

Wind and Solar Curtailment April 21, 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 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.

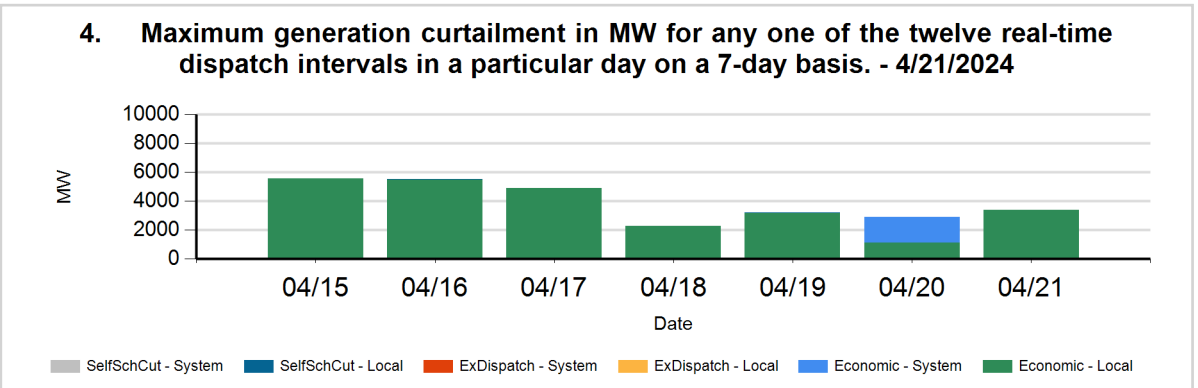
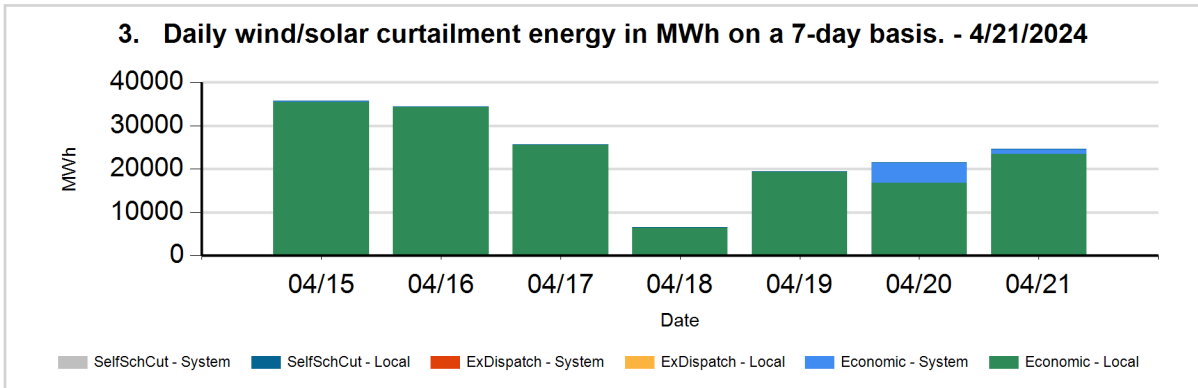
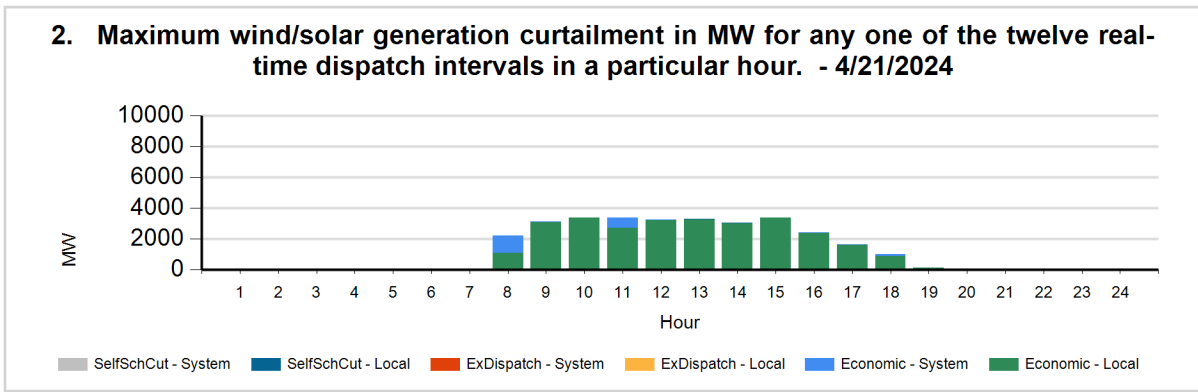
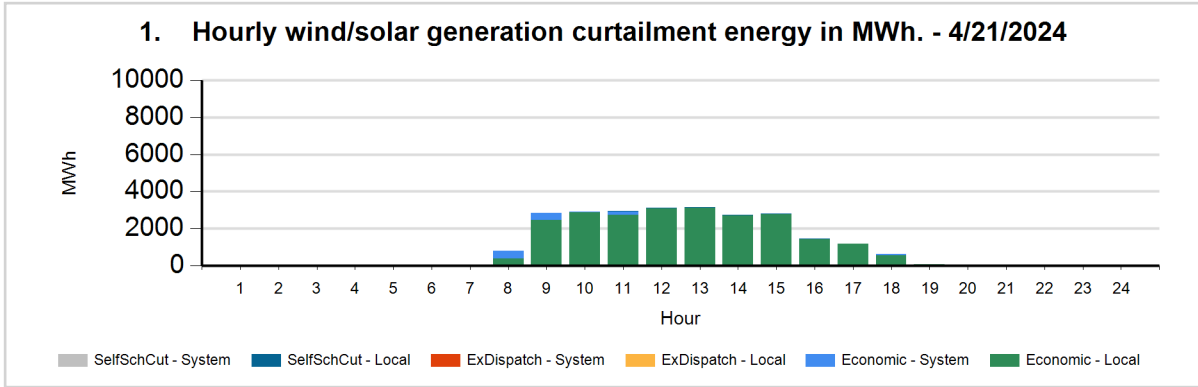
¹Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

