Renewables Watch

California ISO

For Operating Day: **Saturday, October 22, 2016**

The Renewables Watch provides important information about actual renewable production within the ISO grid as California movestoward a 33 percent renewable generation portfolio. The information provided is as accurate as can be delivered in a daily format. It is unverified raw data and is not intended to be used as the basis for operational or financial decisions.

Renewables Production

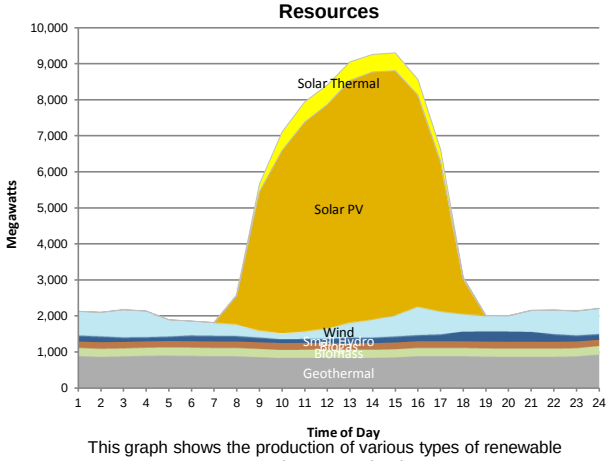
24-Hour Renewables Production

Renewable Resources	Peak Production Time	Peak Production (MW)	Daily Production (MWh)
Solar Thermal	10:09	568	4,146
Solar	13:26	7,055	53,070
Wind	15:44	832	11,690
Small Hydro	19:15	306	4,639
Biogas	16:29	176	4,068
Biomass	19:16	235	5,550
Geothermal	0:19	934	21,108
Total Renewables			**104,270**

Total 24-Hour System Demand (MWh): *564,753*

This table gives numeric values related to the production from the various types of renewable resources for the reporting day. All values are hourly average unless otherwise stated. Peak Production is an average over one minute. The total renewable production in megawatt-hours is compared to the total energy demand for the ISO system for the day.

Hourly Average Breakdown of Renewable Resources

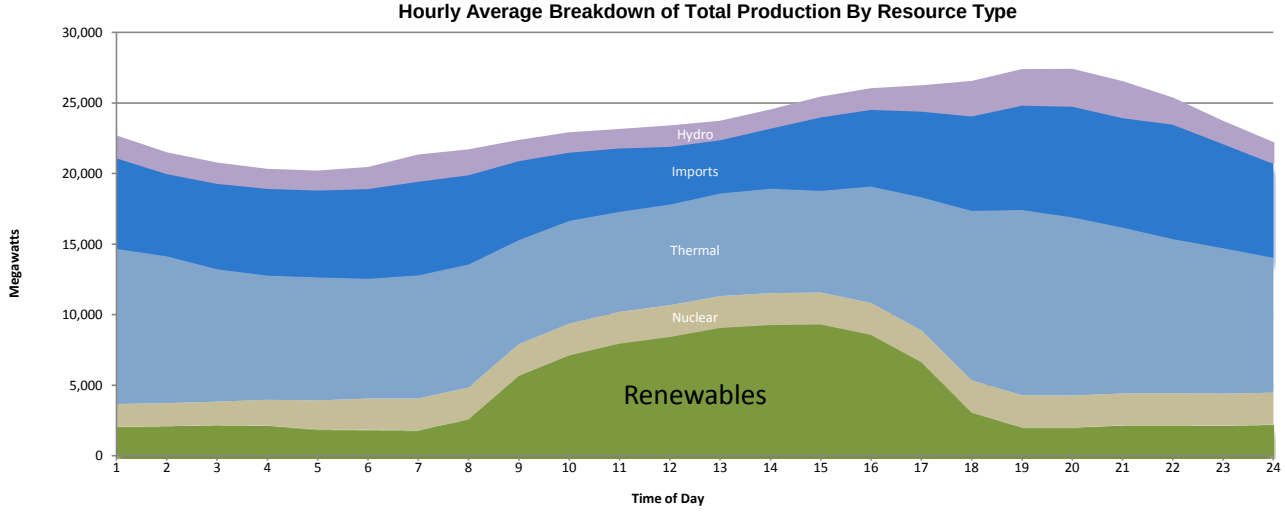


This graph shows the production of various types of renewable generation across the day.

System Peak Demand (MW) **27,724**
*one minute average

Time: **18:55**

Hourly Average Breakdown of Total Production By Resource Type



This graph depicts the production of various generating resources across the day.

Previous Renewables Watch reports and data are available at http://www.caiso.com/green/renewableswatch.html

This table gives numeric values related to the production from the various types of renewable resources for the reporting day. All values are hourly average unless otherwise stated. Peak Production is an average over one minute. The total renewable production in megawatt-hours is compared to the total energy demand for the ISO system for the day. Solar PV and Solar thermal generators that are directly connected to the power grid. "Solar PV" is defined as solar generating units that utilize solar panels containing a photovoltaic material. "Solar Thermal" is defined as solar generating units that convert sunlight into heat and utilize fossil fuel or storage for production which may occur after sunset.

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For Operating Day:

The first graph provided on this page shows how much energy renewable resources are contributing to the grid, and when those resources are producing their daily maximum and how that production correlates to the maximum energy demand.

Comparison to Load