

Memorandum

To: ISO Board of Governors

From: Keith Casey, Vice President, Market & Infrastructure Development

Date: October 25, 2012

Re: Briefing on Renewable Generation in the ISO Generator Interconnection Queue

This memorandum does not require Board action.

EXECUTIVE SUMMARY

The information included in this briefing represents the status of renewable generation in the California Independent System Operator Corporation's generator interconnection queue as of October 4, 2012. Key highlights include:

1. The current ISO queue contains approximately 51,000 MW (36,000 renewable) actively seeking to interconnect to the ISO controlled grid;
2. Changes in renewable projects in the queue since the last generator interconnection queue update include approximately 3,800 MW of project withdrawals, primarily from pre-cluster and Cluster 5 projects; and
3. Compared to the amount of new generation needed to meet the mandated 33% Renewable Portfolio Standard by 2020, the ISO queue currently contains approximately three times that amount. Interconnection studies have been completed for all but Cluster 5 projects, representing 86% of the renewable capacity in the ISO interconnection queue. The remaining project studies are on track for completion in 2013.

DISCUSSION

The following graphs illustrate the renewables in the ISO queue from several perspectives, such as changes by study group and insight into the size and type of renewable projects in the ISO queue.

Figure 1 breaks down the types of renewable generation currently in the interconnection queue and the reductions in renewable capacity since the July 2011 Board briefing. There was a 3,800 MW reduction in capacity since the last Board briefing in May 2012. In previous briefings the reductions were larger due to financial security posting

requirements being due, which is typically accompanied by a large number of project withdrawals. However, no new financial security postings were required during the last five months.

The 3,800 MW of withdrawals since last May were due to two processes. First, the ISO's queue management team has been working with interconnection customers that have executed interconnection agreements but are failing to meet the terms of their agreements. A total of 1,537 MW of pre-cluster projects have withdrawn since the last Board briefing and the majority were the result of ISO's queue management efforts in working with projects that were not making progress towards achieving commercial operation. Second, the FERC accepted the Generation Interconnection and Deliverability Allocation Procedures tariff filing in July, which included an option for active projects in Cluster 5 to withdraw without risk of forfeiture of their study deposit. Most of the 2,329 MW of projects that withdrew from Cluster 5 took advantage of that option.

