

## Wind and Solar Curtailment July 15, 2024

This report is produced daily to provide a detailed accounting of the wind and solar renewable generation that was curtailed and the reasons why¹. This report should be read in the context of the Renewables Watch report for a more complete understanding of both renewable curtailment and generation².

Wind and solar curtailments are grouped into the following categories:

- 1. Economic Local: Market dispatch of generators with economic bids to mitigate local congestion<sup>3</sup>.
- 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.

<sup>1</sup>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.

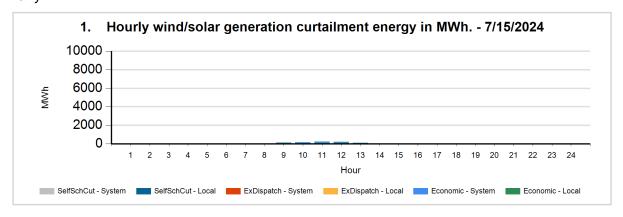
<sup>2</sup>The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <a href="http://www.caiso.com/green/renewableswatch.html">http://www.caiso.com/green/renewableswatch.html</a>.

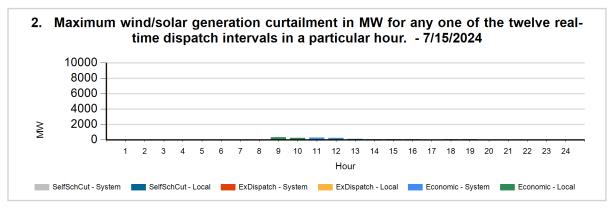
<sup>3</sup>Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

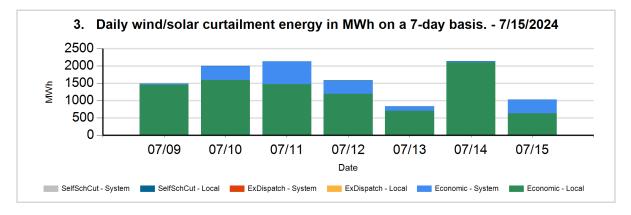
For more information on oversupply conditions, please see: <a href="https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables">https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables</a> FastFacts.pdf

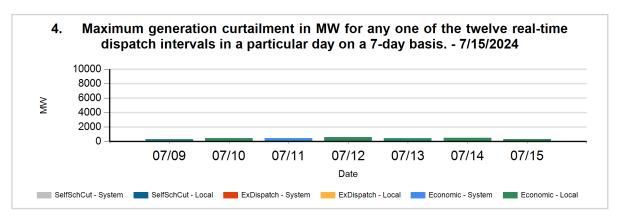


The following charts show the daily and 7-day wind and solar curtailment by category, if any.



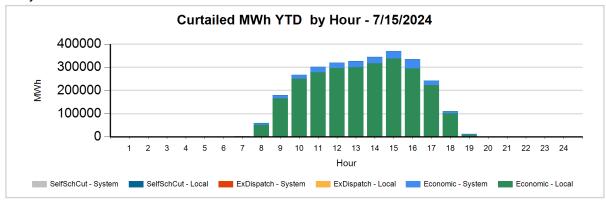




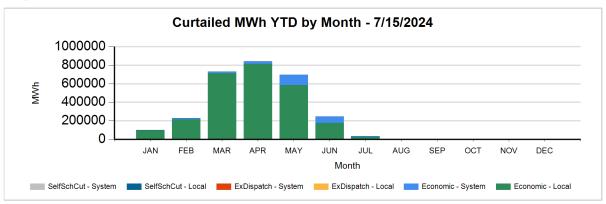




The following charts show hourly year to date wind and solar curtailment by category, if any.



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



TYPE	YTD CURTAILED MWH - 7/15/2024
LocalEconomic	2,626,966
LocalSelfSchCut	1,694
SystemEconomic	247,645
TOTAL	2,876,305



Data used to produce hourly chart



DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
07/15	7	Economic	Local	SOLR	1	11
07/15	8	Economic	Local	SOLR	1	
07/15	8	Economic	System	SOLR	1	9
07/15	9	Economic	Local	SOLR	98	306
07/15	9	Economic	Local	WIND	0	2
07/15	9	Economic	System	SOLR	40	
07/15	10	Economic	Local	SOLR	71	247
07/15	10	Economic	System	SOLR	86	
07/15	11	Economic	Local	SOLR	105	73
07/15	11	Economic	System	SOLR	119	197
07/15	12	Economic	Local	SOLR	98	130
07/15	12	Economic	System	SOLR	118	136
07/15	12	SelfSchCut	Local	SOLR	1	
07/15	13	Economic	Local	SOLR	82	76
07/15	13	Economic	System	SOLR	5	41
07/15	13	SelfSchCut	Local	SOLR	2	
07/15	14	Economic	Local	SOLR	41	53
07/15	14	Economic	System	SOLR	1	13
07/15	15	Economic	Local	SOLR	46	64
07/15	15	Economic	System	SOLR	0	
07/15	15	SelfSchCut	Local	SOLR	1	
07/15	16	Economic	Local	SOLR	30	39
07/15	16	Economic	System	SOLR	8	48
07/15	17	Economic	Local	SOLR	18	43
07/15	17	Economic	System	SOLR	0	
07/15	18	Economic	Local	SOLR	4	1
07/15	18	Economic	System	SOLR	5	63
07/15	19	Economic	Local	SOLR	26	83
07/15	19	Economic	System	SOLR	2	
07/15	20	Economic	Local	SOLR	7	30
07/15	23	Economic	Local	WIND	1	10
07/15	23	Economic	System	WIND	2	23



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.