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STATE OF CALIFORNIA  
ENERGY RESOURCES  
CONSERVATION AND DEVELOPMENT COMMISSION

IN THE MATTER OF: ) DOCKET NO. 08-AFC-08A  
)  
AMENDED APPLICATION FOR )  
CERTIFICATION FOR THE HYDROGEN ) RESPONSE TO CEC STAFF'S STATUS  
ENERGY CALIFORNIA PROJECT BY ) REPORT NO. 4  
HYDROGEN ENERGY CALIFORNIA LLC )  
)

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Applicant hereby responds to certain statements pertaining to water resources contained in California Energy Commission Staff's Status Report #4 dated January 9, 2013. Staff states that certain modeling data referenced in a November 10, 2010 letter to then CEC Project Manager Rod Jones from Buena Vista Water Storage District (BVWSD) "has not been made available to staff." Staff goes on to state that it "continues seeking additional information and input from the applicant, the Buena Vista Water Storage District, the State Water Resources Control Board (SWRCB) and the Central Valley Regional Water Quality Control Board (CVRWQCB) offices regarding proposed brackish water sources as described by the applicant in the Amended AFC." The implication of these statements is that the Applicant and/or relevant agencies have not been forthcoming with information necessary for Staff to review the Project's water supply plan. Applicant strongly disagrees with this implication.

It is not clear what modeling data Staff is referring to in its Status Report #4 since the November 10, 2012 BVWSD letter does not refer to any modeling data. That letter, which expresses the BVWSD's unequivocal and enthusiastic support for the Project's water supply plan, and which details the BVWSD's analysis of the plan's consistency with state water law and policy, is attached as Attachment A (along with a more recent supportive letter from BVWSD). All of the extensive water modeling that has been done in connection with the Project has been completed by Applicant's consultant URS in consultation with BVWSD staff and CEC Staff and consultants. That analysis was provided to the CEC Staff and docketed in various submissions going back nearly two and one half years.

With respect to any additional requests for information related to the Project's water supply plan, Applicant is not aware of any having been made since submittal of the Amended AFC in May of last year. Of the 254 data requests issued by the CEC Staff since that time, not one related directly to potential impacts associated with the Project's water supply plan.

It is important to note that the proposed water supply for the Project has not changed since the AFC was submitted in May 2009. Nothing in the Amended AFC filed in May 2012 altered the water supply plan. Thus, the water supply plan for the Project has been under review by the Staff for over three and one half years. As the following chronology illustrates, during that period of time, Applicant has taken all reasonable steps to ensure that Staff has all of the information necessary for it to complete its evaluation of the proposed water supply plan.

Date	Activity or Document	Description
April 16, 2009	Pre-filing Meeting with CEC Staff to Discuss Water Supply Plan	Prior to filing the AFC for the Project, Applicant and its consultants met with the CEC Staff specifically to discuss the water supply plan for the project. Representatives of BVWSD also attended the meeting. The detailed presentation made by Applicant in this meeting is attached as Attachment 2.
May 28, 2009	AFC Filed	The water supply plan, as detailed in the May 2009 AFC has remained essentially unchanged since that time.
September 24, 2009	CEC Site Visit	CEC Staff responsible for water resources (Paul Marshall and Cheryl Closson) attended this site visit.
November 11, 2009	Applicant's Responses to CEC Staff Data Requests, Set 1	Responses to Data Requests 106, 108 and 109 pertained to water supply. (Docket #54064)
December 21, 2012	Final Environmental Impact Report for BVWSD Water Management Program	This document describes BVWSD's Brackish Groundwater Remediation Program of which the HECA water supply plan is a critical element. (Docket #55029)
April 12, 2010	CEC Data Response and Issues Resolution Workshop	CEC Staff for water resources (Mike Conway) participated in this Workshop
April 29, 2010	Draft Hydrogeologic Data Acquisition Report (HDAR) & Addendum	This report and its addendum provide hydrogeologic analyses and groundwater modeling data for the Project water supply. (Docket #56563)
Week of May 10, 2010	Groundwater model files sent on CD to CEC consultant John Fio	Applicant's consultant URS provided groundwater model files to CEC consultant John Fio for his review and use. Receipt acknowledged via e-mail on May

