

Wind and Solar Curtailment April 23, 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 system-wide oversupply⁴.
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.

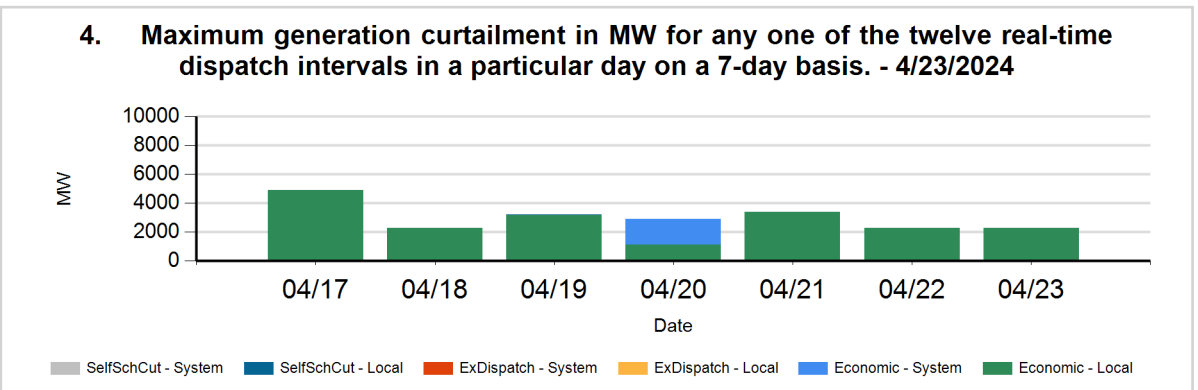
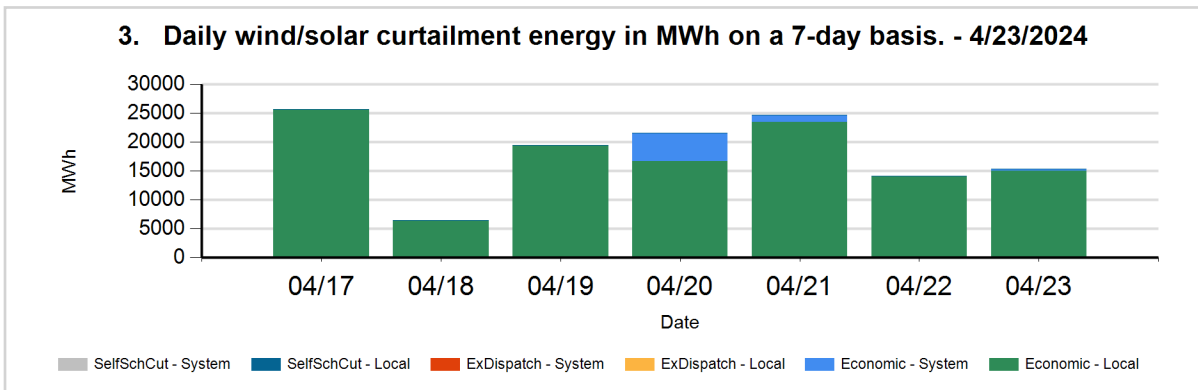
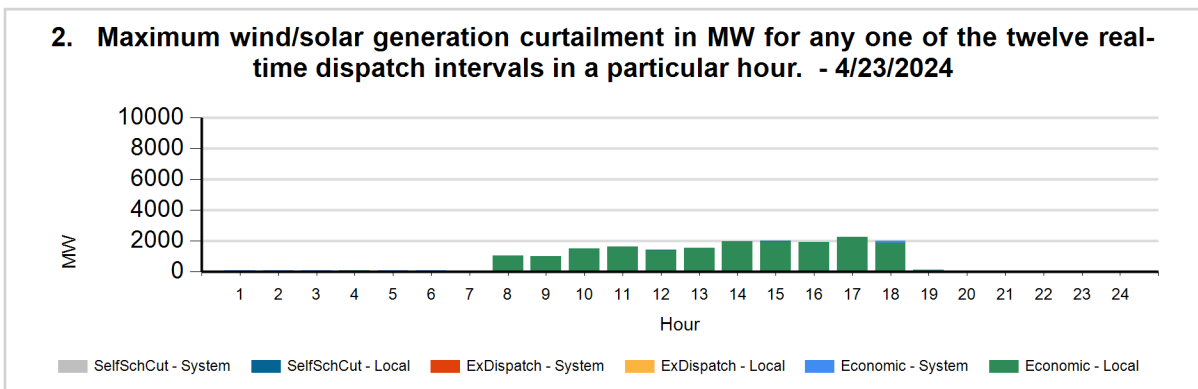
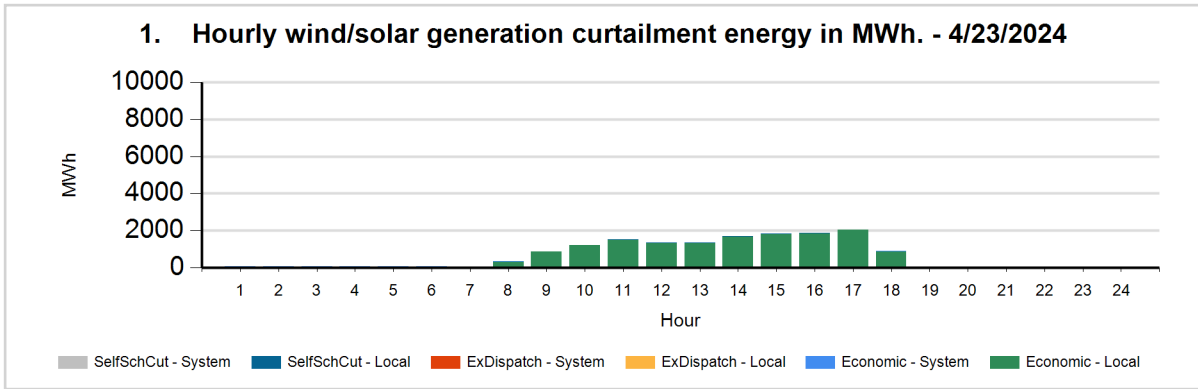
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

