

## **RIVERSIDE PUBLIC UTILITIES**

Board Memorandum

#### **BOARD OF PUBLIC UTILITIES**

DATE: MAY 12, 2025

#### **GENERAL MANAGER'S REPORT**

#### SUBJECT: MONTHLY POWER SUPPLY REPORT – MARCH 31, 2025

#### Monthly Power Usage:

The wholesale load (Vista Substation) for March was 156,138 MWh, an increase of 1,936 MWh compared to the same month in the previous year. Renewable generation served 37.61% or 58,730 MWh of wholesale load. Coal generation served 22.73% or 35,489 MWh of wholesale load. Nuclear energy served 5.85% or 9,131 MWh. Internal natural gas generation served 0.67% or 1,040 MWh of wholesale load. Hydro generation served 1.47% or 2,303 MWh of wholesale load. Finally, the balance for March was covered by Market Transactions, which served 31.67% or 49,445 MWh of the load.



\* 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 March 2025, average daily peak temperatures oscillated around 67 degrees. In March 2024, average daily peak temperatures oscillated around 62 degrees. The monthly peak temperature in March 2025 was 91 degrees, while the monthly peak temperature in March 2024 was 74 degrees.

Differences in the graphical representation of average temperatures may be due to differences in the day of the week.



Average load patterns were warmer in March 2025 compared to March 2024. In March 2025, the average daily peak load was 242 MW, with the monthly peak load reaching 310 MW. The average daily peak load in March 2024 was 236 MW, with the monthly peak load reaching 254 MW. While 2025 had higher peak temperatures, the duration of heat was relatively short. The hottest day was March 24, followed by a significant drop in temperature. This may have limited the impact on multiday load buildup, keeping average loads relatively close between 2025 and 2024.



Hourly demand peaked at 310 MW on 03/24/25 HE 18, an increase of 56 MW compared to a peak of 254 MW the same month last year. Riverside's resources covered 66% of the hourly peak demand on 03/24/25.

#### **10-Year Retail Load Trends**

The retail load for March 2025 was 149,966 MWh, a decrease of 877 MWh from the previous year's reading of 150,843 MWh. The System load for March 2025 was 156,138 MWh, an increase of 1,936 MWh from the prior year's reading of 154,202 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 March 2025, nuclear generation experienced an increase of 5.7% compared to February 2025, and a decrease of 4.3% compared to March 2024. Total hydroelectric generation experienced an increase of 40% compared to February 2025 and a decrease of 11.6% compared to March 2024. In March 2025, wind generation experienced an increase of 68.4% in production compared to February 2025 and about an increase of 25% compared to March 2024. In March 2025, solar generation experienced an increase of 33% in production compared to February 2025 and an increase of 8% in production compared to March 2024. In March 2025, the geothermal generation experienced a decrease of 1.3% in production compared to February 2025 and a 46% decrease in production compared to March 2024. In March 2025, renewable generation, as a percentage of retail load, increased by about 6 percentage points from February 2025 and decreased by about 19 percentage points compared to March 2024. Lastly, in March 2025, Emissions-Free generation, as a percentage of retail load, increased by about 7 percentage points from February 2025 and decreased by 19 percentage points compared to March 2024. The driving factors for the decreased percentages in March 2025, compared to March 2024, are attributed to significant decreases in geothermal with a slight increase 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 emmisions free resources are composed of renewables plus hydro and nuclear \*Riverside's renewable resources are composed of solar, wind and geothermal.

#### March 2025 Resource Availability - Internal Generation

- RERC's availability for the month was 99.95%. ٠
- Spring's availability for the month was 100.00%.
- Clearwater's availability for the month was 100.0%.



# March 2025 Resource Availability – External Resources

Solar resources had capacity factors ranging from 20.10% to 32.49%. Wind resources had capacity factors ranging from 5.84% to 30.35%. Riverside's Palo-Verde nuclear share had steady production with a capacity factor of 94.41%. Hoover is an energy-limited resource and continues to be affected by lake-level restrictions. The resource maintained an 10.32% capacity factor for the month. Riverside's monthly IPP coal resource maintained a capacity factor of 34.82%. Riverside's geothermal resources had capacity factors ranging from 46.74% to 82.22%, 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

### **Resource Outages and Transmission Constraints**

- RERC
  - o Unit 2 emergency inspection of electrical equipment