September 15, 2008

VIA E-MAIL

CALIFORNIA ENERGY COMMISSION
Attn: John Kessler
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512

Re: CPV Sentinel Energy Project: Docket No. 07-AFC-3

Dear Mr. Kessler:

On behalf of Mission Springs Water District, Psomas is submitting comments on the following documents submitted by CPV Sentinel, LLC:

- Desert Water Agency (DWA)/CPV Agreements
  - MOU For Implementation of Well Metering Agreement
  - Water Supply Agreement between DWA and CPV
  - Water Supply Agreement between DWA and North Kern
- PSA (July 21, 2008)
- Comments on PSA (dated August 21, 2008)

Psomas’ comments are as follows:

DWA/CPV Agreements—Specific Comments

**MOU For Implementation of Well Metering Agreement**

Section II.C. of the MOU states:

"Sentinel has entered into an agreement with Ocotillo that allows Sentinel, at its option, to receive an assignment of all of Ocotillo’s rights under the Well Metering Agreement."

It is unclear why Sentinel has entered into an agreement with Ocotillo. Does it mean that Sentinel has obtained any/all water rights to pump from Ocotillo? The statement should be revised to specify the objective(s) and obligations of the agreement for each of the parties concerned. Psomas recommends that MSWD question the effects of this agreement on Sentinel’s Water Supply Plan (WSP). Sentinel should clearly state what the source of all of their water will be for the project, including an assessment of source reliability.

Section III.C. does not include a statement describing DWA’s recharge facilities in Mission Creek Sub-Basin (MCSB). The statement should be revised to describe...
DWA’s recharge facilities in the MCSB. The statement should also clearly describe that the life of the project is 30 years and that the CPV is committed to supplying water for the 30-year life of the project.

**Water Supply Agreement between DWA and CPV (WSA)**

Paragraph J. Refers to “initial quantity.” The WSA makes no such reference. The WSA should be revised to include information on initial quantity, as well as addressing the remaining amount of water required for the duration of the anticipated 30-year life of the project. The WSA should also identify the total amount that CPV is obligated to provide both in terms of average year and maximum year for the duration of the project.

The WSA should address the annual delivery of water to the MCSB to meet the project’s annual needs and prevent negative impacts that might be caused by CPV’s pumping.

The draft WSA reads such that the purchase and delivery of water could be completed as one large delivery or several smaller deliveries, with both delivery scenarios taking place over a five-year period. This is contradictory to the CPV’s statements during the workshop held on September 3, 2008. At the workshop, CPV stated that water would be delivered annually. The WSA needs to be clarified with respect to the schedule of water delivery.

In Section 3, Extraction Fee, the agreement should state that the extraction fee will be used to purchase a like amount of water to be supplied to the MCSB in addition to that purchased by DWA/CPV.

Section 3 also discusses “Temporary Deficit Water.” CPV clearly stated at their September 3, 2008 workshop that there would be no deficit pumping, and that they would be recharging annually prior to pumping. CPV has repeatedly said that they are bringing twice the amount of water that they plan to pump for replenishment of project groundwater resources. The presence of a section entitled “Temporary Deficit Water” tends to call into question the credibility of such assertions. As such, the statement should be reviewed and revised to be consistent with public assertions regarding planned pumping and recharge scenarios.

In general, the WSA only supplies a portion of the water required for the project and only commits DWA and CPV to cooperatively look for additional supplies in the future. It needs to be more binding and definitive and commit both parties for the 30-year life of the project and commit annual deliveries to the MCSB recharge basins.

**Water Supply Agreement between DWA and North Kern (WSAK)**

This agreement is for 8,350 af, which represents a little over 14 years of the required average annual demand (550afy x 1.08 = 594afy) for the life of the project. The agreement needs to state where the remaining water required for the project will come from and when.
Example A, Preliminary Delivery Schedule, indicates the first water delivery will occur in September 2008. It is unclear if this delivery has taken place or will actually take place. The remaining water is scheduled to be delivered at various intervals through March 2009. However, the first phase of the project will not be online until sometime in 2010 and the delivery schedule does not match the annual demands. It is recommended that the delivery schedule outlined in the WSAK be modified to more accurately match project requirements. In addition, the WSAK contains no discussion of how CPV and DWA are going to provide recharge water annually matching CPV pumpage. CPV committed to match annual recharge to demands in the August 29, 2008 workshop.

