Wind and Solar Curtailment August 06, 2021

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[4].
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.

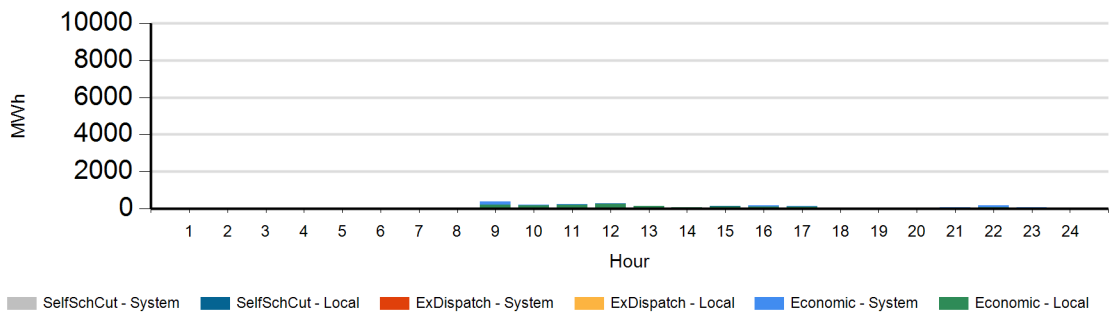
[2]The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: http://www.caiso.com/green/renewableswatch.html.

[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.

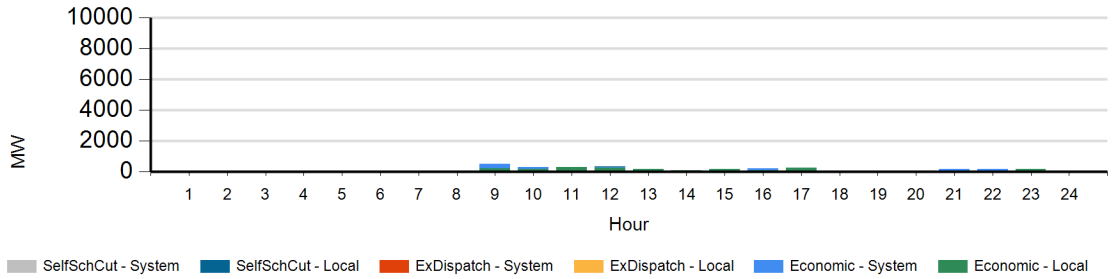
[4]For more information on oversupply conditions, please see: https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf

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

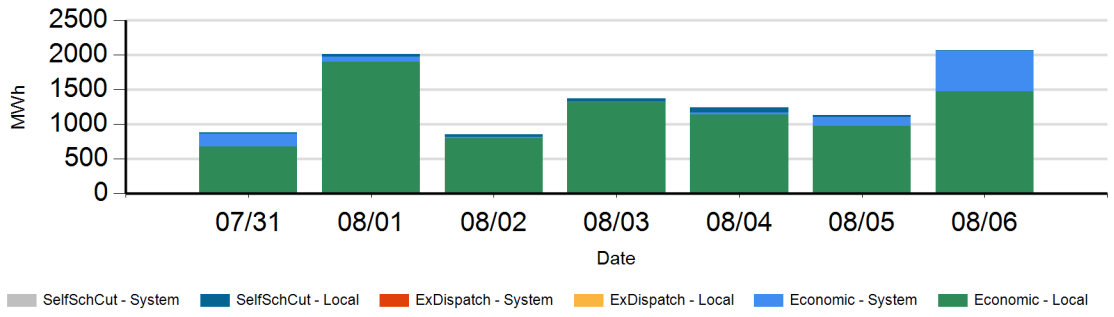
1. Hourly wind/solar generation curtailment energy in MWh. - 8/6/2021



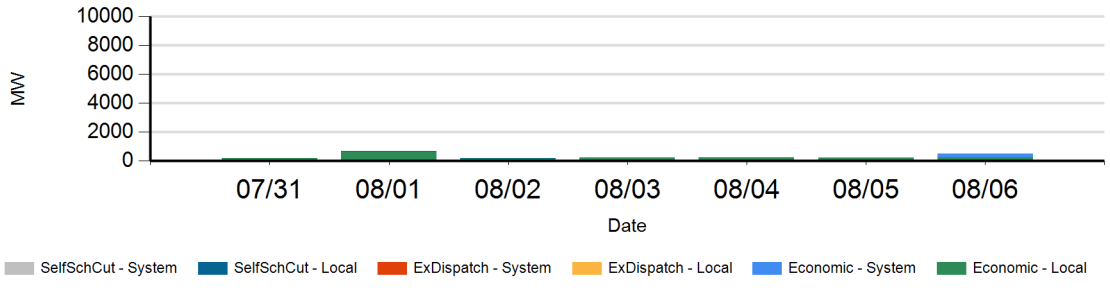
2. Maximum wind/solar generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular hour. - 8/6/2021



