CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET
SACRAMENTO, CA 95814-5512

DOCKET
00-AFC-1C
DATE JUL 14 2006
RECD. JUL 14 2006

DATE: July 14, 2006

TO: Interested Parties

FROM: Christopher Meyer, Compliance Project Manager

SUBJECT: **Contra Costa Power Plant Unit 8 (00-AFC-1C)**
Revised Staff Analysis of the proposed addition of PG&E as an owner, extension of the construction milestones, and four facility enhancements

The 530-megawatt project was certified by the Energy Commission on May 30, 2001. Construction of the facility started late in 2001 and was suspended in February of 2002 due to financial considerations. The Contra Costa Power Plant Unit 8 Power Project was suspended with approximately 7 percent of construction completed and remains in suspension. The facility is located north of the City of Antioch, in Contra Costa County.

On January 13, 2006, the California Energy Commission (Energy Commission) received a petition from Mirant Delta, LLC to amend the Energy Commission Decision for the Contra Costa Power Plant Unit 8 Project. The proposed modifications will allow Mirant Delta, LLC (Mirant) to do the following:

- change the ownership of Contra Costa Power Plant Unit 8 by adding Pacific Gas and Electric Company (PG&E) as an owner;
- extend the construction milestones to reflect (a) construction resuming within 3 months after closing of the Asset Transfer Agreement (ATA) between Mirant and PG&E and (b) commercial operation beginning within 24 months of the closing of the ATA;
- install a water treatment facility for Unit 8;
- enhance the Unit 8 cooling tower blowdown treatment system;
- install an oil/water separator for Unit 8; and
- enlarge the Unit 8 administration building.

Energy Commission staff reviewed the petition to assess the impacts of this proposal on environmental quality and public health and safety, and determined that the changes to the Visual and Facility Design technical areas are minimal, requiring no further staff analysis, and that no other technical areas are impacted by the changes proposed in the petition. The Biological Resources staff identified unresolved issues regarding the project's use of Sacramento-San Joaquin Delta water for cooling, which are discussed in the attached staff analysis. The review included an evaluation of the consistency of the proposed modifications with the Energy Commission's Decision and whether the project will remain in compliance with applicable laws, ordinances, regulations, and standards (LORS) (*Title 20, California Code of Regulations, section 1769*).

The petition to amend the project is available on the Energy Commission's webpage at www.energy.ca.gov/sitingcases/contracosta/index.html. Staff's revised analysis is enclosed for your information and review. Staff's revised analysis and the Energy Commission's Order (if approved), will also be posted on the webpage. The petition was presented at the

July 5, 2006 Business Meeting and was continued until the July 19, 2006 Business Meeting. Energy Commission staff intends to recommend approval of the petition with the revisions to the Staff Analysis at the July 19, 2006, Business Meeting of the Energy Commission. If you have comments on this proposed modification, please submit them to me at the following address no later than 5:00 P.M., July 17, 2006.

Christopher Meyer, Compliance Project Manager
California Energy Commission
1516 9th Street, MS-2000
Sacramento, CA 95814

Comments may be submitted by fax to (916) 654-3882, or by e-mail to cmeyer@energy.state.ca.us. If you have any questions, please contact me at (916) 653-1639.

For further information on how to participate in this proceeding, please contact Margret J. Kim, the Energy Commission's Public Adviser, at (916) 654-4489, or toll free in California at (800) 822-6228, or by e-mail at pao@energy.state.ca.us. If you require special accommodations, please contact Lourdes Quiroz at (916) 654-5146. News media inquiries should be directed to Assistant Director, Claudia Chandler, at (916) 654-4989, or by e-mail at mediaoffice@energy.state.ca.us.