DWA/CPV Agreements—General Comments

In general, these agreements do not commit CPV to provide the full needs of their project for the project life. The agreements do not indicate how, on a year-to-year basis, recharge water would be delivered to the MCSB or how over-pumping in a non-average year would be made up.

We recommend that the CEC condition CPV to the following:

- Commit to the full terms of the final Water Supply Plan (WSP) through the life of the project (30 years).
- Supply the CEC with copies of agreements that cover the full terms of the WSP.
- Ensure that the terms include minimum recharge of at least a net 550 af (CPV’s average annual demand) annually prior to the project demands.
- A provision to make up recharge the next year for any additional annual pumping demand in excess of 550 afy.
- Ensure purchased and delivered water is not considered part of DWA’s SWP allocation or any SWP unallocated surplus water occasionally being purchased. In other words, the purchased recharge water has to be over and above DWA’s SWP purchases, actual new water to the region and be fully committed to meet CPV’s commitment.
- The agreements should contain an operating plan clearly delineating the commitments described above.
- The DWA’s extraction fee will be used to purchase and recharge a like amount of water in the MCGS. That water must also be above and beyond DWA’s SWP purchases. That would meet CPV claim that they are providing twice the recharge water to the MCGB. This additional water should be recharged at most every five years.

PSA:

Psomas has reviewed the PSA and the comments from CPV. Psomas’ comments are presented below by CPV comment number. Psomas has commented only on items related to the WSP.

Comment 61. The California Department of Water Resources’ (DWR) definition of overdraft should be used. In addition, groundwater overdraft may not be considered
detrimental. Overdraft may be part of the overall groundwater management of the basin and is a local responsibility, therefore, the decision whether a basin is in a condition of overdraft is the responsibility of the local groundwater or water management agencies. In some cases, local agencies may choose to deliberately extract groundwater in excess of recharge in a basin (known as “groundwater mining”) as part of an overall management strategy.

Comment 68: CPV responded with the comment: “Also, increased pumping in one sub-basin and decreased pumping in another sub-basin increases recharge in the first sub-basin (with increased pumping) and reduces recharge in the second subbasin (with reduced pumping).” We disagree. The amount of recharge must remain consistent regardless of increased or decreased pumping in one sub-basin or another.

Comment 75: CPV responded with the comment: “This statement should be corrected to reflect that irrigation controller retrofits would conserve water in the Upper Coachella Valley Groundwater basin, within the boundaries of the DWA, which is within both the Whitewater River Sub-basin and the MCSB.” We disagree. CEC’s original statement described where the benefit would occur. Conservation in the Whitewater River sub-basin does not or indirectly benefit the Mission Creek sub-basin.

Comment 76: The replenishment assessment is an indirect fee as it does not commit DWA to recharging the MCSB with water paid for by the assessment fee.

Comment 82: Psomas believes it is up to the discretion of the responsible agency to decide whether an SB 610/221 Water Supply Assessment (WSA) is required or necessary. We strongly recommend that a WSA be required for the full water requirements through the life of the project. This is necessary to assure that real water (not “paper” water) is being committed to support the project, that there is real infrastructure to deliver it, and that it is truly new water and not allocated SWP.

Comment 89: The statement should include both the annual average demand of 550 afy and an annual maximum of 1100 afy.

Comment 91: CPV stated: “Applicant will be submitting an analysis of CEC Staff alternative water plans under separate cover. Table 1 of this analysis indicates that estimated fresh water conservation from the Applicant’s water supply plan is between approximately 1,500 and 1,700 AFY.” A distinction should be made as to where the actual savings/conservation will occur (e.g. the MCSB or the Whitewater River sub-basin). In addition, the conversion of a golf course from potable water to recycled water (that was being recharged to the sub-basin) is not water conservation but rather an improvement in water quality.

Comment 93: CPV stated “Conservation that occurs in the Whitewater River Sub-basin will increase the volume of recharge water in the MCSB from DWA’s existing replenishment
program.” We disagree. There is no commitment or proof that conservation in the Whitewater River sub-basin would benefit the MCSB in any way. It would appear that the water conservation plan is primarily proposed within the White Water Sub-basin. MSWD would like some of the conservation program to take place within the MCSB. This could include placing ET controllers and training golf course staff on their use at two golf courses, Desert Dunes Golf Club and Mission Lakes Country Club. A 25% water savings resulting from conservation measures implemented at the golf courses could amount to 200 to 400 afy water savings.

