Wind and Solar Curtailment November 08, 2018

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.

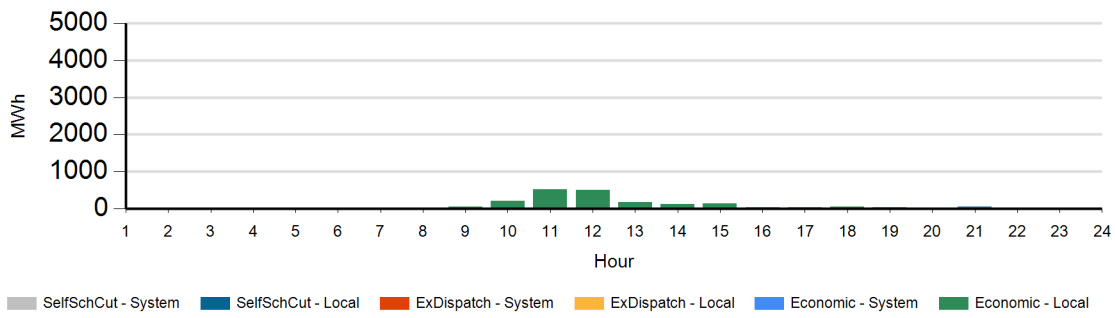
[2]The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: http://www.caiso.com/green/renewableswatch.html.

[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.

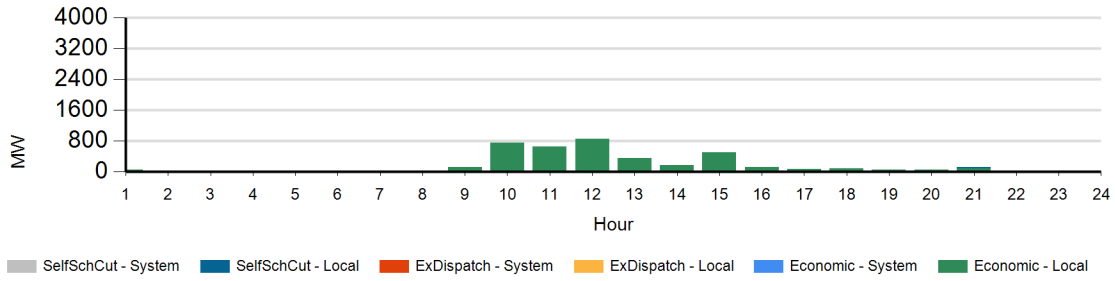
For more information on oversupply conditions, please see:
https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf

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

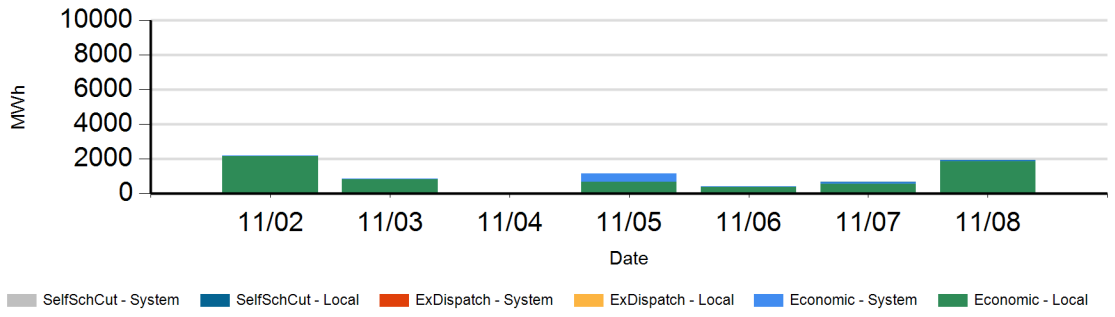
1. Hourly wind/solar generation curtailment energy in MWh.



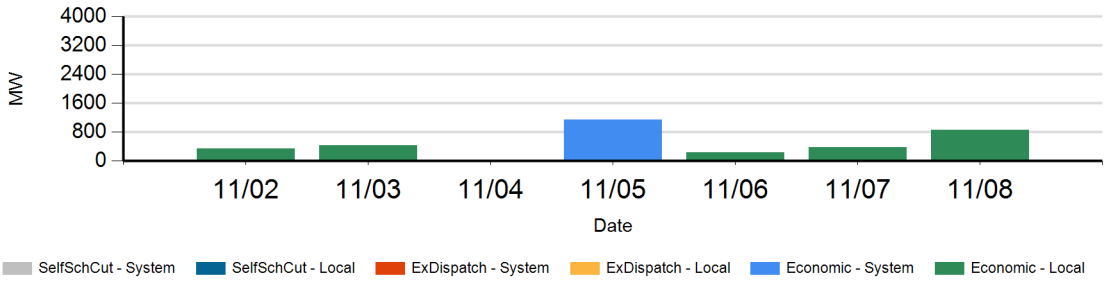
2. Maximum wind/solar generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular hour.