Enclosures:

- Revised Staff Analysis
- June 1, 2006 Preliminary Assessment of Reclaimed Water Memorandum (w/map)
- July 13, 2006 Revised Verified Statement of PG&E

AMENDMENT PETITION TO ADD PG&E AS AN OWNER, EXTEND THE CONSTRUCTION MILESTONES, AND ADD FOUR FACILITY ENHANCEMENTS

REVISED STAFF ANALYSIS
CONTRA COSTA POWER PLANT UNIT 8 (00-AFC-1C)

CHRISTOPHER MEYER

~~JUNE 16~~ JULY 14, 2006

SUMMARY OF ANALYSIS

The 530-megawatt Contra Costa Power Plant Unit 8 Project (CCPP Unit 8) is a natural gas-fired, combined cycle power plant licensed by the California Energy Commission on May 30, 2001. Construction of the facility started late in 2001 and was suspended in February of 2002 due to financial considerations. The CCPP Unit 8 Project was suspended with approximately 7 percent of construction completed and remains in suspension. The facility is located north of the City of Antioch, in Contra Costa County.

On January 13, 2006, the California Energy Commission (Energy Commission) received a petition from Mirant Delta, LLC to amend the Energy Commission Decision for the Contra Costa Power Plant Unit 8 Project. The proposed modifications will allow Mirant Delta, LLC (Mirant) to do the following:

- change the ownership of Contra Costa Power Plant Unit 8 by adding Pacific Gas and Electric Company (PG&E) as an owner;
- extend the construction milestones to reflect (a) construction resuming within 3 months after closing of the Asset Transfer Agreement (ATA) between Mirant and PG&E and (b) commercial operation beginning within 24 months of the closing of the ATA;
- install a water treatment facility for Unit 8;
- enhance the Unit 8 cooling tower blowdown treatment system;
- install an oil/water separator for Unit 8; and
- enlarge the Unit 8 administration building.

Staff reviewed the amendment materials, the original Commission Decision for the CCPP Unit 8 (00-AFC-1) dated March 5, 2001, and the Staff Assessment for that AFC dated May 30, 2001. Staff has further reviewed any changes in laws, ordinances, regulations and standards (LORS), the environment, and the project since the Commission decision in early 2001. To address outstanding issues regarding the mitigation of environmental impacts from Unit 8's proposed use of the existing Units 6 and 7's once-through cooling system, staff recommends that the Energy Commission approve the above changes with an agreement from the co-owners that, prior to beginning operation of the project, the co-owners must obtain approval of an additional amendment that would either provide new mitigation for those impacts or change the cooling system to use a different water source, such as reclaimed water.

STAFF ANALYSIS

Energy Commission staff reviewed the petition to assess the impacts of this proposal on environmental quality and public health and safety, and determined that the changes to the Visual and Facility Design technical areas are minimal, requiring no further staff analysis, and that no other technical areas are impacted by the changes proposed in the petition. The Biological Resources staff identified unresolved issues regarding the project's use of Sacramento-San Joaquin Delta water for cooling, which are discussed below. The review included an evaluation of the consistency of the proposed revision with the Energy Commission's Decision and whether the project will remain in compliance with applicable laws, ordinances, regulations, and standards (LORS) (*Title 20, California Code of Regulations, section 1769*).

Staff supports the project amendment petition as a minor amendment with no changes to the Conditions of Certification. Although staff can approve a minor amendment, this amendment is being submitted to the Energy Commission for action along with the change of ownership portion of the petition.

Although the proposed project amendments and change of ownership will not, of themselves, cause the project to violate any LORS or cause an environmental impact, the outstanding issues regarding the proposed cooling system must be addressed.

Unit 8 is to be cooled by water drawn from the Sacramento-San Joaquin Delta, used first by Units 6 and 7 when they are operating. During the consideration of Unit 8's Application for Certification, potential impacts on aquatic species were identified. The Commission Decision approving the AFC found that those impacts could be mitigated by the installation of an aquatic filter barrier (AFB), sometimes called a "Gunderboom," at the intake. Additional mitigation measures were to be identified by the resource agencies under the Endangered Species Act and incorporated into the project's Biological Resources Mitigation Implementation and Monitoring Plan (BRMIMP). The resource agencies' permits were expected to be approved shortly after the Commission Decision was approved on March 30, 2001, during the height of California's electricity emergency.

The conditions of certification require the installation of an AFB prior to the beginning of project operation. Completion of the BRMIMP was required prior to the start of construction. Mindful of the electricity emergency and again expecting final state advice and federal permits to be approved shortly thereafter, staff approved the beginning of construction in August 2001, after receiving a BRMIMP with language stipulating that a final BRMIMP would be submitted with the mitigation measures required in the resource agencies' permits.

