

Wind and Solar Curtailment July 11, 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 congestion³.
- 2. Economic System: Market dispatch of generators with economic bids to mitigate systemwide 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.

¹Only 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.

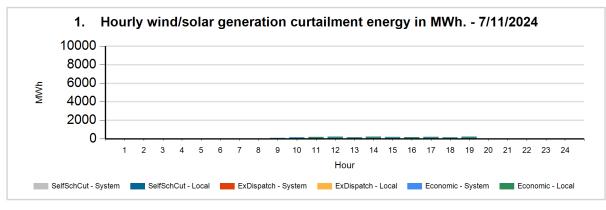
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <u>http://www.caiso.com/green/renewableswatch.html</u>.

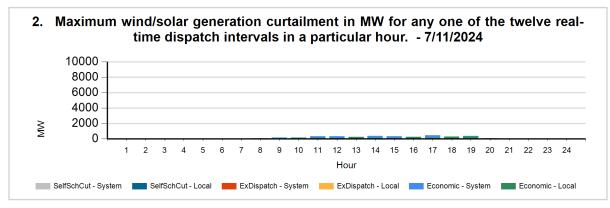
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

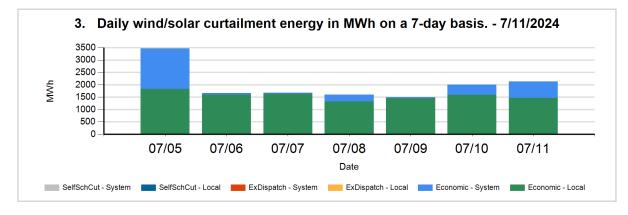
For more information on oversupply conditions, please see: <u>https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf</u>

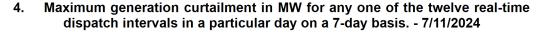


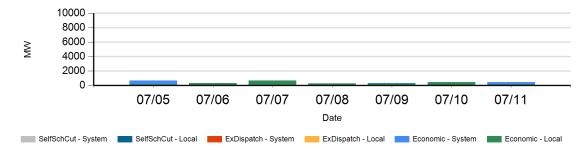
The following charts show the daily and 7-day wind and solar curtailment by category, if any.





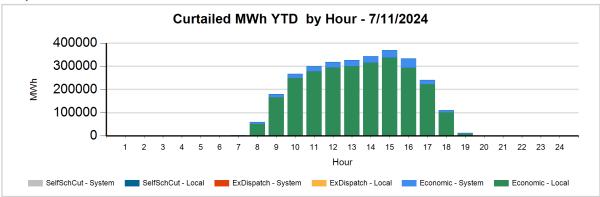




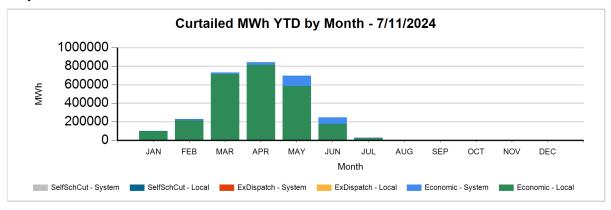




The following charts show hourly year to date wind and solar curtailment by category, if any.



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



TYPE	YTD CURTAILED MWH - 7/11/2024
LocalEconomic	2,622,336
LocalSelfSchCut	1,653
SystemEconomic	246,734
TOTAL	2,870,722



Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
07/11	7	Economic	Local	SOLR	0	
07/11	7	Economic	System	SOLR	0	2
07/11	8	Economic	Local	SOLR	4	9
07/11	8	Economic	System	SOLR	7	63
07/11	9	Economic	Local	SOLR	77	61
07/11	9	Economic	System	SOLR	37	89
07/11	10	Economic	Local	SOLR	106	115
07/11	10	Economic	System	SOLR	52	60
07/11	10	Economic	System	WIND	0	1
07/11	11	Economic	Local	SOLR	152	133
07/11	11	Economic	Local	WIND	0	
07/11	11	Economic	System	SOLR	49	178
07/11	12	Economic	Local	SOLR	154	133
07/11	12	Economic	Local	WIND	1	
07/11	12	Economic	System	SOLR	79	178
07/11	12	Economic	System	WIND	4	5
07/11	13	Economic	Local	SOLR	136	240
07/11	13	Economic	System	SOLR	48	
07/11	13	Economic	System	WIND	0	
07/11	14	Economic	Local	SOLR	155	108
07/11	14	Economic	System	SOLR	77	242
07/11	15	Economic	Local	SOLR	133	87
07/11	15	Economic	System	SOLR	68	242
07/11	16	Economic	Local	SOLR	151	221
07/11	16	SelfSchCut	Local	SOLR	5	12
07/11	17	Economic	Local	SOLR	118	118
07/11	17	Economic	Local	WIND	1	10
07/11	17	Economic	System	SOLR	88	269
07/11	17	Economic	System	WIND	7	47
07/11	17	SelfSchCut	Local	SOLR	1	
07/11	18	Economic	Local	SOLR	86	210



07/11	18	Economic	Local	WIND	10	62
07/11	18	Economic	System	SOLR	54	
07/11	18	Economic	System	WIND	3	
07/11	19	Economic	Local	SOLR	165	287
07/11	19	Economic	Local	WIND	6	
07/11	19	Economic	System	SOLR	55	86
07/11	19	Economic	System	WIND	7	
07/11	20	Economic	Local	SOLR	12	43
07/11	20	Economic	System	SOLR	16	52

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.