

## Wind and Solar Curtailment April 06, 2023

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.

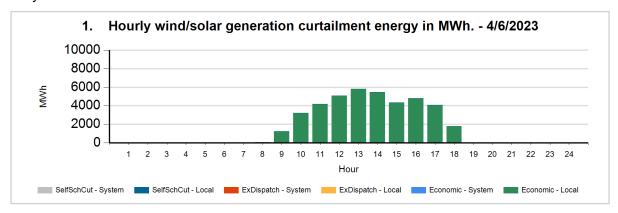
<sup>2</sup>The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <a href="http://www.caiso.com/green/renewableswatch.html">http://www.caiso.com/green/renewableswatch.html</a>.

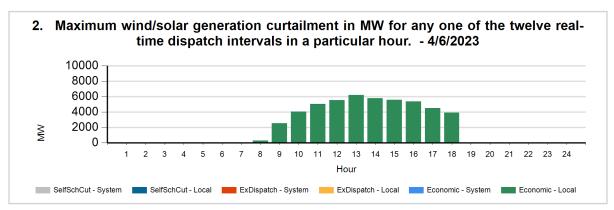
<sup>3</sup>Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

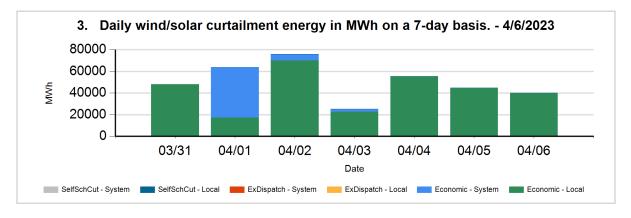
For more information on oversupply conditions, please see: https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables FastFacts.pdf

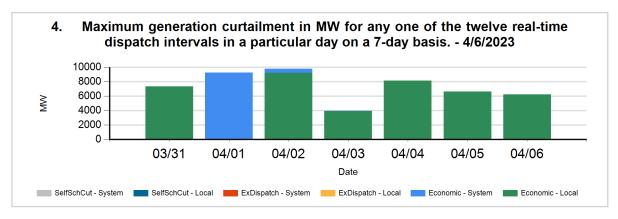


The following charts show the daily and 7-day wind and solar curtailment by category, if any.



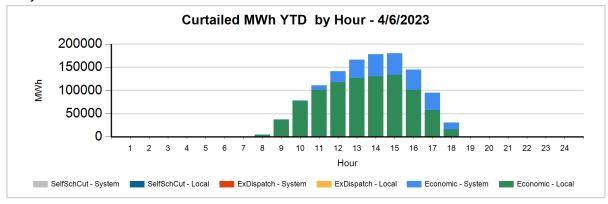




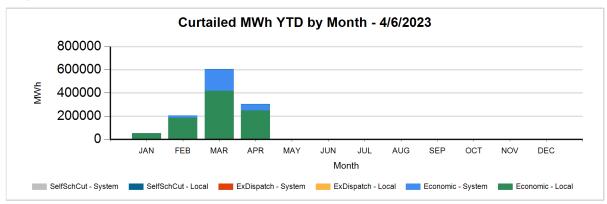




The following charts show hourly year to date wind and solar curtailment by category, if any.



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



TYPE	YTD CURTAILED MWH - 4/6/2023
LocalEconomic	901,523
LocalSelfSchCut	79
SystemEconomic	266,769
TOTAL	1,168,370



## Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/06	8	Economic	Local	SOLR	71	300
04/06	8	Economic	System	SOLR	0	
04/06	9	Economic	Local	SOLR	1221	2432
04/06	9	Economic	Local	WIND	23	119
04/06	9	SelfSchCut	Local	SOLR	1	
04/06	10	Economic	Local	SOLR	3077	3948
04/06	10	Economic	Local	WIND	150	77
04/06	10	SelfSchCut	Local	SOLR	1	8
04/06	11	Economic	Local	SOLR	4064	4893
04/06	11	Economic	Local	WIND	132	127
04/06	11	SelfSchCut	Local	SOLR	2	8
04/06	12	Economic	Local	SOLR	4945	5470
04/06	12	Economic	Local	WIND	127	93
04/06	12	SelfSchCut	Local	SOLR	1	
04/06	13	Economic	Local	SOLR	5665	6006
04/06	13	Economic	Local	WIND	142	193
04/06	13	SelfSchCut	Local	SOLR	1	
04/06	14	Economic	Local	SOLR	5405	5715
04/06	14	Economic	Local	WIND	66	99
04/06	14	SelfSchCut	Local	SOLR	1	
04/06	15	Economic	Local	SOLR	4301	5504
04/06	15	Economic	Local	WIND	53	77
04/06	15	Economic	System	SOLR	5	
04/06	16	Economic	Local	SOLR	4744	5343
04/06	16	Economic	Local	WIND	48	40
04/06	16	SelfSchCut	Local	SOLR	1	
04/06	17	Economic	Local	SOLR	4052	4460
04/06	17	Economic	Local	WIND	31	42
04/06	17	SelfSchCut	Local	SOLR	3	9
04/06	18	Economic	Local	SOLR	1801	3887
04/06	18	Economic	Local	WIND	12	23



04/06	22	Economic	System	WIND	0	2
04/06	23	Economic	Local	WIND	1	8
04/06	23	Economic	System	WIND	0	
04/06	24	Economic	Local	WIND	2	5

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.