

DOCKETED

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Colorado River Board Comment

Additional submitted attachment is included below.



March 1, 2016

California Energy Commission
Dockets Unit, MS—4
1516 Ninth Street
Sacramento, California 95814-5512

Re: Docket No. 02-AFC-1C

To Whom It May Concern:

The purpose of this letter is to provide the California Energy Commission (CEC) with the comments of the Colorado River Board of California (Board) on the Preliminary Staff Assessment (PSA) for the Petition to Amend the Sonoran Energy Project (SEP) Decision (02-AFC-1C) that was released by the CEC for review and comment on February 1, 2016. The Sonoran Energy Project was formerly named the Blythe Energy Project Phase II. The Board was established in 1937 and is charged with safeguarding and protecting the rights and interests of the State, its agencies and citizens, in the water and power resources of the seven-state Colorado River system and these comments will be focused accordingly.

Based upon information provided in the PSA, the Board supports the CEC staff conclusion—

“...that a supplementation to the Blythe Energy Project Phase II (BEP II) 2005 Commission Decision (2005 Decision) is necessary for **Soil & Water Resources**. The Committee should reanalyze the conclusions of the 2005 Decision alongside this new information.” (PSA, page 4.9-1)

The Board also supports inclusion of a number of the requirements and verification procedures described in the Proposed Conditions of Certification (PSA, page 4.9-18). The data, information, conclusions, and recommendations contained in the PSA related to power-plant cooling methods, groundwater basin management, and potential impacts to Colorado River water resources as described herein support a CEC reanalysis of the conclusions contained in the 2005 Decision.

Power-Plant Cooling Method and Metering

Currently, the SEP proposes to utilize up to 2,800 acre-feet per year pumped from new onsite wells or the existing Blythe Energy Project water supply system, at the site overlying the Palo Verde Mesa Groundwater Basin. This proposed water use is associated with both industrial and potable uses, with most of the water use being associated with utilization of a wet-cooling technology at the power plant. Based upon data and information provided in the PSA, utilization

of dry-cooling technology at the plant could result in a significant decrease in potential annual water use by the SEP, from 2,800 af/year to as little as 280 af/year. The Board supports the PSA staff recommendation that the SEP utilize dry-cooling technology, and that the SEP implement groundwater metering (**SOIL&WATER-8** and **SOIL&WATER-11**), and first year and annual water use reporting (**SOIL&WATER-12** and **SOIL&WATER-13**) to demonstrate compliance with the annual water use limit proposed in the Condition of Certification for **SOIL&WATER-10**.

Groundwater Basin Management

A review of Table 4 “Water Budget for the Palo Verde Mesa Groundwater Basin” (PSA, page 4.9-17) indicates that the proposed new water use of 2,800 acre-feet annually by the SEP would significantly contribute to an imbalance between a total inflow of 889 acre-feet per year and a total outflow of 5,840 acre-feet per year. Between 2014 and 2015, California enacted a series of laws that became the Sustainable Groundwater Management Act which calls for the sustainable management and oversight of groundwater basins statewide. Additionally, the State has been experiencing extraordinary drought conditions for more than four years now, and significant water conservation measures and mandated reductions in overall water use have been implemented on a statewide basis. Through implementation of the dry-cooling technology for power plant cooling, the SEP can significantly reduce overall water use at the site as well as reducing overall impacts to the Palo Verde Mesa Groundwater Basin. Sustained groundwater pumping can also have the effect of inducing flow from the neighboring Palo Verde Valley Groundwater Basin, via the Rannells Drain, thereby reducing the Palo Verde Irrigation District’s (PVID) return flow from the Drain to the Colorado River. The cone-of-depression created by the groundwater pumping would induce more Drain flow to the groundwater basin. The water budget for the groundwater basin in which the SEP is located indicates that outflow of groundwater greatly exceeds natural recharge, underflow, and Mesa irrigation return flow, therefore implicating Colorado River water rights.

