

## Wind and Solar Curtailment August 08, 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:

- Economic Local: Market dispatch of generators with economic bids to mitigate local congestion<sup>3</sup>.
- 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.

<sup>1</sup>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.

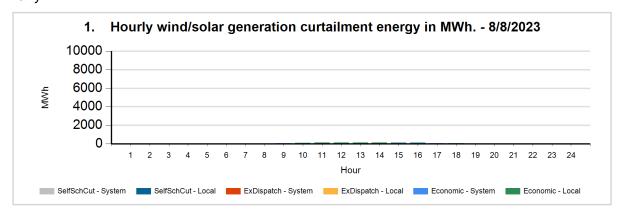
<sup>2</sup>The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <a href="http://www.caiso.com/green/renewableswatch.html">http://www.caiso.com/green/renewableswatch.html</a>.

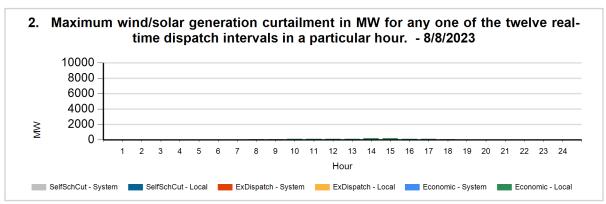
<sup>3</sup>Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

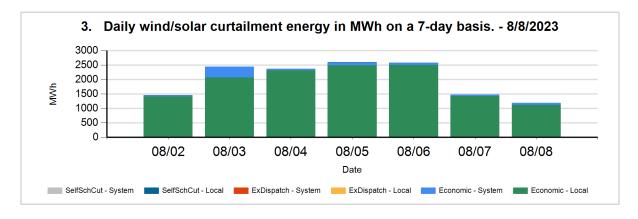
For more information on oversupply conditions, please see: <a href="https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables">https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables</a> FastFacts.pdf

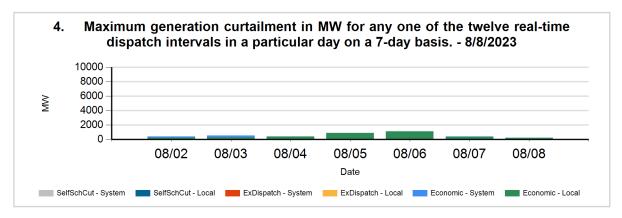


The following charts show the daily and 7-day wind and solar curtailment by category, if any.



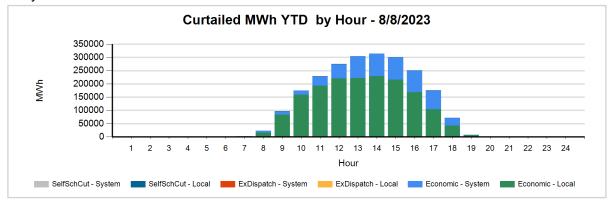




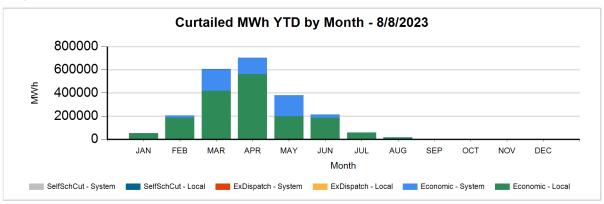




The following charts show hourly year to date wind and solar curtailment by category, if any.



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



TYPE	YTD CURTAILED MWH - 8/8/2023
LocalEconomic	1,664,261
LocalSelfSchCut	1,104
SystemEconomic	568,284
TOTAL	2,233,648