		18, 2010.
June 10, 2010	Applicant's Responses to April 2010 CEC Data Response & Issues Resolution Workshop	Responses 16, 17, 19, 20 pertained to water resources. (Docket #57101)
June 11, 2010	Application for Confidential Designation - Response to Workshop Request No. 18	Groundwater modeling files referenced in the Amended AFC Water Resources section and provided to John Fio week of 5/10/10 filed confidentially with CEC. (Docket #57305)
June 15, 2010	Meeting with CEC and BVWSD staff at BVWSD	Meeting and site visit to discuss Process Water Supply / Brackish Groundwater Remediation Project. Attended by CEC Water Staff (Mike Conway, Karim Abulaban, Marylou Taylor), BVWSD (Bartel and Olu Ogunjobi, Crewdson), Hydrofocus (Fio and Deverel), URS (Muehleck), and HECA (Lemmons).
November 10, 2010	Statement for HECA Power Plant Project's Proposed Use of Buena Vista Storage District's Brackish Water	BVWSD's letter to CEC expressing support for Project's proposed water supply. (Docket #59009)
November 12, 2010	Applicant's Responses to CEC Staff Data Requests Set 3 (153-218)	Responses 191-199 (regarding BVWSD's water supply), Response 200 (regarding Project's water use) and Response 201 (regarding alternative water supplies). (Docket #59011)
November 12, 2010	Applicant's Confidential Response to CEC Staff Data Requests Set 3 (191)	Confidential figure from BVWSD regarding water supply.
May 2, 2012	Amended AFC	No material changes to water supply plan. (Docket #65049)
June 20, 2012	CEC Staff Workshop in Sacramento	No concerns expressed by CEC Staff regarding proposed water supply plan.
July 20, 2012	CEC Staff Data Requests Set 1	No data requests related to water supply. (Docket #66281)
August 31, 2012	CEC Staff Status Report #1	No mention of water supply issues. (Docket #66985)
September 6, 2012	CEC Staff Data Requests Set 2	No data requests related to water supply. (Docket #67037)
September 27,	CEC Workshop	No questions from CEC Staff related to

2012		water supply.
October 26, 2012	CEC Staff Status Report #2	No mention of water supply issues. (Docket #68217).
November 2, 2012	CEC Staff Data Requests Set 3	With the exception of DR A203 that asked about dry cooling vs wet cooling, no data requests related to water supply (Docket #68324)
November 5, 2012	Responses to CEC Workshop Requests A1-A32	None related to water supply.
November 7, 2012	CEC Workshop	No questions from CEC Staff related to water supply.
December 20, 2012	CEC Staff Status Report #3	States that Staff continues to have discussions with Applicant regarding proposed water availability and possible alternative configurations of the water supply plan.
January 9, 2013	CEC Staff Status Report #4	States the Staff intends to conduct issues resolution workshop related to water supply and modeling has not been made available to Staff.

The following salient points can be taken from the above chronology:

- The water supply plan for the Project has not been altered materially since submission of the AFC in May 2009.
- Beginning in April 2009 and continuing through November 2010, there was extensive discussion and analysis of the Project's proposed water supply plan, and Applicant provided the CEC Staff with extensive information and modeling related to the proposed water supply plan.
- During the 7-month period following filing of the Amended AFC in May 2012 until issuance of its Status Report #3, Staff did not raise water supply as a serious unresolved issue and did not request any additional information from the Applicant related specifically to water supply.

Given this set of circumstances, it is deeply troubling to Applicant that staff identifies water supply as one of the two main areas with unresolved issues in its Status Report #4, and even more troubling that it implies that Applicant has not provided necessary information. Based on the extensive information exchange early in these proceedings, and the absence of any expressions of concern on the part of Staff until just recently, Applicant was under the reasonable impression that any significant issues related to water supply had largely been resolved. Certainly, three and one half years into the review process is no time to be suggesting major alterations to an aspect of the Project as fundamental as the water supply plan.

