

Wind and Solar Curtailment April 04, 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 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.

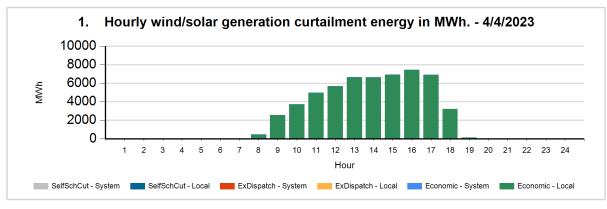
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <u>http://www.caiso.com/green/renewableswatch.html</u>.

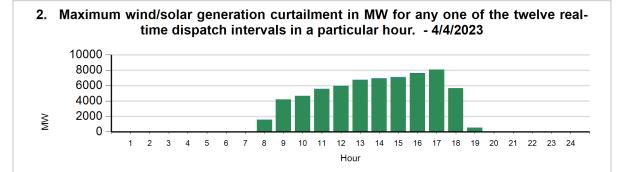
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

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

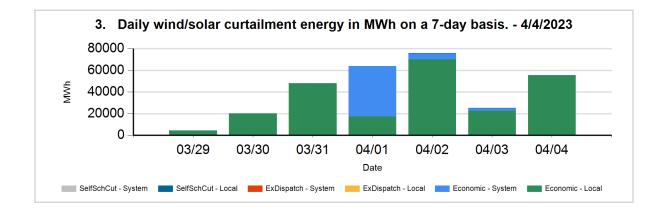


The following charts show the daily and 7-day wind and solar curtailment by category, if any.

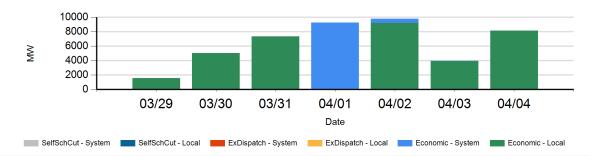




🗾 SelfSchCut - System 🗾 SelfSchCut - Local 🗾 ExDispatch - System 📒 ExDispatch - Local 🗾 Economic - System 📰 Economic - Local

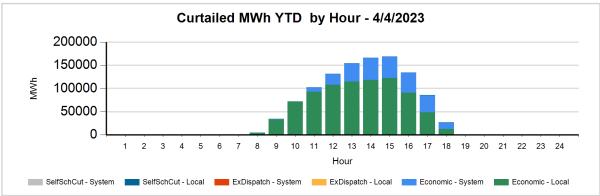


4. Maximum generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular day on a 7-day basis. - 4/4/2023

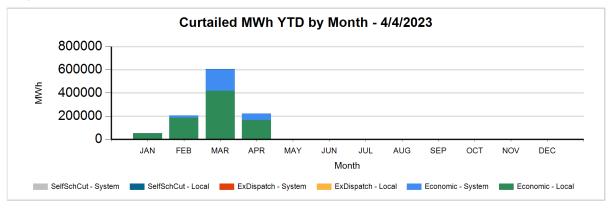




The following charts show hourly year to date wind and solar curtailment by category, if any.



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



TYPE	YTD CURTAILED MWH - 4/4/2023		
LocalEconomic	817,063		
LocalSelfSchCut	56		
SystemEconomic	266,431		
TOTAL	1,083,549		



Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/04	8	Economic	Local	SOLR	444	1367
04/04	8	Economic	Local	WIND	48	158
04/04	8	Economic	System	SOLR	5	49
04/04	9	Economic	Local	SOLR	2509	4087
04/04	9	Economic	Local	WIND	46	131
04/04	10	Economic	Local	SOLR	3683	4638
04/04	10	Economic	Local	WIND	14	17
04/04	10	Economic	System	SOLR	39	
04/04	11	Economic	Local	SOLR	4902	5407
04/04	11	Economic	Local	WIND	52	162
04/04	11	Economic	System	SOLR	22	3
04/04	11	SelfSchCut	Local	SOLR	0	
04/04	12	Economic	Local	SOLR	5552	5820
04/04	12	Economic	Local	WIND	106	102
04/04	12	Economic	System	SOLR	9	41
04/04	12	SelfSchCut	Local	SOLR	2	1
04/04	13	Economic	Local	SOLR	6460	6622
04/04	13	Economic	Local	WIND	162	132
04/04	13	SelfSchCut	Local	SOLR	3	5
04/04	14	Economic	Local	SOLR	6354	6611
04/04	14	Economic	Local	WIND	233	308
04/04	14	Economic	System	SOLR	53	37
04/04	14	SelfSchCut	Local	SOLR	5	
04/04	15	Economic	Local	SOLR	6574	6734
04/04	15	Economic	Local	WIND	294	318
04/04	15	Economic	System	SOLR	48	75
04/04	15	SelfSchCut	Local	SOLR	2	
04/04	16	Economic	Local	SOLR	7095	7275
04/04	16	Economic	Local	WIND	346	367
04/04	16	Economic	System	SOLR	4	
04/04	16	SelfSchCut	Local	SOLR	1	3



04/04	17	Economic	Local	SOLR	6561	7658
04/04	17	Economic	Local	WIND	360	454
04/04	17	Economic	System	WIND	1	
04/04	18	Economic	Local	SOLR	3058	5494
04/04	18	Economic	Local	WIND	148	189
04/04	19	Economic	Local	SOLR	147	519
04/04	20	Economic	Local	SOLR	0	4
04/04	22	Economic	Local	WIND	1	10
04/04	22	Economic	System	WIND	1	9

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.