

Wind and Solar Curtailment October 05, 2023

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.

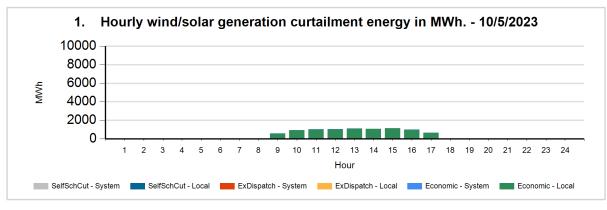
²The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <u>http://www.caiso.com/green/renewableswatch.html</u>.

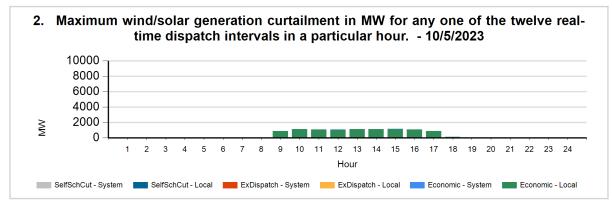
³Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

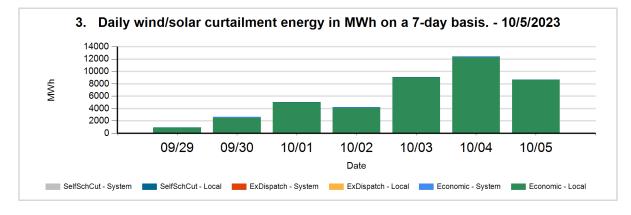
For more information on oversupply conditions, please see: <u>https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf</u>



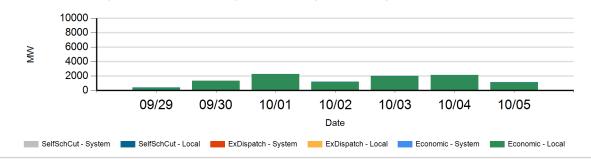
The following charts show the daily and 7-day wind and solar curtailment by category, if any.





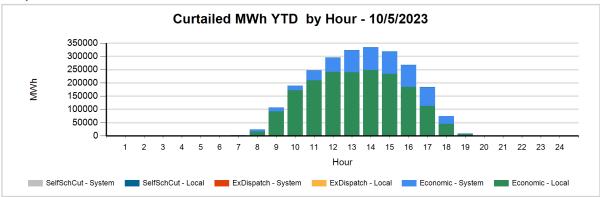


4. Maximum generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular day on a 7-day basis. - 10/5/2023

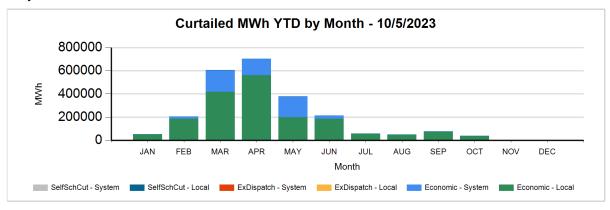




The following charts show hourly year to date wind and solar curtailment by category, if any.



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



TYPE	YTD CURTAILED MWH - 10/5/2023
LocalEconomic	1,809,116
LocalSelfSchCut	1,965
SystemEconomic	571,459
TOTAL	2,382,540



Data used to produce hourly chart

DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
10/05	8	Economic	Local	SOLR	4	9
10/05	8	Economic	System	SOLR	2	5
10/05	9	Economic	Local	SOLR	573	887
10/05	9	Economic	System	SOLR	10	
10/05	10	Economic	Local	SOLR	936	1103
10/05	10	Economic	Local	WIND	11	11
10/05	11	Economic	Local	SOLR	1019	1039
10/05	11	Economic	Local	WIND	17	28
10/05	11	Economic	System	SOLR	3	
10/05	11	SelfSchCut	Local	SOLR	0	
10/05	12	Economic	Local	SOLR	1015	1043
10/05	12	Economic	Local	WIND	35	44
10/05	12	Economic	System	SOLR	1	7
10/05	12	SelfSchCut	Local	SOLR	1	
10/05	13	Economic	Local	SOLR	1048	1095
10/05	13	Economic	Local	WIND	37	45
10/05	13	SelfSchCut	Local	SOLR	4	
10/05	14	Economic	Local	SOLR	1051	1064
10/05	14	Economic	Local	WIND	33	49
10/05	14	Economic	System	SOLR	0	
10/05	15	Economic	Local	SOLR	1101	1122
10/05	15	Economic	Local	WIND	22	41
10/05	15	Economic	System	SOLR	0	2
10/05	16	Economic	Local	SOLR	980	1030
10/05	16	Economic	Local	WIND	22	70
10/05	16	Economic	System	SOLR	1	
10/05	16	SelfSchCut	Local	SOLR	0	
10/05	17	Economic	Local	SOLR	658	875
10/05	17	Economic	Local	WIND	10	
10/05	18	Economic	Local	SOLR	25	117
10/05	18	Economic	Local	WIND	18	17



10/05	18	Economic	System	SOLR	2	
10/05	18	Economic	System	WIND	1	
10/05	19	Economic	Local	WIND	1	9

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.