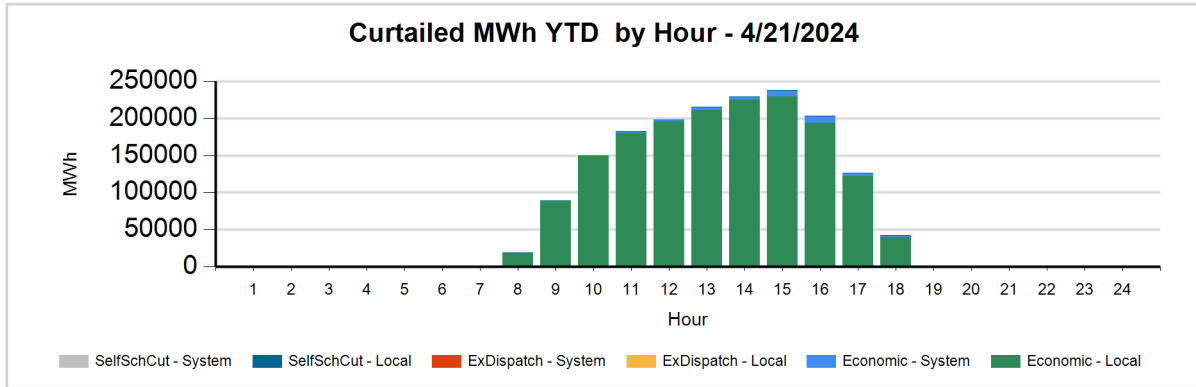
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