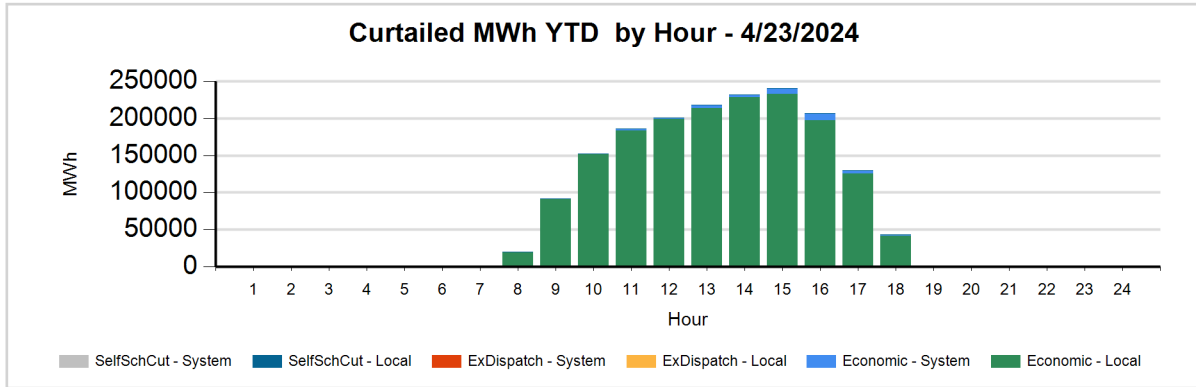
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

⁴For more information on oversupply conditions, please see: https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf