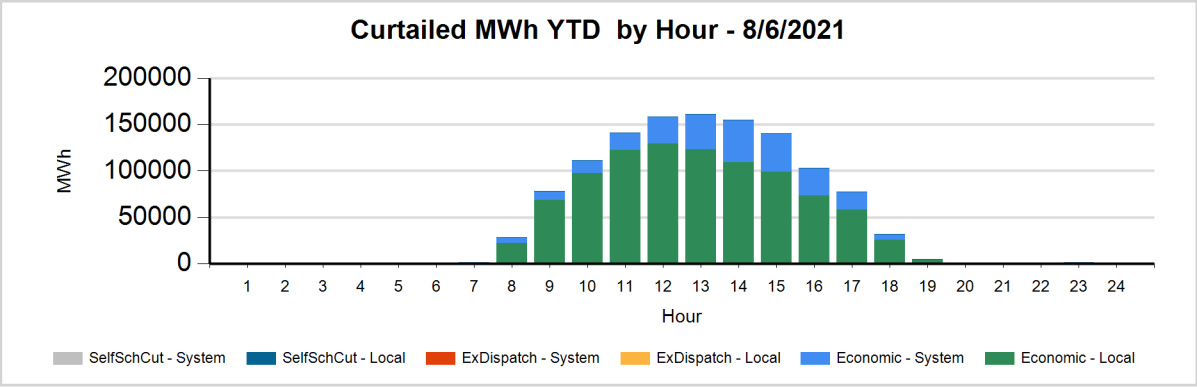
3. Daily wind/solar curtailment energy in MWh on a 7-day basis. - 8/6/2021



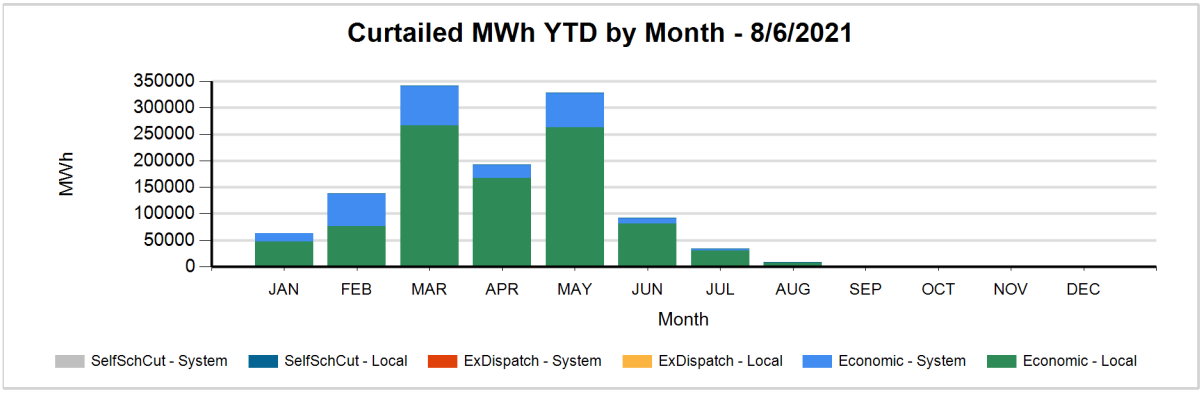
4. Maximum generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular day on a 7-day basis. - 8/6/2021



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 - 8/6/2021
LocalEconomic	937,041
LocalSelfSchCut	4,663
SystemEconomic	255,701
TOTAL	1,197,405

California ISO

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
08/06	7	Economic	System	SOLR	1	7
08/06	8	Economic	Local	SOLR	12	21
08/06	8	Economic	Local	WIND	3	34
08/06	8	Economic	System	SOLR	1	
08/06	9	Economic	Local	SOLR	165	219
08/06	9	Economic	Local	WIND	44	
08/06	9	Economic	System	SOLR	66	138
08/06	9	Economic	System	WIND	93	143
08/06	10	Economic	Local	SOLR	156	173
08/06	10	Economic	System	SOLR	2	
08/06	10	Economic	System	WIND	62	117
08/06	11	Economic	Local	SOLR	212	238
08/06	11	Economic	Local	WIND	7	50
08/06	11	Economic	System	SOLR	1	
08/06	11	Economic	System	WIND	23	
08/06	11	SelfSchCut	Local	SOLR	0	
08/06	12	Economic	Local	SOLR	242	251
08/06	12	Economic	Local	WIND	4	
08/06	12	Economic	System	WIND	39	57
08/06	12	SelfSchCut	Local	SOLR	2	11
08/06	13	Economic	Local	SOLR	125	159
08/06	14	Economic	Local	SOLR	82	90
08/06	15	Economic	Local	SOLR	114	149
08/06	15	SelfSchCut	Local	SOLR	5	
08/06	16	Economic	Local	SOLR	97	78
08/06	16	Economic	System	SOLR	74	138
08/06	17	Economic	Local	SOLR	95	242
08/06	17	Economic	System	SOLR	27	
08/06	18	Economic	Local	SOLR	19	34
08/06	18	SelfSchCut	Local	SOLR	3	
08/06	19	Economic	Local	SOLR	0	2

08/06	21	Economic	Local	WIND	14	
08/06	21	Economic	System	WIND	54	164
08/06	22	Economic	Local	WIND	68	
08/06	22	Economic	System	WIND	84	164
08/06	23	Economic	Local	WIND	14	164
08/06	23	Economic	System	WIND	59	