Wind and Solar Curtailment February 06, 2020

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.

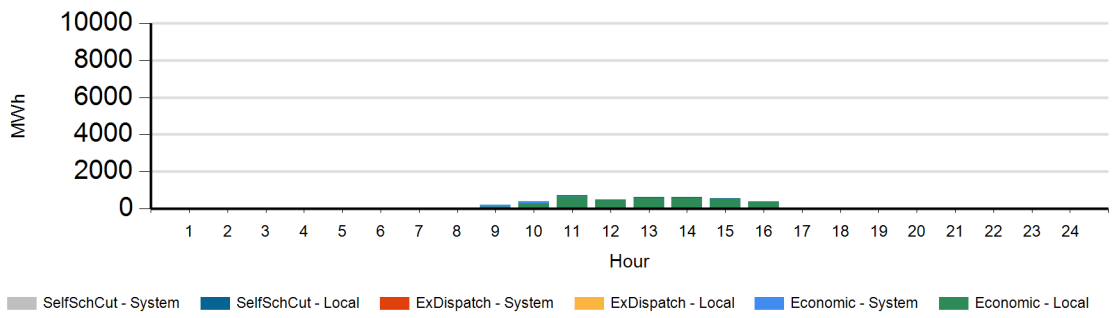
[2]The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: http://www.caiso.com/green/renewableswatch.html.

[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.

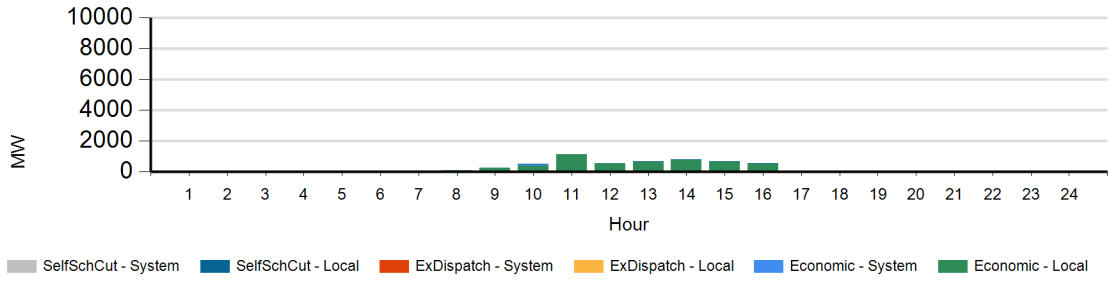
For more information on oversupply conditions, please see:
https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf

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

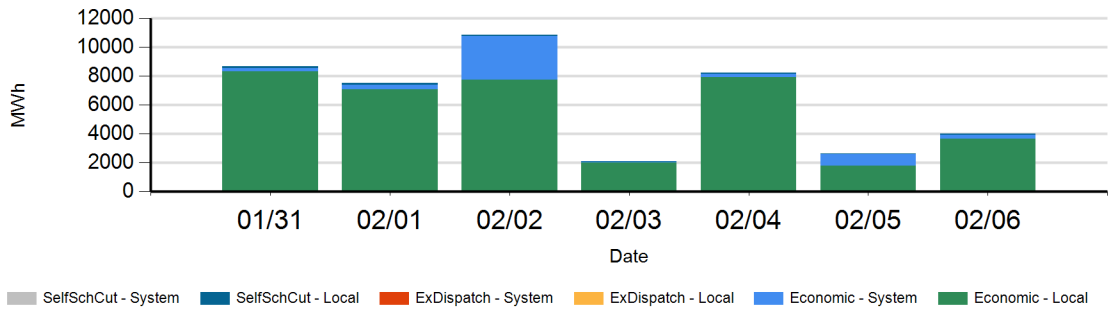
1. Hourly wind/solar generation curtailment energy in MWh. - 2/6/2020



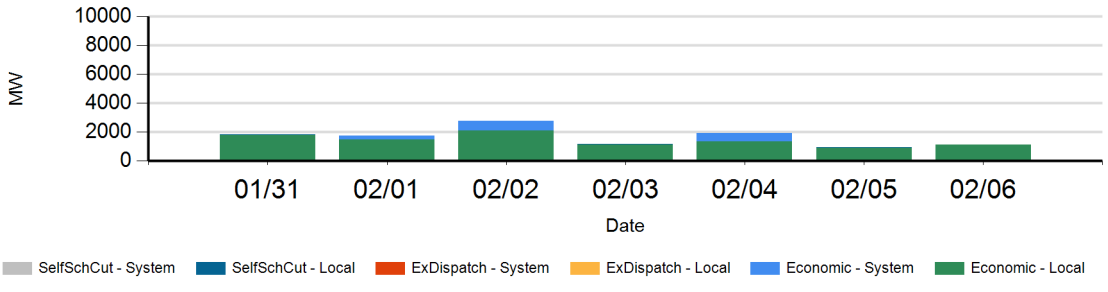
2. Maximum wind/solar generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular hour. - 2/6/2020



