

Wind and Solar Curtailment April 09, 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.
- 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.

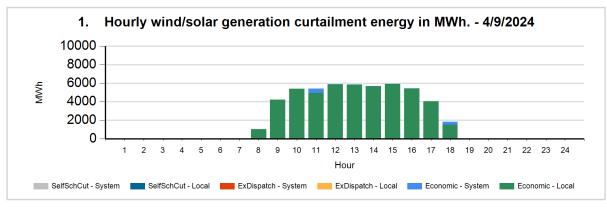
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <u>http://www.caiso.com/green/renewableswatch.html</u>.

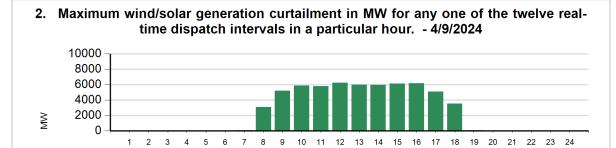
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

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.





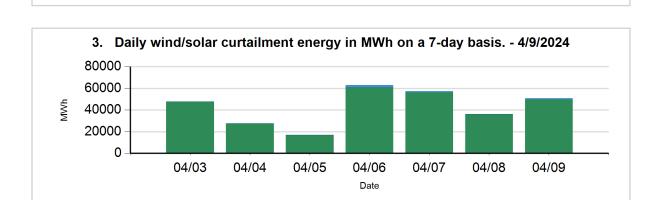
🗾 SelfSchCut - System 🗾 SelfSchCut - Local 🗾 ExDispatch - System 📒 ExDispatch - Local 🗾 Economic - System

🚃 SelfSchCut - System 🛛 SelfSchCut - Local 🖊 ExDispatch - System 💛 ExDispatch - Local 📩 Economic - System

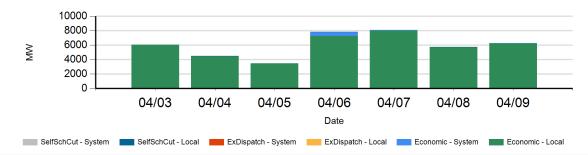
Hour

Economic - Local

Economic - Local

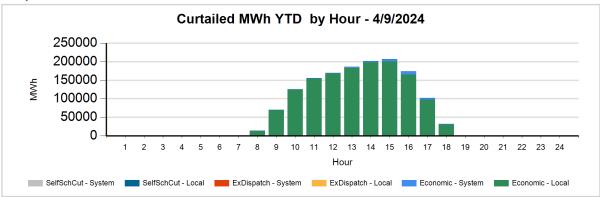


 Maximum generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular day on a 7-day basis. - 4/9/2024

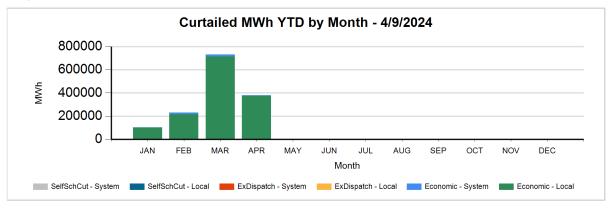




The following charts show hourly year to date wind and solar curtailment by category, if any.



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



TYPE	YTD CURTAILED MWH - 4/9/2024
LocalEconomic	1,404,850
LocalSelfSchCut	706
SystemEconomic	33,048
TOTAL	1,438,604



Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/09	7	Economic	System	SOLR	6	64
04/09	7	Economic	System	WIND	3	9
04/09	8	Economic	Local	SOLR	852	2844
04/09	8	Economic	Local	WIND	183	247
04/09	9	Economic	Local	SOLR	4031	5036
04/09	9	Economic	Local	WIND	180	184
04/09	10	Economic	Local	SOLR	5176	5644
04/09	10	Economic	Local	WIND	202	217
04/09	11	Economic	Local	SOLR	4704	5593
04/09	11	Economic	Local	WIND	228	186
04/09	11	Economic	System	SOLR	457	
04/09	11	Economic	System	WIND	19	
04/09	11	SelfSchCut	Local	SOLR	2	9
04/09	12	Economic	Local	SOLR	5664	6077
04/09	12	Economic	Local	WIND	203	190
04/09	12	Economic	System	WIND	1	4
04/09	12	SelfSchCut	Local	SOLR	3	
04/09	13	Economic	Local	SOLR	5625	5713
04/09	13	Economic	Local	WIND	221	282
04/09	13	Economic	System	WIND	2	5
04/09	13	SelfSchCut	Local	SOLR	4	
04/09	14	Economic	Local	SOLR	5537	5813
04/09	14	Economic	Local	WIND	121	156
04/09	14	Economic	System	WIND	3	2
04/09	14	SelfSchCut	Local	SOLR	5	11
04/09	15	Economic	Local	SOLR	5839	6079
04/09	15	Economic	Local	WIND	81	50
04/09	15	Economic	System	WIND	0	1
04/09	15	SelfSchCut	Local	SOLR	6	3
04/09	16	Economic	Local	SOLR	5387	6123
04/09	16	Economic	Local	WIND	53	59



04/09	16	SelfSchCut	Local	SOLR	3	8
04/09	17	Economic	Local	SOLR	3988	5047
04/09	17	Economic	Local	WIND	45	47
04/09	17	Economic	System	WIND	0	
04/09	17	SelfSchCut	Local	SOLR	0	3
04/09	18	Economic	Local	SOLR	1483	3519
04/09	18	Economic	Local	WIND	24	32
04/09	18	Economic	System	SOLR	312	
04/09	18	Economic	System	WIND	2	4
04/09	19	Economic	Local	SOLR	29	85
04/09	19	Economic	Local	WIND	3	7
04/09	19	Economic	System	SOLR	1	7
04/09	23	Economic	Local	WIND	8	15
04/09	24	Economic	Local	WIND	25	37

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.