

Wind and Solar Curtailment April 05, 2022

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.

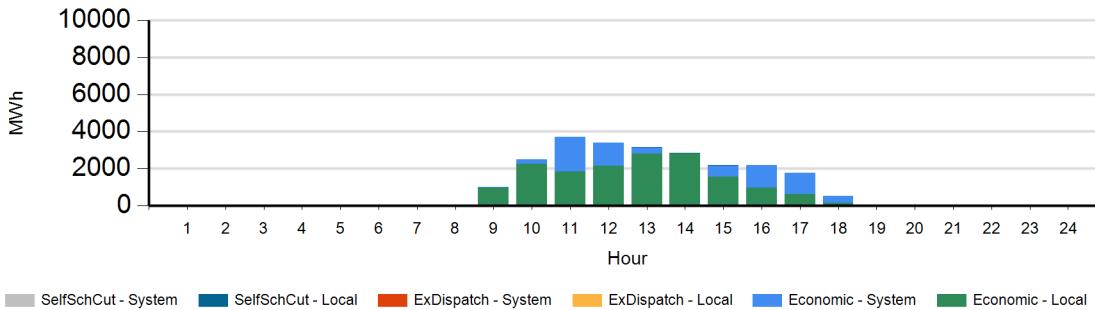
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <http://www.caiso.com/green/renewableswatch.html>.

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.

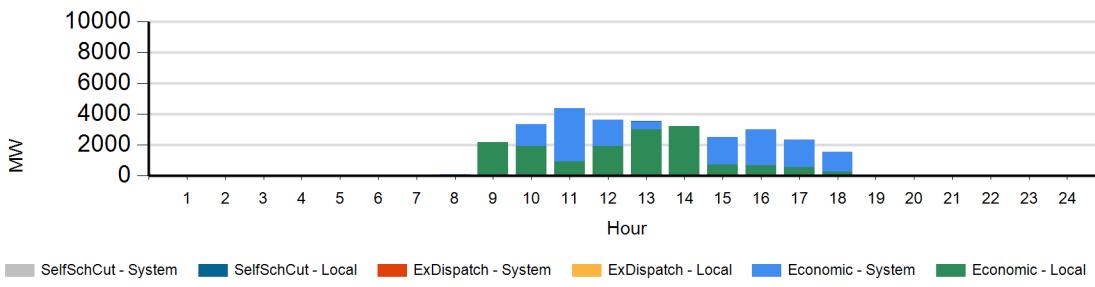
⁴For more information on oversupply conditions, please see:
https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf

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

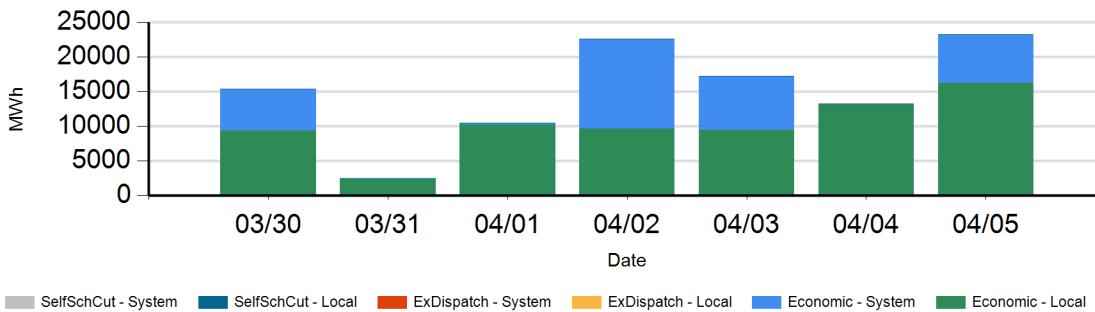
1. Hourly wind/solar generation curtailment energy in MWh. - 4/5/2022



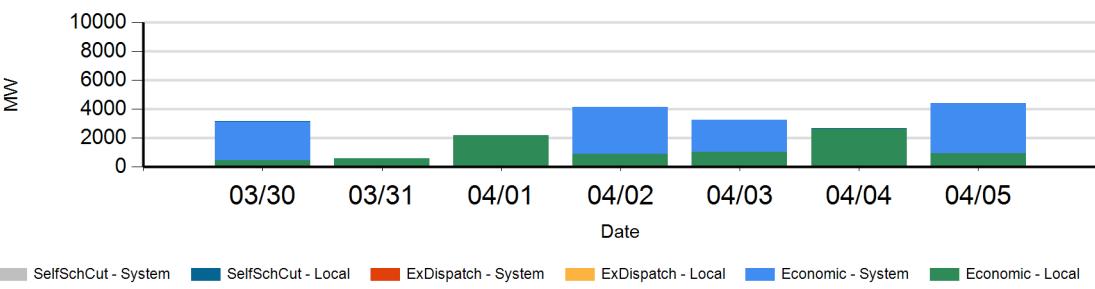
2. Maximum wind/solar generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular hour. - 4/5/2022