To date, final state advisory opinions and federal permits have not been issued for this project. Biological Opinions prepared by the federal agencies, including the United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service, were premised on the installation of the AFB and implementation of a Multispecies Habitat Conservation Plan (HCP) that included protective measures for the Delta smelt.

In June of 2004, Mirant withdrew the U.S. Army Corps of Engineers (USACE) 404 Permit application for the installation of the AFB in waters of the United States and stated that it no longer intends to install the AFB. Among the reasons for abandoning the AFB are doubts, shared by Energy Commission staff, about its efficacy.

In January of 2006, the USFWS, in recognition of new concerns about the Delta smelt population and Mirant's decision not to install of the AFB, requested that the USACE reinitiate consultation under Section 7 of the Endangered Species Act. Discussions between Mirant and the resource agencies continue, but a comprehensive mitigation package has not been agreed upon. We understand that they are negotiating the data gathering protocol. Once the data has been gathered and analyzed, mitigation measures and plans will be developed. Mirant and PG&E intend to bring the new mitigation plan forward for amendment into the Conditions of Certification as soon as it is finalized. Such an amendment would include removal of the requirement for the AFB. If this future amendment to the AFB requirements involves an alternate cooling technology that does not impact the San Joaquin River, the environmental review could be relatively straight forward and several resource agency permits may no longer be required. In the event that the future proposed amendment to the AFB requirements still involves the use of effluent from Units 6 and 7, a comprehensive environmental review would be conducted by the Energy Commission staff to address the impacts of this cooling technology to the environment.

On June 15, 2006, the California Public Utilities Commission approved PG&E's purchase of CCPP Unit 8. PG&E intends to resume construction of the project, currently 7 percent complete, as early as September of 2006 and begin operation in September of 2008. Should it not be possible to complete the consultative process with the federal agencies, staff believes that another cooling option, such as reclaimed water, is available. Sufficient quantities of reclaimed water are available from the Delta Diablo Sanitation District and a preliminary feasibility assessment of a likely pipeline route has been conducted by staff and identified no significant barriers to implementing this alternative cooling approach (see attached June 1, 2006 Preliminary Assessment of Reclaimed Water Memorandum). The use of reclaimed water would eliminate the use of Delta water and the resulting environmental impacts.

The currently incomplete mitigation plan, while generally unrelated to the specific amendments pending before the Energy Commission, affects the change of ownership petition in one way. Subsection 1769(b)(1)(C) requires a statement "...that the new owner or operator understands the conditions of certification and agrees to comply with those conditions". Here, the proposed co-owners clearly do not intend to comply with the conditions requiring installation of the AFB.

Staff recommends approval of the proposed modification and change of ownership with the understanding that:

1) PG&E and Mirant will obtain Energy Commission approval of an amendment reflecting a new mitigation program which mitigates the cooling system impacts to a less than significant level and is acceptable to the federal and state resource

agencies, and obtain all required permits prior to the start of operation. (The previously drafted Biological Opinions from the USFWS and the National Marine Fisheries Service would not satisfy this requirement.)

2) If such a mitigation program ~~cannot be~~ is not developed and/or the federal permits ~~cannot be~~ are not obtained, PG&E and Mirant will obtain approval of an amendment switching to an alternative cooling method (such as reclaimed water) prior to beginning operation.

3) Until the resource agency permits are obtained, Unit 8 will be designed and constructed in such a manner that will not preclude the switch to an alternative cooling technology.

Either alternative will assure that the project complies with LORS and that the potentially significant environmental impacts of the project are mitigated.

~~Staff makes this recommendation subject to~~ On July 13, 2006, PG&E ~~'s~~ filed ~~filing of~~ a revised statement confirming its intention ~~to continue to participate in the ongoing efforts to develop alternate mitigation methods and~~ to abide by the above understandings in addition to the Conditions of Certification. In the revised statement, PG&E states that preconstruction activities will commence immediately following the acquisition of Unit 8. In addition, "PG&E will continue to evaluate the use of reclaimed water during the preconstruction activities and, if reclaimed water proves feasible as [Energy Commission] Staff suggests, PG&E will take steps to modify the project design to use reclaimed water for cooling".

