

Wind and Solar Curtailment March 24, 2021

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.

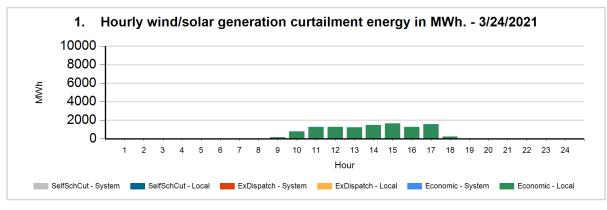
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <u>http://www.caiso.com/green/renewableswatch.html</u>.

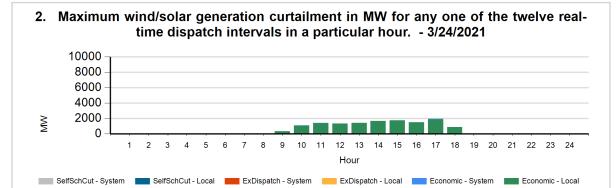
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

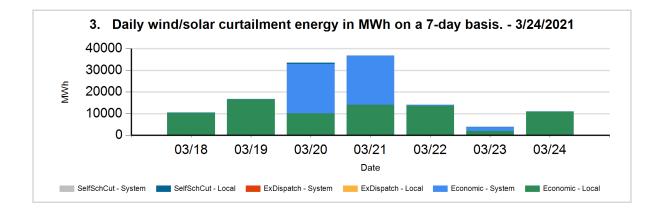
For more information on oversupply conditions, please see: <u>https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf</u>

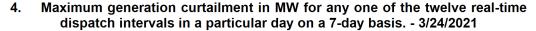


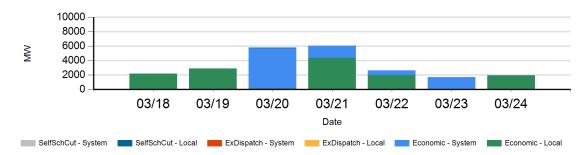
The following charts show the daily and 7-day wind and solar curtailment by category, if any.





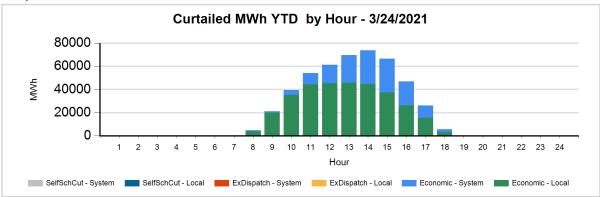




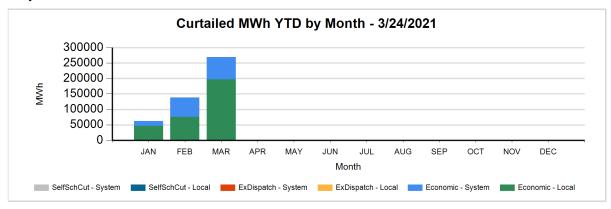




The following charts show hourly year to date wind and solar curtailment by category, if any.



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



TYPE	YTD CURTAILED MWH - 3/24/2021
LocalEconomic	320,766
LocalSelfSchCut	1,474
SystemEconomic	146,329
TOTAL	468,569



Data used to produce hourly chart

TAILED MW	CURTAILED MWH	FUEL TYPE	REASON	CURT TYPE	HOU R	DATE
16	9	SOLR	Local	8 Economic	8	03/24
41	6	SOLR	System	8 Economic	8	03/24
309	148	SOLR	Local	9 Economic	9	03/24
2	2	WIND	Local	9 Economic	9	03/24
	5	SOLR	System	9 Economic	9	03/24
1039	775	SOLR	Local	0 Economic	10	03/24
1	2	WIND	Local	0 Economic	10	03/24
	0	SOLR	System	0 Economic	10	03/24
42	12	SOLR	Local	0 SelfSchCut	10	03/24
1394	1232	SOLR	Local	1 Economic	11	03/24
1	1	WIND	Local	1 Economic	11	03/24
	2	SOLR	System	1 Economic	11	03/24
	25	SOLR	Local	1 SelfSchCut	11	03/24
1345	1287	SOLR	Local	2 Economic	12	03/24
3	2	WIND	Local	2 Economic	12	03/24
1416	1233	SOLR	Local	3 Economic	13	03/24
	1	WIND	Local	3 Economic	13	03/24
	1	SOLR	System	3 Economic	13	03/24
1659	1475	SOLR	Local	4 Economic	14	03/24
	1	WIND	Local	4 Economic	14	03/24
	1664	SOLR	Local	5 Economic	15	03/24
	0	WIND	Local	5 Economic	15	03/24
1483	1289	SOLR	Local	6 Economic	16	03/24
1	1	WIND	Local	6 Economic	16	03/24
1788	1402	SOLR	Local	7 Economic	17	03/24
92	103	WIND	Local	7 Economic	17	03/24
	11	SOLR	System	7 Economic	17	03/24
66	62	WIND	System	7 Economic	17	03/24
698	201	SOLR	Local	8 Economic	18	03/24
177	45	WIND	Local	8 Economic	18	03/24



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.