

CALIFORNIA ENERGY COMMISSION

1516 Ninth Street
Sacramento, California 95814

Main website: www.energy.ca.gov



In the matter of:

2013 Integrated Energy Policy Report

) Docket No. [13-IEP-1G]
)
) Staff Webinar
) RE: Renewable Net Short Update
)

Notice of Staff Webinar on the Renewable Net Short Update

California Energy Commission

DOCKETED
13-IEP-1G

TN # 67233

SEP 20 2012

California Energy Commission staff will host a webinar to solicit public comments on the calculated amount of new renewable generation required to meet policy targets for the year 2022. The webinar will be held on:

October 1, 2012
Beginning at 10 a.m.

Remote Access Available by Computer or Phone via WebEx™
(Instructions below)

Background

This webinar will provide the public with an opportunity to review the annual update to the variables and data sources considered for estimating the amount of new renewable generation needed in 2022 to meet statewide policy. This amount is frequently referred to as the renewable net short (RNS), and is based on the amount of current electric generation from renewable resources and the target levels established by Renewables Portfolio Standard (RPS) legislation.

Estimates of RNS are needed to determine the amount of new renewable generation capacity that must be built in California and/or delivered from out-of-state sources to meet the RPS target. The estimates are also used to evaluate the electricity infrastructure requirements for integrating new generation additions, and identifying market mechanisms that may need to be modified to provide the ancillary services that would be required to maintain reliable system operations.

The latest RNS estimate that will be presented at this webinar is an update to the amount presented in the *2011 Integrated Energy Policy Report*. In 2011, Energy Commission staff held a workshop that outlined the method and sources for variables needed to calculate the RNS. Based on stakeholder input, a recommended method and

forecasted RNS was presented in a final staff report entitled *Method To Calculate The Amount of New Renewables Generation Needed To Comply With Policy Goals* (www.energy.ca.gov/2011publications/CEC-200-2011-001/CEC-200-2011-001-SF.pdf).

The RPS, established by legislation in 2002 under Senate Bill 1078 (Sher, Chapter 516, Statutes of 2002), accelerated in 2006 under Senate Bill 107 (Simitian, Chapter 464, Statutes of 2006), and expanded under Senate Bill X1 2 (Simitian, Chapter 1, Statutes of 2011), defines the required amount of renewable generation as a percentage of electricity retail sales. The RNS is thereby expressed as the amount of electricity (terawatt hours – TWh) that is generated from renewable generation resources instead of the capacity (megawatt – MW) of these facilities. Since the mandate and regulations specify that retail sales are the basis for establishing the renewable goals, electricity used for water pumping and sources produced for personal consumption (self-generation) are not subject to the requirements.

The standard equation for estimating the RNS is:

$$\text{Renewable Net Short (TWh)} = (\text{Projected Retail Electricity Sales} - \text{Energy Efficiency Programs} - \text{Combined Heat \& Power Customer Services} - \text{Distributed Generation Additions} - \text{Other Demand Reduction Programs}) \times \text{Policy Goal Percent} - \text{Generation from Existing Eligible Renewable Facilities}$$

Energy Commission staff will not be revisiting this methodology to calculate the RNS. This webinar will only include an update to the variables used to calculate the RNS forecast for 2022. A final staff paper will follow with updated RNS estimates after consideration of any public comments on the matter.

Proposed Update to Variables for 2022

Table 1 includes the updated range of input variables and the sequence of calculations for estimating the RNS. The table divides the estimates by the demand case used to estimate retail sales. Table 2 provides a comparison of the 2011 vintage mid-demand forecast RNS and updates for 2012. This RNS update is 28 percent lower than the estimate for last year, due mostly to a 26 percent increase in renewable generation additions. The total amount of renewable generation needed to meet the 2022 RPS target declined slightly due to a lower electricity demand forecast.