CONCLUSIONS AND RECOMMENDATIONS

As mandated by Title 20, section 1769(a)(3) of the California Code of Regulations, the Energy Commission may only approve project modifications if specific findings are met. Following staff's review of the proposed amendment, Energy Commission staff recommends approval based on the following findings:

A. There will be no new or additional unmitigated significant environmental impacts associated with the proposed changes.

B. Adherence to the proposed conditions and stipulations will ensure the facility's compliance with all applicable LORS.

C. The facility design changes will be beneficial to the additional project owner, PG&E, by allowing for more autonomous operation of Unit 8.

D. There has been a substantial change in circumstances since the Commission certification justifying the changes in that the sale of Unit 8 to a different owner than the owner of Units 6 and 7 and the sharing of certain common facilities was not contemplated during the certification process.

E. ~~Provided that PG&E submits a revised statement as described above, the~~ The petition satisfies the requirements for a Change of Ownership, including the requirement that the new owner provide a statement that it understands and agrees to comply with the Conditions of Certification.

State Of California | The Resources Agency of California

Memorandum

Date : June 1, 2006
Telephone: (916) 654-5100

To : TERRENCE O'BRIEN

File:

From : California Energy Commission - **ROGER JOHNSON**
1516 Ninth Street
Sacramento, CA 95814-5512

Subject : **PRELIMINARY ASSESSMENT OF RECLAIMED WATER FEASIBILITY FOR CONTRA COSTA POWER PLANT UNIT 8**

A preliminary assessment of the feasibility of using reclaimed water for cooling for the proposed Contra Costa #8 power plant has been conducted by the Energy Commission Soil & Water, Facility Design and Biology staff. Nothing was identified that would prevent the use of reclaimed water at the facility. Staff spoke with Greg Baatrup, Reclaimed Water Manager, for the Delta Diablo Sanitation District. A water treatment plant operated by Delta Diablo Sanitation District that produces Title 22 Tertiary treated water is located less than 3 miles from the project site and could provide sufficient reclaimed water to the project. No reclaimed water piping is currently located in the vicinity of the proposed power plant; however the reclaimed water facility is located on the Pittsburg-Antioch Highway that directly links to a road corridor with the proposed power plant. This should provide a fairly direct route for a reclaimed water transmission line from the treatment plant to the proposed power plant. The Energy Commission staff is currently discussing the feasibility of routing a reclaimed water pipeline along the Pittsburg-Antioch Highway with the City of Antioch Department of Public Works. The water treatment plant has routed several pipelines through the city without problem, and the city has expressed interested in a larger line that could potentially serve Contra Costa Power Unit 8, the city owned golf course, and the irrigation of larger roadway median strips. In addition, there is a possibility to sleeve an abandoned pipeline that passes through the City of Antioch.

The Delta Diablo Sanitation District is currently seeking customers for its reclaimed water. It currently provides reclaimed water to the Los Medanos and Delta Power Projects which both have fresh water emergency backup supplies that have never been used. Furthermore, it has plans for expansion of reclaimed water availability into Antioch in close proximity to the proposed power plant. In addition, Delta Diablo, Brentwood, and Iron Horse Sanitation Districts are in the process of forming a regional reclaimed water authority that would make reclaimed water available to the entire region, adding reliability and increased capacity for the reclaimed water source.

Initially, the Contra Costa Power Plant Unit 8 Project may need to have a fresh water emergency backup supply until the regional system is interconnected to provide a highly reliable cooling water supply.

Nothing was identified in the original Application for Certification or Commission Decision that suggested that reclaimed water for the project was not viable. Several projects either recently licensed or in the siting process will use reclaimed water.

The potential exists for wastewater to be returned to the Delta Diablo Wastewater Treatment Plant. It appears that the capacity of the treatment plant is sufficient to handle the Contra Costa Power Plant Unit 8 effluent.