We look forward to discussing these issues further during the upcoming Status

Conference.

DATED: January 15, 2013

Respectfully submitted,

*/s/ Michael Carroll*

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Michael Carroll  
LATHAM & WATKINS LLP  
Counsel to Applicant

Attachment A

Correspondence from Buena Vista Water Storage District



## Buena Vista Water Storage District

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Nick Torres - Hydrographer

October 29, 2012

Mr. Robert Worl  
Project Manager  
California Energy Commission  
1516 Ninth Street, MS-15  
Sacramento, CA 95814-5512

California Energy Commission

**DOCKETED**  
**08-AFC-8A**

TN # 68269

OCT 30 2012

Re: Support for the HECA Project's Use of Buena Vista Water Storage District's Brackish Water (CEC Docket No. 08-AFC-08A)

Dear Mr. Worl:

Buena Vista Water Storage District (District) would like to thank the California Energy Commission (CEC) for engaging the public and other interested parties throughout the Application for Certification process for the Hydrogen Energy California Power Plant Project (HECA). The District acknowledges the complex and challenging process the CEC undergoes when considering an applicant's certification along with the vast amount of data, information and public input that is necessary to analyze the benefits and impacts of the project.

Certainly one key aspect when considering project certification is the power plant's use of brackish water. As you are already aware, the District will be the supplier of the brackish water for the proposed power plant and the District has and continues to support the use of this brackish groundwater by HECA. The District's Brackish Groundwater and Remediation Project (BGRP) was developed as a component of the Buena Vista Water Management Program (FEIR – State Clearinghouse No. 2009011008) to help remediate the brackish groundwater issues in the District. By providing HECA with this brackish groundwater, Buena Vista will be able to implement a significant portion of the BGRP and improve the water quality of the underlying groundwater for the benefit of the farmers.

A significant way the BGRP will help improve the groundwater quality for the overlying farmers is that part of the BGRP is designed to strategically locate groundwater production wells on the west side of the District to intercept an influx of brackish groundwater (TDS > 2,000 mg/l) in the area of concern and allow better quality groundwater to infiltrate from east of the production wells. By shifting the mixing zone of the higher and lower TDS groundwater to the west, over time the groundwater quality to the east of the intercept wells will improve and help

provide farmers in the area of concern with more options regarding crop selection, irrigation management and irrigation facilities.

Fortunately for HECA, the vast region of brackish groundwater that impacts the western portions of the District is extensive and well beyond the capacity of the BGRP and therefore beyond the HECA requirements of up to 7,500 Af/yr. Under the currently proposed HECA project and its role within the BGRP, the groundwater improvements would only occur in the localized region to the east of the intercept wells and the groundwater benefits will only remain as long as the intercept wells are operating. The HECA project will never consume all brackish groundwater resources in the target areas of the BGRP, but it does create a demand for the brackish water which helps the District and the overlying landowners benefit from the BGRP.

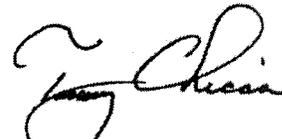
Additionally, the District carries a positive groundwater balance by annually recharging more groundwater (via canal seepage, irrigation percolation and intentional recharge activities) than what the District and its landowners annually extract (> 30,000 Af/yr). By recharging more groundwater than is pumped from the ground, the District has more than sufficient groundwater supplies to operate the BGRP intercept wells and sustain the improved groundwater quality. In short, the District will be recovering less than 25% of the volume of water that the District annually recharges to the aquifer.

The District and its Board of Directors fully stand behind its Brackish Groundwater Remediation Project and fully support HECA's use of the brackish groundwater that impacts farming operations and water management within the District. The District is fortunate to find a willing participant in the BGRP and hopes the CEC will approve HECA's use of the brackish groundwater supplied by the District.

