

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

**APPLICATION FOR CERTIFICATION )  
FOR THE )  
AVENAL ENERGY PROJECT )**

**DOCKET NO. 08-AFC-1**

<b>DOCKET</b>	
<b>08-AFC-1</b>	
DATE	<u>AUG 24 2009</u>
RECD.	<u>AUG 25 2009</u>

**ROB SIMPSON'S REPLY BRIEF**

The Applicant and staff both put their public notice arguments at the end of their briefs, when in fact the public notice provisions should appear first as threshold procedural requirements without which the Commission need consider no further. If the public notices did not comport with the law than Commission should not consider the application.

“At the evidentiary hearing, Mr. Simpson questioned why the notices in this proceeding did not contain a physical address for the Project. (7/7/2009 RT 34:18-35:12, 285:23-286:1.) However, Mr. Simpson has been informed that no physical address existed at the time these notices were mailed. Instead, other descriptors of the site location, such as maps, were included in these notices. (7/7/2009 RT 34:18-35:15, 286:2-4.)”  
Avenal brief 66

Steve Sopp with the City of Avenal Indicated to me on the telephone on August 24, 2009 that the address is 33119 Avenal Cutoff and that the address was issued pursuant to CEC staff inquiry at the beginning of the review process at least a year ago. There is no excuse for the air District not complying with the State and Federal requirements to include the Address of the facility on its public notices. The CEC can not find that this facility is in compliance with LORS when this the most basic requirement needed for informed participation has been omitted.

No notice has been introduced that has a map of the site location. Licensing the facility without providing the address would conflict with Federal law, CEQA and the Public Resources code.

The Failure of the notice extends well beyond the Address, although the lack of address on the Notices should be sufficient for the Commission to Deny the application. In My Request

for remedial action I quoted many of the items that the Air District stated triggered public notice on pages 3-5 (i.e. New Major Source, PE's over 100 lbs/day, offset thresholds being exceeded and SSIPE's greater than 20,000 lbs/year. )

The notice (below) simply does not include any of these items and so can not be construed to satisfy the notice requirements. To conclude that a Notice of these issues can be satisfied without identifying the issues is preposterous and the Commission should not fall for it.

Fresno Bee

**NOTICE OF PRELIMINARY DECISION  
FOR THE PROPOSED ISSUANCE OF  
DETERMINATION OF COMPLIANCE**

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Unified Air Pollution Control District solicits public comment on the proposed issuance of determination of compliance (DOC) to Avenal Power Center LLC for the installation of a nominal 600 MW combined cycle power plant, located at NE¼ Section 19, T21S, R18E – Mount Diablo Base Meridian on Assessor's Parcel Number 36-170-032 in Avenal, CA.

The analysis of the regulatory basis for these proposed actions, Project #C-1080386, is available for public inspection at the District office at the address below. Written comments on this project must be submitted within 30 days of the publication date of this notice to **DAVID WARNER, DIRECTOR OF PERMIT SERVICES, SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT, 1990 EAST GETTYSBURG AVENUE, FRESNO, CA 93726.**

The staff justification for support of the Interpollutant trading includes a quote from the Federal Register which requires the opportunity for "public input";

"Intervenors argue that a one-to-one ratio of SOx to offset PM10 and PM2.5 emissions is insufficient to mitigate for the project's impacts. (Joint Statement, p. 3.) They argue that staff should have instead used a 40-to-1 offset ratio, which they claim is supported by the U.S. Environmental Protection Agency (EPA) in its final rule published on May 18, 2008 titled, "Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM2.5)." (73 Federal Register 28321.) This rulemaking by EPA, however, does not establish a mandatory 40-to-1 ratio. (RT 7/7/09 p. 263.) The rule specifically states: "[u]se of the preferred ratios is recommended by EPA but not mandatory, and we do not intend to preclude the opportunity for a local demonstration of trading ratios on a case-by-case basis and public input into that process." (73 Federal Register 28321, 28339.)"

