

Wind and Solar Curtailment May 09, 2022

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.
- 2. 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.

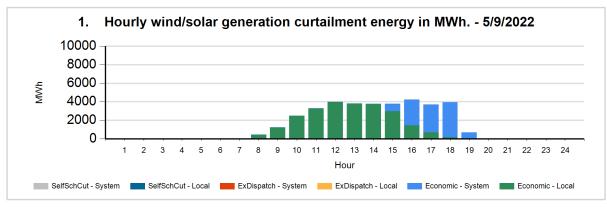
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <u>http://www.caiso.com/green/renewableswatch.html</u>.

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.

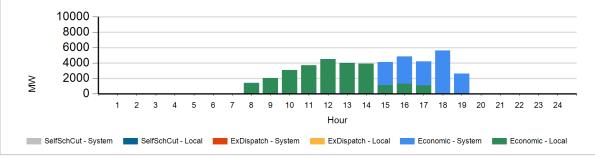
For more information on oversupply conditions, please see: <u>https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf</u>

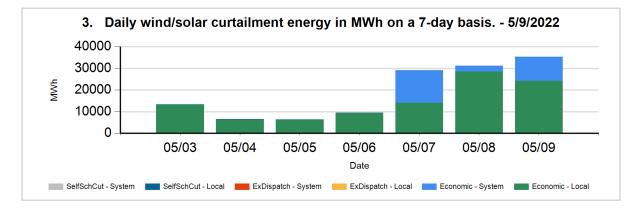


The following charts show the daily and 7-day wind and solar curtailment by category, if any.

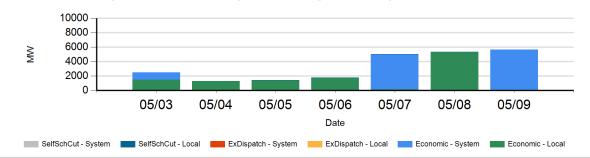


2. Maximum wind/solar generation curtailment in MW for any one of the twelve realtime dispatch intervals in a particular hour. - 5/9/2022



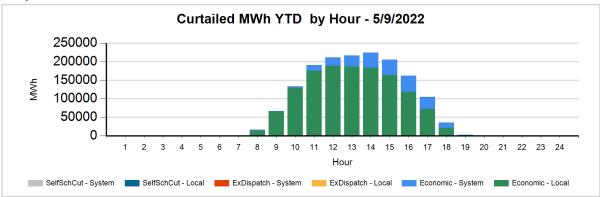


4. Maximum generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular day on a 7-day basis. - 5/9/2022

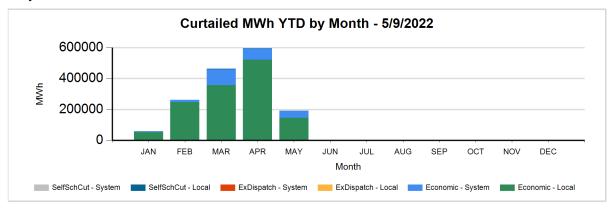




The following charts show hourly year to date wind and solar curtailment by category, if any.



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



TYPE	YTD CURTAILED MWH - 5/9/2022
LocalEconomic	1,319,462
LocalSelfSchCut	4,540
SystemEconomic	246,387
TOTAL	1,570,389



Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
05/09	7	Economic	Local	SOLR	2	
05/09	7	Economic	System	SOLR	5	32
05/09	8	Economic	Local	SOLR	417	1329
05/09	8	Economic	Local	WIND	3	9
05/09	8	Economic	System	SOLR	14	32
05/09	8	Economic	System	WIND	3	28
05/09	8	SelfSchCut	Local	SOLR	1	3
05/09	9	Economic	Local	SOLR	1239	2038
05/09	9	Economic	Local	WIND	4	10
05/09	9	Economic	System	WIND	3	
05/09	10	Economic	Local	SOLR	2410	2929
05/09	10	Economic	Local	WIND	84	145
05/09	11	Economic	Local	SOLR	3209	3584
05/09	11	Economic	Local	WIND	68	113
05/09	11	SelfSchCut	Local	SOLR	5	
05/09	12	Economic	Local	SOLR	3953	4384
05/09	12	Economic	Local	WIND	33	106
05/09	12	SelfSchCut	Local	SOLR	7	11
05/09	13	Economic	Local	SOLR	3746	3951
05/09	13	Economic	Local	WIND	32	53
05/09	13	SelfSchCut	Local	SOLR	9	11
05/09	14	Economic	Local	SOLR	3725	3905
05/09	14	Economic	Local	WIND	24	34
05/09	14	SelfSchCut	Local	SOLR	5	
05/09	15	Economic	Local	SOLR	2908	1126
05/09	15	Economic	Local	WIND	66	10
05/09	15	Economic	System	SOLR	650	2484
05/09	15	Economic	System	WIND	139	505
05/09	15	SelfSchCut	Local	SOLR	3	
05/09	16	Economic	Local	SOLR	1405	1287
05/09	16	Economic	Local	WIND	28	10



05/09	16	Economic	System	SOLR	2276	3047
05/09	16	Economic	System	WIND	498	507
05/09	16	SelfSchCut	Local	SOLR	1	4
05/09	17	Economic	Local	SOLR	689	1052
05/09	17	Economic	Local	WIND	7	10
05/09	17	Economic	System	SOLR	2636	2595
05/09	17	Economic	System	WIND	370	566
05/09	18	Economic	Local	SOLR	156	20
05/09	18	Economic	Local	WIND	2	
05/09	18	Economic	System	SOLR	3319	4902
05/09	18	Economic	System	WIND	462	726
05/09	19	Economic	Local	SOLR	1	4
05/09	19	Economic	System	SOLR	646	2473
05/09	19	Economic	System	WIND	40	139

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.