Sincerely,



David Hampton  
Interim General Manager



Terry Chicca,  
President, Board of Directors

Cc: (Via Email)

Fred Puzzuto, Department of Energy  
Tom Daniels, Hydrogen Energy California



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November 10, 2010

Mr. Rod Jones  
Project Manager  
CALIFORNIA ENERGY COMMISSION  
Siting, Transmission, and Environmental Protection Division  
1516 Ninth Street, MS-15  
Sacramento, CA 95814-5512

Re: Statement in Support of Hydrogen Energy California Power  
Plant Project's Proposed Use of Buena Vista Water Storage  
District's Brackish Water  
(California Energy Commission Docket No. 08-AFC-8)

Dear Mr. Jones:

Buena Vista Water Storage District ("Buena Vista" or "District") wishes to thank you for the opportunity of allowing the District to consider and favorably comment upon the important issue of using brackish groundwater supplies underlying the District for the proposed Hydrogen Energy California Power Plant Project (HECA Project). In addition to the State Water Resources Control Board correspondence dated June 20, 2010 which discusses certain State Water Resources Control Board policies (SWRCB Correspondence), the District also wishes to provide the California Energy Commission (CEC) with, and comment upon, other specific policies of the State of California which clearly and unequivocally support the use of the District's brackish groundwater for the HECA project.

As an introductory matter, Buena Vista Water Storage District (the supplier of the brackish water to be used in the HECA Project) is a California Water Storage District, formed and operating under Division 14 of the California Water Code (Section 39000, et seq.) The District principally supplies irrigation water to landowners. In accordance with its enabling legislation, the District is vested with all power and authority necessary to enable it to acquire, improve, and operate necessary works for the storage and distribution of water and any drainage or reclamation works connected therewith (see for example Water Code §§ 43000 and 43150). In fact, for water storage districts such as Buena Vista, the California Legislature has specifically provided that "All waters and water rights belonging to this State within the district are given, dedicated and set apart for the uses and purposes of the district." (Water Code § 43158.)

As part of the District's ongoing water management planning and operations, and in accordance with the powers and authorities vested in the District with respect to water-related issues, the District has developed and adopted a water management plan, known as the BUENA VISTA WATER MANAGEMENT PROGRAM ("Water Management Program"). The Water Management Program's Final Environmental Impact Report (FEIR) was certified on January 12, 2010 [State Clearinghouse No. 2009011008]. The Water Management Program was developed to further implement the District's mission, which is to provide the landowners and water users of the District with a reliable, affordable, and usable water supply, while facilitating programs that protect and benefit the groundwater basin and better utilize water supply resources (FEIR p. I-1). The Water Management Program consists of four components, each such component being a separate and individual project designed to more effectively and beneficially manage the District's water resources. The four Water Management Program components consist of:

- Component 1: a Groundwater Recharge and Recovery Project;
- Component 2: a Water Exchange Project;
- Component 3: a Conservation Easement Water Acquisition and Management Project;
- and Component 4: a Brackish Groundwater Remediation Project.

It is the last referenced water management project that is of interest in the HECA Project process. The Brackish Groundwater Remediation Project (BGRP) was developed to remediate brackish groundwater conditions within certain areas underlying the District. By way of background, there are a number of localized areas and zones within the District that contain elevated TDS concentrations in the range of 2,000 to 4,000 mg/l. Typically, these areas are located along the westerly District boundaries. These high TDS waters recharge the underground aquifer from the west (FEIR, p. III-7). Elevated TDS concentrations have already adversely impacted plant growth and crop yields in certain areas (FEIR, p. II-10). The purpose of the District's BGRP is to construct and operate strategically located brackish groundwater recovery wells and associated collection and conveyance pipelines that will extract and transport brackish water to participants who will operate receiving facilities that may be located either inside or outside District boundaries (FEIR, p. III-5). The HECA Project is one such participant. The use of extraction wells will enable the District to reduce the inflow of brackish groundwater underlying the District, thus tending to halt or slow the reduction of irrigable acres within the District, while also halting or slowing any trends of local farming interests to grow less economically viable crops or, in some cases, eliminate farming practices altogether.

