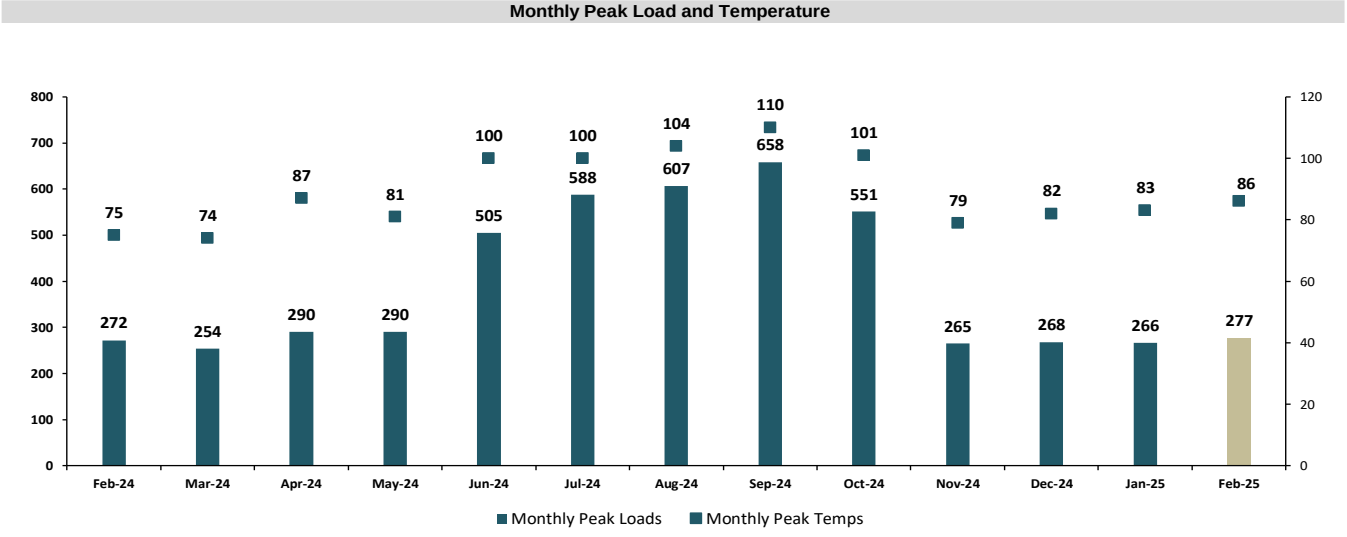
* The Market Transaction category comprises bilateral power contracts and purchases(sales) from(to) the CAISO.

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 February 2025, average daily peak temperatures oscillated around 71 degrees. In February 2024, average daily peak temperatures oscillated around 62 degrees. The monthly peak temperature in February 2025 was 86 degrees, while the monthly peak temperature in February 2024 was 75 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 load patterns were similar in February 2025 compared to February 2024. In February 2025, the average daily peak load was 245 MW, with the monthly peak load reaching 277 MW. The average daily peak load in February 2024 was 245 MW, with the monthly peak load reaching 272 MW.

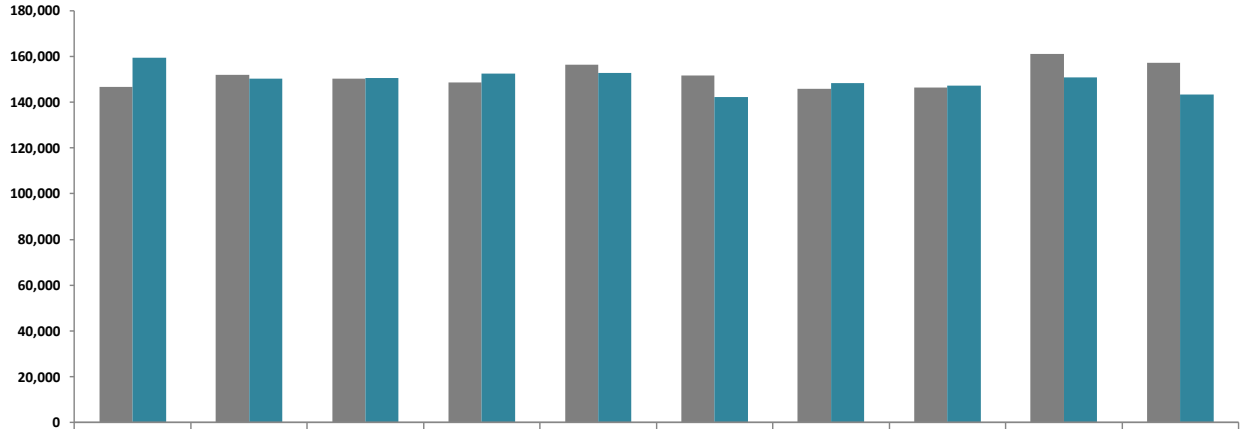


Hourly demand peaked at 277 MW on 02/26/25 HE 17, an increase of 5 MW compared to a peak of 272 MW the same month last year. Riverside's resources covered 76% of the hourly peak demand on 02/26/25.

