

ERCOT Grid Operations

ESR Integration Report: 01/01/2024

Current Daily Values:

Installed ESR Discharge Capacity*	5,940 MW
Total ESR Discharge Capacity**	7,041 MW
Installed ESR Charge Capacity+	7,022 MW
Total ESR Charge Capacity++	7,022 MW
Peak Load	49,453 MW
Peak Load Hour (HE)	21
ESR Discharge at Peak Load Hour	180 MW
ESR Charge at Peak Load Hour	196 MW
ESR Net Charge/Discharge at Peak Load Hour^	-16 MW
Max ESR Discharge Generation	986 MW
Max ESR Discharge Time	08:06
Penetration at Max ESR Discharge Time	2.15%

Max ESR Charge Load	523 MW
Max ESR Charge Time	15:23
Penetration at Max ESR Charge Time	1.18%

Max ESR Discharge Penetration	2.15%
Max ESR Discharge Penetration Time	08:06
ESR Discharge Generation at Max ESR Discharge Penetration Time	986 MW

Max ESR Charge Penetration	1.19%
Max ESR Charge Penetration Time	15:23
ESR Charge Load at Max ESR Charge Penetration Time	523 MW

^{*} Sum of maximum capacity (i.e. seasonal max. reasonability limit in RIOO) of all ESR generators modeled in ERCOT's network operations model and are commercially operable (estimated based on commercial operations date in RIOO).

Note that generation, generation record, and generator capacity values in following pages of this report are based on units modeled in ERCOT's network operations model.

^{**} Sum of maximum capacity (i.e. seasonal max. reasonability limit in RIOO) of all ESR generators modeled in ERCOT's network operations model.

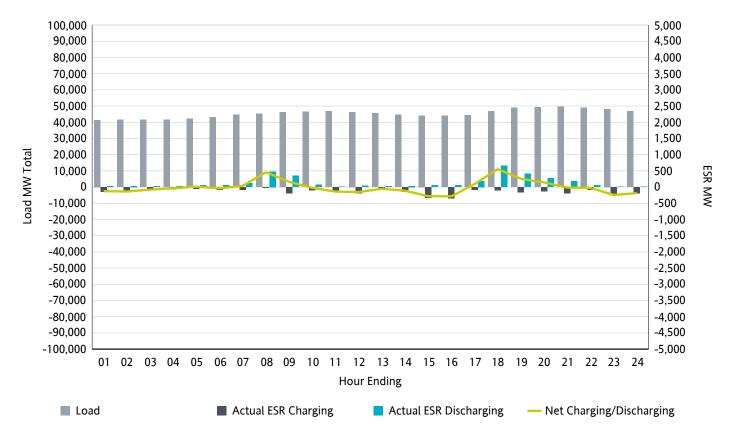
⁺ Sum of maximum capacity (i.e. max. power consumption in RIOO) of all ESR CLRs that are modeled in ERCOT's network operations model and are commercially operable (estimated based on commercial operations date in RIOO).

⁺⁺ Sum of maximum capacity (i.e. max. power consumption in RIOO) of all ESR CLRs that are modeled in ERCOT's network operations model.

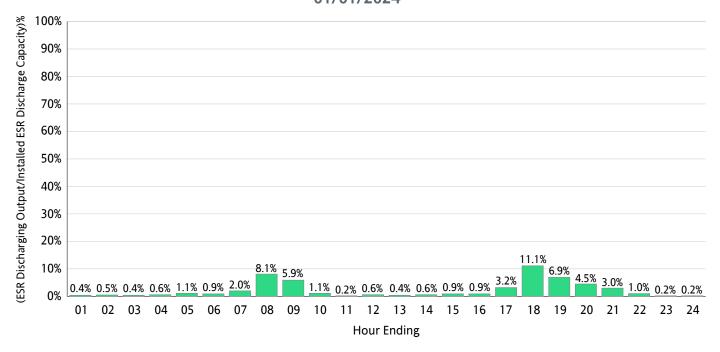
[^] ESR Net Charge/Discharge = Total Discharging from ESR generators - Total Charging from ESR CLRs. Positive represents Net Discharge; negative represents Net Charge.

Hourly Average Actual Load vs. Actual ESR Output

01/01/2024

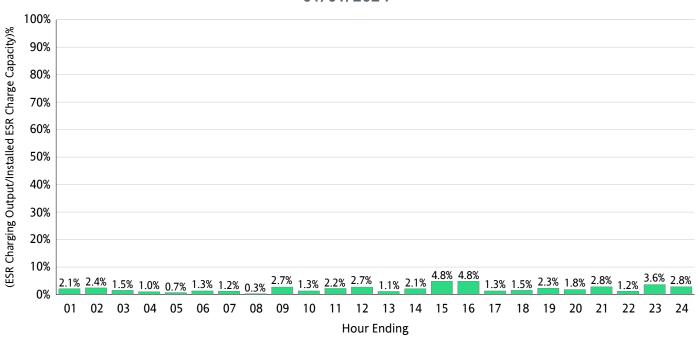


Actual ESR Discharging Output as a Percentage of Total Installed ESR Discharge Capacity 01/01/2024



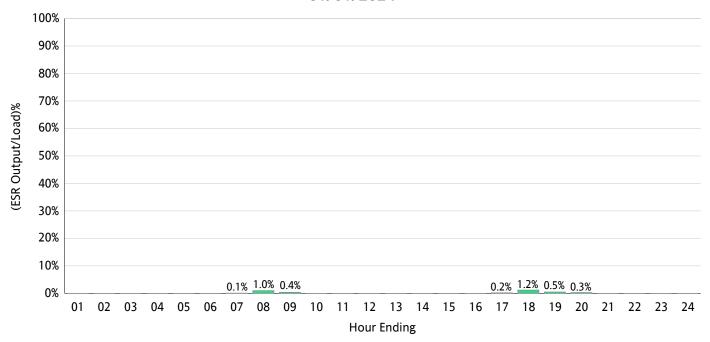
Actual ESR Discharging Output

Actual ESR Charging Output as a Percentage of Total Installed ESR Charge Capacity 01/01/2024



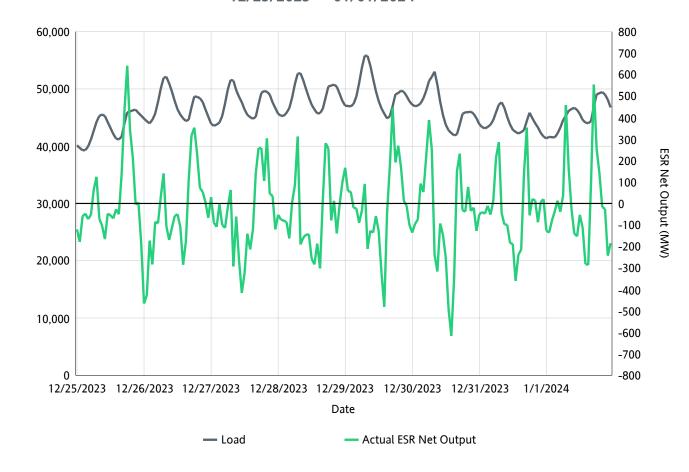
Actual ESR Charging Output

Actual ESR Net Output as a Percentage of ERCOT Load 01/01/2024



Actual ESR Net Output

ERCOT Load vs. Actual ESR Net Output 12/25/2023 - 01/01/2024



ERCOT Load (MW)