With respect to the SWRCB Correspondence, the District fully concurs with the statement contained therein that provides "... state policy for water quality control does allow, under some circumstances, the use of supply water with TDS ranging from 1,000 to 3,000 mg/l to supply renewable energy projects." In fact, the circumstances surrounding the HECA Project and use of brackish water pursuant to the District's BGRP are fully consistent with such statement and the other principles that are discussed in the SWRCB Correspondence. As an example, the anticipated TDS of water provided under the BGRP to the HECA Project is expected to be within the range of 2,000 to 4,000 mg/l (FEIR, p. III-7), which is clearly within the TDS parameters referenced in the SWRCB Correspondence and therefore consistent with SWRCB Resolutions 75-58 and 88-63.

Additionally, the water to be provided is "brackish water from natural sources" as referenced in SWRCB Resolution 75-58 and as discussed in Principle No. 1 of such

correspondence. The District's supply meets the priority scheme suggested by Principle No. 1 because no other higher priority brackish water is available for the project (higher priority water being defined and limited under Resolution 75-58 to only "wastewater being discharged to the ocean" or "ocean" water).

Use of brackish water pursuant to Buena Vista's BGRP is also consistent with Principle No. 2 as set forth in the SWRB Correspondence. The water being provided is not "fresh inland waters" as defined or described within such correspondence or as referenced in SWRCB Resolution 75-58. Again, the supply water will be brackish groundwater with an anticipated salinity range of between 2,000 to 4,000 mg/l, and which provides no habitat for fish or wildlife.

Use of brackish groundwater provided from Buena Vista's BGRP is also consistent with Principle No. 7, which suggests using wastewater for power plant purposes if available. The brackish water being provided by the District is consistent with this principle in that (a) no wastewater is available for use at the HECA Project location, and (b) using the naturally occurring brackish water is of a higher use "priority" than using wastewater, as is referenced in the priority scheme set forth in Principle No. 1 above and in SWRCB Resolution 75-58.

Buena Vista would also like to advise the CEC that Buena Vista Water Storage District's geographic boundaries are not located in a "water short area" where the commodity value of the water is so high that even highly brackish water should be preserved solely for domestic use. In fact, total District groundwater replenishment currently exceeds District groundwater extraction by an annual average of approximately 46,000 acre-feet per year (FEIR, p. III-2). Therefore, the use of Buena Vista's brackish groundwater for the HECA Project will not result in a water supply deficit within the area.

As explained above, Buena Vista believes the use of water pursuant to its BGRP is fully consistent with SWRCB policies, including Resolutions 75-58 and 88-63, as referenced and discussed in the SWRCB Correspondence of June 20, 2010.

In addition to the policies and SWRCB resolutions referenced in the SWRCB Correspondence, there are other California policy statements that support the use of Buena Vista's brackish groundwater for the HECA Project. In fact, the State of California has regularly and consistently recognized salinity and brackish water as an area of concern within the state. For example, the State Water Resources Control Board has included a statement on its website, as follows:

Elevated salinity and nitrates in surface water and groundwater are increasing problems affecting much of California, other western states, and arid regions throughout the world. In California, as surface and groundwater supplies become scarcer, and as wastewater streams become more concentrated, salinity and nitrate impairments are occurring with greater frequency and magnitude. (See: [www.swrcb.ca.gov/centralvalley/water-issues/salinity/index.shtml](http://www.swrcb.ca.gov/centralvalley/water-issues/salinity/index.shtml).)

Furthermore, the State of California, by and through the State Water Resources Control Board, adopted Resolution 2009-0011 which, in turn, adopted California's Recycled Water Policy. The preamble to the Recycled Water Policy includes the following statements:

"To achieve that mission, we support and encourage every region in California to develop a **salt/nutrient management** plan by 2014 ...."  
(Emphasis added.)

