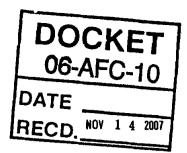
STATE OF CALIFORNIA California Energy Commission

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In the Matter of: Application for Certification of the Starwood Power-Midway, LLC Peaking Project

Docket No. 06-AFC-10

STARWOOD POWER-MIDWAY, LLC REPLY BRIEF

Starwood Power-Midway, LLC ("Applicant" or "Starwood") filed its Application for Certification on November 17, 2006. Staff issued its Preliminary Staff Assessment on July 25, 2007 and its Final Staff Assessment ("FSA") on October 10, 2007. Following the Prehearing Conference on October 30, 2007. Staff then filed its rebuttal testimony on November 9, 2007. Staff filed a number of documents, all having significant legal and process implications. The legal issues are addressed in this Reply Brief.

1. <u>Supplemental Testimony of Steve Baker and Dick Anderson</u>. This testimony makes two arguments that require comment: (A) that the State Water Resources Control Board (SWRCB) set a new standard in 2002 that needs to be adopted in this proceeding, and that (B) the SWRCB resolution 75-58 is applicable to simple cycle plants.

A. <u>New Water Policy Standard</u>. Staff leans heavily on a letter written by Arthur Baggett, Jr. of the SWRCB over five years ago to argue that the standard for an acceptable water supply is:

> "The Policy requires that the lowest quality cooling water reasonably available from both a technical and economic standpoint should be utilized as the source of water for any evaporative cooling process utilized at these facilities."

This standard cannot be supported, for a number of reasons:

(1) <u>Purpose of Letter.</u> The letter is not addressed to the Commission's Siting Committee, nor does it contain a reference to a particular application. The language in the Baggett letter was not adopted in the 2003 Integrated Energy Policy Report, which was adopted one year after the Baggett letter. The Baggett language additionally does not appear in the LORS discussions in the 26 cases that have been decided since the letter was issued (See Attachment 1). Nor does the language appear in the Preliminary Staff Analysis in the present proceeding.

There is no record that the Commission has reviewed this letter and made any determination of how it conflicts or agrees with Commission policy. For this reason, it should be rejected.

(2) Interpretation of Letter. There are a number of ways to read and interpret the proffered letter. Paragraph 4 starts with the sentence: "Notwithstanding these changes and the age of the policy, the basic principals of the policy are sound." This statement appears to endorse the continued viability of SRWCB 75-58, and belies the position that the letter changes state policy. Second, paragraph 5 ends with the statement: "This encourages me as it indicates that the policy and the efforts of you and your staff are having the desired effect." This appears to inform the Commission that the SWCRB is happy with the current policy. Finally, the statement relied upon by Staff (the second sentence of paragraph 5) appears to be one individual's summary of the policy, lacking the precision of a legal analysis.

(3) <u>Policy Change.</u> Most importantly, a change in the state policy, which assuredly Staff's proposal would do (Note that Staff changed its LORS discussion between the PSA and the FSA to include the Baggett language – FSA page 4.9-25), should be done in a careful manner. In its SOIL & WATER Section of the FSA, starting at page 4.9-2, Staff lists all of the applicable LORS and State Policies. Nowhere in this long list of laws and policies does Staff mention the letter that it now wants to rely upon for the conclusion reached in the FSA. Inasmuch as Staff did not appear to rely upon this letter for their water source conclusion, it cannot now be used to support their position.

We respectfully suggest changes be made in the IEPR process or a proceeding initiated by the Siting Committee, giving all interested parties the opportunity to be a part of the process. Applicant respectfully suggests that the Commission may want to initiate a process to consider revisions to state water policy as applied by the Commission. The Commission may want to reconsider its current policy which prefers once-through ocean water cooling and does not consider reclaimed water. Further, a policy that prompts Staff to recommend no mitigation for the use of fresh water (Niland) but require mitigation for the use of waste water, begs for clarification.

B. <u>Cooling Water</u>. The three principles applicable to the use of inland waters for power plant use are not intended to apply to projects where water is used to increase the efficiency of the turbines. The three principles state as follows: (1) Principle 1 – "...the source of **powerplant** cooling water ...", (2) Principle 2 – "...use of fresh inland waters for **powerplant** cooling ...", and (3) Principle 3 – "... license of appropriate water for **powerplant** cooling,...". (Emphasis added) The definitions section of SWRCB 75-58 contains the following definition:

<u>Steam-Electric Power Generating Facilities</u> – electric power generating facilities utilizing fossil or nuclear-type fuel or solar heating in conjunction with a thermal cycle employing the steam-water system as the thermodynamic medium and for the purposes of this policy is synonomous (sic) with the word "powerplant".

