

## Wind and Solar Curtailment July 27, 2024

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

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<sup>4</sup>.
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.

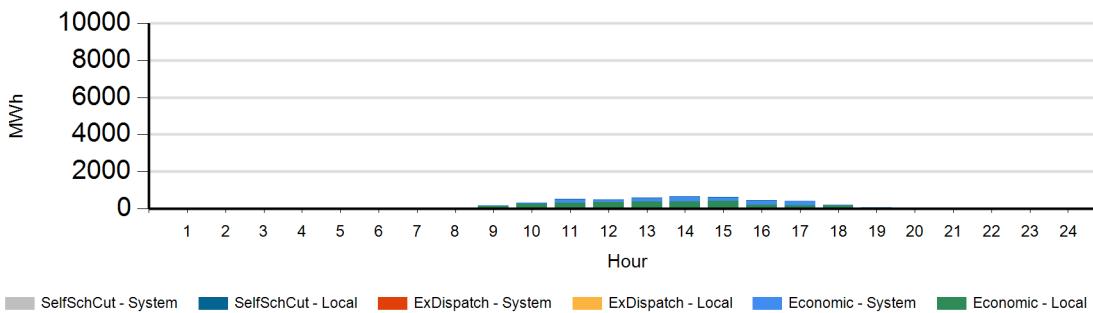
<sup>2</sup>The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <http://www.caiso.com/green/renewableswatch.html>.

<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.

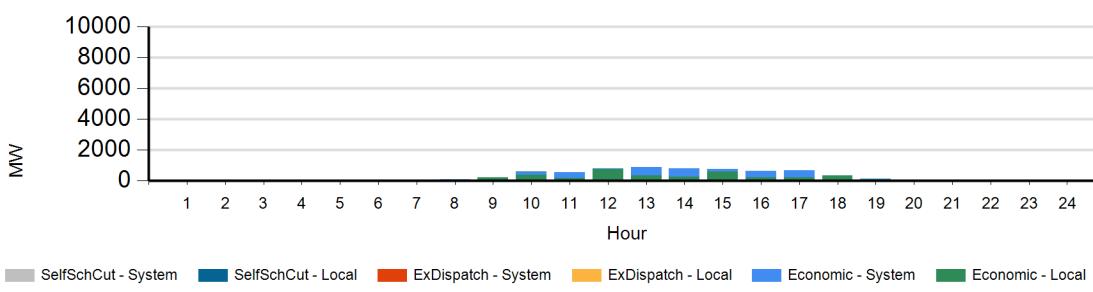
<sup>4</sup>For more information on oversupply conditions, please see:  
[https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables\\_FastFacts.pdf](https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf)

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

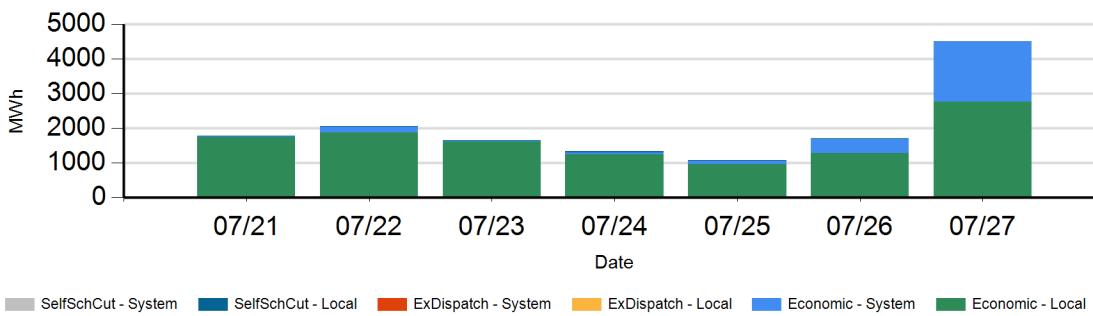
#### 1. Hourly wind/solar generation curtailment energy in MWh. - 7/27/2024