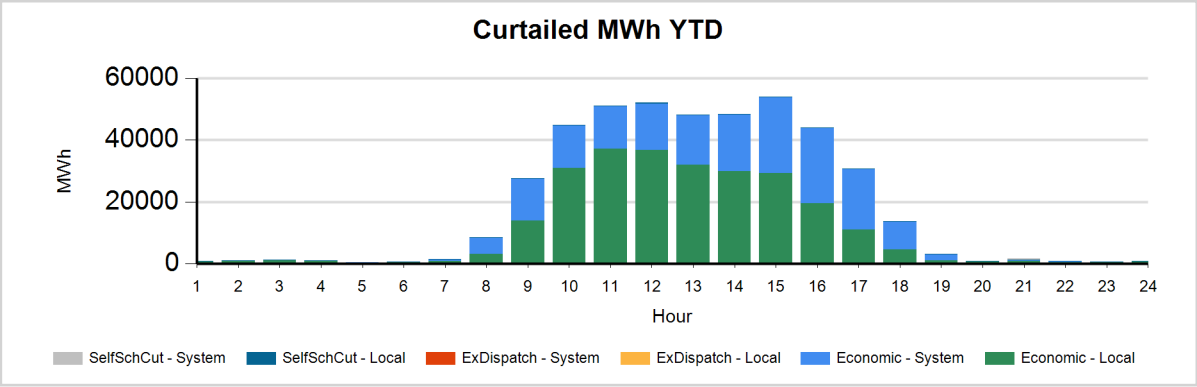
3. Daily wind/solar curtailment energy in MWh on a 7-day rolling basis.



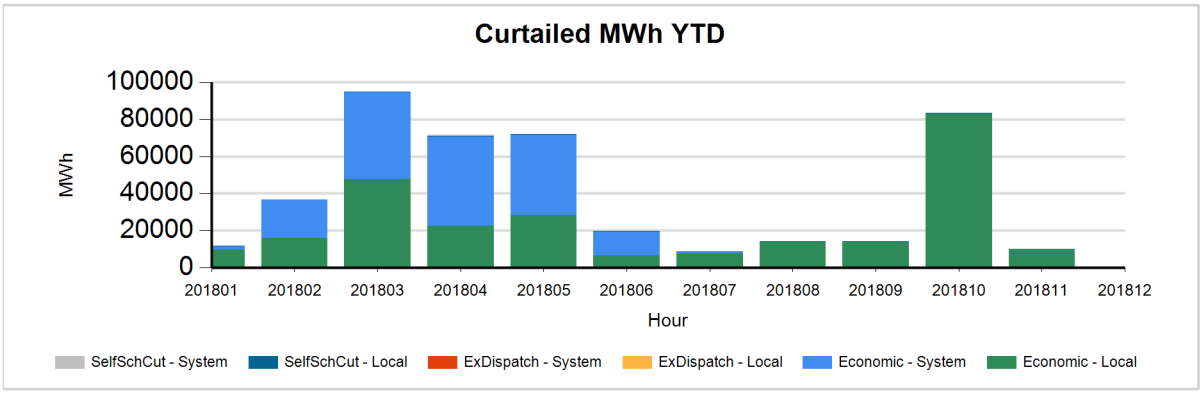
4. Maximum generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular day on a 7-day rolling basis.



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
LocalEconomic	258,040
LocalSelfSchCut	1,662
SystemEconomic	177,220
SystemSelfSchCut	493
TOTAL	437,415

California ISO

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
11/08	1	Economic	Local	WIND	8	43
11/08	8	Economic	Local	WIND	2	8
11/08	9	Economic	Local	SOLR	42	103
11/08	9	Economic	Local	WIND	4	6
11/08	10	Economic	Local	SOLR	193	729
11/08	10	Economic	Local	WIND	15	24
11/08	11	Economic	Local	SOLR	491	623
11/08	11	Economic	Local	WIND	30	23
11/08	12	Economic	Local	SOLR	457	802
11/08	12	Economic	Local	WIND	44	45
11/08	13	Economic	Local	SOLR	116	310
11/08	13	Economic	Local	WIND	60	35
11/08	14	Economic	Local	SOLR	66	87
11/08	14	Economic	Local	WIND	50	76
11/08	15	Economic	Local	SOLR	85	462
11/08	15	Economic	Local	WIND	43	44
11/08	16	Economic	Local	WIND	40	108
11/08	17	Economic	Local	WIND	33	62
11/08	18	Economic	Local	WIND	45	73
11/08	19	Economic	Local	WIND	28	42
11/08	20	Economic	Local	WIND	18	50
11/08	21	Economic	Local	WIND	31	75
11/08	21	SelfSchCut	Local	WIND	11	34