Wind and Solar Curtailment September 01, 2022

This report is produced daily to provide a detailed accounting of the wind and solar renewable generation that was curtailed and the reasons why[1]. This report should be read in the context of the Renewables Watch report for a more complete understanding of both renewable curtailment and generation[2].

Wind and solar curtailments are grouped into the following categories:

1. Economic - Local: Market dispatch of generators with economic bids to mitigate local congestion[3].
2. Economic - System: Market dispatch of generators with economic bids to mitigate system-wide oversupply.
3. SelfSchCut - Local: Market dispatch of self-schedules to mitigate local congestion.
4. SelfSchCut - System: Market dispatch of self-schedules to mitigate system-wide oversupply.
5. ExDispatch - Local: Exceptional dispatch to mitigate local congestion.
6. ExDispatch - System: Exceptional dispatch to mitigate system-wide oversupply.

Note: Amounts smaller than 1 MW are filtered out for simplicity. Such small curtailments are occasionally observed when forecasts are lower than Pmin when market will de-commit the unit and send the 0 MW dispatch.

[1]Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

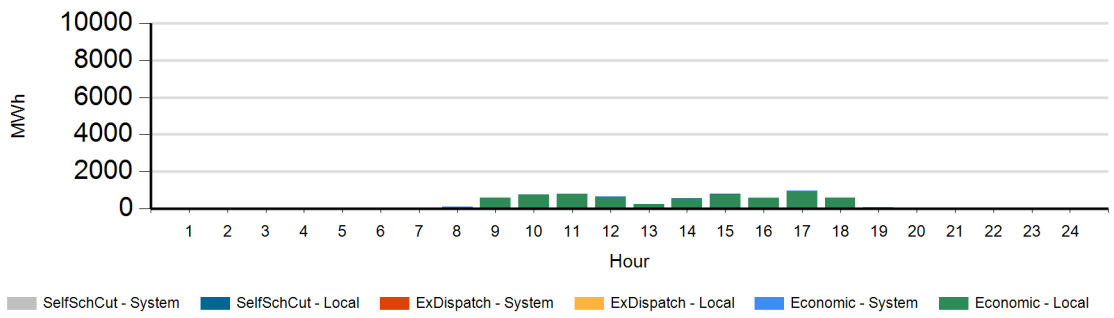
[2]The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: http://www.caiso.com/green/renewableswatch.html.

[3]Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

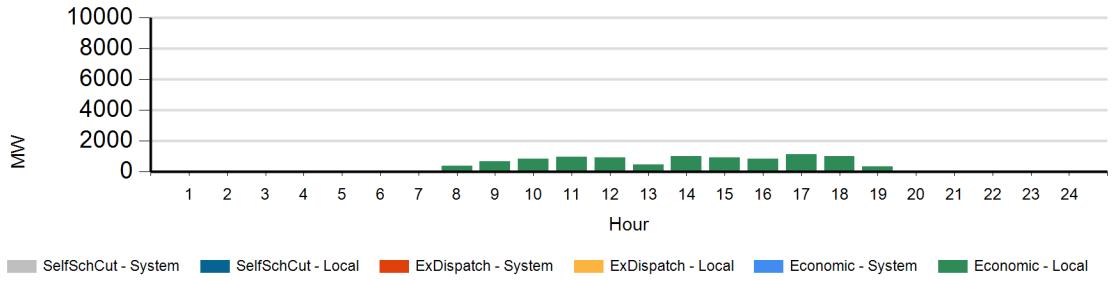
For more information on oversupply conditions, please see:
https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf

The following charts show the daily and 7-day wind and solar curtailment by category, if any.

