NCPA A Public Agency
Northern California Power Agency
180 Cirby Way, Roseville California 95678

MICHAEL W. McDONALD
General Manager

COMMENTS BY
NORTHERN CALIFORNIA POWER AGENCY (NCPA)
TO THE STATE WATER RESOURCES CONTROL BOARD'S
FOURTH WORKSHOP ON BAY/DELTA STANDARDS[1]

JULY 13, 1994

The Northern California Power Agency (NCPA) and the CVP Customer Technical Committee are pleased to present these comments to the State Water Resource Control Board's final workshop on standards for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary.

NCPA is a nonprofit, California Joint Action Agency whose membership consists of 14 agencies that collectively provide electricity service to over 600,000 residential, business, and agricultural consumers throughout northern California.[2] The CVP Customer Technical Committee represents a broad grouping of wholesale power customers of Western Area Power Administration (Western).[3] A large share of both agencies' power is produced by the federal Central Valley Project (CVP). This power is purchased from Western at rates that reflect the full costs of producing the power.

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[1]Presented by Mr. Fred Schneiter, Chairman, Northern California Power Agency.

[2]NCPA's members are the Cities of Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Palo Alto, Redding, Roseville, Santa Clara, and Ukiah, Plumas-Sierra Rural Electric Cooperative, Turlock Irrigation District, and Truckee-Donner Public Utility District.

[3]In addition to NCPA and its members, the members of the CVP Customer Technical Committee are: Sacramento Municipal Utilities District (SMUD), NASA-AMES Research Center, Modesto Irrigation District, Glenn-Colusa Irrigation District, Trinity County Public Utility District, Naval Facilities Engineering Command, and the U.S. Department of Energy.

NCPA is pleased to be joined on this panel by Western's Sacramento Area Manager, Mr. James C. Feider, as well as by Mr. Richard Ferreira, Assistant General Manager of Sacramento Municipal Utilities District (SMUD). Our three agencies share a common interest in providing environmentally clean, renewable, and affordable supplies of electrical power to present and future generations of Californians. Collectively, therefore, we welcome this opportunity to address the Board.

In addition to responding to the questions posed in the Notice of Workshop, our objectives in appearing before the Board are threefold: (1) to reiterate CVP power users' support for fish and wildlife restoration in the Bay/Delta and the Central Valley; and (2) to provide qualitative and quantitative information on the economic, social, and environmental benefits which CVP hydroelectric generation provides to California; and (3) to identify the potential impacts of alternative solutions to Bay/Delta problems on CVP power. Our goal is to assist the Board in the development of measures to restore the aquatic resources of the Bay/Delta that are scientifically sound and economically efficient, and to suggest ways to implement these in a balanced manner.

COMMENTS ON THE BOARD'S QUESTIONS

Question 1: What fish and wildlife standards should the SWRCB evaluate as alternatives in this review?

We recommend that the Board adopt standards that address the wide range of factors that experts have identified as responsible for changes in fish and wildlife habitats and populations in the Bay/Delta. In its evaluation, the Board should consider the actions of all federal, state, and local entities which control the use of Central Valley water resources or influence conditions in the Bay/Delta. The Board should also consider the cumulative effect of all fish and wildlife restoration activities currently underway or planned by federal, state, and local agencies (e.g., Bay/Delta standards, Endangered Species Act requirements, Trinity River Restoration Project, San Joaquin Basin Action Plan). The combined effects of these various efforts must be addressed in an integrated manner to achieve maximum benefits for the environment and protect the businesses and residents of California.

Although we have not developed a "power customers' alternative" to offer the Board, we are working with the Board's staff on ways to utilize available modelling tools in the evaluation of alternative standards.

Question 2: How should the economic and social effects of alternative standards be determined?

We will discuss the modelling methods developed to evaluate the implications of alternative standards on CVP power customers below. However, before discussing these methods, the benefits of CVP hydropower to the economy of California must first be clearly understood. We emphasize these benefits NOT to argue against the protection of fish and wildlife in the Bay/Delta. CVP power customers are presently supporting extensive measures to restore the fish and wildlife resources of the Central Valley and are willing to make additional sacrifices, as appropriate, to address the problems of the Bay/Delta.

There are five specific benefits of CVP power:

- Clean, renewable CVP hydroelectric power avoids the release of substantial quantities of carbon dioxide, nitrogen oxides, and other pollutants into the atmosphere of northern California;

- CVP hydropower resources maximize the value of other power resources utilized by our members, including renewables, efficiency measures, and purchases of energy from the Pacific Northwest and other suppliers;

- The Restoration Fund surcharges paid by CVP power users support numerous fish and wildlife restoration measures that benefit the aquatic resources of the Bay/Delta;

- Revenues from sale of hydroelectric power make an important contribution to repaying federal investments in CVP facilities,[4] reducing the costs borne by other users of the CVP; and

- Access to CVP power helps publicly owned utilities fund a wide range of vital social services and programs (e.g., police, fire, parks, libraries, recreation) from the electric revenues they receive.