It is clear that the SWRCB did not intend for this policy to apply to simple cycle power production facilities.

<u>Plant Cooling.</u> It is additionally clear that the SWRCB Policy 75-58 was intended to apply to cooling water. The phrase "cooling water" and "powerplant cooling" appear throughout the policy. Simple cycle facilities, such as the Starwood project, will use of water for inlet fogging and emission control (70% of Starwood's water usage will be for emission control). The use of water for emission control is not governed by the policy nor disputed by the Staff. The use of water for fogging and emission control is not cooling as the term is commonly used in the industry. The Commission in Tracy Peaker Power Plant Project, (01-AFC-16) recognized the difference in water use: "A peaker plant can operate without the use of evaporative cooling water because evaporative cooling water is used for efficiency purposes only." Final Decision, page 181). Applicant does not extend this argument to combined cycle facilities.

At page 2 Staff makes the argument that the IEPR "follows the SWRCB's clarification letter regarding Resolution No. 75-58 and uses the words "cooling purposes by power plants" which does not differentiate between cooling processes. The 2003 IEPR section "Power Plant Water Use and Waste Water Discharge (pages 39-41 utilizes 7 footnotes referencing its sources. No mention is made of the Baggett letter. Additionally, this Commission has already clarified the role of the IEPR "The Commission views Section 5 of the 2003 IEPR as a restatement of *existing* State water policy. We did not create new, substantive water policy in the 2003 IEPR." (Blythe II, 02-AFC-1, Commission Decision, December 14, 2005, page 248.)

2. <u>Supplemental Testimony of Dick Anderson and Somer Goulet</u>. The Supplemental Staff testimony raises two basic issues: The application of Staff's new state policy and the requirement for compensation.

A. <u>Baggett Letter</u>. If there is any doubt as to the significance of Staff's proposed policy change, this testimony aptly demonstrates the implications. Staff does not mention the Baggett letter in their Preliminary Staff Assessment, but includes the following statement in their Final Staff Assessment: "Since adopting Resolution 75-58 in 1976, the SWRCB has more recently confirmed the ongoing applicability of its policy for cooling of modern power plants and clarified a basic principle by stating 'The policy requires that the lowest quality water reasonably available from both a technical and economic standpoint should be utilized as the source water for any evaporating cooling process utilized at these facilities." Staff then goes on to propose a requirement for offsetting the use of this waste water. Apparently, Staff believes their new policy requires mitigation plans for the use of waste water.

B. <u>Compensation</u>. While there have been cases where Applicants have voluntarily put forth enhancement/mitigation plans for the Commission's consideration, there are no instances where the Commission has required offsets for water use. Indeed,

the Commission has stated "... the Applicants WCOP (Water Conservation Offset Program) is voluntary, since there are no applicable laws that require it". (Blythe II, Commission Decision, page 272). Accepting the Staff position and reversing the reasoning behind the Blythe decision should be done cautiously. Adoption of Staff's SOIL & WATER-9 requires a contract between Starwood and a third party (Westlands), with contract provisions being provided by Staff. Staff is giving "project – no project" control to an entity that is not a party to this proceeding.

With regard to the Staff proposal, Applicant objects to the imposition of "compensation" for water that would be percolated into the soil or evaporated into the air. In the Van Raefsfeld proceeding, the Applicant proposed a mitigation plan for well water withdrawals that were determined to cause aquifer impacts. This is very different from Staff's position in this proceeding.

However, in the event Applicant were to propose an enhancement program, it would be based upon realistic assumptions. For example, Staff uses the maximum hours of operation per year for 20 years of operation to determine water use. If we use the actual anticipated annual water use of 14 AFY (FSA, Page 3-3), then subtract the amount of water used for emission control (70%) the contributed amount would be less than \$5,250, and it should only commence when Baker Farms wants to use the wastewater for cropland watering. Staff's plan is neither mitigation nor compensation as it is not based upon impacts.

Finally, if Applicant were to propose to use potable water, for example, we could envision a Staff proposed mitigation plan where we would be required to take agricultural wastewater and filter-clean it for an industrial use. Our water plan could be a mitigation plan - this demonstrates the ridiculous nature of Staff's mitigation proposal.

