



PUBLIC

ERCOT update on flat COP HBSOC submission

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- **Purpose**

Provide an update on flat COP HBSOC submission issue to stakeholders.

Key Takeaway(s)

- Inputs to the Reliability Unit Commitment (RUC) engine have been leading to higher-than-necessary RUC commitments.
- ESR COP HBSOC data have been much improved since education and outreach began.
- Where behavior persists, ERCOT has not ruled out further steps.
- ERCOT will continue to monitor RUC activity and propose changes where necessary.

Inputs to the Reliability Unit Commitment (RUC) engine have been leading to higher-than-necessary RUC commitments

1

QSEs submit HBSOC

Hour-Beginning State-of-Charge is submitted via the Current Operating Plan (COP), signaling planned charge/discharge.

→

2

A “flat” value signals no movement

RUC interprets an unchanging HBSOC as energy and Ancillary Services being inaccessible for dispatch.

→

3

RUC commits extra capacity

To cover energy and AS that RUC believes the ESR fleet cannot provide in future hours.

~40%

of the ESR fleet submitted flat HBSOC across the entire day, removing that energy from RUC's future-hour resource pool

But in Real-Time...

RUC ASSUMED

Energy and AS were inaccessible → RUC committed additional capacity

ACTUAL OUTCOME

ESRs discharged and were dispatched; committed units sat online at minimum output



Rerunning RUC Study – August 9th, 2026



- Two scenarios were studied for August 9th 14:00 RUC timestamp
 - Actual SOC:** For all ESR units, replace COP HBSOC with telemetry SOC.
 - Zero DF:** Set all deployment factors to zero for all hours for all AS types

COP HBSOC quality significantly affects RUC recommendation amounts; zeroing out all deployment factors has minimal impact.

Note: August 9th was chosen as the study day due to high accepted RUC recommended MW amount. The ratio of flat vs non-flat submission was 24% vs 76% (9,300 MWh vs 30,000 MWh).



ERCOT has taken steps to address “flat” COP HBSOC behavior through education and outreach



May 28, 2026

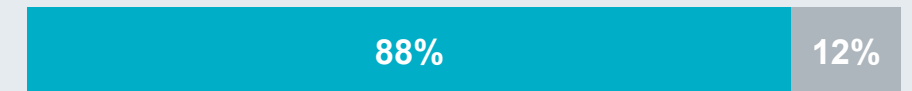


■ Profiled ■ Flat

20,000 MWh profiled • 15,000 MWh flat

→
**Significant
reduction
in flat HBSOC
proportion**

September 15, 2026



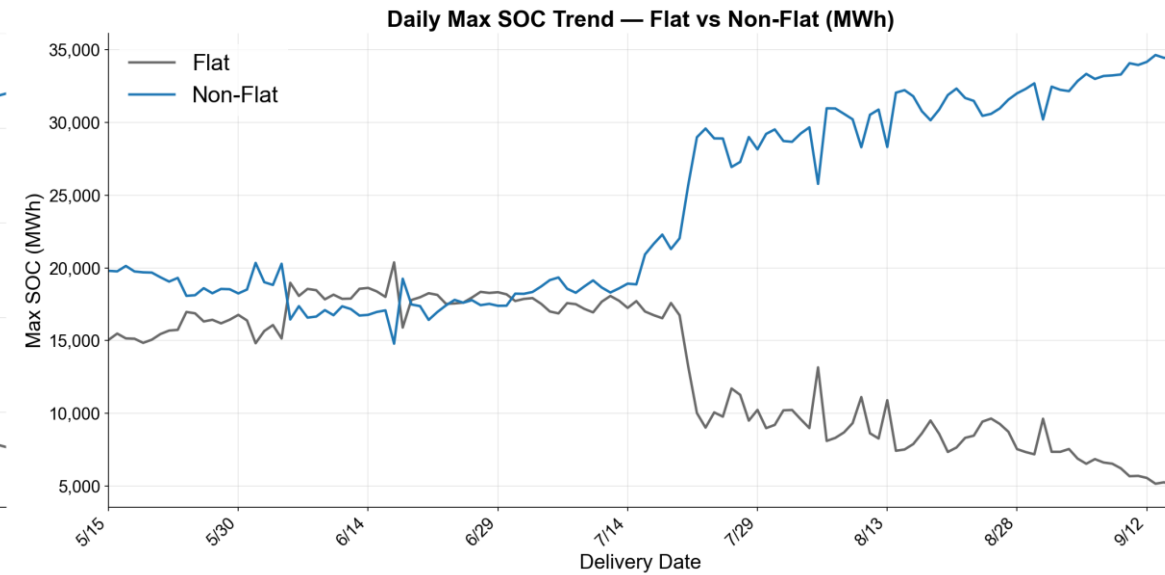
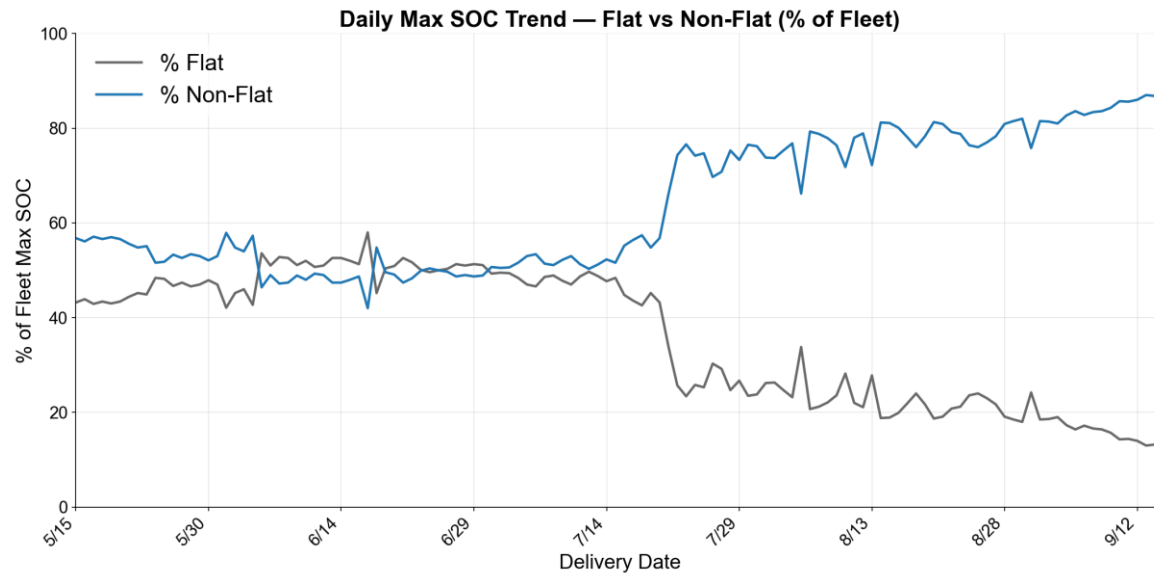
■ Profiled ■ Flat