Figure 1
Change in Renewable Capacity in ISO Queue since July 2011

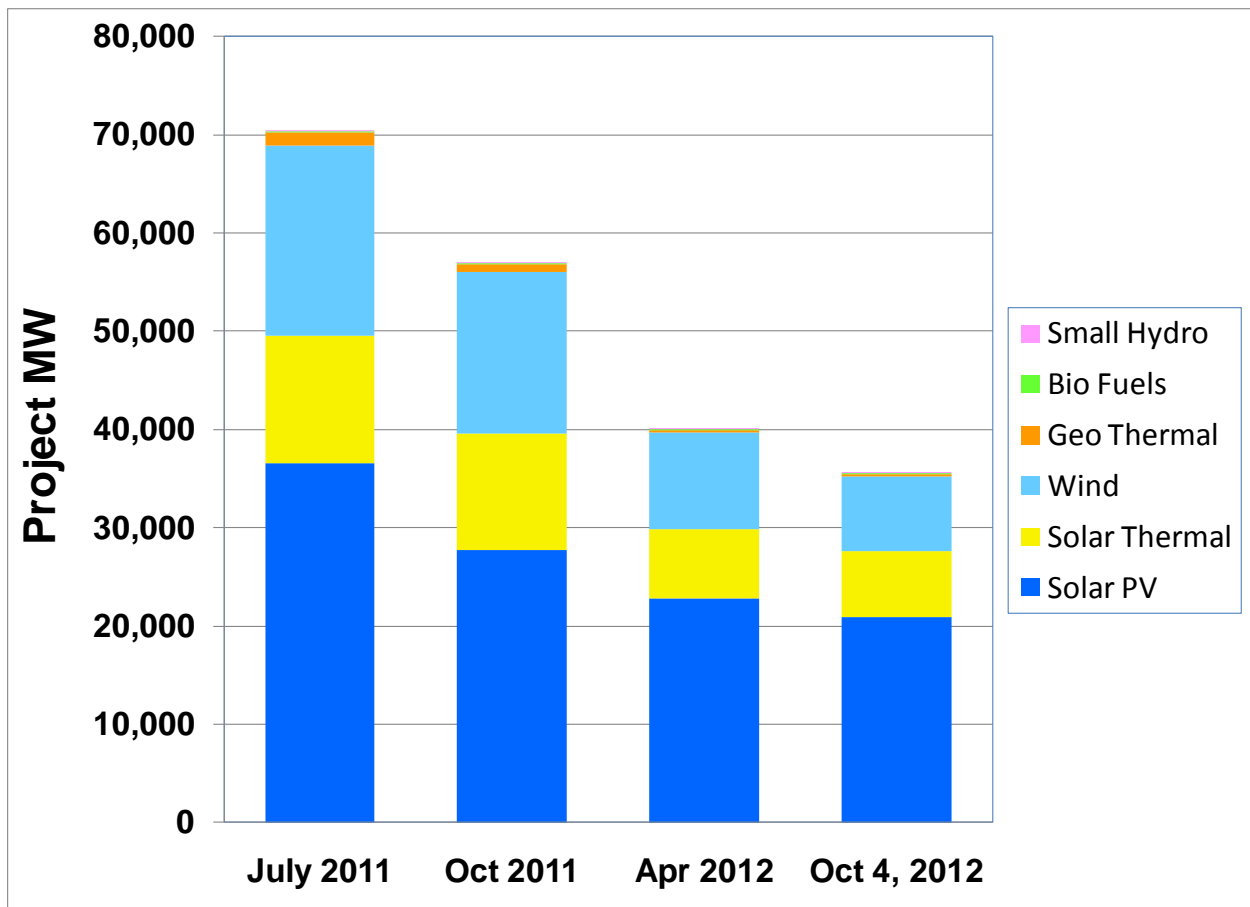


Figure 2 shows the amount of renewable capacity in the queue by study group and graphically displays the changes described above, providing the detail of withdrawals by study group. Cluster 3 and 4 Phase II studies are scheduled to be complete on November 5, 2012. The next step for these projects, which total to 9,400 MW, will be the generator interconnection agreement negotiation process.

Figure 2
Renewable Generation Capacity in the ISO Queue by Study Group
(changes by study group since May 2012 update)