3. <u>Staff Brief.</u> Staff's Brief addresses the single issue of whether Starwood's use of water should be considered "cooling water" under SWRCB 75-58 and the 2003 IEPR. Before addressing the factual issue, Applicant wants to reiterate that SWRCB 75-58 does not apply to simple cycle plants as all three relevant Principles address "powerplant cooling", and "powerplant" is synonymous with "Steam-Electric Power Generating Facilities", employing a steam-water system. The Hearing Officer recognized the definitions in the state policy. With regard to the factual issue, Applicant's witnesses will testify that a mere 30% of its water requirements will be used for inlet fogging, as the staff has argued this is "cooling purposes". Inlet fogging water amounts to about 4 acrefeet per year on average – a de minimis amount.

Respectfully submitted:

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ATTACHMENT 1 CEC Decisions after May 23, 2002

| Case | Number | Decision | AFY | Water Source | LORS? | Offset |
|-----------------|-----------|----------|-------|---------------------|-------|--------|
| Los Esteros | 01-AFC-12 | 7/2/02 | 560 | Reclaimed | No | No |
| Tracy Peaker | 01-AFC-16 | 7/22/02 | 30 | Delta-Mendota | No | No |
| Magnolia | 01-AFC-6 | 3/5/03 | 1,400 | Reclaimed | No | No |
| Malburg | 01-AFC-25 | 5/20/03 | 1,400 | Reclaimed + Potable | No | No |
| Palomar | 01-AFC24 | 8/6/03 | 3,000 | Reclaimed | No | No |
| SMUD | 01-AFC-19 | 9/9/03 | 2,660 | Canal water | No | No |
| Von Raesfeld | 02-AFC-3 | 9/9/03 | Unk | Reclaimed | No | No |
| Russell City | 01-AFC-6 | 10/3/07 | 3,700 | Reclaimed | No | No |
| Salton Sea | 02-AFC-2 | 12/17/03 | 290 | Colorado River | No | Vol |
| Inland | 01-AFC-17 | 12/17/03 | 4,150 | Reclaimed + fresh | No | No |
| San Joaquin | 01-AFC-22 | 1/14/04 | 5,300 | Reclaimed | No | No |
| Ripon | 03-SPPE-1 | 2/4/04 | 130 | Non-potable | No | No |
| Walnut | 02-AFC-4 | 2/18/04 | 1,800 | Reclaimed | No | No |
| Kings River | 03-SPPE-2 | 5/19/04 | 75 | Groundwater | Unk | No |
| Tesla | 01-AFC-21 | 6/16/04 | 5,900 | Reclaimed | No | No |
| Morro Bay | 00-AFC-12 | 8/2/04 | N/A | Once-through | No | No |
| E Altamont | 01-AFC-4 | 8/22/04 | 4,600 | Reclaimed + SWP | No | No |
| Riverside | 04-SPPE-1 | 12/15/04 | 250 | Reclaimed | No | No |
| El Segundo | 00-AFC-4 | 12/23/04 | 120 | Reclaimed | No | No |
| Roseville | 03-AFC-1 | 4/13/05 | 7,000 | Reclaimed | No | No |
| Blythe II | 02-AFC-1 | 12/14/05 | 6,600 | Wells | No | Vol |
| SF Reliability | 04-AFC-1 | 10/3/06 | 130 | Reclaimed | No | No |
| Blythe Trans | 99-AFC8 | 10/11/06 | N/A | N/A | N/a | N/a |
| Niland | 06-SPPE-1 | 10/11/06 | 21 | Raw water | No | No |
| Los Esteros | 03-AFC-2 | 10/11/06 | 1,400 | reclaimed | No | No |
| Pastoria II | 05-AFC-1 | 11/8/06 | 55 | SWP in storage | No | No |
| El Centro | 06-SPPE-2 | 1/3/07 | 1,125 | Colorado River | No | No |
| Russell City II | 1-AFC-7C | 10/3/07 | N/A | N/A | N/A | N/A |
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Energy Resources Conservation and Development Commission State of California

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In the Matter of:

The Application for Certification for the Starwood Power Plant Docket No. 06-AFC-10

CERTIFICATE OF SERVICE

I, Allan J. Thompson, hereby declare that on November 14, 2007 I transmitted a copy of "Starwood Power-Midway, LLC Reply Brief" to all below listed parties via electronic mail consistent with the requirements of 20 CCR 1209, 1209.5 and 1210.

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