35,000 MWh profiled • 4,700 MWh flat

Note: A flat COP HBSOC is defined as the same value (or variation within 0.25% of the resource's max SOC) held for at least 24 consecutive hours, across ESRs with 'ON', 'ONTEST', or 'OUT' status in COP. Data reflects each QSE's latest COP snapshot submitted to ERCOT.



Flat COP HBSOC submissions have reduced dramatically



- COP data containing flat HBSOC has shown improvement since mid-July, coinciding with ERCOT's outreach to Market Participants submitting flat HBSOC values.
- The remaining ~5,000 MWh SOC with flat COP HBSOC came mainly from large ESRs with **ONTEST** or **OUT** status in real-time.



Update on Business Practice Manual

- ERCOT updated the Business Practice Manual on “Current Operating Plan Practices By QSE” to clarify the expectations for ESR COP HBSOC.
- The updated document can be found on ERCOT’s [Business Practice Manual](#) webpage.

QSEs shall ensure that HBSOC submissions accurately reflect the Resource's expected real-time operating condition for each hour of the Operating Day, consistent with Protocol Section 3.9.1.

An accurate HBSOC submission is a critical input in the RUC optimization. Systemically inaccurate or ‘flat’ (i.e., unchanging) HBSOC submissions that do not reflect actual expected conditions create a disconnect between the RUC study period and real-time SCED. Where a flat HBSOC value is submitted, the RUC engine will be unable to utilize the ESR's capacity for energy or AS products in the corresponding operating hour, unless the net SOC impact of those awards, calculated using the applicable deployment factors, sums to zero relative to the submitted flat trajectory. This may cause ERCOT's RUC to recommend additional Resource commitments. This may also cause additional RUC capacity short charges billed to QSEs if those RUC recommendations are acted upon by ERCOT.

Accurate HBSOC submissions are required even when the Resource is in ONTEST status: the QSE shall make best efforts to submit COP HBSOC values that reflect the Resource's expected operating condition while testing.

[Home](#) > [Market Rules](#) > Business Practice Manual

Business Practice Manual

ERCOT business practices provide supplemental information to explain or communicate the functionality of the ERCOT Systems and Processes. These business practices support the ERCOT ISO's market and operations responsibilities as directed by the Nodal Protocols.

[Current Operating Plan Practices By QSE](#)

Describes ERCOT's expectations regarding Current Operating Plan entries by QSEs.

Sep 18, 2026 - docx - 90.4 KB



Next Steps

- ERCOT will continue monitoring COP HBSOC submission and their impact on RUC commitments and may reach out to market participants if necessary.
- While the proportion of flat HBSOC submissions has improved following education and outreach, ERCOT has not ruled out further actions if ongoing behavior persists.
- Separately, ERCOT will continue monitoring RUC activity more broadly to identify underlying drivers and pursue improvements where they are warranted.



Questions?

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