

## Wind and Solar Curtailment October 02, 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 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.

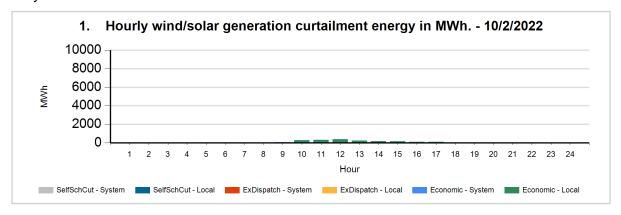
<sup>2</sup>The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: <a href="http://www.caiso.com/green/renewableswatch.html">http://www.caiso.com/green/renewableswatch.html</a>.

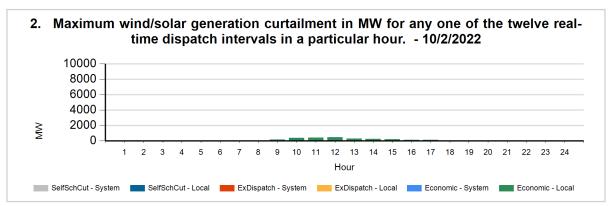
<sup>3</sup>Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

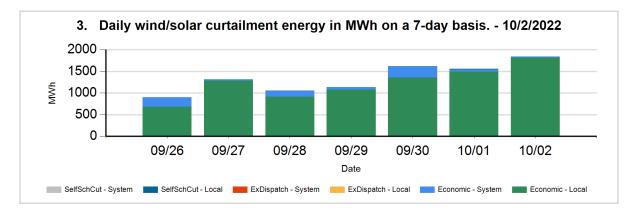
For more information on oversupply conditions, please see: <a href="https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables">https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables</a> FastFacts.pdf

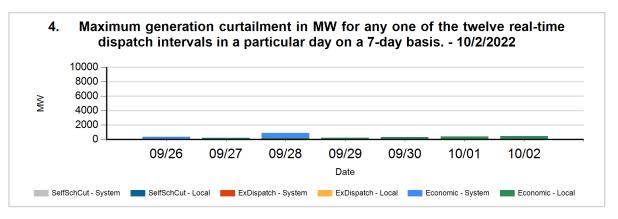


The following charts show the daily and 7-day wind and solar curtailment by category, if any.



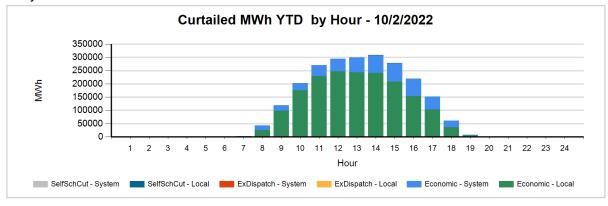




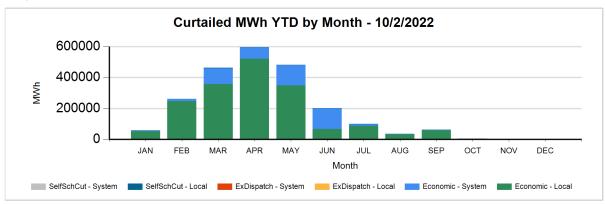




The following charts show hourly year to date wind and solar curtailment by category, if any.



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



TYPE	YTD CURTAILED MWH - 10/2/2022
LocalEconomic	1,769,712
LocalSelfSchCut	5,853
SystemEconomic	484,990
TOTAL	2,260,556