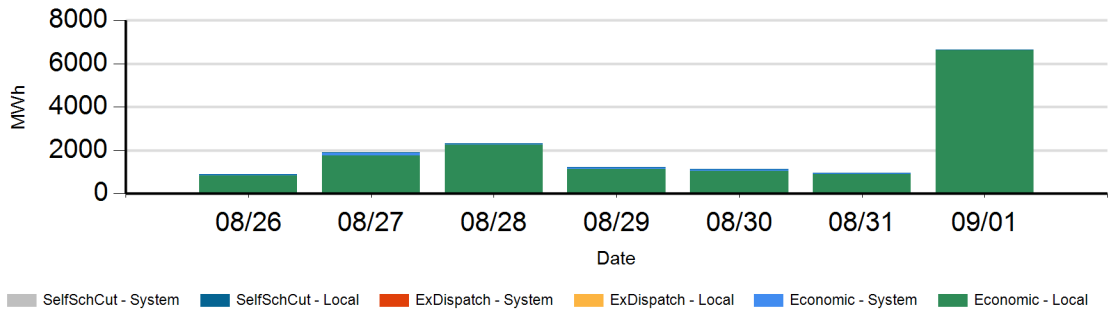
1. Hourly wind/solar generation curtailment energy in MWh. - 9/1/2022



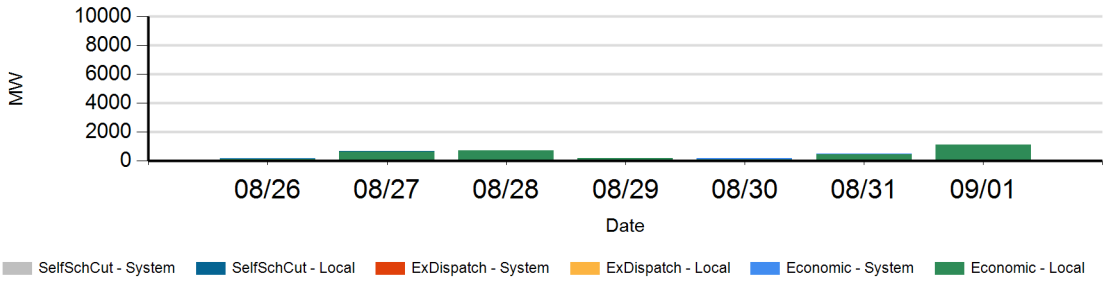
2. Maximum wind/solar generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular hour. - 9/1/2022



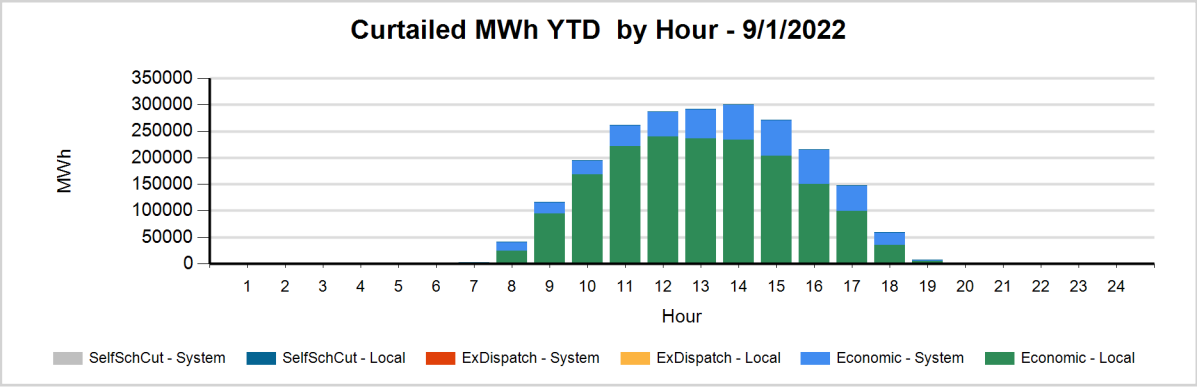
3. Daily wind/solar curtailment energy in MWh on a 7-day basis. - 9/1/2022