Colorado River Water Resources

The SEP is located within the boundary of PVID and groundwater pumping for the SEP would affect subsurface water in the Palo Verde Valley Groundwater Basin that is hydraulically connected to the Colorado River. Currently, all supplies of Colorado River water apportioned to the State of California (i.e., 4.4 million acre-feet in a “normal” year) are fully allocated. These allocations were made pursuant to contracts with the Secretary of the Department of the Interior through the 1928 Boulder Canyon Project Act (45 Stat. 1057) and were confirmed in the 2006 Consolidated Decree of the United States Supreme Court in *Arizona v. California* (547 U.S. 150, 2006). PVID is the Colorado River contractor for Colorado River water use in the Palo Verde Valley and on 16,000 acres of the Lower Palo Verde Mesa.

PVID has the contractual right to divert and beneficially use Colorado River water for potable and irrigation purposes on a gross area of 104,500 acres of Palo Verde Valley land within its service area and on 16,000 acres on the Lower Palo Verde Mesa. The Board agrees with the PSA statement that the portion of irrigation water applied to these irrigated acres that is not consumptively used by the “...crops percolates past the root zone to recharge the underlying

aquifer” (CEC 2005a) (PSA page 4.9-16). Consequently, the SEP’s proposed annual water use of 2,800 acre-feet per year would be supplied by groundwater pumping that would reduce return flow to the Colorado River via the PVID drainage collection system.

Water Conservation Offset Program

A Water Conservation Offset Plan (WCOP) must be developed to offset the reduction in return flow to the Colorado River that is acceptable to the U.S. Bureau of Reclamation, the Board, PVID, and junior water rights entitlement holders in California (e.g., the Metropolitan Water District of Southern California). Pursuant to Article V of the Consolidated Decree in *Arizona v. California*, Reclamation has the responsibility to prepare an annual “Colorado River Accounting and Water Use Report: Arizona, California, and Nevada” (reports available at <http://www.usbr.gov/lc/region/g4000/wtracct.html>), which includes diversions by PVID, and measured and unmeasured return flows from PVID. Groundwater use by SEP which results in a reduction in return flows from PVID would increase PVID’s consumptive use charged against California in Reclamation’s annual Accounting and Water Use Report. California’s apportionment to Colorado River water is fully allocated and an increase in PVID’s consumptive use (diversions minus measured and unmeasured return flows) has the effect of reducing the amount of Colorado River water available for use by the Metropolitan Water District of Southern California as a result of the 2003 Colorado River Water Delivery Agreement: Federal Quantification Settlement Agreement.

After reviewing the February 23, 2016 Sonoran Energy Project Water Conservation Plan, the Board concurs with the CEC staff that canal-lining “is unlikely to constitute a true offset” (PSA, p. 4.9-12). Canal lining in the Palo Verde Valley would not reduce the overall consumptive use of mainstream Colorado River water, but would simply reduce the amount of water that would return to the River via the measured drainage system or the unmeasured subsurface flow to the River.

In conclusion, the Board supports the CEC staff recommendations in the PSA associated with a number of the Proposed Modifications to Conditions of Certification outlined in “Soil & Water Resources Table 1” (PSA, p. 4.9-3) and described in the PSA on pages 4.9-23 through 4.9-26. Specifically, the Board supports the requirements and verification procedures described in the following Proposed Conditions of Certification for Soil and Water—

- SOIL&WATER-7** WCOP for dry-cooling water use of up to 280 af/year (PSA pages 4.9-23 and 4.9-24);
- SOIL&WATER-8** Requirement for metering of groundwater pumping (PSA pages 4.9-24 and 4.9-25);
- SOIL&WATER-10** Revised annual water use limit of a maximum of 280 af/year (PSA page 4.9-25);
- SOIL&WATER-11** Servicing, testing and calibrating of water meters (page 4.9-26);
- SOIL&WATER-12** Requirement for first year monthly water use reporting (page 4.9-26); and

SOIL&WATER-13

Requirement for annual water use reporting on a monthly and annual basis during the life of the SEP (page 4.9-26).

The Board appreciates the opportunity to provide these comments on the CEC's PSA for the Petition to Amend the Sonoran Energy Project (formerly Blythe Energy Project II) Decision. Please feel free to contact me if you have any questions or require additional information at (818) 500-1625.

Sincerely,

Tanya Trujillo

Tanya M. Trujillo
Executive Director

cc: Mr. Steve Hvinden, U.S. Bureau of Reclamation—Boulder Canyon Operations Office
Mr. Ned Hyduke, Palo Verde Irrigation District
Mr. William Hasencamp, Metropolitan Water District of Southern California