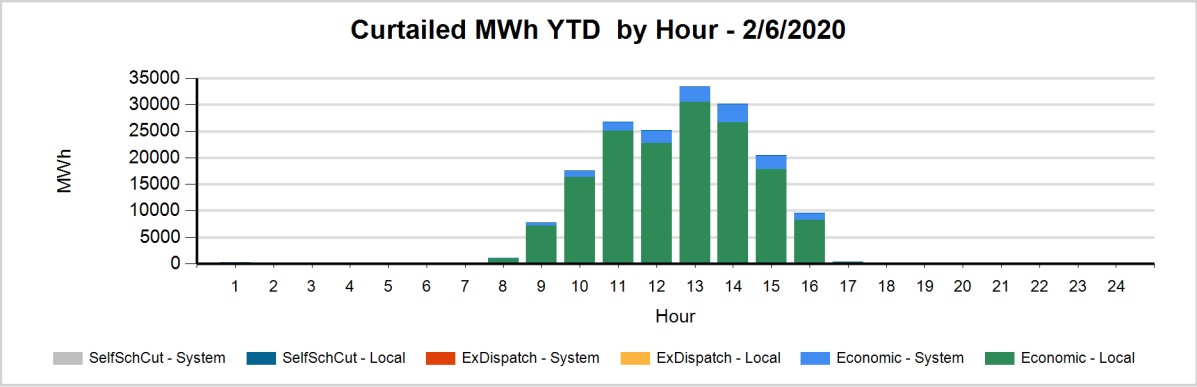
3. Daily wind/solar curtailment energy in MWh on a 7-day basis. - 2/6/2020



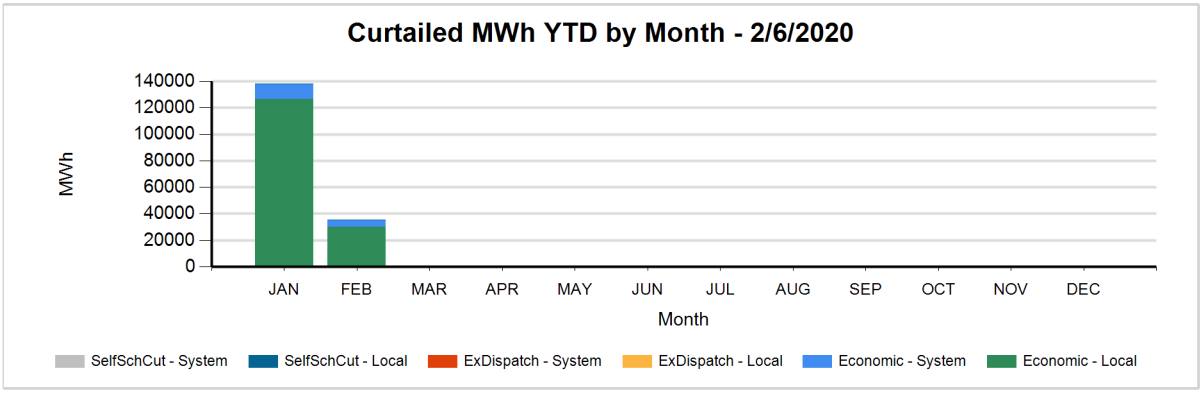
4. Maximum generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular day on a 7-day basis. - 2/6/2020



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 - 2/6/2020
LocalEconomic	156,606
LocalSelfSchCut	759
SystemEconomic	15,916
TOTAL	173,281

Data used to produce hourly chart

California ISO

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
02/06	8	Economic	Local	SOLR	14	72
02/06	8	Economic	System	SOLR	10	
02/06	9	Economic	Local	SOLR	94	262
02/06	9	Economic	System	SOLR	94	
02/06	10	Economic	Local	SOLR	259	370
02/06	10	Economic	Local	WIND	11	12
02/06	10	Economic	System	SOLR	92	69
02/06	10	Economic	System	WIND	1	
02/06	10	SelfSchCut	Local	SOLR	21	25
02/06	11	Economic	Local	SOLR	638	1109
02/06	11	Economic	Local	WIND	11	11
02/06	11	Economic	System	SOLR	41	
02/06	11	SelfSchCut	Local	SOLR	17	
02/06	12	Economic	Local	SOLR	468	527
02/06	12	Economic	Local	WIND	10	11
02/06	12	Economic	System	SOLR	2	
02/06	12	SelfSchCut	Local	SOLR	7	
02/06	13	Economic	Local	SOLR	598	646
02/06	13	Economic	Local	WIND	7	4
02/06	13	SelfSchCut	Local	SOLR	19	20
02/06	14	Economic	Local	SOLR	594	738
02/06	14	Economic	Local	WIND	5	16
02/06	14	SelfSchCut	Local	SOLR	15	20
02/06	15	Economic	Local	SOLR	548	651
02/06	15	Economic	Local	WIND	3	2
02/06	15	Economic	System	SOLR	0	
02/06	15	SelfSchCut	Local	SOLR	6	14
02/06	16	Economic	Local	SOLR	379	533
02/06	16	Economic	System	SOLR	2	10
02/06	16	SelfSchCut	Local	SOLR	6	6
02/06	17	Economic	Local	SOLR	2	
02/06	17	Economic	System	SOLR	5	49

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.