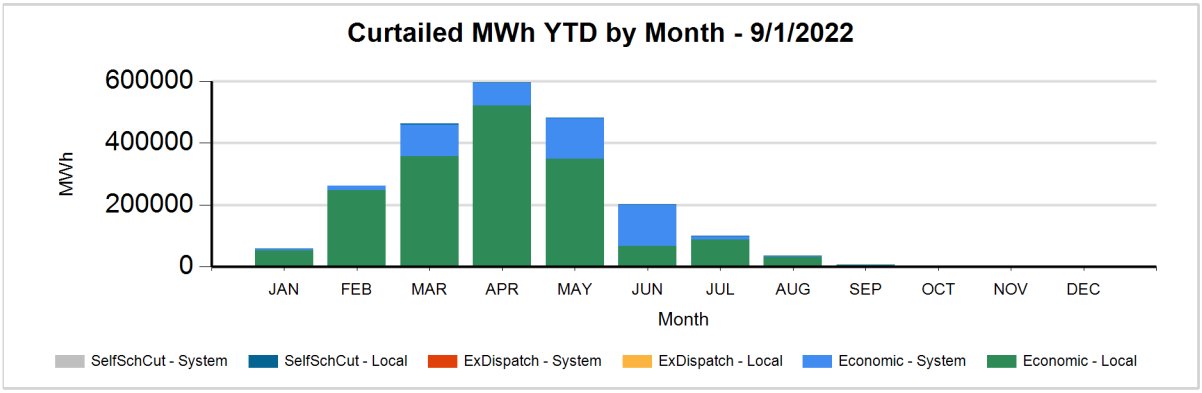
4. Maximum generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular day on a 7-day basis. - 9/1/2022



The following charts show hourly year to date wind and solar curtailment by category, if any.



The following charts show monthly year to date wind and solar curtailment by category, if any.



TYPE	YTD CURTAILED MWH - 9/1/2022
LocalEconomic	1,714,935
LocalSelfSchCut	5,695
SystemEconomic	481,659
TOTAL	2,202,290

Data used to produce hourly chart

California ISO

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
09/01	1	Economic	Local	WIND	7	25
09/01	8	Economic	Local	SOLR	82	380
09/01	8	Economic	Local	WIND	1	2
09/01	8	Economic	System	SOLR	1	
09/01	9	Economic	Local	SOLR	575	671
09/01	9	Economic	Local	WIND	5	7
09/01	9	Economic	System	SOLR	0	
09/01	10	Economic	Local	SOLR	745	767
09/01	10	Economic	Local	WIND	25	64
09/01	11	Economic	Local	SOLR	758	934
09/01	11	Economic	Local	WIND	33	28
09/01	12	Economic	Local	SOLR	603	880
09/01	12	Economic	Local	WIND	38	38
09/01	12	Economic	System	SOLR	9	
09/01	13	Economic	Local	SOLR	214	417
09/01	13	Economic	Local	WIND	20	46
09/01	14	Economic	Local	SOLR	467	920
09/01	14	Economic	Local	WIND	65	90
09/01	14	SelfSchCut	Local	SOLR	1	
09/01	15	Economic	Local	SOLR	657	769
09/01	15	Economic	Local	WIND	122	142
09/01	15	SelfSchCut	Local	SOLR	5	
09/01	16	Economic	Local	SOLR	462	806
09/01	16	Economic	Local	WIND	101	8
09/01	16	Economic	System	SOLR	11	
09/01	16	Economic	System	WIND	2	
09/01	17	Economic	Local	SOLR	871	978
09/01	17	Economic	Local	WIND	99	125
09/01	17	Economic	System	SOLR	6	
09/01	18	Economic	Local	SOLR	533	896
09/01	18	Economic	Local	WIND	67	90
09/01	19	Economic	Local	SOLR	44	261
09/01	19	Economic	Local	WIND	16	59

The information contained in this report is preliminary and subject to change without notice. No inference, decision or conclusion should be made based on the information in this report or any series of these reports. All values are hourly average unless otherwise stated. Questions about this report should be directed to Short-Term Forecasting at ShortTermForecasting@caiso.com.