## Data used to produce hourly chart

08/08   1   Economic   System   WIND   0   4     08/08   3   Economic   Local   WIND   1   5     08/08   4   Economic   Local   WIND   4   4     08/08   5   Economic   Local   WIND   4   4     08/08   6   Economic   Local   WIND   4   44     08/08   7   Economic   Local   WIND   4   44     08/08   7   Economic   Local   WIND   4   44     08/08   8   Economic   Local   SOLR   8     08/08   8   Economic   Local   WIND   1   1     08/08   8   Economic   Local   WIND   1   1     08/08   9   Economic   Local   SOLR   62   89     08/08   9   Economic   Local   WIND   0   0	DATE	HOU	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
08/08   1   Economic   System   WIND   0   4     08/08   3   Economic   Local   WIND   1   5     08/08   4   Economic   Local   WIND   4   4     08/08   5   Economic   Local   WIND   4   4     08/08   6   Economic   Local   WIND   4   44     08/08   7   Economic   Local   WIND   4   44     08/08   7   Economic   System   SOLR   8   8     08/08   8   Economic   Local   WIND   1   1   1     08/08   8   Economic   Local   WIND   1   1   1   1     08/08   8   Economic   System   SOLR   25   89     08/08   9   Economic   Local   WIND   0   0   0   0   0   0   0   0	08/08		Economic	Local	WIND	1	
08/08   3   Economic   Local   WIND   1   5     08/08   4   Economic   Local   WIND   4   6     08/08   5   Economic   Local   WIND   4   4     08/08   6   Economic   Local   WIND   4   4     08/08   7   Economic   Local   WIND   4   4     08/08   7   Economic   Local   WIND   4   4     08/08   7   Economic   Local   WIND   4   4     08/08   8   Economic   Local   SOLR   8     08/08   8   Economic   Local   WIND   1   1     08/08   8   Economic   Local   WIND   0   0     08/08   9   Economic   Local   WIND   0   0     08/08   9   Economic   Local   WIND   0   0     08	08/08					0	4
08/08   4   Economic   Local   WIND   4   6     08/08   5   Economic   Local   WIND   4   4     08/08   6   Economic   Local   WIND   4   4     08/08   7   Economic   Local   SOLR   4   44     08/08   7   Economic   Local   WIND   4   4     08/08   7   Economic   System   SOLR   8     08/08   8   Economic   Local   WIND   1   1   1     08/08   8   Economic   Local   WIND   1				-			
08/08   5   Economic   Local   WIND   4   4     08/08   6   Economic   Local   WIND   4   4     08/08   7   Economic   Local   SOLR   4   44     08/08   7   Economic   Local   WIND   4   4     08/08   8   Economic   System   SOLR   8     08/08   8   Economic   Local   WIND   1   1   1     08/08   8   Economic   Local   WIND   1							
08/08   6   Economic   Local   WIND   4   4     08/08   7   Economic   Local   SOLR   4   44     08/08   7   Economic   Local   WIND   4   4     08/08   7   Economic   System   SOLR   8     08/08   8   Economic   Local   SOLR   14   57     08/08   8   Economic   Local   WIND   1   1   1     08/08   8   Economic   Local   WIND   1   1   1     08/08   8   Economic   Local   SOLR   25   0     08/08   9   Economic   Local   WIND   0   0     08/08   9   Economic   System   SOLR   112   125     08/08   9   Economic   Local   SOLR   112   125     08/08   10   Economic   Local   SOLR   112 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
08/08   7   Economic   Local   SOLR   4   44     08/08   7   Economic   Local   WIND   4   4     08/08   7   Economic   System   SOLR   8     08/08   8   Economic   Local   WIND   1   1     08/08   8   Economic   Local   WIND   1   1   1     08/08   8   Economic   System   SOLR   25   62   89     08/08   9   Economic   Local   SOLR   62   89     08/08   9   Economic   Local   WIND   0   0     08/08   9   Economic   System   SOLR   13   13     08/08   9   Economic   Local   SOLR   112   125     08/08   9   Economic   Local   SOLR   112   125     08/08   10   Economic   Local   SOLR   1							
