

Wind and Solar Curtailment April 01, 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.

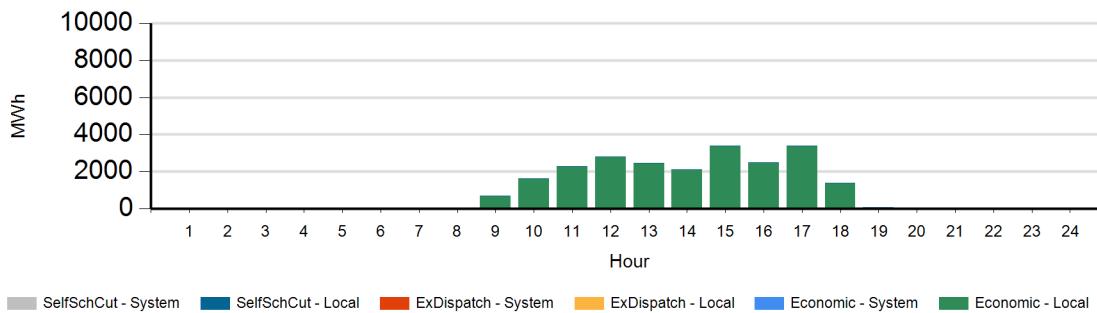
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <http://www.caiso.com/green/renewableswatch.html>.

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.

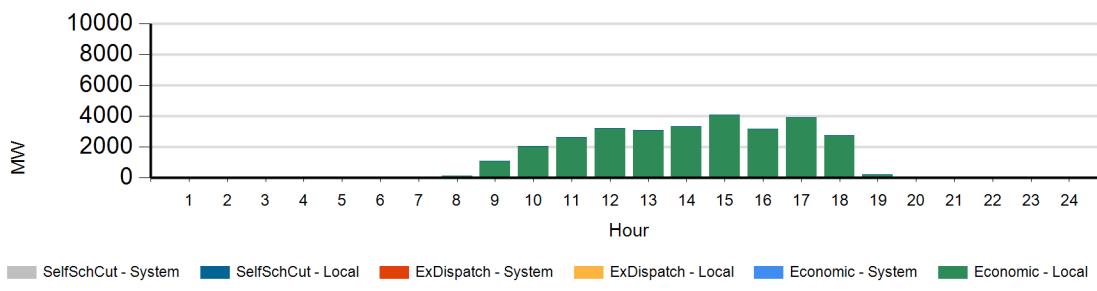
⁴For more information on oversupply conditions, please see:
https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf

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

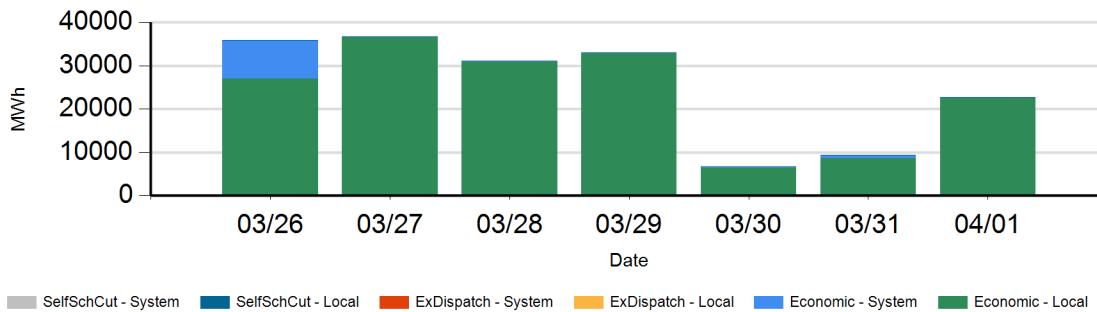
1. Hourly wind/solar generation curtailment energy in MWh. - 4/1/2024



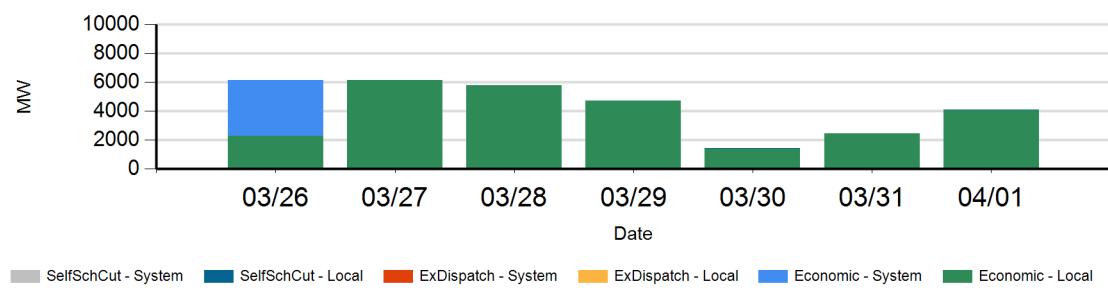
2. Maximum wind/solar generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular hour. - 4/1/2024



