Wind and Solar Curtailment December 28, 2022

This report is produced daily to provide a detailed accounting of the wind and solar renewable generation that was curtailed and the reasons why[1]. This report should be read in the context of the Renewables Watch report for a more complete understanding of both renewable curtailment and generation[2].

Wind and solar curtailments are grouped into the following categories:

1. Economic - Local: Market dispatch of generators with economic bids to mitigate local congestion[3].
2. Economic - System: Market dispatch of generators with economic bids to mitigate system-wide 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.
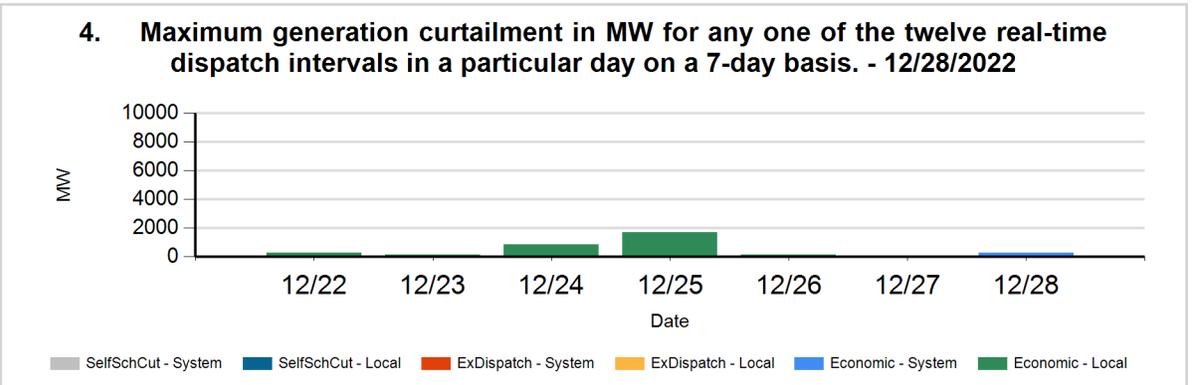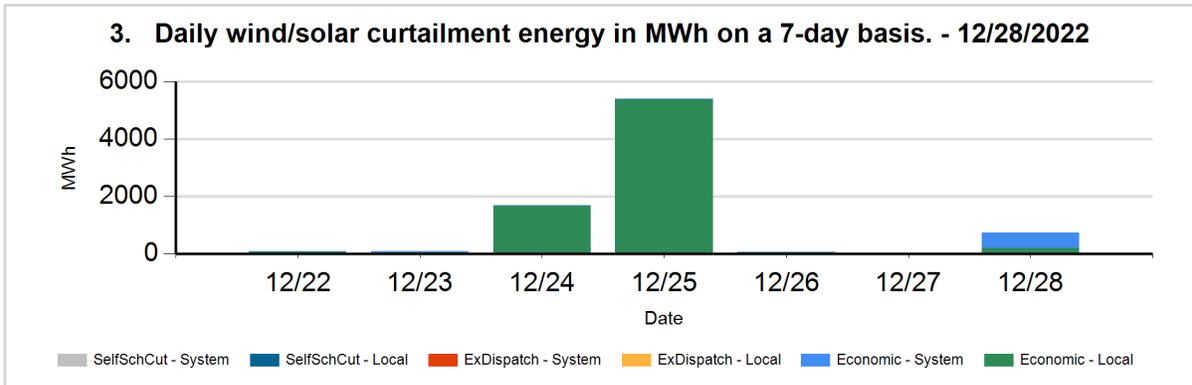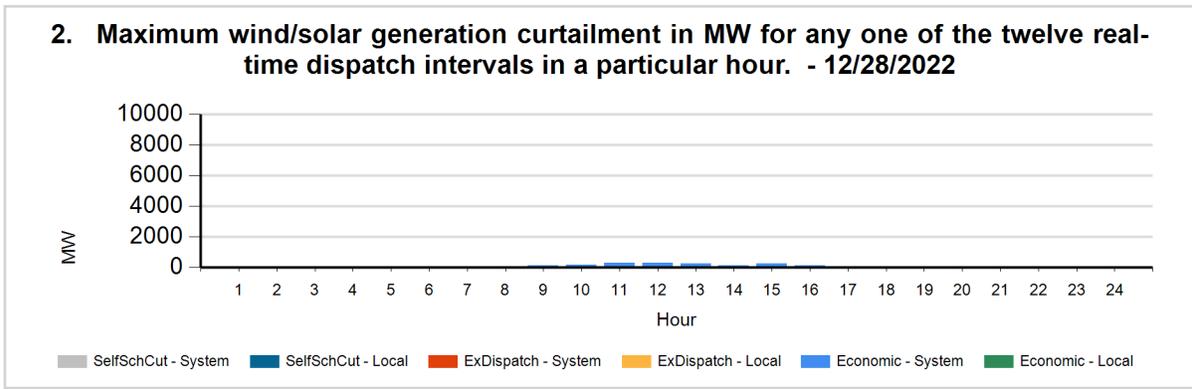
[1]Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

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

[3]Congestion 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:
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.