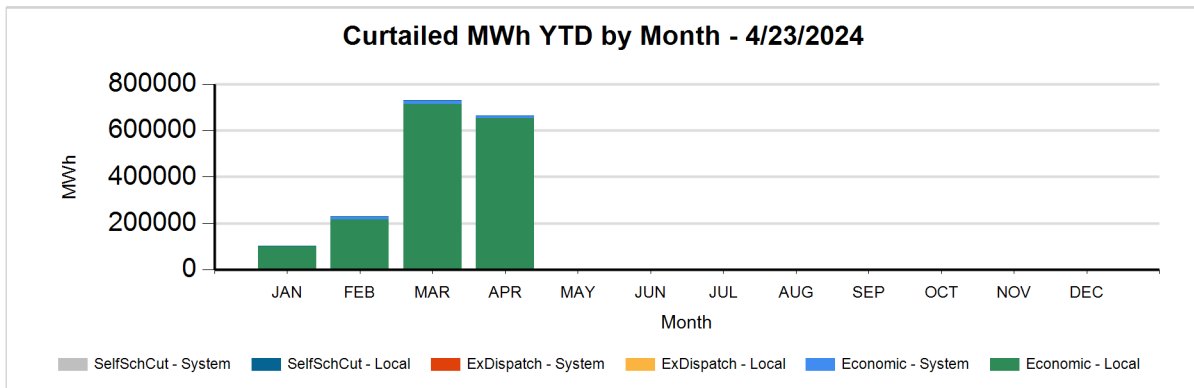
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 4/23/2024
LocalEconomic	1,682,486
LocalSelfSchCut	1,001
SystemEconomic	39,899
TOTAL	1,723,386

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/23	1	Economic	Local	WIND	13	6
04/23	1	Economic	System	WIND	38	68
04/23	2	Economic	Local	WIND	4	4
04/23	2	Economic	System	WIND	60	62
04/23	3	Economic	Local	WIND	13	4
04/23	3	Economic	System	WIND	51	62
04/23	4	Economic	Local	WIND	24	65
04/23	4	Economic	System	WIND	39	
04/23	5	Economic	Local	WIND	29	4
04/23	5	Economic	System	WIND	27	57
04/23	6	Economic	Local	WIND	16	4
04/23	6	Economic	System	WIND	39	55
04/23	7	Economic	Local	WIND	18	4
04/23	7	Economic	System	WIND	19	48
04/23	8	Economic	Local	SOLR	314	1001
04/23	8	Economic	Local	WIND	8	32
04/23	8	Economic	System	WIND	3	
04/23	9	Economic	Local	SOLR	849	1005
04/23	10	Economic	Local	SOLR	1213	1503
04/23	10	SelfSchCut	Local	SOLR	0	
04/23	11	Economic	Local	SOLR	1501	1621
04/23	11	Economic	Local	WIND	2	
04/23	11	Economic	System	WIND	1	
04/23	11	SelfSchCut	Local	SOLR	4	
04/23	12	Economic	Local	SOLR	1347	1396
04/23	12	Economic	System	WIND	0	
04/23	12	SelfSchCut	Local	SOLR	3	1
04/23	13	Economic	Local	SOLR	1348	1532
04/23	13	SelfSchCut	Local	SOLR	2	
04/23	14	Economic	Local	SOLR	1680	1933
04/23	14	SelfSchCut	Local	SOLR	4	13

04/23	15	Economic	Local	SOLR	1795	1940
04/23	15	Economic	Local	WIND	36	41
04/23	15	SelfSchCut	Local	SOLR	3	10
04/23	16	Economic	Local	SOLR	1736	1765
04/23	16	Economic	Local	WIND	114	160
04/23	16	SelfSchCut	Local	SOLR	5	
04/23	17	Economic	Local	SOLR	1807	1939
04/23	17	Economic	Local	WIND	237	298
04/23	17	Economic	System	WIND	0	
04/23	18	Economic	Local	SOLR	757	1554
04/23	18	Economic	Local	WIND	97	316
04/23	18	Economic	System	SOLR	45	117
04/23	19	Economic	Local	SOLR	15	71
04/23	19	Economic	System	SOLR	3	38

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.