08/08   7   Economic   Local   WIND   4   4     08/08   7   Economic   System   SOLR   8     08/08   8   Economic   Local   SOLR   14   57     08/08   8   Economic   Local   WIND   1   1   1     08/08   8   Economic   System   SOLR   25   25     08/08   9   Economic   Local   SOLR   62   89     08/08   9   Economic   Local   WIND   0   0     08/08   9   Economic   System   SOLR   13   0     08/08   9   Economic   System   WIND   0   0     08/08   10   Economic   Local   SOLR   112   125     08/08   10   Economic   Local   SOLR   136   139     08/08   11   Economic   Local   SOLR   124   <							
08/08   7   Economic   System   SOLR   8     08/08   8   Economic   Local   SOLR   14   57     08/08   8   Economic   Local   WIND   1   1     08/08   8   Economic   System   SOLR   25     08/08   9   Economic   Local   WIND   0     08/08   9   Economic   Local   WIND   0     08/08   9   Economic   System   SOLR   13     08/08   9   Economic   System   WIND   0     08/08   9   Economic   Local   SOLR   112   125     08/08   10   Economic   Local   WIND   0   0   0     08/08   10   Economic   Local   SOLR   136   139   08/08   138   139   139   139   139   139   139   139   139   139   139							
08/08   8   Economic   Local   SOLR   14   57     08/08   8   Economic   Local   WIND   1   1     08/08   8   Economic   System   SOLR   25     08/08   9   Economic   Local   WIND   0     08/08   9   Economic   Local   WIND   0     08/08   9   Economic   System   SOLR   13     08/08   9   Economic   System   WIND   0     08/08   9   Economic   Local   SOLR   112   125     08/08   9   Economic   Local   SOLR   112   125     08/08   10   Economic   Local   SOLR   136   139     08/08   11   Economic   Local   SOLR   137   139     08/08   12   Economic   Local   SOLR   124   131     08/08   14   Econo	08/08			Local	WIND	4	4
08/08   8   Economic   Local   WIND   1   1     08/08   8   Economic   System   SOLR   25     08/08   9   Economic   Local   SOLR   62   89     08/08   9   Economic   Local   WIND   0   0     08/08   9   Economic   System   SOLR   13   0     08/08   9   Economic   System   WIND   0   0     08/08   10   Economic   Local   SOLR   112   125     08/08   10   Economic   Local   WIND   0   0     08/08   10   Economic   Local   SOLR   136   139     08/08   11   Economic   Local   SOLR   137   139     08/08   12   Economic   Local   SOLR   124   131     08/08   14   Economic   Local   SOLR   120   181	08/08	7	Economic	System	SOLR	8	
08/08   8   Economic   System   SOLR   25     08/08   9   Economic   Local   SOLR   62   89     08/08   9   Economic   Local   WIND   0   0     08/08   9   Economic   System   SOLR   13   13     08/08   9   Economic   System   WIND   0   0     08/08   10   Economic   Local   SOLR   112   125     08/08   10   Economic   Local   WIND   0   0     08/08   11   Economic   Local   SOLR   136   139     08/08   12   Economic   Local   SOLR   137   139     08/08   13   Economic   Local   SOLR   124   131     08/08   14   Economic   Local   SOLR   120   181     08/08   15   Economic   Local   WIND   25   37 </td <td>08/08</td> <td>8</td> <td>Economic</td> <td>Local</td> <td>SOLR</td> <td>14</td> <td>57</td>	08/08	8	Economic	Local	SOLR	14	57
08/08   9   Economic   Local   SOLR   62   89     08/08   9   Economic   Local   WIND   0   0     08/08   9   Economic   System   SOLR   13   13     08/08   9   Economic   System   WIND   0   0     08/08   10   Economic   Local   SOLR   112   125     08/08   10   Economic   Local   WIND   0   0     08/08   11   Economic   Local   SOLR   136   139     08/08   12   Economic   Local   SOLR   137   139     08/08   13   Economic   Local   SOLR   124   131     08/08   14   Economic   Local   SOLR   120   181     08/08   14   Economic   Local   WIND   10   39     08/08   15   Economic   Local   WIND   25 </td <td>08/08</td> <td>8</td> <td>Economic</td> <td>Local</td> <td>WIND</td> <td>1</td> <td>1</td>	08/08	8	Economic	Local	WIND	1	1