Comment 99: CPV stated: “This analysis is based on project pumping at twice the expected rate of use.” We disagree. CPV stated that depending on operational use of the plant, water use could vary between 550 to 1,100 afy. Since 1,100 afy is the worse case scenario, that is what should be evaluated. CPV also stated: “Also, the temporary nature of the projected drawdown should be placed in the context of drawdown that has been experienced in these wells in the past and the projected drawdown that is expected to occur over the next 30 years, with or without the project.” CPV decided to use the superposition model to develop the incremental drawdown related to their groundwater extraction for the project and then tries to equate it to a small percentage of what would occur from other entities. In true CEQA analysis, you are supposed to do both, evaluate how the project will affect the groundwater levels and then the cumulative impact from both the project and existing and future projects.

Comment 100: CPV stated: “Moreover, the potential drawdown of the basin caused by the project shown in the groundwater modeling is temporary and largely theoretical. The actual drawdown would likely be immeasurable and far less than the natural fluctuation of water in the basin, and is thus, not cumulatively considerable.” Again, CPV chose the superposition model to calculate potential impacts to groundwater levels in the basin. In CPVs argument, if CPV’s production wells were located at the Mesquite Hummocks area and caused measurable drawdown, as long as they were recharging the basin with the same amount of water as was being extracted, there is no impact. However, the impact to the Mesquite Hummocks area is based on decline in water levels over a period of time. It would seem more constructive if CPV would work with the CEC to develop criteria of drawdown over time instead of arguing how their incremental portion is smaller than all other factors affecting water levels in this area.

Comment 101: At the September 3, 2008 workshop, CPV clearly and repeatedly stated that they would recharge annually before pumping so there would never be a deficit. The required annual average and maximum recharge should be clearly stated for the project life. The PSA should include a clear statement to that effect and it should be a condition for approval.

Comment 102: CPV stated: “In sum, the project would not impact the MCSB in a significant way.” If CPV is going to suggest such a statement then include the analysis that indicates that it is insignificant. The PSA currently does not include such an analysis.
Comment 103: CPV stated: “The 33,000 AF is an extreme case and in reality the power plant is expected to consume approximately half as much water (i.e., 16,500 AF).” We agree with the CEC that the extreme case has to be evaluated.

Comment 104: CPV stated: “Conservation from connection of the Golf Course should ramp up to 1,034 AFY by the time the project commences pumping for operations.” As previously stated, there is no conservation from connection of the golf course to recycled water. It is an exchange and would probably benefit water quality and not conservation of water.

Comment 109: The estimated groundwater storage capacity should be as stated by DWR as the authoritative expert.

Comment 112: CPV stated: “Given the fact that Applicant proposes to recharge more water from the basin than it pumps through a WSP implemented through DWA with no participation by MSWD, there seems to be no rationale for using the UWMP of MSWD.” However, neither CPV nor DWA have conducted a reliability assessment of the water supply. Since the whole basis of the water supply is based on the ability of the MCSB to have the necessary characteristics, capacity, and operational functionality, it is appropriate that the MSWD Urban Water Management Plan be referenced in addition to a Water Supply Assessment that CPV should prepare.

Comment 114: CPV stated: “Applicant believes that this definition is confusing to the reader and the more appropriate analysis is based on the groundwater modeling from the Applicant.” We disagree. The applicant’s groundwater modeling chose only to determine the effects of the applicant on the MCSB. As previously stated, we feel that overdraft may be part of the overall groundwater management of the basin and is a local responsibility; therefore, the decision whether a basin is in a condition of overdraft is the responsibility of the local groundwater or water management agencies.

Comment 118: This statement is true and factual through 2005. This information was received from both DWA and CVWD. It is unclear to what error CPV refers.

Comment 119: We beg to differ with CPV on this comment. The population projections come from local and regional sources and are not “casual”. We believe that projected population and related water demand have to be taken into account. We believe that the CEC staff comments are adequate regarding the potential for overdraft and water shortages.

Comment 123: CEC staff should consider recharge to the MCSB as part of Alternatives 1, 2 and 3. This is necessary to account for the loss of recycled recharge at the Horton WWTP. Inclusion of recharge to the MCGS to Alternatives 1, 2, and 3 will slightly alter the analysis.

Comment 140: CEC staff left out an important element in Alternatives 1, 2 and 3, namely, recharge matching withdrawals by CPV.
Thank you for the opportunity to comment on these reports. If you have any questions or need clarification, please feel free to contact me at your earliest convenience.

Sincerely,

Michael P. Donovan, P.G., C.Hg.
Principal and Vice President

Senior Hydrogeologist

cc. Mission Springs Water District, Dan Patneaude