## Data used to produce hourly chart

10/02       14       SelfSchCut       Local       SOLR       1         10/02       15       Economic       Local       SOLR       159       193         10/02       15       Economic       System       SOLR       6         10/02       15       SelfSchCut       Local       SOLR       0         10/02       16       Economic       Local       SOLR       102       110         10/02       16       SelfSchCut       Local       SOLR       0	DATE	HOU R	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
10/02	10/02	1	Economic	Local	WIND	5	6
10/02	10/02	2	Economic	Local	WIND	4	5
10/02   5   Economic   Local   WIND   4   4   4   4   4   4   4   4   4	10/02	3	Economic	Local	WIND	4	5
10/02	10/02	4	Economic	Local	WIND	4	4
10/02	10/02	5	Economic	Local	WIND	4	4
10/02	10/02	6	Economic	Local	WIND	4	4
10/02	10/02	7	Economic	Local	WIND	2	3
10/02   9   Economic   Local   SOLR   54   181     10/02   9   Economic   Local   WIND   1   1     10/02   9   Economic   System   SOLR   1     10/02   10   Economic   Local   WIND   4   15     10/02   10   Economic   Local   WIND   4   15     10/02   10   SelfSchCut   Local   SOLR   296   371     10/02   11   Economic   Local   WIND   9   28     10/02   11   Economic   Local   WIND   9   28     10/02   11   SelfSchCut   Local   SOLR   355   397     10/02   12   Economic   Local   WIND   9   28     10/02   12   Economic   Local   SOLR   355   397     10/02   12   Economic   Local   WIND   9   2     10/02   12   Economic   Local   WIND   22   39     10/02   12   Economic   Local   WIND   1     10/02   13   Economic   Local   SOLR   2   8     10/02   14   Economic   Local   SOLR   2   8     10/02   15   Economic   Local   SOLR   182   230     10/02   15   Economic   Local   SOLR   159   193     10/02   15   Economic   Local   SOLR   6     10/02   15   SelfSchCut   Local   SOLR   6     10/02   15   SelfSchCut   Local   SOLR   0     10/02   16   Economic   Local   SOLR   0     10/02   16   Economic   Local   SOLR   102   110     10/02   16   SelfSchCut   Local   SOLR   0	10/02	8	Economic	Local	SOLR	16	34
10/02         9         Economic         Local         WIND         1         1           10/02         9         Economic         System         SOLR         1           10/02         10         Economic         Local         SOLR         259         352           10/02         10         Economic         Local         WIND         4         15           10/02         10         SelfSchCut         Local         SOLR         1         4           10/02         11         Economic         Local         SOLR         296         371           10/02         11         Economic         Local         WIND         9         28           10/02         11         SelfSchCut         Local         SOLR         2           10/02         12         Economic         Local         SOLR         355         397           10/02         12         Economic         Local         WIND         1         1           10/02         12         Economic         System         WIND         1         1           10/02         12         SelfSchCut         Local         SOLR         2         8	10/02	8	Economic	System	SOLR	1	
10/02   9   Economic   System   SOLR   1	10/02	9	Economic	Local	SOLR	54	181
10/02         10         Economic         Local         SOLR         259         352           10/02         10         Economic         Local         WIND         4         15           10/02         10         SelfSchCut         Local         SOLR         1         4           10/02         11         Economic         Local         SOLR         296         371           10/02         11         Economic         Local         WIND         9         28           10/02         11         SelfSchCut         Local         SOLR         2         2           10/02         12         Economic         Local         SOLR         355         397           10/02         12         Economic         Local         WIND         22         39           10/02         12         Economic         System         WIND         1         1           10/02         12         SelfSchCut         Local         SOLR         2         8           10/02         13         Economic         Local         SOLR         240         269           10/02         14         SelfSchCut         Local         SOLR <td< td=""><td>10/02</td><td>9</td><td>Economic</td><td>Local</td><td>WIND</td><td>1</td><td>1</td></td<>	10/02	9	Economic	Local	WIND	1	1
10/02         10         Economic         Local         WIND         4         15           10/02         10         SelfSchCut         Local         SOLR         1         4           10/02         11         Economic         Local         SOLR         296         371           10/02         11         Economic         Local         WIND         9         28           10/02         11         SelfSchCut         Local         SOLR         2	10/02	9	Economic	System	SOLR	1	