08/08   9 Economic   Local   WIND   0     08/08   9 Economic   System   SOLR   13     08/08   9 Economic   System   WIND   0     08/08   10 Economic   Local   SOLR   112   125     08/08   10 Economic   Local   WIND   0   0     08/08   11 Economic   Local   SOLR   136   139     08/08   12 Economic   Local   SOLR   137   139     08/08   12 Economic   Local   SOLR   124   131     08/08   13 Economic   Local   SOLR   120   181     08/08   14 Economic   Local   WIND   10   39     08/08   15 Economic   Local   WIND   25   37     08/08   15 Economic   Local   WIND   25   37     08/08   16 Economic   Local   SOLR   86   97     08/08   16 Economic <t< td=""><td>08/08</td><td>8</td><td>Economic</td><td>System</td><td>SOLR</td><td>25</td><td></td></t<>	08/08	8	Economic	System	SOLR	25	
08/08   9   Economic   System   SOLR   13     08/08   9   Economic   System   WIND   0     08/08   10   Economic   Local   SOLR   112   125     08/08   10   Economic   Local   WIND   0   0     08/08   11   Economic   Local   SOLR   136   139     08/08   12   Economic   Local   SOLR   137   139     08/08   13   Economic   Local   SOLR   124   131     08/08   14   Economic   Local   SOLR   120   181     08/08   14   Economic   Local   WIND   10   39     08/08   15   Economic   Local   WIND   25   37     08/08   15   Economic   Local   WIND   25   37     08/08   16   Economic   Local   WIND   40   41	08/08	9	Economic	Local	SOLR	62	89
08/08   9   Economic   System   WIND   0     08/08   10   Economic   Local   SOLR   112   125     08/08   10   Economic   Local   WIND   0   0     08/08   11   Economic   Local   SOLR   136   139     08/08   12   Economic   Local   SOLR   137   139     08/08   13   Economic   Local   SOLR   124   131     08/08   14   Economic   Local   SOLR   120   181     08/08   14   Economic   Local   WIND   10   39     08/08   15   Economic   Local   WIND   25   37     08/08   15   Economic   System   SOLR   11     08/08   16   Economic   Local   WIND   40   41     08/08   16   Economic   Local   WIND   40   41	08/08	9	Economic	Local	WIND	0	
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08/08   10   Economic   Local   WIND   0     08/08   11   Economic   Local   SOLR   136   139     08/08   12   Economic   Local   SOLR   137   139     08/08   13   Economic   Local   SOLR   124   131     08/08   14   Economic   Local   SOLR   120   181     08/08   14   Economic   Local   WIND   10   39     08/08   15   Economic   Local   SOLR   86   170     08/08   15   Economic   Local   WIND   25   37     08/08   15   Economic   System   SOLR   11     08/08   16   Economic   Local   WIND   40   41     08/08   16   Economic   System   SOLR   1     08/08   16   Economic   System   SOLR   1     08/08	08/08	9	Economic	System	WIND	0	
08/08   11   Economic   Local   SOLR   136   139     08/08   12   Economic   Local   SOLR   137   139     08/08   13   Economic   Local   SOLR   124   131     08/08   14   Economic   Local   SOLR   120   181     08/08   14   Economic   Local   WIND   10   39     08/08   15   Economic   Local   SOLR   86   170     08/08   15   Economic   Local   WIND   25   37     08/08   15   Economic   System   SOLR   11     08/08   16   Economic   Local   WIND   40   41     08/08   16   Economic   System   SOLR   1     08/08   17   Economic   System   SOLR   60   91	08/08	10	Economic	Local	SOLR	112	125
