August heatwave update

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Heatwave drove temperatures over 100°F and resulted in high loads.
Load forecasts along temperature forecasts were evolving over time.
Divergence between external and CAISO prices were observed in the Southern part of the system.

Palo Verde tracking SCE prices by not being congested.
Malin price separated from Northern California due to congestion on Malin intertie, while it tracked closer to bilateral Mid-C price.
Solar production observed variability during the heatwave
Wind production observed variability during the heatwave
Day-ahead Net Schedule Interchange reached minimum levels during peak hours driven by an increase of exports.
EIM transfers generally provided additional supply during peak hours and added to the real-time total interchange.
Volume of exports is composed by self schedules and economical bids
Supply cleared above RA is generally in excess of the volume of cleared exports
Overall, interties performed well, with additional energy coming in real-time through manual dispatches and emergency ties.
Capacity above shown RA was used to meet load conditions at the gross and net peaks - Day-ahead
Cleared supply in real-time relied on RA capacity and above RA.
A variety of conditions resulted in certain RA capacity to not be available.
Import capacity got stranded behind Malin intertie due to derated capacity
NOB intertie was fully utilized during peak hours and had stranded capacity that could not flow
A large share of export was flowing through Paloverde and it became a net export during peak hours.
Level of under-scheduling varies by area; the majority of day-ahead demand is self scheduled.
Convergence bids were largely net demand positions on August 14 during peak hours.
The day-ahead RUC process observed power balance infeasibilities for peak hours against the day-ahead forecast.

RUC utilized an upper-level confidence band for load forecast.
Day-ahead exports trended higher during tight supply days*

*This includes wheels
Export tend to be mostly self schedules as they come from the day-ahead process (This includes wheels)

These changes will result in exports with low priority to be curtailed in RUC and HASP under limited supply conditions. Export or import curtailments can happen in RUC and HASP also due to congestion.
With this change, any day-ahead exports self scheduled into real-time will have a day-ahead priority only up to the RUC schedule

- Prior to this change the self schedule had a day ahead priority up to the IFM schedule.
- When RUC assesses the need to curtail exports, RUC schedules will be lower than IFM schedules
- Coming into the real-time market:
  - Self schedule up to RUC schedule will have day-ahead priority
  - Any self schedule above RUC level will not have a day-ahead priority.
    - If supported by non-RA, it will have high priority
    - If not supported by non-RA, it will have lowest priority
- The market utilizes the defined priorities and will start making uneconomical adjustment from lowest to highest priority
The flex test failures experienced in CAISO area during peak hours were immaterial to the tight supply conditions.

Transfers into the CAISO area were naturally trending below the upper caps set by the failures.
DR resources were dispatched during peak hours. Their performance is pending to be assessed.