3 emphasis added

No notice has been introduced soliciting "public input" indicating deviation from the 40-to-1 "preferred ratio" to the 1-to-1 proposed ratio, regarding the Sox for PM offset. The FDOC and

offsets are not Federally enforceable as required by district rule 2520

DISTRICT RULE 2520 FEDERALLY MANDATED OPERATING PERMITS

1. Purpose

“1.4 An administrative mechanism for incorporating requirements authorized by preconstruction permits issued under District Rule 2201 (New and Modified Stationary Source Review) in a Part 70 permit as administrative amendments,”

Which includes the notice requirements of 2520

“The notice shall provide the following information:

11.1.4.1.1 The identification of the source categories, the activities and emissions change involved in the permitting action;”

The Notice failed to provide this information

11.1.4.1.2 “The name and address of the District, the name and telephone number of District staff to contact for additional information;”

The Notice failed to provide a “telephone number”

11.1.4.1.6 “A statement that members of the public may request the APCO or his designee to preside over a public hearing for the purpose of receiving oral public comment, if a hearing has not already been scheduled. The APCO shall provide notice of any public hearing scheduled to address the proposed decision at least 30 days prior to such hearing.”

**Most importantly the Notice failed to provide the opportunity for a public hearing.** This is the underpinning of public participation in Federal actions subject to the Clean Air Act and the peoples right to “petition the government for a redress of grievances”

**THE PROJECT COULD CERTAINLY CAUSE GROWTH WHICH HAS NOT BEEN MITIGATED**

Mr Meyer Testified that;

7 My understanding is that the entire surrounding area  
8 has been zoned for heavy industry.

9 And that this project was deemed by the  
10 city as necessary for the development of that as  
11 an industrial park. So whereas it is agricultural

12 now, the intent in the future was to develop this  
 13 area.  
 428

Staff's conclusion "that Avenal Energy will not result in any unmitigated significant adverse impacts" ignores the above testimony Mr Meyers indication that this project is "necessary for the development of.. an industrial park" demonstrates a growth potential as a direct result of this siting, the impact of which has not been adequately studied. It is particularly significant as the likely growth associated with the plant may be more plants on the same site.

Mr. Meyer:

looking at the growth in California, and the no-project alternative --  
 2 basically a no-project alternative wouldn't  
 3 address the constant growth of demand in  
 4 California. And that if this project wasn't  
 5 built, another project would possibly have to be  
 6 built to replace the demand for energy in this  
 7 area.  
 417

Mr Meyers testimony assumes a "constant growth of demand" scenario which is not supported by the record for this proceeding. It also fails to recognize that another "project" may not emit greenhouse gases or other pollutants.

**ASSOCIATE MEMBER DOUGLAS: Mr. McClary**

2 stated that this plant represents a, or would  
 3 represent a net reduction in greenhouse gas  
 4 emissions should it operate, systemwide.  
 5 Are there any limitations to that in  
 6 your mind? Is that statement true regardless of  
 7 load growth, for example?  
 8 MR. VIDAVER: The only circumstance I  
 9 can think of under which Avenal would displace  
 10 higher -- lower emitting resources is borders on  
 11 purely theoretical.  
 12 If gas prices, the price at which Avenal  
 13 purchased natural gas was so low that despite  
 14 being less efficient than some other resource, you  
 15 would still find Avenal to be the cheapest  
 16 resource, and therefore procure energy from it,  
 17 you could have a case where Avenal would run and  
 18 the greenhouse gases would actually increase.  
 19 Because Avenal would be displacing a more  
 20 efficient resource.

The above scenario is entirely plausible that a plant like Avenal that could be constructed and

perhaps operated so much “cheaper” than a cleaner plant like that planned in Carlsbad that it “would displace” the “lower emitting resources” and “the greenhouse gases would actually increase”. The same scenario could occur with renewable resources. There is certainly a correlation between price and demand. Continuing to flood the market with cheap dirty power generation sources could continue to undermine the move to cleaner energy sources.

ASSOCIATE MEMBER DOUGLAS shined a light on the absurdity of the applicants business as usual approach to greenhouse gas goals, that building more fossil fuel fired plants somehow moves us towards our AB 32 requirements. New plants emissions should be compared to emissions from new renewable generation not just old fossil fuel fired generation. When convenient the applicant justifies the plant based upon either growth or replacement of marginally less efficient facilities.

12 if we were to permit a large combined  
 13 cycle power plant on every street corner in  
 14 California with the last having the same  
 15 greenhouse gas benefits as the first, or at some  
 16 point do you reach the stage of too much, in order  
 17 to meet our reliability needs and build towards  
 18 our greenhouse gas goals.