"We strongly **encourage local and regional water agencies to move toward** clean, abundant, local water for California by emphasizing appropriate water recycling, water conservation, and maintenance of supply infrastructure ...." (Emphasis added.)

"We declare our independence from relying on the vagaries of annual precipitation and move towards sustainable **management of surface waters and groundwater**, together with enhanced water conservation, water reuse, and the use of stormwater." (Emphasis added.)

Section 6.b.(a) of the Recycled Water Policy proposes the adoption of salt/nutrient management plans and specifically provides:

"It is the intent of this Policy for every groundwater basin/sub-basin in California to have a consistent **salt/nutrient management** plan. The degree of specificity within these plans and the length of these plans will be dependent on a variety of **site-specific factors**, including but not limited to size and complexity of a basin, source water quality, stormwater recharge, hydrogeology, and aquifer water quality." (Emphasis added.)

In August of 2009, a memorandum was circulated by the Executive Officer of the State Water Resources Control Board informing the Regional Water Boards of their role in implementing the Recycled Water Policy with a goal of initiating and participating in stakeholder processes for the development of salt/nutrient management plans.

A further example of the State of California's acknowledgement of and concern over brackish water and salinity management is the fact that an entire chapter was devoted to salt and salinity management in the 2009 California Water Plan, Bulletin 160-09 of the Department of Water Resources ("California Water Plan"). The California Water Plan's steering committee includes representatives from a number of state agencies, including but not limited to the California Energy Commission, the California Environmental Protection Agency, the California Natural Resources Agency, the California Public Utilities Commission, the Department of Public Health, the Department of Water Resources, the Governor's Office of Planning and Research, the State Water Resources Control Board, and Regional Water Boards. (Water Plan, p. 1-12.) Chapter 18 of the California Water Plan, which is entitled *Salt and Salinity Management*, is dedicated entirely to salt and salinity management and in part provides:

"**Local and regional solutions to salt management can vary significantly, but are generally most appropriate to local and regional scales**, unless the planning process in developing those solutions determine that there is a benefit to developing infrastructure at a State level. Therefore **salt management should be fully integrated into water management** such as through integrated regional water

management plans." (California Water Plan, p. 18-14.) (Emphasis added.)

Clearly, the State of California has recognized that not only is salinity a problem, but that it must be managed, beginning at the local level. To further support his proposition, the California Water Plan also states:

**"Local solutions should be sought first**, as these can be implemented more rapidly than those imposed by State or federal authorities. All stakeholders affected by nitrate, seawater intrusion, soil or **groundwater salinization** or loss of fresh water flows should address salt management ...." (California Water Plan, p. 18-24.) (Emphasis added.)

The drafters of the California Water Plan also acknowledge "... water quality protection is more cost effective and has a greater chance of success than water quality remediation." (California Water Plan, p. 18-18.) This is precisely the type of water management program that the District is implementing under its BGRP, to wit: remove/extract the inflow of brackish water from the westerly edge of District boundaries to prevent salinization of higher quality water underlying the District. The extraction of such brackish water is the most cost-effective approach for managing the salinity problem underlying the District.

Under the *Collaboration* section within Chapter 18 of the California Water Plan, it is suggested that all state, federal, and local agencies should implement projects that assist the state's communities, watersheds, and regions in achieving a sustainable salt balance and that all such entities "should strive to coordinate their efforts where possible." (California Water Plan, p. 18-28.) Under the present circumstances, Buena Vista urges the coordination and cooperation of the CEC in allowing the HECA Project to use Buena Vista's brackish groundwater pursuant to the District's BGRP.