Table 1: Forecasted Renewable Net Short

	All Values in TWh for the Year 2022	Formula	Low Demand Forecast Renewable Net	Mid Demand Forecast Renewable Net	High Demand Forecast Renewable Net
1	Statewide Retail Sales - June 2012 IEPR12 Final		291.1	301.4	317.7
2	Non RPS Deliveries (CDWR, WAPA, MWD)		12.5	12.5	12.5
3	Retail Sales for RPS	3=1-2	278.6	288.9	305.2
4	Additional Energy Efficiency		22.2	19.5	12.6
5	Additional Rooftop PV		-	0.4	0.9
6	Additional Combined Heat and Power		20.8	11.6	9.9
7	Adjusted Statewide Retail Sales for RPS	7=3-4-5-6	235.6	257.3	281.8
8	Total Renewable Energy Needed For 33% RPS	8=7* 33%	77.8	84.9	93.0
	Existing and Expected Renewable Generation				
9	Total In-State Renewable Generation (COD prior to 1/1/2014)		46.2	46.2	46.2
10	Total Out-of-State Renewable Generation (COD prior to 1/1/2014)		13.4	13.4	13.4
11	Total Existing Renewable Generation for CA RPS (COD prior to 1/1/2014)	11=9+10	59.6	59.6	59.6
12	Total In-State Renewable Generation (COD prior to 1/1/2013)		41.9	41.9	41.9
13	Total Out-of-State Renewable Generation (COD prior to 1/1/2013)		12.5	12.5	12.5
14	Total Existing Renewable Generation for CA RPS (COD prior to 1/1/2013)	14=12+13	54.4	54.4	54.4
15	Total RE Net Short to meet 33% RPS In 2022 (GWh) (COD prior to 1/1/2014)	15=8-11	18.2	25.3	33.4
16	Total RE Net Short to meet 33% RPS In 2022 (GWh) (COD prior to 1/1/2013)	16=8-14	23.4	30.5	38.6

Table 2: Vintage 2011 Renewable Net Short Compared to 2012 Update

	All Values in TWh for the Year 2020	Formula	Mid Demand Forecast Renewable Net Short (vintage 2011)	Mid Demand Forecast Renewable Net Short (vintage 2012)	Difference
1	Statewide Retail Sales		297.9	294.6	(3.3)
2	Non RPS Deliveries (CDWR, WAPA, MWD)		13.6	12.5	(1.1)
3	Retail Sales for RPS	3=1-2	284.3	282.1	(2.2)
4	Additional Energy Efficiency		17.1	15.4	(1.7)
5	Additional Rooftop PV		3.2	1.3	(2.0)
6	Additional Combined Heat and Power		7.2	10.6	3.4
7	Adjusted Statewide Retail Sales for RPS	7=3-4-5-6	256.7	254.8	(1.8)
8	Total Renewable Energy Needed For 33% RPS	8=7* 33%	84.7	84.1	(0.6)
	Existing and Expected Renewable Generation				
9	Total In-State Renewable Generation (COD prior to 1/1/2013)		34.2	41.9	7.7
10	Total Out-of-State Renewable Generation (COD prior to 1/1/2013)		9.2	12.5	3.3
11	Total Existing Renewable Generation for CA RPS	11=9+10	43.4	54.4	11.0
12	Total RE Net Short to meet 33% RPS In 2020 (GWh)	12=8-11	41.3	29.7	(11.6)

Public Comment

Energy Commission staff is seeking the active participation and comments from utilities, generators, other state agencies, and other stakeholders. Staff encourages interested parties to present their views either orally at the webinar or through written comments. Staff will take oral comments immediately following the staff presentation. Written comments should be submitted to the Energy Commission staff by 4:00 p.m. on

October 8, 2012. All written comments will become part of a public record. Additionally, written comments may be posted to the Energy Commission's website.

The Energy Commission encourages comments by e-mail. Please include your name and any organization name. Comments should be in a downloadable, searchable format such as Microsoft® Word (.doc) or Adobe® Acrobat® (.pdf). Please indicate Renewable Net Short Update in the subject line. Send comments to:

docket@energy.ca.gov

If you prefer, you may send a paper copy of your comments to:

California Energy Commission
Dockets Office, MS-4
Re: Docket No. 13-IEP-1G
1516 Ninth Street
Sacramento, CA 95814-5512

Public Adviser and Other Commission Contacts

The Energy Commission's Public Adviser's Office provides the public assistance in participating in Energy Commission proceedings. If you want information on how to participate in this forum, please contact the Public Adviser's Office at PublicAdviser@energy.ca.gov or (916) 654-4489 (toll free at (800) 822-6228).

If you have a disability and require assistance to participate, please contact Lou Quiroz at lquiroz@energy.ca.gov or (916) 654-5146 at least five days in advance.

Media inquiries should be sent to the Media and Public Communications Office at mediaoffice@energy.ca.gov or (916) 654-4989.

If you have questions on the subject matter of this meeting, please contact Angela Tanghetti at (916) 654-4854, or by e-mail at angela.tanghetti@energy.ca.gov.

Remote Attendance

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Availability of Documents

Documents and presentations for this meeting will be available online at: www.energy.ca.gov/2013_energypolicy/documents/index.html.

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