May 16, 1994
PC 94-467

John Caffrey, Chairman
STATE WATER RESOURCES CONTROL BOARD
P.O. Box 100
Sacramento, CA
95812-0100

Dear Mr. Caffrey:

Please find enclosed the Sacramento Municipal Utility District's input to the State Water Resources Control Board's Second Workshop in a Series to Review Standards for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary.

If you have any questions please contact me at 732-6342.

Sincerely,

[Signature]

Brian Jobson
Senior Power Contracts Administrator
SMUD INPUT TO SWRCB'S SECOND WORKSHOP ON STANDARDS FOR THE SAN FRANCISCO BAY/SACRAMENTO-SAN JOAQUIN DELTA ESTUARY

I am here to express SMUD's concern that a major beneficial use of water tributary to the Delta may be overlooked in the establishment of water quality standards. This beneficial use provides a basic need which none of us live without. It powers our industry, lights our homes, and the costs and efficiency with which we produce it have a substantial impact on our economy and our environment. I refer to the generation of electric power, and specifically hydroelectric power. The Sacramento Municipal Utility District owns and operates a 660 MW hydroelectric project on the American River which captures and stores spring runoff for power generation during heavier lead periods of the summer, fall and winter. The Upper American River Project also provides the load following and regulation services that allow the SMUD system to function in a reliable manner. This is clean, inexpensive, renewable power which we provide to our 470,000 customer owners without reaping profits for stockholders, and without worsening the air quality problem we are trying to solve. Water quality standards for the Sacramento-San Joaquin Delta which could impact SMUD's ability to store spring runoff could have direct adverse impact on this important resource.

SMUD has also been the largest purchaser of hydroelectric power from the Central Valley Project (CVP) for the last 40 years, purchasing 460 MW from the CVP. This important resource could be further constrained by Delta standards in its ability to generate capacity and energy when customers demand it. Requiring massive releases during periods of low power demand (i.e. spring and fall),
can have severe impacts on the ability of the project to generate power during peak load periods of the summer and winter. Without the certain availability of clean dependable peaking capacity and energy, old inefficient thermal units will run more often, or new ones will be constructed, generating more air pollution, and costing ratepayers more money.

In summary, fully one half of SMUD's capacity resources, which supply over one million people with power, are hydroelectric plants on rivers tributary to the Delta, so SMUD customer-owners have a huge stake in the outcome of this proceeding.

The District does share the Board's concern about aquatic resources in the Bay-Delta system, and wishes to constructively contribute to the recovery efforts underway. Indeed we are the largest financial contributor to the CVP Restoration Fund, have supported the CVPIA since its inception. SMUD's record as an industry leader in environmental achievement is well known. The District's specific input to the development of Delta standards within the context of the three subjects for today's workshop:

1.) What are the principal ESA issues the SWRCB should consider during this review?
SMUD is concerned that a piecemeal, species by species approach cannot produce an effective recovery of Delta aquatic resources, and will result in inefficient use of the limited water resources available for this and other beneficial uses.
As a result, existing beneficial uses, including hydroelectric power, could incur more impacts than necessary to recover the Delta aquatic resources. Coordination of efforts by State and Federal agencies is essential.

The Board should also determine what role structural measures can play in recovery efforts, so as to reduce demands on inflow when possible, particularly during seasons when other beneficial uses cannot benefit from such releases. For instance, effective screening of Delta cross channels, sloughs and diversions, and installation of rock barriers, can reduce the inflow needed to provide adequate environmental conditions. Unless such options are considered as preferable from the outset, the standards and recovery effort may not lend themselves to such solutions, and other beneficial uses may be harmed unnecessarily.

2.) What are the effects of diversions throughout the Bay-Delta Estuary on beneficial uses?

Delta diversions have required massive releases from storage reservoirs, to maintain westward Delta outflows in spite of currents created by pumping plants through Delta channels and sloughs. The demand for these reservoir releases is compounded by needs of anadromous fish for suitable temperature and attraction flows in rivers tributary to the Delta. Demands for municipal and industrial water, and
agricultural water will also continue to grow. It is difficult to rely on firm water and power yield of the CVP when demands on releases are so variable. Predictable release patterns from major reservoirs are needed to maintain the dependable capacity of the hydroelectric power systems which depend on those releases. California cannot afford the adverse impacts of losing this valuable resource, and the environmental and economic costs of replacing hydroelectric power with thermal resources. Flushing more and more water through a broken system is an approach which does too much damage to other beneficial uses, including hydroelectric power generation. We should work to find solutions which make the most efficient use of the water we have.

3.) What methods should the SWRCB use to analyze the water supply and environmental effects of alternative standards?

The Board should analyze the impacts of its action on power supply as well as water supply. SMUD relies on hydroelectric power generated by rivers tributary to the Delta to supply 50% of the electric capacity needs of over one million people in Sacramento County. These impacts should not be overlooked. Numerous models are available to calculate and help minimize impacts to hydroelectric power generation. SMUD is willing to work with the Board to address these impacts.
Thank you for the opportunity to provide input to the Board's development of Delta standards. We at SMUD look forward to a close and cooperative relationship to ensure that hydroelectric generation is given thorough consideration by the Board in its efforts to recover the aquatic resource of the Bay Delta system.