08/08   12 Economic   Local   SOLR   137   139     08/08   13 Economic   Local   SOLR   124   131     08/08   14 Economic   Local   SOLR   120   181     08/08   14 Economic   Local   WIND   10   39     08/08   15 Economic   Local   SOLR   86   170     08/08   15 Economic   Local   WIND   25   37     08/08   15 Economic   System   SOLR   11     08/08   16 Economic   Local   SOLR   86   97     08/08   16 Economic   Local   WIND   40   41     08/08   16 Economic   System   SOLR   1     08/08   17 Economic   Local   SOLR   60   91	08/08	10	Economic	Local	WIND	0	
08/08   13   Economic   Local   SOLR   124   131     08/08   14   Economic   Local   SOLR   120   181     08/08   14   Economic   Local   WIND   10   39     08/08   15   Economic   Local   SOLR   86   170     08/08   15   Economic   Local   WIND   25   37     08/08   15   Economic   System   SOLR   11     08/08   16   Economic   Local   WIND   40   41     08/08   16   Economic   Local   WIND   40   41     08/08   16   Economic   System   SOLR   1     08/08   17   Economic   Local   SOLR   60   91	08/08	11	Economic	Local	SOLR	136	139
08/08   14   Economic   Local   SOLR   120   181     08/08   14   Economic   Local   WIND   10   39     08/08   15   Economic   Local   SOLR   86   170     08/08   15   Economic   Local   WIND   25   37     08/08   15   Economic   System   SOLR   11     08/08   16   Economic   Local   SOLR   86   97     08/08   16   Economic   Local   WIND   40   41     08/08   16   Economic   System   SOLR   1     08/08   17   Economic   Local   SOLR   60   91	08/08	12	Economic	Local	SOLR	137	139
08/08 14 Economic Local WIND 10 39   08/08 15 Economic Local SOLR 86 170   08/08 15 Economic Local WIND 25 37   08/08 15 Economic System SOLR 11   08/08 16 Economic Local SOLR 86 97   08/08 16 Economic Local WIND 40 41   08/08 16 Economic System SOLR 1   08/08 17 Economic Local SOLR 60 91	08/08	13	Economic	Local	SOLR	124	131
08/08   15   Economic   Local   SOLR   86   170     08/08   15   Economic   Local   WIND   25   37     08/08   15   Economic   System   SOLR   11     08/08   16   Economic   Local   SOLR   86   97     08/08   16   Economic   Local   WIND   40   41     08/08   16   Economic   System   SOLR   1     08/08   17   Economic   Local   SOLR   60   91	08/08	14	Economic	Local	SOLR	120	181
08/08   15   Economic   Local   WIND   25   37     08/08   15   Economic   System   SOLR   11     08/08   16   Economic   Local   SOLR   86   97     08/08   16   Economic   Local   WIND   40   41     08/08   16   Economic   System   SOLR   1     08/08   17   Economic   Local   SOLR   60   91	08/08	14	Economic	Local	WIND	10	39
08/08   15   Economic   System   SOLR   11     08/08   16   Economic   Local   SOLR   86   97     08/08   16   Economic   Local   WIND   40   41     08/08   16   Economic   System   SOLR   1     08/08   17   Economic   Local   SOLR   60   91	08/08	15	Economic	Local	SOLR	86	170
08/08 16 Economic Local SOLR 86 97   08/08 16 Economic Local WIND 40 41   08/08 16 Economic System SOLR 1   08/08 17 Economic Local SOLR 60 91	08/08	15	Economic	Local	WIND	25	37
08/08   16   Economic   Local   WIND   40   41     08/08   16   Economic   System   SOLR   1     08/08   17   Economic   Local   SOLR   60   91	08/08	15	Economic	System	SOLR	11	
08/08   16   Economic   System   SOLR   1     08/08   17   Economic   Local   SOLR   60   91	08/08	16	Economic	Local	SOLR	86	97
08/08 17 Economic Local SOLR 60 91	08/08	16	Economic	Local	WIND	40	41
	08/08	16	Economic	System	SOLR	1	
08/08 17 Economic Local WIND 18 41	08/08	17	Economic	Local	SOLR	60	91
	08/08	17	Economic	Local	WIND	18	41



08/08	17	Economic	System	SOLR	2	
08/08	18	Economic	Local	SOLR	41	54
08/08	18	Economic	Local	WIND	25	33
08/08	19	Economic	Local	SOLR	1	2
08/08	19	Economic	Local	WIND	2	7
08/08	23	Economic	Local	WIND	2	4
08/08	24	Economic	Local	WIND	2	7

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.