In addition to the Recycled Water Policy and the California Water Plan referenced above, salt-related problems have also been recognized by the U.S. Department of the Interior and the California Resources Agency. An example of such recognition is provided in the September 1990 report entitled A Management Plan for Agricultural Subsurface Drainage and Related Problems on The West Side San Joaquin Valley, commonly known as the "Rainbow Report". The Rainbow Report recognizes that salts have been a persistent problem in parts of the San Joaquin Valley for more than a century, making some cultivated land unusable as far back as the 1880s and 1890s (Rainbow Report, p. 15). The Rainbow Report also acknowledges that without proper mitigation measures, economic impacts to the San Joaquin Valley could be severe, and as a result of a decline in irrigated acreage, income, sales, and jobs will suffer tremendously. In fact, as of 1990, which is the year of the report's preparation, the economic effects of unchecked salinity problems were estimated to result in hundreds of millions of dollars in economic damages or losses on an annual basis (Rainbow Report, p. 83). The report also indicates that one of the methods available for coping with salinity and brackish water problems is through groundwater management, and the use of wells to extract brackish water (see for example, Rainbow Report, pp. 88 and 102). Interestingly, one of the brackish water management methodologies suggested in the Rainbow Report is exactly the type of project that will be used by the District to supply water for the HECA project, to wit: extract brackish water in an effort to protect and enhance other groundwater underlying the District.

As yet another example of the State of California's acknowledgement of and concern over brackish water, The Central Valley Regional Water Quality Control Board, in a report entitled Salinity in the Central Valley, an Overview (May 2006), also recognizes the impacts that brackish water and salinity are having within the State of California. The report references that cropping patterns may change, jobs may be lost, and other problems will occur as a result of salinity increases. The report also recognizes that, as is the case in the Buena Vista Water Storage District, salinity problems can be caused by naturally occurring salinity in soils and groundwater, due to the geology of the area. The report further provides that salinity management involving environmentally and economically sustainable solutions should take place to ensure that "responsibility for salinity mitigation actions is shared equitably." (Report, p. 53.) Buena Vista believes a viable economic solution is now available through the HECA Project to remediate at least a portion of Buena Vista's brackish groundwater problem.

The California Regional Water Quality Control Board, Central Valley Region, again recognized the problem of brackish water and salinity within a report entitled, Water Quality Control Plan for the Tulare Lake Basin, Second Edition (revised January 2004). The report recognizes that salinity is a problem, that some of the salt load to the groundwater is the result of natural processes, and that absent a drain to carry wastewater from the basin, "The only other solution is to manage the rate of degradation . . . ." (See Report, p. IV-5.)

Not only is the HECA Project's use of District brackish groundwater consistent with California brackish water remediation policies as set forth and defined by the various state regulatory and administrative agencies mentioned above, but Buena Vista believes that such brackish water use is consistent with, and perhaps compelled by, California Constitution Article X, Section 2, which provides:

It is hereby declared that because of the conditions prevailing in this State the general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable ...."

This constitutional provision has also been codified by the California Legislature through both Water Code section 100 and Water Code section 520. In effect, by allowing HECA's use of brackish water pursuant to the District's BGRP, the remaining water underlying Buena Vista can be used for irrigation and/or domestic use, which are the two highest uses of water within the State of California. These high priority uses are codified within Water Code section 1254 which states, "In acting upon applications to appropriate water the board shall be guided by the policy that domestic use is the highest use and irrigation is the next highest use of water." Therefore, the HECA Projects' use of the District's brackish water provides, at a minimum, a trilogy of benefits consisting of:

- (1) Putting to beneficial use certain brackish water that is otherwise unsuitable for existing present uses, and allowing it to be used for HECA purposes; and
- (2) Protecting the existing groundwater resources underlying Buena Vista Water Storage District from persistent brackish water intrusion, thus enhancing such groundwater; and
- (3) Allowing the newly protected groundwater resources within Buena Vista Water Storage District to be used for agricultural and/or other beneficial uses.

Without HECA's use of brackish water pursuant to the District's BGRP, water resources underlying Buena Vista Water Storage District will be of limited usefulness (and therefore of lesser beneficial use) as a result of brackish water intrusion that will continue to exacerbate groundwater salinity problems underlying the District.