10-Year Retail Load Trends

The retail load for February 2025 was 157,215 MWh, a decrease of 3,889 MWh from the previous year's reading of 161,104 MWh. The System load for February 2025 was 143,288 MWh, a decrease of 7,484 MWh from the prior year's reading of 150,772 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.

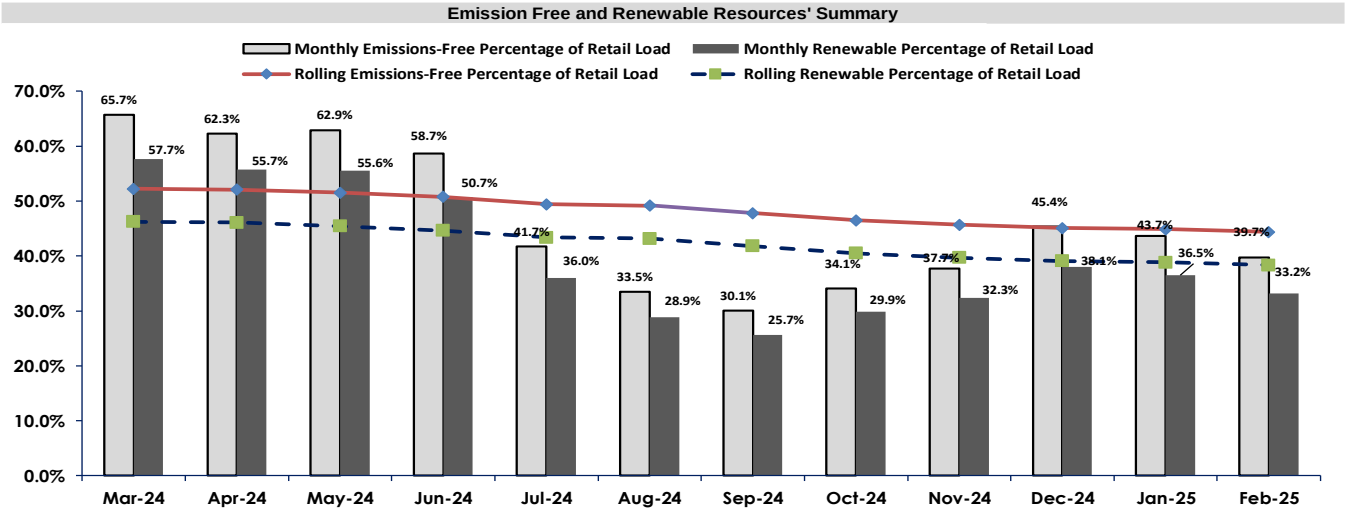
February Retail & System Loads (MWh/Month): 10-Year Trends



	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Retail Load	146,584	151,867	150,429	148,724	156,478	151,734	145,837	146,362	161,104	157,215
System Load	159,386	150,218	150,516	152,498	152,882	142,245	148,268	147,258	150,772	143,288

Renewable Generation Trends

In February 2025, nuclear generation experienced a decrease of 8.4% compared to January 2025, and a decrease of 2.2% compared to February 2024. Total hydroelectric generation experienced an increase of 13% compared to January 2025 and an increase of 43.4% compared to February 2024. In February 2025, wind generation experienced an increase of 0.9% in production compared to January 2025 and about an increase of 71% compared to February 2024. In February 2025, solar generation experienced an increase of 9% in production compared to January 2025 and an increase of 17% in production compared to February 2024. In February 2025, the geothermal generation experienced a decrease of 11.1% in production compared to January 2025 and a 30% decrease in production compared to February 2024. In February 2025, renewable generation, as a percentage of retail load, decreased by about 3.3 percentage points from January 2025 and decreased by about 7 percentage points compared to February 2024. Lastly, in February 2025, Emissions-Free generation, as a percentage of retail load, decreased by about 4 percentage points from January 2025 and decreased by 6 percentage points compared to February 2024. The driving factors for the decreased percentages in February 2025, compared to February 2024, are attributed to significant decreases in geothermal with decreases 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.