1. Hourly wind/solar generation curtailment energy in MWh. - 12/28/2022
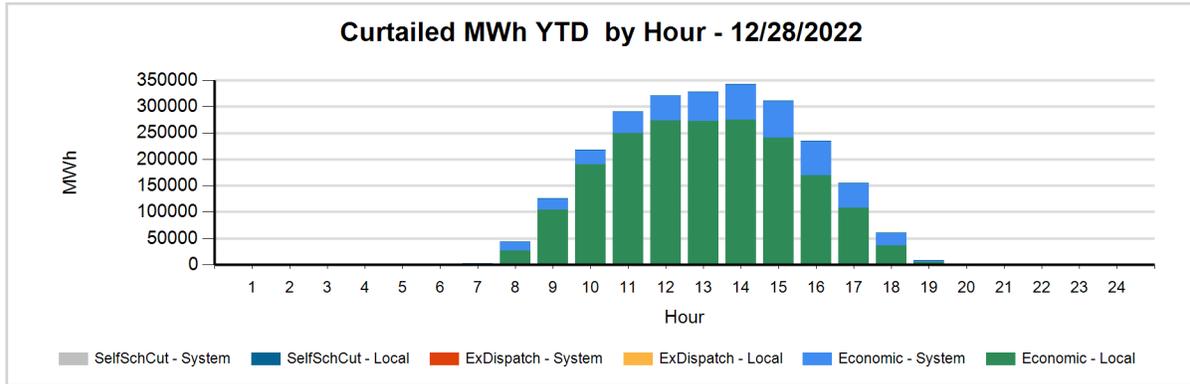

Legend: SelfSchCut - System | SelfSchCut - Local | ExDispatch - System | ExDispatch - Local | Economic - System | Economic - Local

2. Maximum wind/solar generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular hour. - 12/28/2022

Legend: SelfSchCut - System | SelfSchCut - Local | ExDispatch - System | ExDispatch - Local | Economic - System | Economic - Local

3. Daily wind/solar curtailment energy in MWh on a 7-day basis. - 12/28/2022

Legend: 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. - 12/28/2022

Legend: SelfSchCut - System | SelfSchCut - Local | ExDispatch - System | ExDispatch - Local | Economic - System | Economic - Local

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

Curtailed MWh YTD by Hour - 12/28/2022

Legend: SelfSchCut - System | SelfSchCut - Local | ExDispatch - System | ExDispatch - Local | Economic - System | Economic - Local

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

Curtailed MWh YTD by Month - 12/28/2022

Legend: SelfSchCut - System | SelfSchCut - Local | ExDispatch - System | ExDispatch - Local | Economic - System | Economic - Local
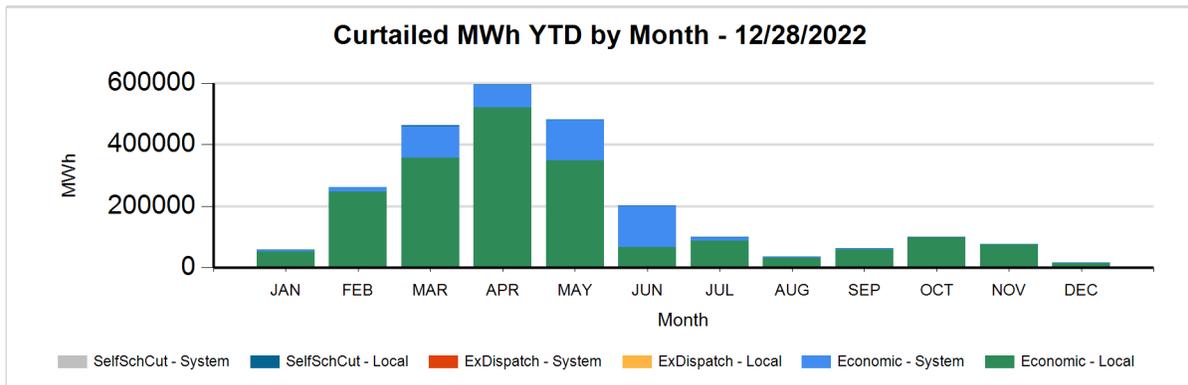
TYPE	YTD CURTAILED MWH - 12/28/2022
LocalEconomic	1,954,980
LocalSelfSchCut	6,326
SystemEconomic	487,679
TOTAL	2,448,985

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
12/28	2	Economic	Local	WIND	3	38
12/28	3	Economic	Local	WIND	1	3
12/28	3	Economic	System	WIND	1	
12/28	4	Economic	Local	WIND	1	
12/28	4	Economic	System	WIND	2	6
12/28	5	Economic	Local	WIND	1	5
12/28	9	Economic	Local	WIND	1	
12/28	9	Economic	System	SOLR	0	
12/28	9	Economic	System	WIND	40	118
12/28	10	Economic	Local	SOLR	15	
12/28	10	Economic	Local	WIND	15	
12/28	10	Economic	System	SOLR	11	48
12/28	10	Economic	System	WIND	77	124
12/28	11	Economic	Local	SOLR	12	2
12/28	11	Economic	Local	WIND	63	
12/28	11	Economic	System	SOLR	14	171
12/28	11	Economic	System	WIND	34	99
12/28	12	Economic	Local	SOLR	6	17
12/28	12	Economic	Local	WIND	9	
12/28	12	Economic	System	SOLR	12	127
12/28	12	Economic	System	WIND	107	123
12/28	13	Economic	Local	SOLR	7	6
12/28	13	Economic	Local	WIND	18	
12/28	13	Economic	System	SOLR	15	125
12/28	13	Economic	System	WIND	72	121
12/28	14	Economic	Local	SOLR	4	
12/28	14	Economic	Local	WIND	19	
12/28	14	Economic	System	SOLR	17	75
12/28	14	Economic	System	WIND	28	34
12/28	15	Economic	System	SOLR	21	210
12/28	15	Economic	System	WIND	62	53

12/28	16	Economic	Local	WIND	25	
12/28	16	Economic	System	SOLR	1	14
12/28	16	Economic	System	WIND	8	90
12/28	17	Economic	System	SOLR	3	19

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.