**THE PROJECT IS NOT CONSISTENT WITH:**

**IMPACT OF ASSEMBLY BILL 32 SCOPING PLAN ELECTRICITY RESOURCE GOALS ON NEW NATURAL GAS-FIRED GENERATION**

<http://www.energy.ca.gov/2009publications/CEC-200-2009-011/CEC-200-2009-011.PDF>

**AND**

**REVISED 2010 PEAK DEMAND FORECAST**

<http://www.energy.ca.gov/2009publications/CEC-200-2009-001/CEC-200-2009-001-CMF.PDF>

The Project will not impede development of renewable energy sources because renewable projects are developed in response to specific Requests for Offers (“RFOs”) from the utility companies...The procurement process and the loading order therefore, prevent the possibility that new gas-fired facilities will “crowd out” new renewable facilities that are necessary for reaching AB-32 goals, even in the unlikely event that speculators in California “overbuild” gas fired facilities.

(7/7/2009 RT 148:24-149:13; Committee CEQA Guidance at 22.)

AVENAL POWER CENTER, LLC’S OPENING BRIEF 15

This describes the same way that fossil fuel fired plants are usually developed. There is no basis for the claims that this will “prevent” any possibility. A built or even an approved fossil fuel fired plant could “crowd out” new renewable facilities.

In the FSA, Staff suggested the Project is less than ideal for integrating renewables because it is unable to provide rapid start capability. (Ex. 200 at 4.1-81.) However, 100 MW of 1014899.5 17 the Project's capacity comes from supplemental firing and can rapidly be turned on or off to provide spinning reserve, load following, and other ancillary services when the turbines are operating. (Ex. 26 at A7[a].) Additionally, the facility would be licensed with an auxiliary boiler to provide for hot starts within approximately two hours, providing some flexibility to facilitate expanded deployment of renewable energy. (*Id.*; 7/7/2009 RT 25:11-13, 86:1-9.) It is important to note that no facility will be able to meet all of the potential services identified by Staff. (7/7/2009 RT 87:2-18.) While a peaking facility would provide more rapid starts, both

Staff and Avenal Power noted such a facility is also inherently less efficient on a steady state basis due to its simple-cycle technology. (7/7/2009 RT 86:10-87:9, 201:8-202:1.) A peaking facility would therefore, produce greater GHG emissions per Mwh.

AVENAL POWER CENTER, LLC'S OPENING BRIEF 16

The applicant somehow assumes without basis that a peaking facility would inherently be simple cycle. This plant could be designed to incorporate fast start technology like other modern plants.

During the evidentiary hearing, Mr. Simpson attempted to question whether new gasfired generation has the potential to cause a decrease in energy prices and therefore, an increase in demand. (7/7/2009 RT 110:12-112:7.) Power plants cannot create demand for electricity, but instead they simply respond to changes in demand based on their cost to produce versus what the energy price is. (7/7/2009 RT 83:13-21; Ex. 26 at A10.) The economic reality of developing a facility with such a large capital investment ensures that natural gas plants will not be built unless there is already sufficient demand for the electricity to be produced by the plant. (See, e.g., Committee CEQA Guidance at 22.)

AVENAL POWER CENTER, LLC'S OPENING BRIEF 17

This Economic might makes right argument ignores the reality of facilities that have been built like Sutter and Metcalf that were very similar designs to Avenal and after the start of operations the developer amended its Air permits to operate the facilities like lumbering peaker plants with daily starts polluting much more than the plants original designs because the market was not there for the baseload plants. It ignores the epidemic of Power generators bankruptcies and Companies like Calpine that are now dismantling partially built plants in other states to bring parts to Russell City Energy Center. It ignores the fact that if the facility does not operate there is still a huge life cycle unmitigated greenhouse impact from development of the plant that should be factored in to claims of Greenhouse gas reductions. Cheaper energy will increase demand.

It is noteworthy that the bulk of the opposition to the Project comes from individuals and groups residing or operating outside the City of Avenal.

AVENAL POWER CENTER, LLC'S OPENING BRIEF 44

This may be noteworthy if true. The hearing that I attended had many commenters opposed to the facility that claimed to reside in Avenal. Indeed the bulk of the support for the plant

comes from individuals and groups residing or operating outside the City of Avenal.

The Project may also pay a natural gas transportation franchise fee surcharge that could be as high as \$2.5 million annually for the City of Avenal.

AVENAL POWER CENTER, LLC'S OPENING BRIEF46

Section 10912 therefore contains the definitions of a "project" triggering **section 10910's** water supply analysis requirements. Section 10912's "project" definition could potentially apply to an industrial project per sections 10912(a)(5) or (a)(7). But Section 10912(a)(5) applies only to "[a] proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area." The Project will require an average of 326 workers per month

during construction and 25 permanent employees during operations, none of which will be housed at the Project site. (See Ex. 200 at 4.8-4.) The Project will occupy only 36.0 acres of land. (Ex. 200 at 4.2-15.) Finally, Avenal Power's best estimate of the floor area of the Project facility is approximately 98,400 square feet (pending more detailed design planning), which is far less than 650,000 square feet. (Calculated from Ex. 1 at Figure 2.3-3.)

