Wind and Solar Curtailment May 19, 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.

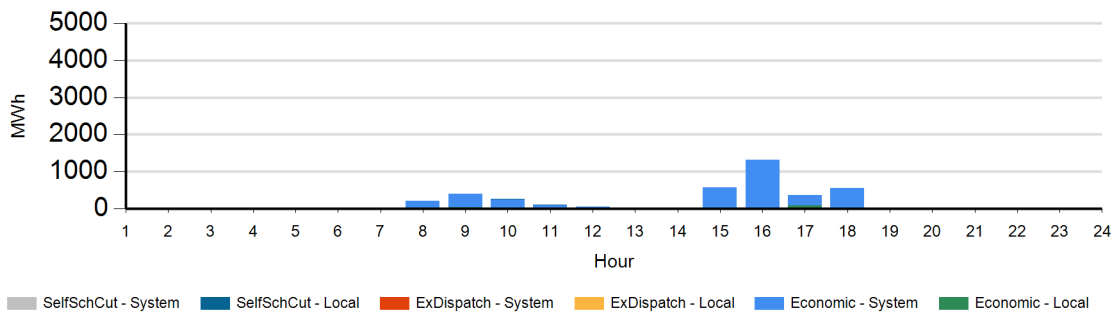
[2]The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: http://www.caiso.com/green/renewableswatch.html.

[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.

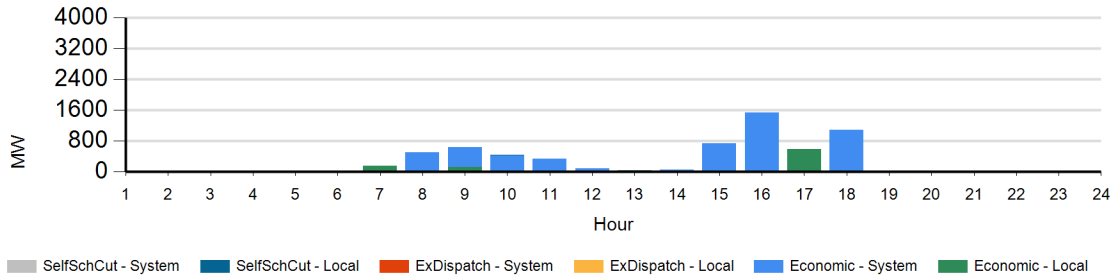
For more information on oversupply conditions, please see:
https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf

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

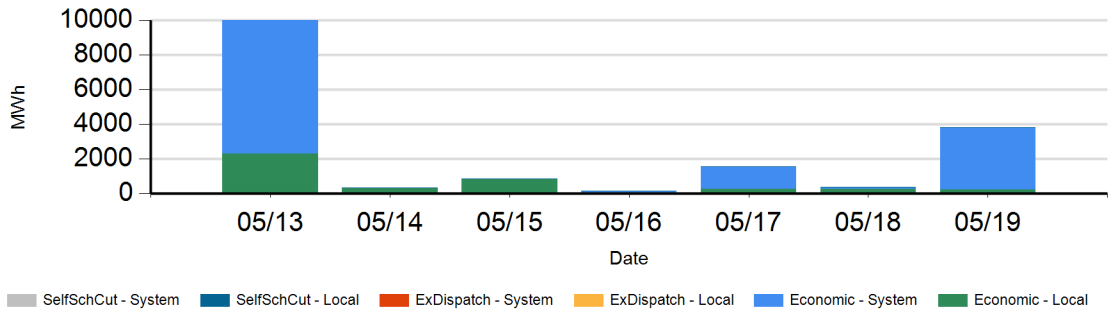
1. Hourly wind/solar generation curtailment energy in MWh.



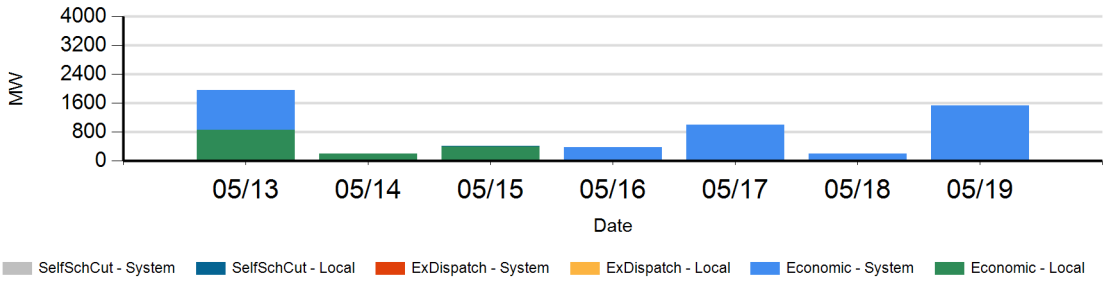
2. Maximum wind/solar generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular hour.