February 2025 Resource Availability - Internal Generation

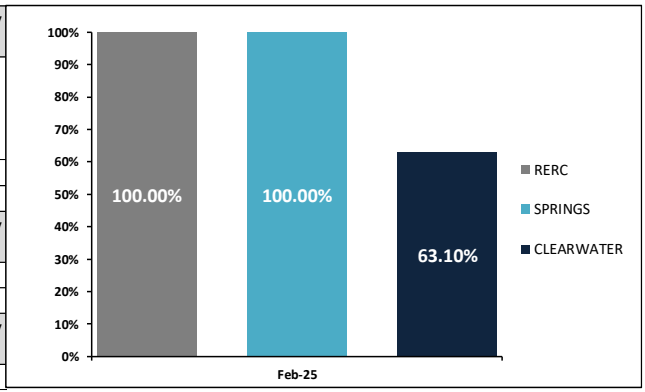
- RERC's availability for the month was 100.00%.
- Spring's availability for the month was 100.00%.
- Clearwater's availability for the month was 63.10%.

Resource Availibility

Feb-25	Total Outage Hours	Total Monthly Hrs.	Actual Available Hrs.	Availability %
RERC1	0.00	672.00	672.00	100.00%
RERC2	0.00	672.00	672.00	100.00%
RERC3	0.00	672.00	672.00	100.00%
RERC4	0.00	672.00	672.00	100.00%
RERC	**0.00**	**2688.00**	**2688.00**	**100.00%**

Feb-25	Total Outage Hours	Total Monthly Hrs.	Actual Available Hrs.	Availability %
SPRINGS	**0**	**2688**	**2688**	**100.00%**

Feb-25	Total Outage Hrs.	Total Monthly Hrs.	Actual Available Hrs.	Availability %
CLEARWATER	**248**	**672**	**424**	**63.10%**

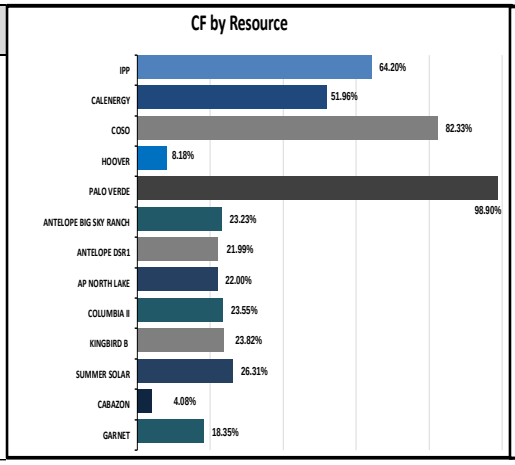


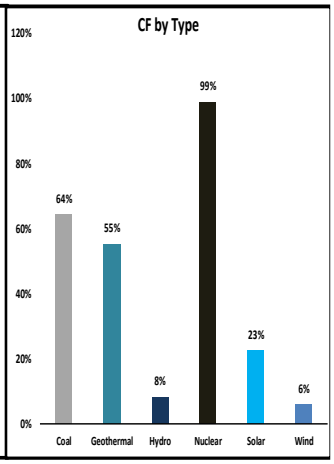
February 2025 Resource Availability – External Resources

Solar resources had capacity factors ranging from 15.53% to 26.31%. Wind resources had capacity factors ranging from 4.08% to 18.35%. Riverside's Palo-Verde nuclear share had steady production with a capacity factor of 98.90%. Hoover is an energy-limited resource and continues to be affected by lake-level restrictions. The resource maintained an 8.18% capacity factor for the month. Riverside's monthly IPP coal resource maintained a capacity factor of 64.20%. Riverside's geothermal resources had capacity factors ranging from 51.96% to 82.33%, 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

Feb-25	Resource Type	Max. Monthly Actual Energy MWH	MWH	Capacity Factors
IPP	Coal	92,064	59,107	64.20%
CALENERGY	Geothermal	57,792	30,031	51.96%
COSO	Geothermal	6,720	5,532	82.33%
HOOVER	Hydro	20,160	1,649	8.18%
PALO VERDE	Nuclear	8,736	8,640	98.90%
ANTELOPE BIG SKY RANCH	Solar	6,720	1,561	23.23%
ANTELOPE DSR1	Solar	16,800	3,694	21.99%
AP NORTH LAKE	Solar	13,440	2,956	22.00%
COLUMBIA II	Solar	7,486	1,763	23.55%
KINGBIRD B	Solar	9,408	2,241	23.82%
SUMMER SOLAR	Solar	6,720	1,768	26.31%
TEQUESQUITE	Solar	5,040	783	15.53%
CABAZON	Wind	26,208	1,070	4.08%
GARNET	Wind	4,032	740	18.35%





Resource Outages and Transmission Constraints

- RERC
  - NONE
- SPRINGS
  - NONE
- CLEARWATER
  - Conduct various electrical maintenance tasks
  - Gas turbine borescope and package inspection