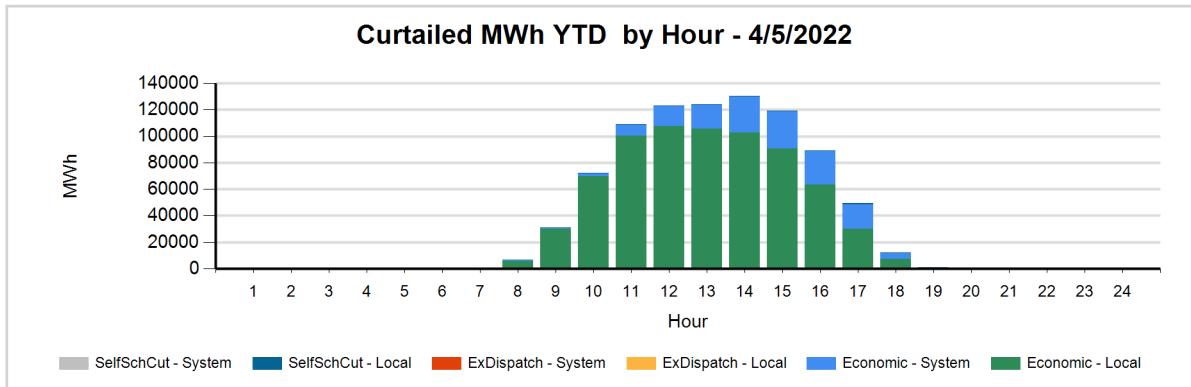
3. Daily wind/solar generation curtailment energy in MWh on a 7-day basis. - 4/5/2022



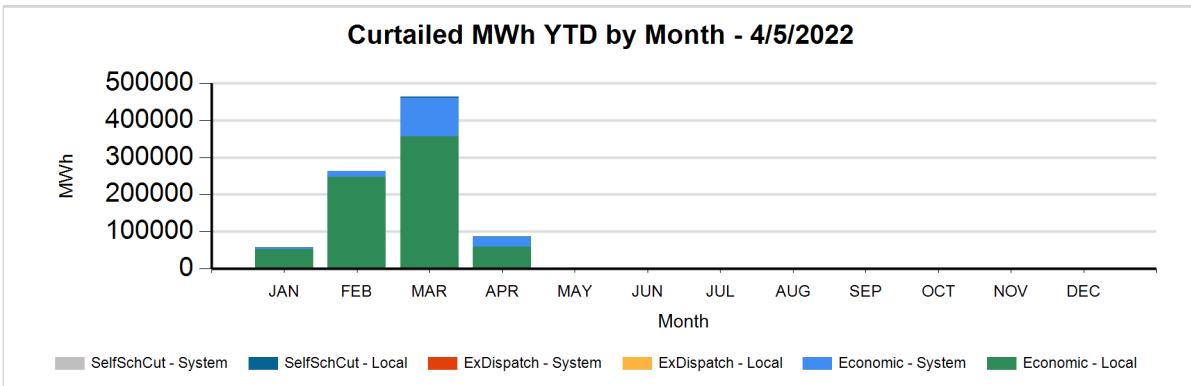
4. Maximum generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular day on a 7-day basis. - 4/5/2022



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 - 4/5/2022
LocalEconomic	713,141
LocalSelfSchCut	3,900
SystemEconomic	152,646
TOTAL	869,687



Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/05	2	Economic	System	WIND	2	28
04/05	3	Economic	Local	WIND	5	26
04/05	3	SelfSchCut	Local	WIND	4	8
04/05	4	Economic	Local	WIND	2	7
04/05	4	SelfSchCut	Local	WIND	2	5
04/05	5	SelfSchCut	Local	WIND	1	5
04/05	6	SelfSchCut	Local	WIND	5	5
04/05	7	Economic	Local	WIND	1	4
04/05	7	SelfSchCut	Local	WIND	1	2
04/05	8	Economic	Local	SOLR	0	1
04/05	8	Economic	Local	WIND	1	7
04/05	8	Economic	System	SOLR	8	71
04/05	8	Economic	System	WIND	0	
04/05	9	Economic	Local	SOLR	1012	2147
04/05	9	Economic	Local	WIND	2	4
04/05	9	Economic	System	SOLR	1	
04/05	10	Economic	Local	SOLR	2232	1922
04/05	10	Economic	Local	WIND	32	
04/05	10	Economic	System	SOLR	211	1214
04/05	10	Economic	System	WIND	17	202
04/05	11	Economic	Local	SOLR	1778	914
04/05	11	Economic	Local	WIND	41	9
04/05	11	Economic	System	SOLR	1746	3202
04/05	11	Economic	System	WIND	147	258
04/05	12	Economic	Local	SOLR	2147	1911
04/05	12	Economic	Local	WIND	10	9
04/05	12	Economic	System	SOLR	1170	1485
04/05	12	Economic	System	WIND	69	212
04/05	13	Economic	Local	SOLR	2807	2988
04/05	13	Economic	Local	WIND	10	8
04/05	13	Economic	System	SOLR	316	539

04/05	13	Economic	System	WIND	7	20
04/05	13	SelfSchCut	Local	SOLR	3	8
04/05	14	Economic	Local	SOLR	2827	3216
04/05	14	Economic	Local	WIND	9	7
04/05	14	Economic	System	SOLR	3	
04/05	14	Economic	System	WIND	0	
04/05	14	SelfSchCut	Local	SOLR	2	
04/05	15	Economic	Local	SOLR	1541	693
04/05	15	Economic	Local	WIND	4	
04/05	15	Economic	System	SOLR	612	1789
04/05	15	Economic	System	WIND	11	17
04/05	15	SelfSchCut	Local	SOLR	2	
04/05	16	Economic	Local	SOLR	956	651
04/05	16	Economic	Local	WIND	1	
04/05	16	Economic	System	SOLR	1210	2311
04/05	16	Economic	System	WIND	19	19
04/05	17	Economic	Local	SOLR	595	545
04/05	17	Economic	Local	WIND	8	
04/05	17	Economic	System	SOLR	1136	1769
04/05	17	Economic	System	WIND	19	18
04/05	18	Economic	Local	SOLR	139	263
04/05	18	Economic	Local	WIND	0	
04/05	18	Economic	System	SOLR	376	1267
04/05	18	Economic	System	WIND	10	18
04/05	19	Economic	Local	SOLR	11	51

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.

