

#### **ERCOT Grid Operations**

ESR Integration Report: 12/21/2023

#### **Current Daily Values:**

Installed ESR Discharge Capacity*	5,417 MW
Total ESR Discharge Capacity**	7,041 MW
Installed ESR Charge Capacity+	7,022 MW
Total ESR Charge Capacity++	7,022 MW

Peak Load	47,849 MW
Peak Load Hour (HE)	19
ESR Discharge at Peak Load Hour	145 MW
ESR Charge at Peak Load Hour	168 MW
ESR Net Charge/Discharge at Peak Load Hour^	-23 MW

Max ESR Discharge Generation	689 MW
Max ESR Discharge Time	17:18
Penetration at Max ESR Discharge Time	1.48%

Max ESR Charge Load	455 MW
Max ESR Charge Time	09:05
Penetration at Max ESR Charge Time	1.00%

Max ESR Discharge Penetration	1.48%
Max ESR Discharge Penetration Time	17:18
ESR Discharge Generation at Max ESR Discharge Penetration Time	689 MW

Max ESR Charge Penetration	1.00%
Max ESR Charge Penetration Time	09:05
ESR Charge Load at Max ESR Charge Penetration Time	455 MW

<sup>\*</sup> 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.

<sup>\*\*</sup> Sum of maximum capacity (i.e. seasonal max. reasonability limit in RIOO) of all ESR generators modeled in ERCOT's network operations model.

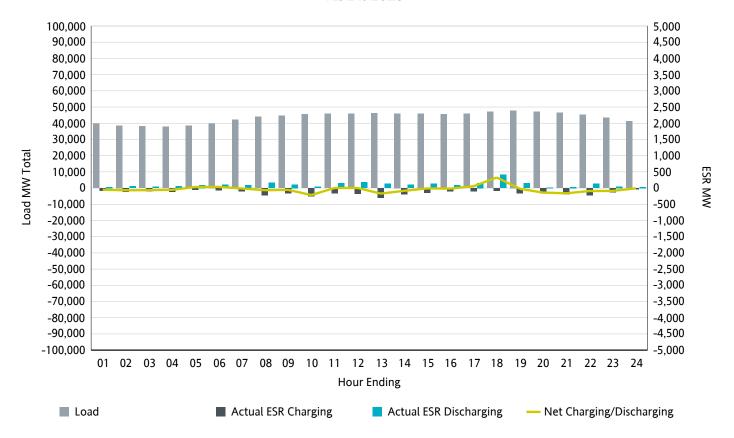
<sup>+</sup> Sum of maximum capacity (i.e. max. power consumption in RIOO) of all ESR CLRs that are modeled in ERCOT's network operations model and are commercially operable (estimated based on commercial operations date in RIOO).

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

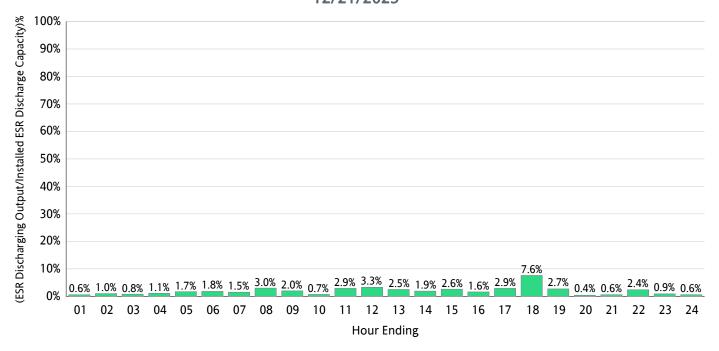
<sup>^</sup> ESR Net Charge/Discharge = Total Discharging from ESR generators - Total Charging from ESR CLRs. Positive represents Net Discharge; negative represents Net Charge.

#### Hourly Average Actual Load vs. Actual ESR Output

#### 12/21/2023

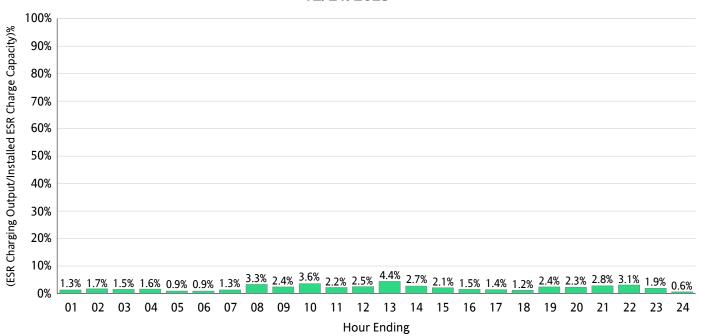


## Actual ESR Discharging Output as a Percentage of Total Installed ESR Discharge Capacity 12/21/2023



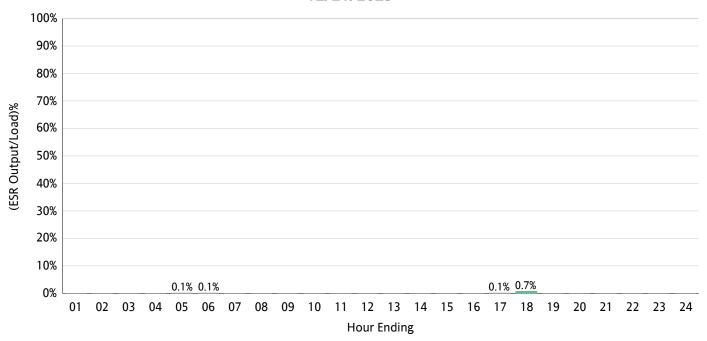
Actual ESR Discharging Output

## Actual ESR Charging Output as a Percentage of Total Installed ESR Charge Capacity 12/21/2023



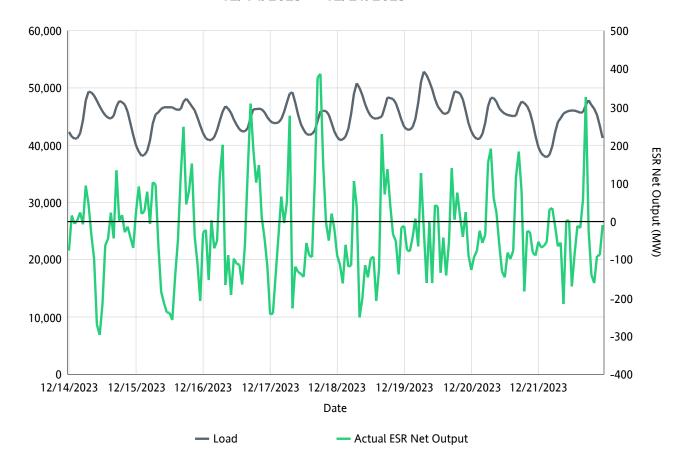
Actual ESR Charging Output

# Actual ESR Net Output as a Percentage of ERCOT Load 12/21/2023



Actual ESR Net Output

# ERCOT Load vs. Actual ESR Net Output 12/14/2023 - 12/21/2023



ERCOT Load (MW)