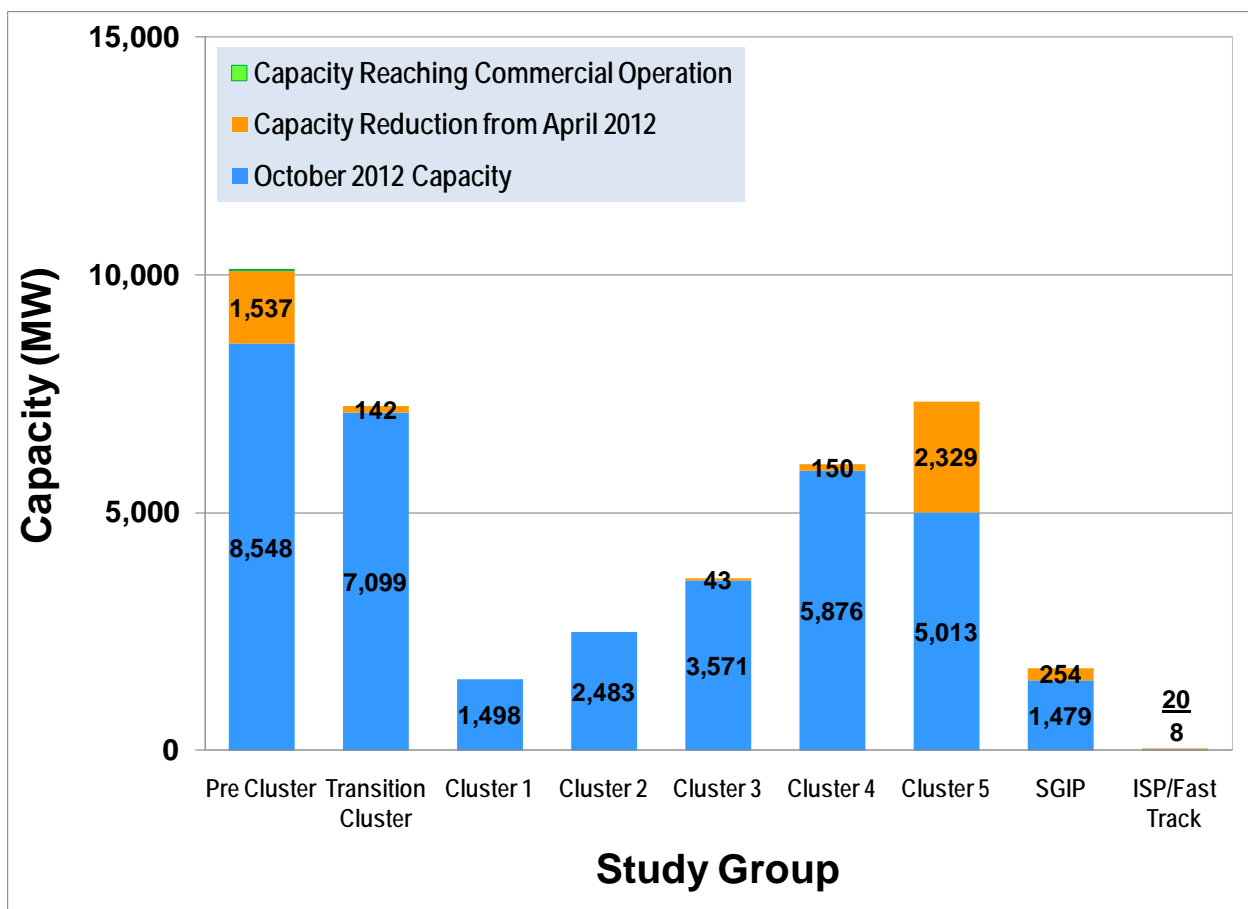


Figure 3 provides insight into the amount of generation capacity in the ISO queue by project size and type. Solar PV continues to be the dominant generating technology for all size ranges. Figure 3 also provides a breakdown of the capacity in the ISO queue by the number of projects for each project size category. Projects in the 100 to 500 MW category make up 60% of project capacity, however, the 1 to 20 MW category continues to have the largest number of projects.