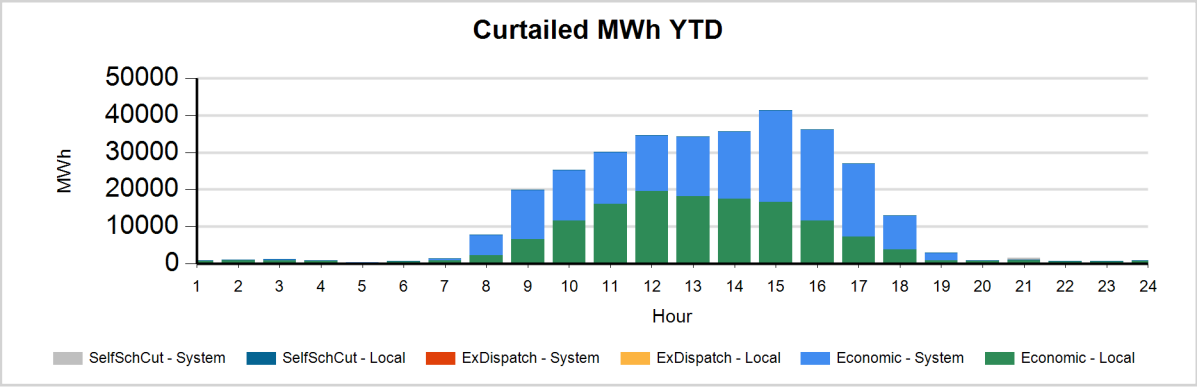
3. Daily wind/solar curtailment energy in MWh on a 7-day rolling basis.



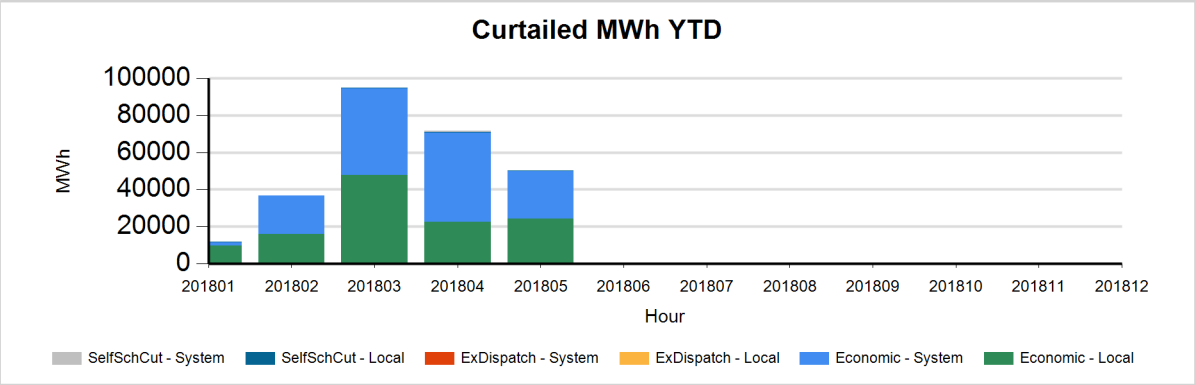
4. Maximum generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular day on a 7-day rolling basis.



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	140,589
LocalSelfSchCut	1,370
SystemEconomic	175,893
SystemSelfSchCut	493
TOTAL	265,075

California ISO

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
05/19	1	Economic	System	WIND	0	3
05/19	7	Economic	Local	SOLR	13	147
05/19	8	Economic	Local	SOLR	7	18
05/19	8	Economic	System	SOLR	181	458
05/19	8	Economic	System	WIND	14	30
05/19	9	Economic	Local	SOLR	38	112
05/19	9	Economic	System	SOLR	328	492
05/19	9	Economic	System	WIND	28	29
05/19	10	Economic	Local	SOLR	7	19
05/19	10	Economic	System	SOLR	230	370
05/19	10	Economic	System	WIND	20	31
05/19	10	SelfSchCut	Local	SOLR	3	8
05/19	11	Economic	Local	SOLR	6	5
05/19	11	Economic	System	SOLR	70	299
05/19	11	Economic	System	WIND	16	32
05/19	12	Economic	Local	SOLR	7	4
05/19	12	Economic	System	SOLR	24	46
05/19	12	Economic	System	WIND	20	34
05/19	13	Economic	Local	SOLR	9	10
05/19	13	Economic	Local	WIND	2	26
05/19	14	Economic	Local	SOLR	18	18
05/19	14	Economic	System	SOLR	4	7
05/19	14	Economic	System	WIND	1	17
05/19	15	Economic	Local	SOLR	3	3
05/19	15	Economic	System	SOLR	532	704
05/19	15	Economic	System	WIND	29	25
05/19	16	Economic	System	SOLR	1249	1476
05/19	16	Economic	System	WIND	56	57
05/19	17	Economic	Local	SOLR	88	553
05/19	17	Economic	Local	WIND	5	32
05/19	18	Economic	System	SOLR	527	1053

05/19	18	Economic	System	WIND	22	38
05/19	19	Economic	System	SOLR	2	14
05/19	19	Economic	System	WIND	1	7