California Energy Commission
DOCKETED
14-HYDRO-01
TN 72808
MAR 18 2014

From: Greene, Cindy
To: Woodward, Jim@Energy;
cc: Beans, Daniel;
Subject: CEC Docket No. 14-HYDRO-01
Date: Tuesday, March 18, 2014 11:50:39 AM
Attachments: CEC Drought Hydropower March 19 2014 Response 14-HYDRO-01.pdf
Docket No. 14-HYDRO-01 Request March 10, 2014.pdf

Please find attached the Initial Drought Hydropower Response from Redding Electric Utility. Originals to follow via US Mail. If you have any questions please contact Dan Beans at (530) 339-7333.

Cindy Greene
Executive Assistant
REU Finance/Resources
777 Cypress Avenue
Redding, CA 96001
Phone: (530) 339-7388
cgreene@reupower.com
REU Redding Electric Utility

REDDING ELECTRIC UTILITY
777 Cypress Avenue, P.O. Box 496071, Redding, CA 96049-6071 530.339.7300 • Fax 530.339.7389

California Energy Commission - March 17, 2014
Initial Drought Hydropower Response (Docket No. 14-HYDRO-01)

1) Redding Electric Utility is estimating 820 GWh of energy will be needed for 2014.

2) The average annual hydroelectric energy procurement for Redding Electric Utility, dating back to 2003, is 335 GWh. Generation accounted for 25 GWh and purchases averaged 310 GWh.

3) The lowest total hydroelectric energy procurement occurred in 2008 with 202 GWh of which 185GWh was purchased and 17 GWh was generated.

4) Redding's most recent estimate of 2014 hydroelectric energy generation is 25 GWh (3%) and purchases 150 GWh (18%). If the estimates hold true, 2014 will be the lowest hydroelectric year to date for the time frame studied.

5) The drought has raised reliability concerns. Our existing hydroelectric contracts normally provide us with operational flexibility. Reduced flexibility will put a strain on our resource reserve margins.

6) If access to hydroelectric generation decreases further, we would consider that a critical situation both operationally and financially.

7) Redding's hydroelectric purchase contracts have fixed costs that do not vary with energy delivery. The 2014 estimated hydroelectric energy is approximately 75 GWh below last year (and over 100 GWh lower than an average hydro year). A 75 GWh reduction will have a financial impact ranging from $3 to $7 million.

8) The estimated additional procurement of GHG allowances will be 33,000 MT. This assumes the additional energy (75 GWh) needed times the emission factor (0.428 MT/MWh) and transmission losses of 2%.

9) Beyond the reliability concerns, the drought will have negative financial effects that will need to be addressed in rates during the coming months and years.

10) At this time, Redding does not expect water curtailments will affect hydroelectric energy procurement other than what is discussed above.

11) The drought will have other negative impacts on our local farmers and our regional economy.

CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET
SACRAMENTO, CA 95814-5512
www.energy.ca.gov

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March 10, 2014

Mr. Barry Tippin, Director
Redding Electric Utility
P.O. Box 496071
Redding, CA 96049-6071

Dear Mr. Tippin:

The California Energy Commission (Energy Commission) requests the assistance of your publicly owned electric utility to help us better understand reasonably expected and potential hydroelectric generation supply issues related to the statewide drought. The questions that follow are intended to assess the magnitude of severe drought conditions that create hardship related to electricity supply. These questions are similar to those being asked by the CPUC of investor-owned utilities. This letter requests information related to hydroelectric generation. As the situation develops and circumstances change, you may receive additional requests for information related to electric generators, such as natural gas, that also rely on water.

California is facing a severe drought situation that is among the worst in the last half century. Dealing with this drought will require a coordinated effort on the part of multiple public and private agencies. It is critical for the state's leadership to understand the ongoing effects of this drought on the electricity sector and utilities that provide power to California.

Your candid responses are respectfully requested by Wednesday, March 19, 2014, with updates requested on the first of the month thereafter. Please submit your response to our Dockets Office and reference docket number 14-HYDRO-01 on your response.

The Energy Commission is aware there may be confidentiality concerns. If you desire any of this material to be treated as confidential, an application for confidentiality should be sent with your submission. This application, along with five copies of the confidential material, should be sent to the Energy Commission's Dockets Office. Jared Babula in the Office of the Chief Counsel may be contacted to discuss any concerns and how to submit an application for confidentiality. Mr. Babula may be reached at (916) 651-1462 and jared.babula@energy.ca.gov.

The Energy Commission will use the information to inform the Governor's Office about the overall situation and the issues facing publicly owned electric utilities. If no substantive updates are necessary, please inform us on the monthly schedule. Please include information on primary and secondary staff contacts.

Concerns or questions about the Energy Commission's questions may be directed to Jim Woodward at (916) 654-5180 (jim.woodward@energy.ca.gov) or Marc Pryor at (916) 653-0159 (marc.pryor@energy.ca.gov).

Sincerely,

Robert P. Oglesby
Executive Director

Enclosure

RO:jw/sdf

Drought Hydropower Questions

Question 1: Please provide your POU's current estimate of total electric firm energy requirements in GWh for 2014.

Question 2: Please provide your POU's average annual hydroelectric energy procurement in GWh since 1970. Please differentiate between generated and purchased hydro energy supplies, and specify the timeframe over which these averages were determined if fewer years than from 1970 were used.

Question 3: Please provide your POU's lowest hydroelectric energy procurement in GWh during the same time period used in Question 2, and identify the year in which this occurred. Please provide figures for both POU-owned/controlled hydroelectric generation and hydroelectric energy supply contracts.

Question 4: Please provide your POU's most recent estimate of 2014 hydroelectric energy procurement (generation and purchases), both in GWh and as a percentage of this year's firm energy requirement.

Question 5: Does your POU expect that low hydro conditions (or the drought more generally) will raise any system or local reliability concerns? Please explain.

Question 6: Under what circumstances would the effects of the drought create severe or critical operational concerns?

Question 7: At what value of annual hydro generation this year (in GWh) would the effects of drought result in significant or substantial financial concerns? Please estimate additional costs your POU may incur because of low hydro conditions. Please provide the assumptions used.

Question 8: Please estimate any additional procurement of GHG allowances, in metric tons, that your POU expects will be necessary because of low hydro conditions. Please provide the assumptions used.

Question 9: Does your POU expect that low hydro conditions (or the drought more generally) will have any other local impacts beyond local reliability? If so, are efforts underway to address these impacts?

Question 10: Will water curtailments this year, such as by SWRCB, affect your POU's hydroelectric energy procurement or dispatch (either utility-controlled hydro generation or purchases)? If so, to what extent will these supply resources be affected in terms of GWh, and over what timeframe(s)?

Question 11: Energy Commission staff would like to know about any potential drought related issues that will or could affect system and/or local reliability. For example, are there known or potential issues with water allocations or supplies to thermal plants (e.g., power plant cooling)? This is an open-ended question and we hope that your POU can, to the extent possible, provide us with information regarding your POU's overall assessment regarding how drought conditions may affect reliability in your local communities.