Figure 3
MW of Renewable Projects in ISO Queue
by Size and Type

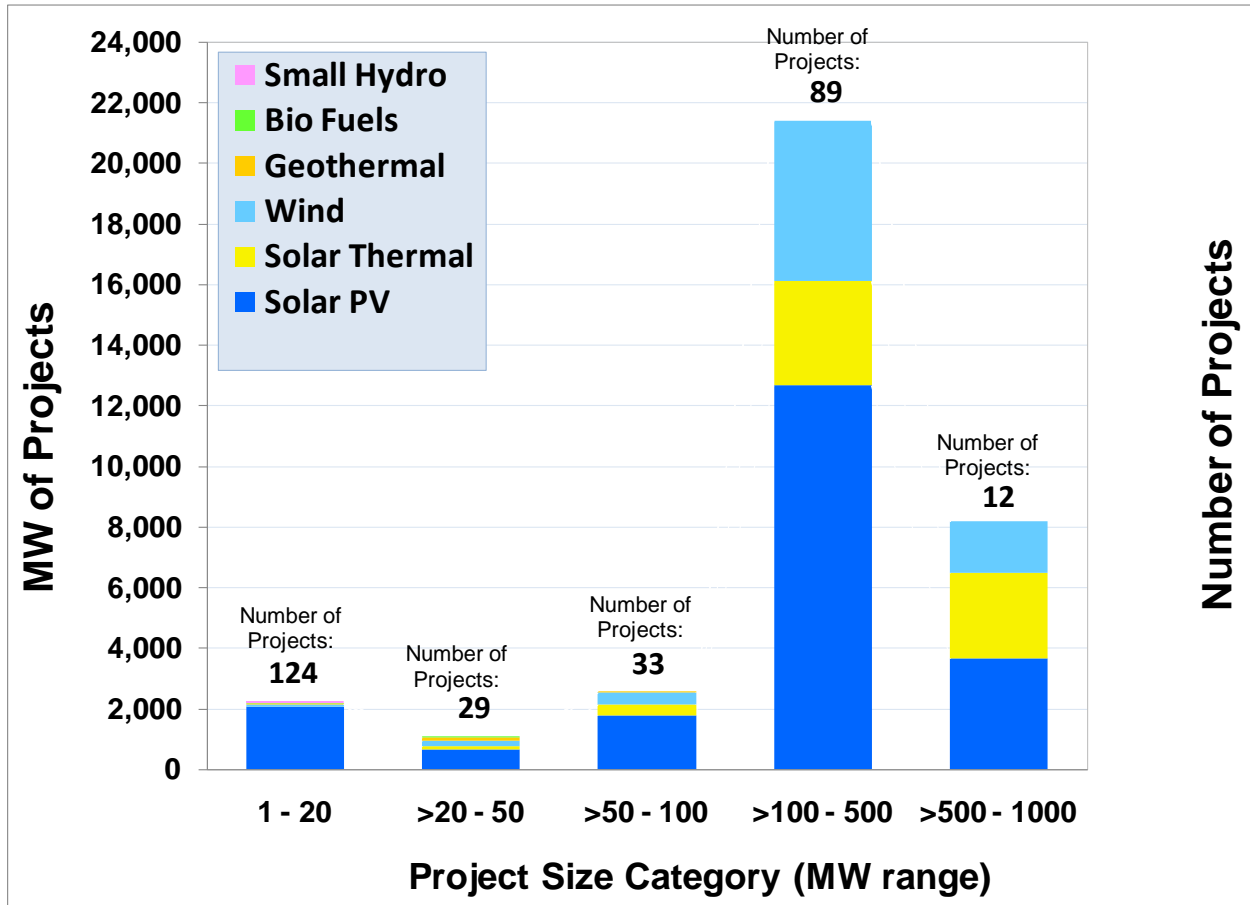


Figure 4 shows the current online renewable capacity and projections of future renewable capacity within the ISO footprint by technology type. The ISO expects to have 10,300 MW of operating renewable generation within its footprint by the end of 2012. During 2012 the ISO has started to realize significant additions of new renewable generation capacity, which is expected to continue until the 33% RPS requirement is reached. Most of the future gains are expected to come from solar and wind resources.

The projected amounts of renewable capacity for 2013 and 2014 in Figure 4 reflect the current online renewable capacity plus an amount of renewable generation that has obtained a power purchase agreement with a California investor owned utility and is anticipated to come on line in those years.

The 17,500 MW amount shown for 2020 is the expected in-state renewable generation needed to reach the 33% RPS requirement. Approximately 7,000 MW of additional in-state renewables will be needed between 2012 and 2020 to reach the 33% RPS requirement. Not shown in Figure 4 are an additional 2,600 MW of out of state renewable generation expected to contribute to reaching the 33% requirement, which will bring the total renewable generation to over 20,000 MW. Some of the 2,600 MW of out of state renewable generation could come from the 5,300 MW of out of state renewable generation currently in the ISO interconnection queue or from other out of state renewable generation not connecting directly to the ISO system.

Figure 4
Current and Projected Renewable Generation Capacity within the ISO