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

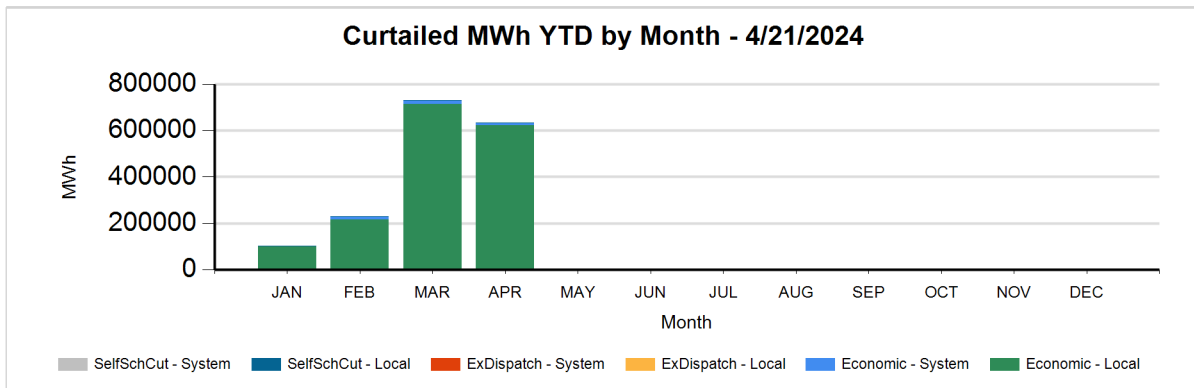
The following charts show the daily and 7-day wind and solar curtailment by category, if any.



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 - 4/21/2024
LocalEconomic	1,653,506
LocalSelfSchCut	958
SystemEconomic	39,438
TOTAL	1,693,903

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
04/21	1	Economic	Local	WIND	1	3
04/21	2	Economic	Local	WIND	1	4
04/21	8	Economic	Local	SOLR	360	1035
04/21	8	Economic	Local	WIND	13	37
04/21	8	Economic	System	SOLR	423	1116
04/21	8	Economic	System	WIND	7	14
04/21	9	Economic	Local	SOLR	2426	3097
04/21	9	Economic	Local	WIND	30	27
04/21	9	Economic	System	SOLR	375	
04/21	9	Economic	System	WIND	8	6
04/21	10	Economic	Local	SOLR	2876	3363
04/21	10	Economic	Local	WIND	25	27
04/21	10	Economic	System	WIND	2	
04/21	10	SelfSchCut	Local	SOLR	0	
04/21	11	Economic	Local	SOLR	2663	2718
04/21	11	Economic	Local	WIND	60	11
04/21	11	Economic	System	SOLR	212	518
04/21	11	Economic	System	WIND	11	135
04/21	11	SelfSchCut	Local	SOLR	3	
04/21	12	Economic	Local	SOLR	3056	3187
04/21	12	Economic	Local	WIND	44	60
04/21	12	Economic	System	SOLR	2	
04/21	12	Economic	System	WIND	1	1
04/21	12	SelfSchCut	Local	SOLR	6	
04/21	13	Economic	Local	SOLR	3099	3219
04/21	13	Economic	Local	WIND	46	50
04/21	13	Economic	System	SOLR	2	5
04/21	13	Economic	System	WIND	1	1
04/21	13	SelfSchCut	Local	SOLR	2	13
04/21	14	Economic	Local	SOLR	2686	2996
04/21	14	Economic	Local	WIND	42	45

04/21	14	Economic	System	WIND	1	2
04/21	14	SelfSchCut	Local	SOLR	3	12
04/21	15	Economic	Local	SOLR	2786	3287
04/21	15	Economic	Local	WIND	24	73
04/21	15	Economic	System	WIND	1	
04/21	15	SelfSchCut	Local	SOLR	3	
04/21	16	Economic	Local	SOLR	1460	2399
04/21	16	Economic	System	WIND	0	1
04/21	16	SelfSchCut	Local	SOLR	3	
04/21	17	Economic	Local	SOLR	1189	1633
04/21	17	SelfSchCut	Local	SOLR	0	2
04/21	18	Economic	Local	SOLR	542	853
04/21	18	Economic	System	SOLR	68	144
04/21	19	Economic	Local	SOLR	49	135

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.