10/02         10         SelfSchCut         Local         SOLR         1         4           10/02         11         Economic         Local         SOLR         296         371           10/02         11         Economic         Local         WIND         9         28           10/02         11         SelfSchCut         Local         SOLR         2         2           10/02         12         Economic         Local         SOLR         355         397           10/02         12         Economic         Local         WIND         22         39           10/02         12         Economic         System         WIND         1         1           10/02         12         SelfSchCut         Local         SOLR         2         8           10/02         13         Economic         Local         SOLR         240         269           10/02         14         Economic         Local         SOLR         1         1           10/02         14         SelfSchCut         Local         SOLR         159         193           10/02         15         Economic         Local         SOLR	10/02	10	Economic	Local	SOLR	259	352
10/02         11         Economic         Local         SOLR         296         371           10/02         11         Economic         Local         WIND         9         28           10/02         11         SelfSchCut         Local         SOLR         2	10/02	10	Economic	Local	WIND	4	15
10/02         11         Economic         Local         WIND         9         28           10/02         11         SelfSchCut         Local         SOLR         2           10/02         12         Economic         Local         SOLR         355         397           10/02         12         Economic         Local         WIND         22         39           10/02         12         Economic         System         WIND         1         1           10/02         12         SelfSchCut         Local         SOLR         2         8           10/02         12         SelfSchCut         Local         SOLR         240         269           10/02         13         Economic         Local         SOLR         182         230           10/02         14         SelfSchCut         Local         SOLR         15         193           10/02         15         Economic         Local         SOLR         159         193           10/02         15         SelfSchCut         Local         SOLR         0           10/02         16         Economic         Local         SOLR         102         110	10/02	10	SelfSchCut	Local	SOLR	1	4
10/02         11         SelfSchCut         Local         SOLR         2           10/02         12         Economic         Local         SOLR         355         397           10/02         12         Economic         Local         WIND         22         39           10/02         12         Economic         System         WIND         1         1           10/02         12         SelfSchCut         Local         SOLR         2         8           10/02         13         Economic         Local         SOLR         240         269           10/02         14         Economic         Local         SOLR         182         230           10/02         14         SelfSchCut         Local         SOLR         1         1           10/02         15         Economic         Local         SOLR         159         193           10/02         15         SelfSchCut         Local         SOLR         0           10/02         16         Economic         Local         SOLR         102         110           10/02         16         SelfSchCut         Local         SOLR         102         110	10/02	11	Economic	Local	SOLR	296	371
10/02         12         Economic         Local         SOLR         355         397           10/02         12         Economic         Local         WIND         22         39           10/02         12         Economic         System         WIND         1         1           10/02         12         SelfSchCut         Local         SOLR         2         8           10/02         13         Economic         Local         SOLR         240         269           10/02         14         Economic         Local         SOLR         182         230           10/02         14         SelfSchCut         Local         SOLR         1         1           10/02         15         Economic         Local         SOLR         159         193           10/02         15         SelfSchCut         Local         SOLR         0           10/02         16         Economic         Local         SOLR         102         110           10/02         16         SelfSchCut         Local         SOLR         0	10/02	11	Economic	Local	WIND	9	28
10/02         12         Economic         Local         WIND         22         39           10/02         12         Economic         System         WIND         1           10/02         12         SelfSchCut         Local         SOLR         2         8           10/02         13         Economic         Local         SOLR         240         269           10/02         14         Economic         Local         SOLR         182         230           10/02         14         SelfSchCut         Local         SOLR         1           10/02         15         Economic         Local         SOLR         159         193           10/02         15         SelfSchCut         Local         SOLR         6         0           10/02         15         SelfSchCut         Local         SOLR         0         0           10/02         16         Economic         Local         SOLR         0         110           10/02         16         SelfSchCut         Local         SOLR         0         0	10/02	11	SelfSchCut	Local	SOLR	2	