AVENAL POWER CENTER, LLC'S OPENING BRIEF 59

09 this project was deemed by the  
10 city as necessary for the development of that as  
11 an industrial park.

**Mr. Meyer428**

**The applicants Exhibit 62 correctly identifies the site as a "148-acre parcel" The applicant and staff should not manipulate the site size to escape constraints of the State Water Board.**

### **3. Project Location**

The proposed location for the Avenal Energy Project (or Facility) constitutes the majority of the northeast quarter of Section 19, Township 21 South, Range 18 East, Mt. Diablo Base and Meridian. The proposed site is located approximately 2 miles east of Interstate 5, on a 148-acre parcel, in Kings County, California, surrounded by open farmland except for the City of Avenal water treatment facility to the Northeast. The San Luis Canal – California Aqueduct (Canal) right-of-way abuts the northeast corner of the parcel. The parcel, Kings County Assessor's Parcel Number (APN) 36-170-035, is currently in agricultural production, is zoned industrial by the City of Avenal and is owned by the applicant. The proposed project is within the San Joaquin Valley Air Pollution Control District (APCD).

#### **exhibit 62**

This translates to approximately 38.8 AFY for a 500 dwelling unit project. Outdoor residential

water use for a residential property in the southern San Joaquin Valley (which includes Kings County) is approximately 0.36 AFY. (Public Policy Institute of California, Lawns and Water Demand in California [2006].20) With an average combined use of 0.438 AFY per residence, a 500-unit subdivision will consume approximately 218.8 AFY, which is almost more than 10 times the Project's estimated water use of 20 AFY.

AVENAL POWER CENTER, LLC'S OPENING BRIEF 60

The applicant testified that;

The plant has a letter from the city of Avenal to provide up to 200 acrefeet of water per year.  
Page 27 MR. REXROAD:

This is the figure that should be used, well in excess of the "triggering" level for The Water Code.

The City of Avenal was recently investigated by a grand Jury for its water practices. The report included;

**At a regular meeting of the Kings County Board of Supervisors, the Board adopted an ongoing** bi-weekly emergency declaration due to drought conditions in the County. The Community Development Director of the City of Avenal spoke in support of this declaration and emphasized that water availability in California had deteriorated to such an extent that the City was no longer permitted to purchase unused California Aqueduct water. For example, Avenal could and did increase its available water supply in the past by purchasing unused aqueduct water allocated under contract to the City of Huron. The right to purchase and transfer water use was temporarily suspended during mid-2008 but is again available. The basic contract under which Avenal purchases water from the system that transfers water via the California Aqueduct totals 3,500 acre-feet per year. Because of the ongoing drought conditions in the State, the City of Avenal was able to purchase only 2,625 acre-feet of water during the year 2008.

109

**The City of Avenal renegotiated its water contract with the Avenal State Prison in 1998.** As a result, the prison receives a pro-rated reduction when the City's contract is reduced below its 3,500 acre-foot per year amount. Avenal State Prison receives 1,411 acre-feet in the current year for which Avenal has been allocated 2,625 acre-feet, for example, 54 percent of available water goes to the prison.

110

<http://www.countyofkings.com/grand%20jury/reports09/City%20of%20Avenal.pdf>

**In an apparently related investigation;**

**On September 30, 2008, the Grand Jury toured Avenal State Prison. We observed** housing units, educational and vocational facilities, the canteen, the yard and interviewed key administration. Prior to our visit, the Grand Jury supplied Avenal State Prison with a list of comprehensive questions. We were provided with extensive, well organized portfolios in response to the Grand Jury list of questions and information. The most

critical issue facing Avenal State Prison is an inadequate water supply in order to maintain functions of the prison facility.

**69**

## **FINDINGS AND RECOMMENDATIONS**

**Finding 1.** A water shortage is preventing the fulfillment of the contracted water supply to the Avenal State Prison.

**Recommendation 1.** Avenal State Prison should work with the City of Avenal to secure additional water supplies through water purchase agreements. See Attachment.

