

Wind and Solar Curtailment November 18, 2020

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.
- 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.

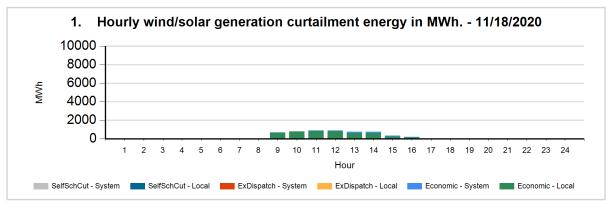
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <u>http://www.caiso.com/green/renewableswatch.html</u>.

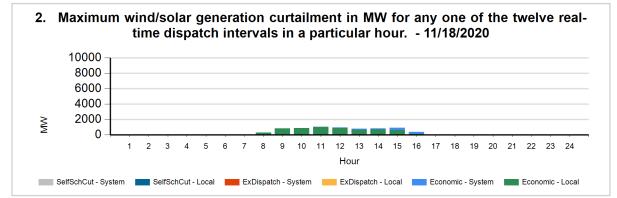
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

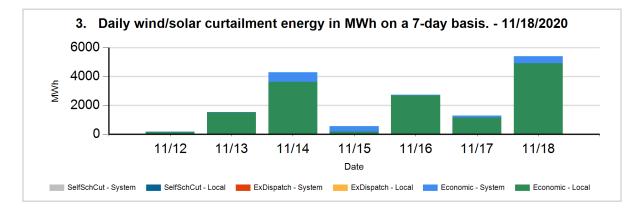
For more information on oversupply conditions, please see: <u>https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf</u>

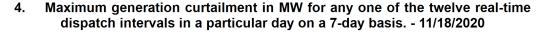


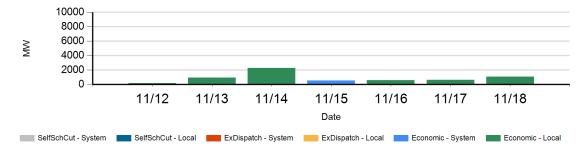
The following charts show the daily and 7-day wind and solar curtailment by category, if any.





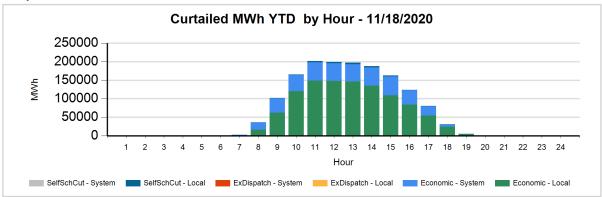




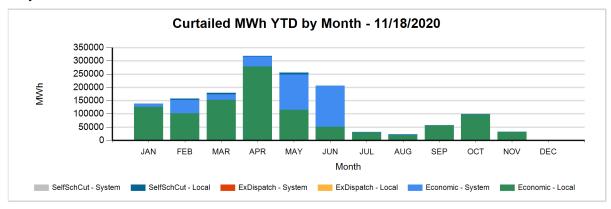




The following charts show hourly year to date wind and solar curtailment by category, if any.



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



TYPE	YTD CURTAILED MWH - 11/18/2020
LocalEconomic	1,056,071
LocalSelfSchCut	20,848
SystemEconomic	420,644
TOTAL	1,497,562



Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
11/18	7	Economic	Local	SOLR	1	
11/18	7	Economic	System	SOLR	1	13
11/18	8	Economic	Local	SOLR	46	285
11/18	8	Economic	System	SOLR	1	
11/18	9	Economic	Local	SOLR	696	807
11/18	9	Economic	Local	WIND	4	5
11/18	9	Economic	System	SOLR	1	
11/18	10	Economic	Local	SOLR	795	844
11/18	10	Economic	Local	WIND	10	10
11/18	11	Economic	Local	SOLR	851	952
11/18	11	Economic	Local	WIND	46	102
11/18	11	Economic	System	WIND	5	
11/18	12	Economic	Local	SOLR	802	840
11/18	12	Economic	Local	WIND	33	49
11/18	12	Economic	System	WIND	48	77
11/18	13	Economic	Local	SOLR	601	616
11/18	13	Economic	Local	WIND	27	32
11/18	13	Economic	System	WIND	115	138
11/18	14	Economic	Local	SOLR	576	670
11/18	14	Economic	Local	WIND	43	35
11/18	14	Economic	System	WIND	140	137
11/18	15	Economic	Local	SOLR	177	476
11/18	15	Economic	Local	WIND	60	147
11/18	15	Economic	System	WIND	111	273
11/18	16	Economic	Local	SOLR	4	46
11/18	16	Economic	Local	WIND	136	75
11/18	16	Economic	System	WIND	76	239
11/18	17	Economic	System	WIND	2	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.

