

LATE COMMENT

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Via Electronic Mail to commentletters@waterboards.ca.gov

Charlie Hoppin, Chair
Francis Spivey-Weber, Vice Chair
Tam M. Doduc, Member
Steven Moore, Member
Felicia Marcus, Member
State Water Resources Control Board
P.O. Box 100
Sacramento, California



Re: Public Workshop: Comprehensive (Phase 2) Review and Update to the Bay-Delta Plan; Workshop 3: Analytical Tools for Evaluating Water Supply, Hydrodynamic and Hydropower Effects

Dear Chairman Hoppin and Members of the Board:

On behalf of the Northern California Power Agency¹, I appreciate the opportunity to participate in the above-referenced workshop. My presentation will highlight how changes in Delta flow objectives could significantly impact the financial viability of the Central Valley Project (CVP) as related to environmental restoration funding as well as the overall reliability and cost of CVP generation.

NCPA, founded in 1968, is a joint action agency serving 16 public power systems located throughout Northern California. NCPA is governed by locally elected officials who have placed a high priority on making investments to create an affordable, reliable, and clean energy supply for their electric ratepayers. Drawing upon a mix of geothermal, hydroelectric, natural gas, wind, and solar resources, NCPA has built and operates a portfolio of electricity generation that is 95% carbon-free. Also, NCPA members collectively purchase approximately 40% of the CVP's available generation as marketed by the Western Area Power Administration.

The Federal Central Valley Project is located within the Central Valley and Trinity River basins, and includes 18 constructed dams and reservoirs with a total storage capacity of 13

¹ NCPA is a nonprofit California joint powers agency established in 1968 to generate, transmit, and distribute electric power to and on behalf of its sixteen members, including: the cities of Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Palo Alto, Redding, Roseville, Santa Clara, and Ukiah; the San Francisco Bay Area Rapid Transit (BART), the Port of Oakland, the Truckee Donner Public Utility District, Placer County Water Agency, and the Plumas-Sierra Rural Electric Cooperative, which collectively serve nearly 700,000 electric consumers in Central and Northern California.

million acre feet. The system includes 615 miles of canals, five pumping facilities, ten power plants with a maximum operating capability of about 2,113 megawatts (MW), approximately 865 circuit-miles of high-voltage transmission lines, 22 substations, and 19 communication sites. The ten power plants generate approximately 4.6 billion kilowatthours in an average water year. The U.S. Bureau of Reclamation (Reclamation) operates the water control and delivery system and all of the power plants with the exception of the San Luis Pump-Generator (also known as W.R. Gianelli), which is operated by the State of California for Reclamation.

Western Area Power Administration operates and maintains the Federal transmission system and markets the hydroelectric power generated from the CVP. More than 90 power customers are served from the CVP system, including 47 wholesale customers, four first preference customers, public utility districts, California state agencies, Federal agencies, irrigation districts, municipalities, and Native American tribes.

In 1992, Congress passed the Central Valley Project Improvement Act (CVPIA) which includes provisions to restore and enhance fish and wildlife habitats in California's Central Valley and Trinity basins. Section 3406 (b) of the CVPIA identifies 34 program restoration activities that Reclamation and the U.S. Fish and Wildlife Service must undertake, and Section 3407 established a Restoration Fund to pay for these activities. Since its enactment, approximately \$1.5 billion has been obligated for these environmental activities, of which CVP water and power customers have paid more than \$800 million. Currently, on average, CVP water and power customers are paying approximately \$50 million per year into the Restoration Fund.

New Delta flow objectives that increase winter and spring river flows could thwart the progress of CVPIA's restoration activities in various ways. First, it would seriously undermine the agencies' ability to manage the 800,000 acre-feet of CVP annual yield required by CVPIA 3406 (b) (2) to implement fish, wildlife, and habitat restoration. Specifically, it would reduce cold water storage behind Reclamation dams and, thereby make it more difficult to manage and control river temperatures in the summer and fall. For example, this summer, the Bureau released 50,000 acre-feet of Trinity River water down the Klamath to prevent a fish kill from taking place this fall. This release may not have been possible if the reservoir storage level was low due to an increase in winter and spring releases. Also, CVPIA 3406 (b) (13) led to the creation of the Spawning and Rearing Habitat Restoration Program requiring the restoration and replenishment of gravel used to build spawning and rearing habitat for salmonids. A high volume of releases during winter and spring would put these habitats at risk, threatening to disturb, unsettle, or wash them away.

New Delta flow objectives requiring increased winter and spring river flows on the Sacramento watershed could also significantly diminish the economic value of CVP generation. The CVP's multi-purpose reservoirs capture a significant amount of winter and spring river runoff. This stored water, then released throughout the year, meets the needs of agriculture, navigation, and fish and wildlife, while enhancing water quality, and generating electricity. This hydroelectric generation is most valuable when it helps meet California's summer peak load requirements. Hydroelectricity's flexibility to rapidly ramp up and down is also crucial in firming intermittent renewable resources, such as solar and wind, brought online when the energy demands during the long, hot summer are at their highest. Loss of this most economical and clean source of power that is available during the

summer months would result in increased reliance on more expensive and higher carbonemitting sources of energy.

The cost per megawatt hour of CVP generation has increasingly exceeded the open-market price. Over the last four years, CVP generation has, on average, cost 80 cents more per megawatt hour than what could be purchased from the California Independent System Operator during the same hours of generation. There are several factors that contribute to this rise in price, chiefly the environmental premium paid by CVP power customers for CVPIA restoration activities. What could further drive up the price for California's electricity consumers, however, is the implementation of any new flow objectives that require increased winter and spring water releases. These releases could require bypassing CVP generators in order to release the larger amount of water from the dams and reduce the amount of water released, along with the corresponding generation, during the summer months.

If water deliveries are reduced, the cost responsibility for CVP power customers increases in two ways. First, power customers are required to make up the difference between the CVPIA Restoration Fund assessment and the amount collected from water customers. They are assessed a specified charge per acre-foot of delivery. If water deliveries are reduced, water customers contribute fewer dollars into the Restoration Fund and, thereby increase the amount paid by power customers. Second, CVP power customers are responsible for repaying CVP and CVPIA costs beyond what the water customers are able to pay.

As the State Water Board considers new Delta flow objectives, I would urge that further analysis be conducted to determine the environmental and financial impacts on the CVP and CVPIA funding. If the cost per megawatt hour for CVP generation continues to increase and be more expensive than power that could be purchased on the market, it will, ultimately, jeopardize the financial viability of CVP power and the funding for CVPIA restoration activities. To aid your efforts, please contact Tom Boyko, Regional Manager of the Western Area Power Administration, at (916) 353-4418.

Thank you for consideration of these comments in advance of my presentation for the workshop. If you have any questions, please contact me at (916) 781-4297.

Sincerely,

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Western Consultant, Northern California Power Agency

Former Regional Manager of the Western Area Power Administration