**71**

<http://www.countyofkings.com/grand%20jury/reports09/2008-2009%20Final%20Report.pdf>

The applicant wishes to credit itself for satisfying State Water Board by;

“In addition, the Project will have a net water demand of less than zero. The Project will permanently remove approximately 38.4 acres of land from irrigation, since the land used for the Project facilities will no longer need to be irrigated. This fact, combined with other efficiency measures, will save more water each year compared with previous usages for the site than the Project will actually use. (Ex. 200 at 4.9-8.) Therefore, the 34.8 acre permanent Project footprint has mitigated more than the Project’s 20 AFY average water consumption.  
AVENAL POWER CENTER, LLC’S OPENING BRIEF 61

21 In addition to mitigating the Project’s water use, Avenal Power will also mitigate the Project’s conversion of prime farmland by preserving prime farmland at a 1:1 ratio for the Project’s permanent disturbed acreage.

AVENAL POWER CENTER, LLC’S OPENING BRIEF 61

State water policies are to protect Farmland. Removing farmland could therefore not satisfy these goals in addition because the applicant claims to be providing mitigation ostensibly the replacement farmland would also require irrigation negating any claim of “demand of less than zero”

The project should also comply with current water policy;

### **Recycled Water Policy**

#### *1. Preamble*

California is facing an unprecedented water crisis.

The collapse of the Bay-Delta ecosystem, climate change, and continuing population growth have combined with a severe drought on the Colorado River and failing levees in the Delta to create a new reality that challenges California’s ability to provide the clean water needed for a healthy environment, a healthy population and a healthy economy, both now and in the future.

Increase the use of recycled water over 2002 levels by at least one million acre-feet per year (afy) by 2020 and by at least two million afy by 2030.

#### 4. *Mandate for the Use of Recycled Water*

1. The State Water Board and Regional Water Boards will exercise the authority granted to them by the Legislature to the fullest extent possible to encourage the use of recycled water, consistent with state and federal water quality laws.

[http://www.waterboards.ca.gov/water\\_issues/programs/water\\_recycling\\_policy/docs/recycledwaterpolicy\\_approved.pdf](http://www.waterboards.ca.gov/water_issues/programs/water_recycling_policy/docs/recycledwaterpolicy_approved.pdf)

6. Studies of availability of inland waters for use in powerplant cooling facilities to be constructed in Central Valley basins, the South Coastal Basins or other areas which receive supplemental water from Central Valley streams as for all major new uses must include an analysis of the impact of such use on Delta outflow and Delta water quality objectives. The studies associated with powerplants should include an analysis of the cost and water use associated with the use of alternative cooling facilities employing dry, or wet/dry modes of operation.

4. The State Board shall include a term in all permits and licenses for appropriation of water for use in powerplant cooling that requires the permittee or licensee to conduct ongoing studies of the environmental desirability and economic feasibility of changing facility operations to minimize the use of fresh inland waters. Study results will be submitted to the State Board at intervals as specified in the permit term.

6. Applications to appropriate inland waters for powerplant cooling purpose shall include results of studies comparing the environmental impact of alternative inland sites as well as alternative water supplies and cooling facilities. Studies of alternative coastal sites must be included in the environmental impact report. Alternatives to be considered in the environmental impact report, including but not limited to sites, water supply, and cooling facilities, shall be mutually agreed upon by the prospective appropriator and the State Board staff. These studies should include comparisons of environmental impact and economic and social benefits and costs in conformance with the Warren-Alquist State Energy Resources Conservation and Development Act, the California Coastal Zone Plan, the California Environmental Quality Act and the National Environmental Policy Act.

[http://www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/resolutions/1975/rs75\\_058.pdf](http://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/1975/rs75_058.pdf)

The Project complies with the state constitutional mandate that water resources of the state be put to beneficial use to the fullest extent possible, and that the waste, unreasonable use, or unreasonable method of use of water is prohibited. (Ex. 200 at 4.9-24.) The Commission has also adopted the state water policy contained in State Water Resources Control Board Resolution 75-58, which strongly discourages the use of freshwater for power plant cooling. (Ex. 200 at 4.9-24; see 2003 IEPR at 39-41 .) Staff determined that the water conservation measures discussed above, such as the use of dry cooling, ZLD, and dry NOx

controls, comply with the applicable water conservation policies. (Ex. 200 at 4.9-24.)  
AVENAL POWER CENTER, LLC'S OPENING BRIEF 61

The Applicant overly narrowed the State Water policy to conclude that simply using "dry cooling, ZLD, and dry NOx controls" constitute compliance.

#### Conclusion

The Application should not be approved.

Rob Simpson August 24, 2009