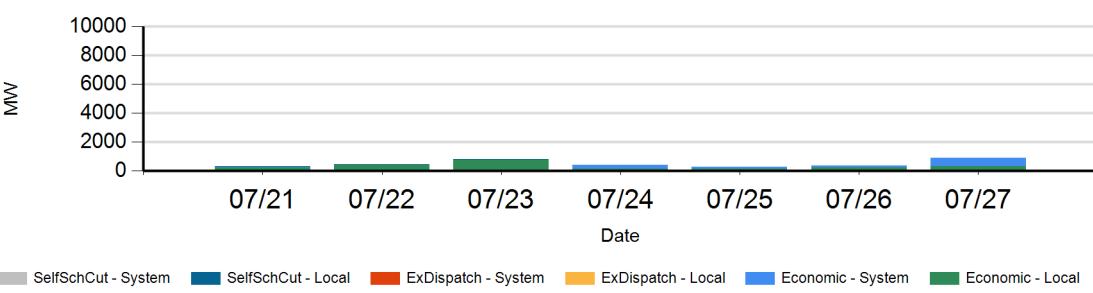
#### 2. Maximum wind/solar generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular hour. - 7/27/2024



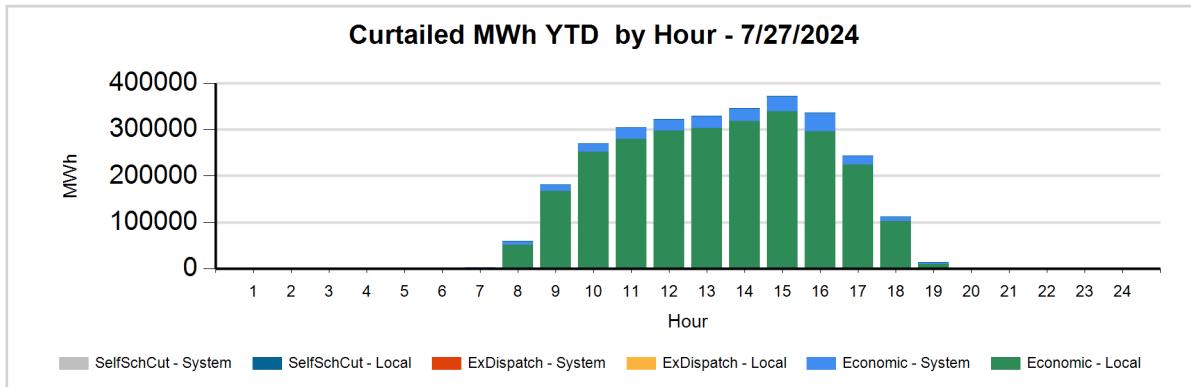
#### 3. Daily wind/solar generation curtailment energy in MWh on a 7-day basis. - 7/27/2024



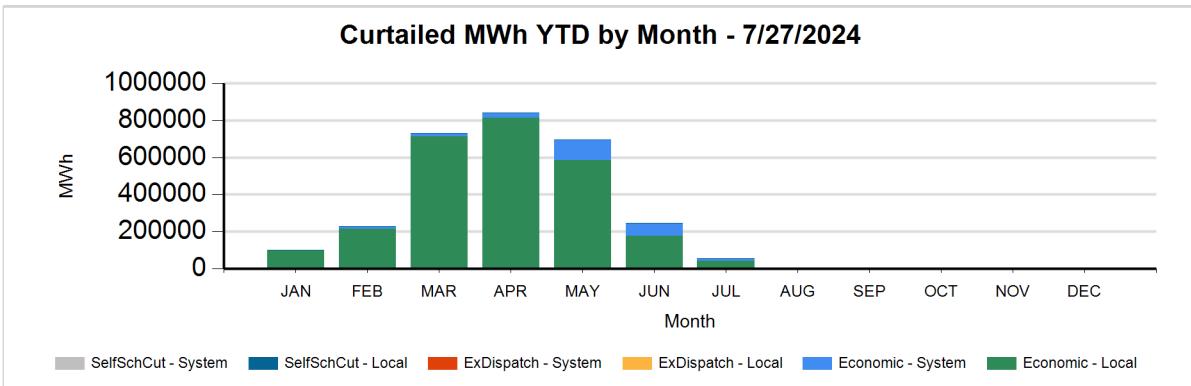
#### 4. Maximum generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular day on a 7-day basis. - 7/27/2024



