

DOCKETED

Docket Number:	97-AFC-01C
Project Title:	High Desert Power Plant (COMPLIANCE)
TN #:	206454
Document Title:	Petition for Modification
Description:	N/A
Filer:	Deric Wittenborn
Organization:	Ellison, Schneider & Harris LLP
Submitter Role:	Applicant
Submission Date:	10/29/2015 4:00:58 PM
Docketed Date:	10/29/2015



High Desert Power Project, LLC

14302 FNB Parkway | Omaha, Nebraska 68154-5212
402-691-9500 | FAX: 402-691-9727

October 29, 2015

Chair Robert B. Weisenmiller
Commissioner Karen Douglas
Commissioner David Hochschild
Commissioner Andrew McAllister
Commissioner Janea A. Scott
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814-5512

Re: High Desert Power Project (09-AFC-1C) Petition for Modification

Dear Chair and Commissioners:

As directed in the California Energy Commission's ("Commission") September 10, 2014 *Order Approving Petition to Amend*, the High Desert Power Project, LLC ("HDPP") will file a petition for modification ("Petition") to bring the Commission's certification for the High Desert Power Plant (the "Facility") up to date with events and circumstances unforeseen by the Commission and HDPP when the Facility was licensed in May of 2000. Such events and circumstances have reshaped the water supply landscape for the Facility.

First, in August of 2000, three months after the Commission's certification of the Facility, the California Supreme Court substantially affirmed the Judgment of the Riverside County Superior Court adjudicating the water rights in the Mojave Basin and appointing the Mojave Water Agency ("MWA") to act as the Watermaster to implement the adjudication. Through MWA's leadership, the Mojave Basin has been well-managed, serving as a model for the landmark Sustainable Groundwater Management Act of 2014.

Second, by Memorandum of Understanding ("MOU") dated June 27, 2003 (more than three years after the Commission's certification of the Facility), the California Department of Fish and Wildlife (then California Department of Fish and Game) and Victor Valley Wastewater Reclamation Authority ("VWVRA") agreed that VWVRA would continue to discharge at least 9,000 acre feet per year of recycled water to the Mojave River to protect instream resources, thus freeing surplus Recycled Water for other uses in the region. This MOU settled, and fundamentally reshaped, how water is used and managed for the benefit of the environment and water users in the Mojave Basin.

Third, starting in 2007, water deliveries from the State Water Project ("SWP Water") have been dramatically reduced as a result of court decisions regarding the biological opinion issued to

protect the Delta smelt in the Sacramento-San Joaquin Delta (“Delta Smelt Biological Opinion”). The SWP Water reductions have fundamentally altered the Facility’s water supply plans. The reduction in pumping undermined the Commission’s and HDPP’s mutual understanding and belief that SWP Water would be available in sufficient quantities to allow the Facility to “bank” water many years in advance of need, thus assuring a dependable supply. As a result – and acting of its own volition – in 2008 HDPP petitioned the Commission to lift the prohibition and allow for the use Recycled Water at the Facility.

Fourth, HDPP and the Commission both shared the reasonable expectations that the local water suppliers would be able to improve their delivery systems to provide water of sufficient quality and quantity as needed for reliable operations. With respect to Recycled Water, while the local purveyors have made great strides, the quantity and quality of water required has not materialized as anticipated. On average, there may very well be sufficient supplies; however, by definition, no single year is an “average” year and flexible power plants such as the Facility – which California will depend on as it moves toward 50% renewable energy and while eliminating use of imported coal-fired energy and once-through cooling power plants – do not run on “average.” Instead, they run in real time meaning they must be capable of varying their output from minimum to maximum on an hourly, daily, monthly and annual basis as required by market conditions. Rather than giving up on Recycled Water supplies materializing, the Petition will seek the flexibility needed to blend other sources of water and to operate the Facility, not on average, but under all energy demand and water supply conditions.

Fifth, the current drought has simply been more prolonged and more severe than any reasonable person would have anticipated in 2000, when the Facility was originally certified, or when the Delta Smelt Biological Opinion reshaped the water landscape.

In response to these and other circumstances, HDPP will file the Petition to drought proof the Facility. As described herein, under normal or even average circumstances, the Facility will need little to no MWA-administered groundwater to efficiently and reliably operate. Moreover, to assure that the Facility will use as much Recycled Water and as little groundwater as feasible, the Petition will propose a “Loading Sequence” for use of various water supplies. Under the Loading Sequence, lower quality water supplies will be used first and preferentially such that Recycled Water is the Facility’s primary supply and that SWP Water, Banked SWP Water and MRB Adjudicated Water (as defined in the Petition) are the Facility’s backup supplies for blending.

To objectively verify the Facility’s commitment to implement the Loading Sequence, HDPP will monitor and report on two important water quality parameters: (1) cooling tower blowdown rate and (2) the levels of chlorides in the cooling tower water. Specifically, HDPP will continue to maximize use of Recycled Water as the Facility’s primary water supply blended with other available water sources in ratios needed to maintain the “CT Blowdown Rate” and the chloride concentration within acceptable levels.

With respect to CT Blowdown Rate, the Facility operators will monitor the actual CT Blowdown Rate and compare it to the CT Blowdown Rate required to maintain cooling water quality within

the limits required to maintain permitted cooling tower PM₁₀ emissions and to protect the Facility's cooling systems and equipment. With respect to chloride concentrations, when chloride concentration is greater than 980 mg/L, defined as the "Threshold Chloride Concentration," the circulating cooling water is not of acceptable quality. Whenever the actual CT Blowdown Rate is less than the required rate or whenever the cooling water chloride concentration is above the Threshold Chloride Concentration, then blending makeup water using supplies of higher quality is required to maintain compliance with air quality requirements and reliable operations. These two criteria, CT Blowdown Rate and Threshold Chloride Concentration, will ensure that the Facility uses its available water supplies consistent with the Loading Sequence, favoring Recycled Water as much as feasible for blending with other supplies.

Finally, in reviewing the Petition, it will be vitally important for the Commissioners to distinguish between (a) how HDPP expects the project to operate versus (b) the permitting flexibility needed to operate this merchant facility in a competitive marketplace. As discussed in detail in the Petition, the expectation is that only under extreme circumstances will the Facility use MRB Adjudicated Water to operate reliably. Nevertheless, to compete in the marketplace and to ensure the Facility can reliably serve the State of California, HDPP needs the permitting flexibility to respond to the extreme events over which the Facility has no control. Accordingly, HDPP will propose to secure access to groundwater as may be needed under extreme circumstances, limited by using a five year rolling average to account for the annual variability in water quality, quantities, supplies and circumstances beyond its control.

As will be demonstrated in the Petition, permitting flexibility, tempered with the accountability that will be proposed in revisions to Condition SOIL&WATER-1, is required to drought proof the Facility.

Sincerely,



Bradley K. Heisey
Senior Vice President
High Desert Power Project, LLC

cc: Robert Oglesby, CEC Executive Director