

Wind and Solar Curtailment April 17, 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.
- 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.

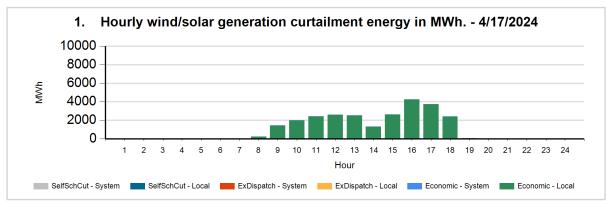
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <u>http://www.caiso.com/green/renewableswatch.html</u>.

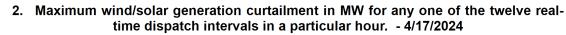
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

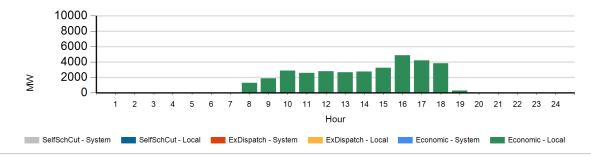
For more information on oversupply conditions, please see: <u>https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf</u>

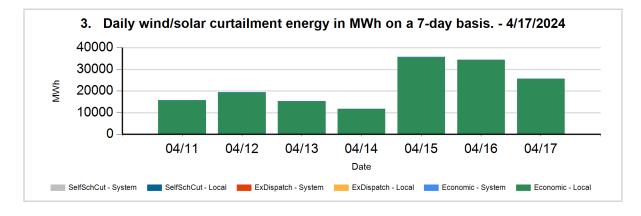


The following charts show the daily and 7-day wind and solar curtailment by category, if any.

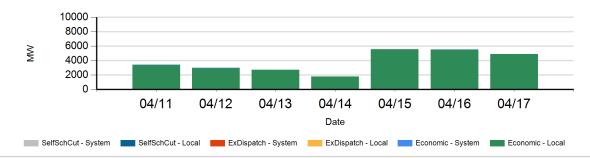






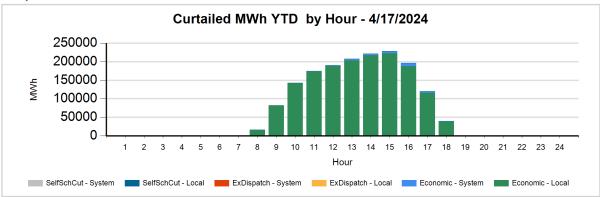


4. Maximum generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular day on a 7-day basis. - 4/17/2024

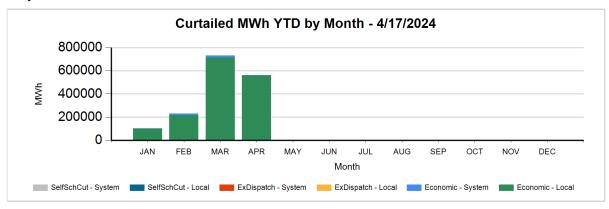




The following charts show hourly year to date wind and solar curtailment by category, if any.



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



TYPE	YTD CURTAILED MWH - 4/17/2024
LocalEconomic	1,587,453
LocalSelfSchCut	887
SystemEconomic	33,483
TOTAL	1,621,822



Data used to produce hourly chart



RTAILED MW	CURTAILED MWH	FUEL TYPE	REASON	CURT TYPE	HOU R	DATE
15	2	SOLR	Local	Economic	7	04/17
1257	234	SOLR	Local	Economic	8	04/17
15	1	WIND	Local	Economic	8	04/17
	1426	SOLR	Local	Economic	9	04/17
	13	WIND	Local	Economic	9	04/17
	2	SOLR	System	Economic	9	04/17
2837	2002	SOLR	Local	Economic	10	04/17
35	11	WIND	Local	Economic	10	04/17
	1	SOLR	System	Economic	10	04/17
4	0	SOLR	Local	SelfSchCut	10	04/17
2561	2388	SOLR	Local	Economic	11	04/17
	34	WIND	Local	Economic	11	04/17
	2	SOLR	Local	SelfSchCut	11	04/17
2731	2539	SOLR	Local	Economic	12	04/17
45	39	WIND	Local	Economic	12	04/17
10	4	SOLR	Local	SelfSchCut	12	04/17
2590	2443	SOLR	Local	Economic	13	04/17
	69	WIND	Local	Economic	13	04/17
	3	SOLR	Local	SelfSchCut	13	04/17
2630	1273	SOLR	Local	Economic	14	04/17
116	49	WIND	Local	Economic	14	04/17
9	2	SOLR	Local	SelfSchCut	14	04/17
2909	2408	SOLR	Local	Economic	15	04/17
353	228	WIND	Local	Economic	15	04/17
4339	3701	SOLR	Local	Economic	16	04/17
552	539	WIND	Local	Economic	16	04/17
3590	3050	SOLR	Local	Economic	17	04/17
625	675	WIND	Local	Economic	17	04/17
3160	1973	SOLR	Local	Economic	18	04/17
	428	WIND	Local	Economic	18	04/17
	17	SOLR	System	Economic	18	04/17
271	69	SOLR	Local	Economic	19	04/17



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.