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 - 7/27/2024
LocalEconomic	2,644,528
LocalSelfSchCut	1,775
SystemEconomic	251,540
<b>TOTAL</b>	<b>2,897,842</b>

## Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
07/27	7	Economic	Local	SOLR	0	
07/27	7	Economic	System	SOLR	1	14
07/27	8	Economic	Local	SOLR	14	67
07/27	8	Economic	System	SOLR	8	20
07/27	9	Economic	Local	SOLR	112	187
07/27	9	Economic	Local	WIND	10	37
07/27	9	Economic	System	SOLR	15	
07/27	9	Economic	System	WIND	25	
07/27	10	Economic	Local	SOLR	217	354
07/27	10	Economic	Local	WIND	7	
07/27	10	Economic	System	SOLR	31	145
07/27	10	Economic	System	WIND	40	68
07/27	10	SelfSchCut	Local	SOLR	1	7
07/27	11	Economic	Local	SOLR	284	149
07/27	11	Economic	Local	WIND	39	
07/27	11	Economic	System	SOLR	147	297
07/27	11	Economic	System	WIND	42	92
07/27	11	SelfSchCut	Local	SOLR	1	
07/27	12	Economic	Local	SOLR	290	653
07/27	12	Economic	Local	WIND	47	121
07/27	12	Economic	System	SOLR	101	27
07/27	12	Economic	System	WIND	47	
07/27	12	SelfSchCut	Local	SOLR	2	
07/27	13	Economic	Local	SOLR	323	294
07/27	13	Economic	Local	WIND	39	23
07/27	13	Economic	System	SOLR	127	424
07/27	13	Economic	System	WIND	83	144
07/27	13	SelfSchCut	Local	SOLR	1	
07/27	14	Economic	Local	SOLR	366	248
07/27	14	Economic	Local	WIND	11	
07/27	14	Economic	System	SOLR	149	386

07/27	14	Economic	System	WIND	122	139
07/27	14	SelfSchCut	Local	SOLR	1	
07/27	15	Economic	Local	SOLR	407	588
07/27	15	Economic	System	SOLR	95	24
07/27	15	Economic	System	WIND	115	138
07/27	15	SelfSchCut	Local	SOLR	2	
07/27	16	Economic	Local	SOLR	182	201
07/27	16	Economic	Local	WIND	26	
07/27	16	Economic	System	SOLR	119	276
07/27	16	Economic	System	WIND	132	165
07/27	16	SelfSchCut	Local	SOLR	2	
07/27	17	Economic	Local	SOLR	153	187
07/27	17	Economic	Local	WIND	4	
07/27	17	Economic	System	SOLR	115	285
07/27	17	Economic	System	WIND	144	178
07/27	18	Economic	Local	SOLR	120	233
07/27	18	Economic	Local	WIND	38	101
07/27	18	Economic	System	SOLR	22	
07/27	18	Economic	System	WIND	38	
07/27	19	Economic	Local	SOLR	34	83
07/27	19	Economic	Local	WIND	28	41
07/27	19	Economic	System	SOLR	4	2
07/27	20	Economic	Local	SOLR	1	
07/27	20	Economic	Local	WIND	5	
07/27	20	Economic	System	SOLR	3	33
07/27	21	Economic	Local	WIND	10	15

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](mailto:ShortTermForecasting@caiso.com).