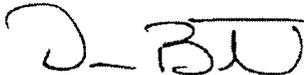
As is evident from the above, the HECA Project's use of brackish water pursuant to Buena Vista's BGRP is not only consistent with California water policy as considered and developed by various state administrative and regulatory agencies, but such use is also consistent with the State Legislature which has repeatedly acknowledged that brackish groundwater is a problem within the State. The Legislature has specifically referenced brackish groundwater, desalination, or other salinity problems within Water Code sections 10013, 10608.50, 12947, 79545, and 79547.2, and the necessity to protect and manage the groundwater within the State (Water Code § 79501(e)) through a coordinated control of all factors that affect water quality in any given area (Water Code § 13241(c)).

In conclusion, the interception, extraction, delivery and use by the HECA Project of brackish water underlying Buena Vista Water Storage District pursuant to the District's Groundwater Management Plan and Brackish Groundwater Remediation Program is entirely consistent with state, regional, and local water management policies and associated mitigation implementation strategies. In fact, the use of such brackish water by the HECA Project will provide a clear benefit by protecting other Buena Vista groundwater supplies for higher and better uses, including irrigation and/or domestic use. As was stated by the California Legislature in 2002, "The Legislature finds and declares all of the following . . . The long-term economic and environmental sustainability of agriculture is critical to the future of the state, and it is in the interest of the state to enact policies that enhance that sustainability." (Health and Safety Code § 25209.10). The HECA Project's use of Buena Vista's brackish water will further this stated goal, the other State policies discussed above, and be consistent with Water Code section 13146, which provides, "State offices, departments and boards, in carrying out activities which affect water quality, shall comply with state policy for water quality control unless otherwise directed or authorized by statute, in which case they shall indicate to the state board in writing their authority for not complying with such policy."

We appreciate the opportunity to comment on this very important issue and to indicate our support for the use of Buena Vista Water Storage District's brackish groundwater for the HECA Project. If you have any questions or concerns, please do not hesitate to contact me.

Sincerely,

BUENA VISTA WATER STORAGE DISTRICT



Dan W. Bartel, Engineer-Manager

DWB:vty

cc: Robert W. Hartsock, Esq.  
McMurtrey, Hartsock & Worth  
(Your File No.: BV-5.2.16)

**STATE OF CALIFORNIA  
ENERGY RESOURCES  
CONSERVATION AND DEVELOPMENT COMMISSION**

In the Matter of:	)	Docket No. 08-AFC-08A
	)	
REVISED APPLICATION FOR	)	<b>PROOF OF SERVICE</b>
CERTIFICATION FOR THE HYDROGEN	)	
ENERGY CALIFORNIA POWER PLANT	)	(December 24, 2012)
PROJECT (“HECA”)	)	
_____	)	

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HYDROGEN ENERGY CALIFORNIA PROJECT  
CEC Docket No. 08-AFC-08A

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HYDROGEN ENERGY CALIFORNIA PROJECT  
CEC Docket No. 08-AFC-08A

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HYDROGEN ENERGY CALIFORNIA PROJECT  
CEC Docket No. 08-AFC-08A

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HYDROGEN ENERGY CALIFORNIA PROJECT  
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**DECLARATION OF SERVICE**

I, Paul Kihm, declare that on January 15, 2013, I served and filed copies of the attached:

**RESPONSE TO CEC STAFF'S STATUS REPORT NO. 4**

to all parties identified on the Proof of Service List above in the following manner:

**California Energy Commission Docket Unit**

Transmission via electronic mail to:

**CALIFORNIA ENERGY COMMISSION**  
Attn: DOCKET NO. 08-AFC-08A  
1516 Ninth Street, MS-4  
Sacramento, California 95814-5512  
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**For Service to All Other Parties**

Transmission via electronic mail to all email addresses on the Proof of Service list.

I declare under penalty of perjury that the foregoing is true and correct. Executed on January 15, 2013, at Costa Mesa, California.

*/s/ Paul Kihm*

\_\_\_\_\_  
Paul Kihm