

# **RIVERSIDE PUBLIC UTILITIES**

Board Memorandum

# **BOARD OF PUBLIC UTILITIES**

DATE: MARCH 24, 2025

## **GENERAL MANAGER'S REPORT**

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

#### Monthly Power Usage:

The wholesale load (Vista Substation) for January was 162,794 MWh, a decrease of 1,465 MWh compared to the same month in the previous year. Renewable generation served 34.01% or 55,365 MWh of wholesale load. Coal generation served 50.02% or 81,431 MWh of wholesale load. Nuclear energy served 5.79% or 9,432 MWh. Internal natural gas generation served 0.34% or 559 MWh of wholesale load. Hydro generation served 0.89% or 1,456 MWh of wholesale load. Finally, the balance for January was covered by Market Transactions, which served 8.94% or 14,551 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 January 2025, average daily peak temperatures oscillated around 66 degrees. In January 2024, average daily peak temperatures oscillated around 64 degrees. The monthly peak temperature in January 2025 was 83 degrees, while the monthly peak temperature in January 2024 was 79 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 January 2025 compared to January 2024. In January 2025, the average daily peak load was 246 MW, with the monthly peak load reaching 266 MW. The average daily peak load in January 2024 was 250 MW, with the monthly peak load reaching 275 MW.



Hourly demand peaked at 266 MW on 01/27/25 HE 20, a decrease of 9 MW compared to a peak of 275 MW the same month last year. Riverside's resources covered 95% of the hourly peak demand on 01/27/25.

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

The retail load for January 2025 was 151,729 MWh, an increase of 1,501 MWh from the previous year's reading of 150,228 MWh. The System load for January 2025 was 162,794 MWh, a decrease of 1,465 MWh from the prior year's reading of 164,259 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 January 2025, nuclear generation was the same as nuclear production compared to December 2024, and a decrease of 0.8% compared to January 2024. Total hydroelectric generation experienced an increase of 20% compared to December 2024 and an increase of 27.3% compared to January 2024. In January 2025, wind generation experienced an increase of 72.2% in production compared to December 2024 and about an increase of 157% compared to January 2024. In January 2025, solar generation experienced an increase of 21% in production compared to December 2024 and an increase of 17% in production compared to January 2024. In January 2025, the geothermal generation experienced a decrease of 6.9% in production compared to December 2024 and a 15% decrease in production compared to January 2024. In January 2025, renewable generation, as a percentage of retail load, decreased by about 1.6 percentage points from December 2024 and decreased by about 3 percentage points compared to January 2024. Lastly, in January 2025, Emissions-Free generation, as a percentage of retail load, decreased by about 2 percentage points from December 2024 and decreased by 3 percentage points compared to January 2024. The driving factors for the decreased percentages in January 2025, compared to January 2024, are attributed to slight decreases in geothermal 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 emmisions free resources are composed of renewables plus hydro and nuclear \*Riverside's renewable resources are composed of solar, wind and geothermal.

## January 2025 Resource Availability - Internal Generation

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

Jan-25	Total Outage Hours	Total Monthly Hrs.	Actual Available Hrs.	Availability %	100%						
RERC1	0.00	744.00	744.00	100.00%	90% -						
RERC2	1.50	744.00	742.50	99.80%	80% -						
RERC3	0.00	744.00	744.00	100.00%	70% -						
RERC4	0.00	744.00	744.00	100.00%	cov						
RERC	1.50	2976.00	2974.50	99.95%	60% -				RERC		
					50% -	99.95%	100.00%	100.00%			
Jan-25	Total	<b>Total Monthly</b>	Actual Available	Availability	40% -						
	<b>Outage Hours</b>	Hrs.	Hrs.	%	30% -				■ CLEARWATER		
SPRINGS	0	2976	2976	100.00%							
					20% -						
Jan-25	Total Outage	Total Monthly	Actual Available	Availability	10% -						
	Hrs.	Hrs.	Hrs.	%	0%						
CLEARWATER	0	744	744	100.00%			Jan-25				

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#### January 2025 Resource Availability – External Resources

Solar resources had capacity factors ranging from 11.06% to 22.13%. Wind resources had capacity factors ranging from 3.84% to 15.22%. Riverside's Palo-Verde nuclear share had steady production with a capacity factor of 98.00%. Hoover is an energy-limited resource and continues to be affected by lake-level restrictions. The resource maintained a 7.00% capacity factor for the month. Riverside's monthly IPP coal resource maintained a capacity factor of 80.00%. Riverside's geothermal resources had capacity factors ranging from 53.38% to 78.75%, 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																
Jan-25	Resource Type	Max. Monthly MWH	ctual Energ	Capacity Factors	CF by Resource					120% CF by Type						
IPP	Coal	101,928	81,431	79.89%	IPP				79.89%							
CALENERGY	Geothermal	63,984	34,154	53.38%	CALENERGY			53.38%		100%				98%		
COSO	Geothermal	7,440	5,859	78.75%	COSO				78.75%							
HOOVER	Hydro	22,320	1,456	6.52%	HOOVER	6.52%				80%	80%					
PALO VERDE	Nuclear	9,672	9,432	97.52%	PALO VERDE											
ANTELOPE BIG SKY RANCH	Solar	7,440	1,503	20.20%	ANTELOPE BIG SKY RANCH		20.20%		97.52%	60%		56%				
ANTELOPE DSR1	Solar	18,600	3,422	18.40%	ANTELOPE DSR1		18.40%									
AP NORTH LAKE	Solar	14,880	2,470	16.60%	AP NORTH LAKE		16.60%									
COLUMBIA II	Solar	8,288	1,834	22.13%	COLUMBIA II		22.13%			40%						
KINGBIRD B	Solar	10,416	2,074	19.91%	KINGBIRD B		19.91%								19%	
SUMMER SOLAR	Solar	7,440	1,637	22.00%	SUMMER SOLAR		22.00%			20%						
TEQUESQUITE	Solar	5,580	617	11.06%	CABAZON	3.84%	T						7%			5%
CABAZON	Wind	29,016	1,115	3.84%	GARNET	15	5.22%			0%	_					
GARNET	Wind	4,464	680	15.22%	Grant						Coal	Geothermal	Hydro	Nuclear	Solar	Wind

## **Resource Outages and Transmission Constraints**

- RERC
  - Unit 2 monthly inspection
- SPRINGS
  - o NONE
- CLEARWATER
  NONE