These economic, environmental, and social benefits will continue as long as Western's rates remain competitive with the prices of other power supplies available to Western's customers in the marketplace. The current margin between Western's rates and the price of alternative power supplies is quite narrow. Western's current average power rate is approximately 30 mills or 3.0 cents per kilowatt-hour (Kwh). In addition, customers pay a surcharge into the CVPIA Restoration Fund which brings the total cost of Western's power to nearly 32 mills or 3.2 cents per Kwh. This is very close to price of energy from the Pacific Northwest, which costs up to 35 mills or 3.5 cents per Kwh. Moreover, in the recent competitive power solicitations sponsored by the California Public Utilities Commission, developers offered to build gas-fired combustion turbines for as low as 3.5 cents per Kwh. These figures show that there is little room for further large increases in Western's rates before municipal and other customers that have access to bulk power markets consider alternative sources of energy that would have negative effects on Western's revenues, the California economy, and the quality of the environment.

If CVP power becomes uncompetitive through a substantial loss of generation or capacity, or both, the costs imposed on California's economy and society could be substantial. For example, electricity prices could escalate dramatically if Western's hydroelectric capacity is reduced through sharp reductions in the amount of water

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[4] According to U.S. Bureau of Reclamation figures, through fiscal year 1993, the federal government's cumulative investment in CVP dams, canals, pumping stations, power plants and other facilities amounted to $3.1 billion dollars. Roughly 19 percent of this amount, or $576 million dollars, has been assigned to CVP power users for repayment.

stored behind CVP dams, and/or if the value of its energy is reduced by sharp increases in generation at times when the energy is in lesser demand (i.e., during the spring period). The long-term impacts of such operational changes should be of serious concern to the Board and all of our citizens.

Loss of CVP energy and capacity would also upset the integrated resource plans which Western's customers have developed (and which Western requires) to ensure the most efficient use of this valuable, renewable resource. Virtually all of the options for replacing the lost power would entail greater emissions in northern California and neighboring states, jeopardizing the improvements in air quality that the residents of these regions demand. In addition, higher power costs would hurt publicly owned utilities that depend on revenues from electric utility operations to fund vital social services, including police, fire protection, parks, libraries, recreation and others. State and federal facilities lacking access to bulk power markets would also see their power bills rise, requiring offsetting cutbacks in services or higher taxes.

Within this context, we now turn to a description of the methods used to assess the impacts of alternative Bay/Delta standards on CVP power users. In general, the implementation of new Bay/Delta standards will change the operations of CVP facilities and thereby change the amount and timing of CVP power generation and capacity and consumption of "CVP Project-Use power." The changes in hydropower generation, capacity, and Project-Use power will effect both the quantity and nature of the power available for sale to Western's customers and Western's costs of providing these services. Changes in the quantity and cost of power marketed by Western will, in turn, effect: (1) the revenues available for Western for repaying federal investments in the CVP; and (2) the cost of power to municipalities, thereby effecting the rates these agencies must charge to their consumers and the revenues available to fund community services.

NCPA and the CVP Customer Technical Committee have evaluated changes in CVP operations in the past and will use the same modelling tools to assess the implications of proposed Bay/Delta standards and alternative implementation approaches. The first step in the analysis involves the use of the PROSIM hydrological model to simulate

CVP/State Water Project (SWP) water operations and calculate CVP generation.[5] Next, the PROSYM Production Cost model is used to determine the quantity of CVP hydroelectric generation available to satisfy Western customer demand.[6] The output from the PROSYM model defines the maximum energy and capacity available under the defined environmental and water operational constraints. The models are run for a base case and additional cases assuming alternative water standards and implementation methods. Comparing alternative cases, the changes in CVP generation and capacity are determined and the impacts of these changes estimated. The economic and environmental impacts caused by customers' need to purchase or generate replacement power can thus be determined.

In addition to the replacement costs, the impact of operational changes on the cost of CVP power can be estimated. The increased costs result from spreading Western's capital and operating costs and Restoration Fund obligations across a reduced sales volume.

Question 3: Should the SWRCB request the CVP and SWP to implement portions of the draft standards prior to adoption of a water rights decision?

In general, NCPA believes it would be desirable to begin the long process of improving fish and wildlife in the Bay/Delta as soon as possible. However, we recognize that the Board will need to conduct a water rights proceeding to address the implementation of its adopted Bay/Delta water standards.

CONCLUSIONS

In conclusion, NCPA and its members reiterate their support for the Board's efforts to protect the fish and wildlife resources of the Bay/Delta. In NCPA's view, this objective can best be achieved through an integrated approach that is cost-effective, based on the

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[5]PROSIM (Project Simulation Model) was designed by the U.S. Bureau of Reclamation to simulate the operations of the CVP and SWP with current facilities and policies, including the Coordinated Operating Agreement.

[6]PROSYM is a chronological electric utility production simulation model designed to perform hour-by-hour investigations of the operations of electric utilities.