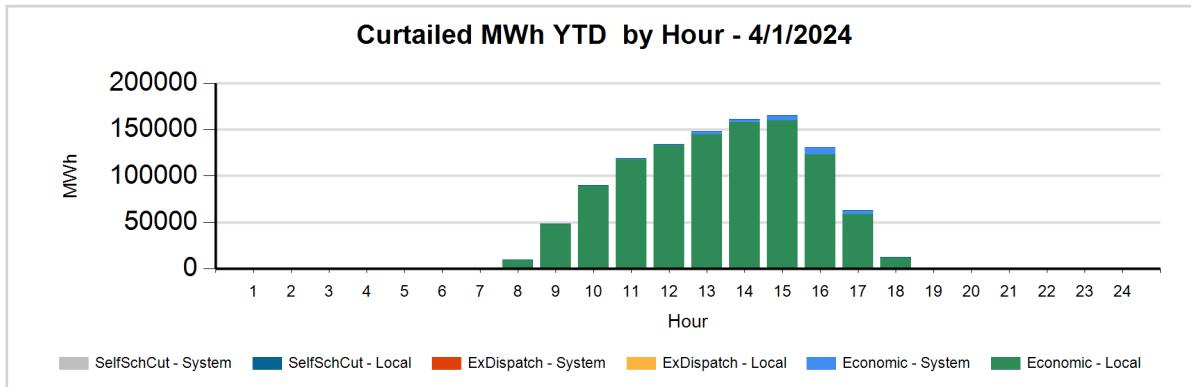
3. Daily wind/solar curtailment energy in MWh on a 7-day basis. - 4/1/2024



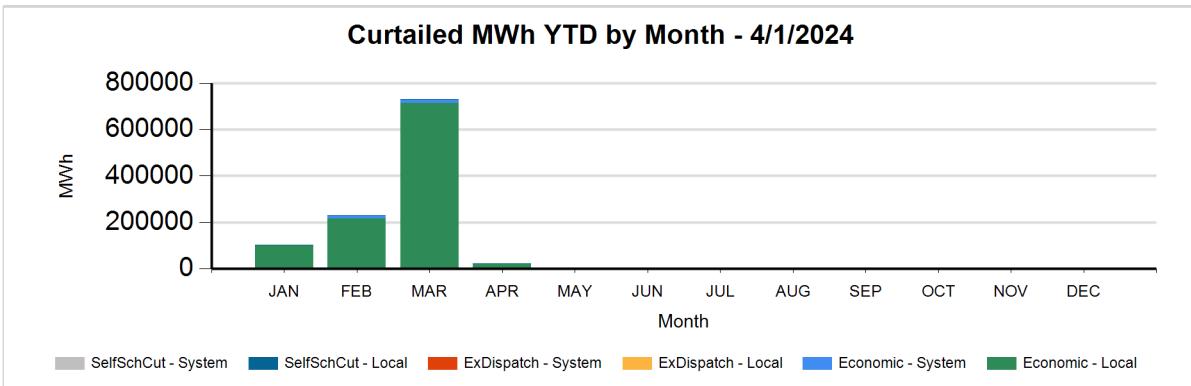
4. Maximum generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular day on a 7-day basis. - 4/1/2024



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 - 4/1/2024
LocalEconomic	1,053,096
LocalSelfSchCut	453
SystemEconomic	29,334
TOTAL	1,082,883

Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/01	8	Economic	Local	SOLR	35	138
04/01	8	Economic	Local	WIND	0	
04/01	9	Economic	Local	SOLR	692	1058
04/01	9	Economic	Local	WIND	1	
04/01	9	SelfSchCut	Local	SOLR	10	22
04/01	10	Economic	Local	SOLR	1620	1963
04/01	10	Economic	Local	WIND	13	57
04/01	10	SelfSchCut	Local	SOLR	2	3
04/01	11	Economic	Local	SOLR	2260	2621
04/01	11	Economic	Local	WIND	5	
04/01	11	Economic	System	WIND	3	
04/01	11	SelfSchCut	Local	SOLR	9	10
04/01	12	Economic	Local	SOLR	2773	3149
04/01	12	Economic	Local	WIND	21	49
04/01	12	SelfSchCut	Local	SOLR	8	9
04/01	13	Economic	Local	SOLR	2452	3054
04/01	13	Economic	Local	WIND	8	24
04/01	13	SelfSchCut	Local	SOLR	12	16
04/01	14	Economic	Local	SOLR	2059	3343
04/01	14	Economic	Local	WIND	28	1
04/01	14	SelfSchCut	Local	SOLR	8	7
04/01	15	Economic	Local	SOLR	3362	4050
04/01	15	Economic	Local	WIND	20	24
04/01	15	SelfSchCut	Local	SOLR	7	9
04/01	16	Economic	Local	SOLR	2465	3061
04/01	16	Economic	Local	WIND	18	77
04/01	16	SelfSchCut	Local	SOLR	15	11
04/01	17	Economic	Local	SOLR	3257	3790
04/01	17	Economic	Local	WIND	101	100
04/01	17	SelfSchCut	Local	SOLR	18	25
04/01	18	Economic	Local	SOLR	1311	2600

04/01	18	Economic	Local	WIND	44	126
04/01	18	SelfSchCut	Local	SOLR	15	29
04/01	19	Economic	Local	SOLR	54	180
04/01	19	SelfSchCut	Local	SOLR	3	17

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.