10/02       12       Economic       System       WIND       1         10/02       12       SelfSchCut       Local       SOLR       2       8         10/02       13       Economic       Local       SOLR       240       269         10/02       14       Economic       Local       SOLR       182       230         10/02       14       SelfSchCut       Local       SOLR       1         10/02       15       Economic       Local       SOLR       159       193         10/02       15       SelfSchCut       Local       SOLR       6         10/02       15       SelfSchCut       Local       SOLR       0         10/02       16       Economic       Local       SOLR       102       110         10/02       16       SelfSchCut       Local       SOLR       0	10/02	12	Economic	Local	SOLR	355	397
10/02       12       SelfSchCut       Local       SOLR       2       8         10/02       13       Economic       Local       SOLR       240       269         10/02       14       Economic       Local       SOLR       182       230         10/02       14       SelfSchCut       Local       SOLR       1         10/02       15       Economic       Local       SOLR       159       193         10/02       15       SelfSchCut       Local       SOLR       6       6         10/02       15       SelfSchCut       Local       SOLR       0       100       110         10/02       16       Economic       Local       SOLR       0       110         10/02       16       SelfSchCut       Local       SOLR       0       0	10/02	12	Economic	Local	WIND	22	39
10/02       13       Economic       Local       SOLR       240       269         10/02       14       Economic       Local       SOLR       182       230         10/02       14       SelfSchCut       Local       SOLR       1         10/02       15       Economic       Local       SOLR       159       193         10/02       15       Economic       System       SOLR       6         10/02       15       SelfSchCut       Local       SOLR       0         10/02       16       Economic       Local       SOLR       102       110         10/02       16       SelfSchCut       Local       SOLR       0	10/02	12	Economic	System	WIND	1	
10/02       14       Economic       Local       SOLR       182       230         10/02       14       SelfSchCut       Local       SOLR       1         10/02       15       Economic       Local       SOLR       159       193         10/02       15       Economic       System       SOLR       6         10/02       15       SelfSchCut       Local       SOLR       0         10/02       16       Economic       Local       SOLR       102       110         10/02       16       SelfSchCut       Local       SOLR       0	10/02	12	SelfSchCut	Local	SOLR	2	8
10/02       14       SelfSchCut       Local       SOLR       1         10/02       15       Economic       Local       SOLR       159       193         10/02       15       Economic       System       SOLR       6         10/02       15       SelfSchCut       Local       SOLR       0         10/02       16       Economic       Local       SOLR       102       110         10/02       16       SelfSchCut       Local       SOLR       0	10/02	13	Economic	Local	SOLR	240	269
10/02       15       Economic       Local       SOLR       159       193         10/02       15       Economic       System       SOLR       6         10/02       15       SelfSchCut       Local       SOLR       0         10/02       16       Economic       Local       SOLR       102       110         10/02       16       SelfSchCut       Local       SOLR       0	10/02	14	Economic	Local	SOLR	182	230
10/02         15         Economic         System         SOLR         6           10/02         15         SelfSchCut         Local         SOLR         0           10/02         16         Economic         Local         SOLR         102         110           10/02         16         SelfSchCut         Local         SOLR         0	10/02	14	SelfSchCut	Local	SOLR	1	
10/02       15       SelfSchCut       Local       SOLR       0         10/02       16       Economic       Local       SOLR       102       110         10/02       16       SelfSchCut       Local       SOLR       0	10/02	15	Economic	Local	SOLR	159	193
10/02         16 Economic         Local         SOLR         102         110           10/02         16 SelfSchCut         Local         SOLR         0	10/02	15	Economic	System	SOLR	6	
10/02 16 SelfSchCut Local SOLR 0	10/02	15	SelfSchCut	Local	SOLR	0	
	10/02	16	Economic	Local	SOLR	102	110
10/02         17 Economic         Local         SOLR         83         100	10/02	16	SelfSchCut	Local	SOLR	0	
	10/02	17	Economic	Local	SOLR	83	100



10/02	18	Economic	Local	SOLR	9	34
10/02	18	Economic	System	SOLR	0	
10/02	20	Economic	Local	WIND	0	1
10/02	21	Economic	Local	WIND	0	1
10/02	22	Economic	Local	WIND	0	2
10/02	23	Economic	Local	WIND	0	1
10/02	24	Economic	Local	WIND	0	1

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.