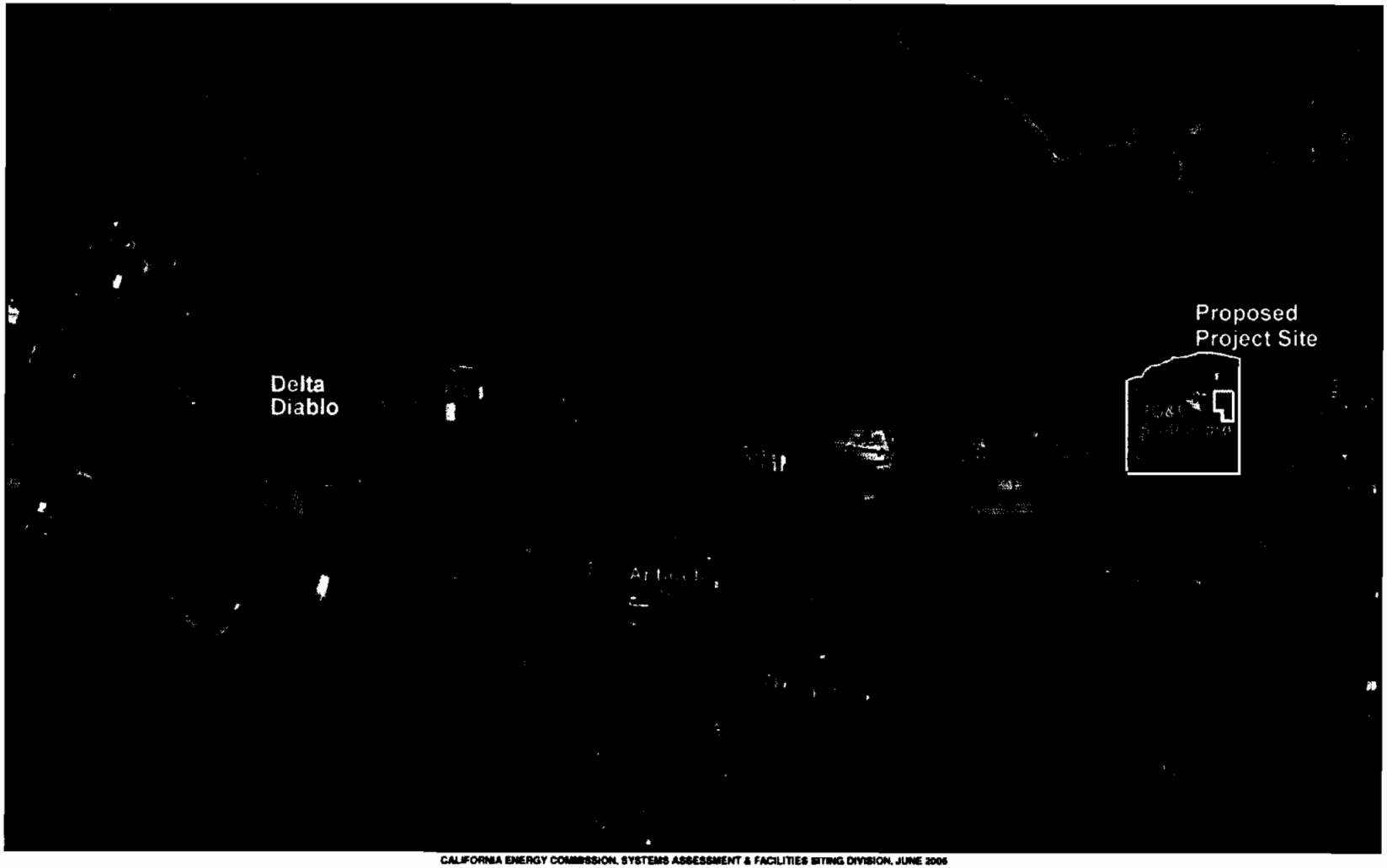
The CEC biological staff reviewed the database of known biological resources, and no fatal-flaws were identified with the construction of a 3-mile system to provide reclaimed water to the Contra Costa Power Plant Unit 8 and return the effluent to the treatment facility. There are no biological impacts identified with the operation of the proposed reclaimed water and effluent return pipelines. The following species have a potential to occur in the proposed project area (level noted after species) and could be impacted directly or indirectly by construction, dependent on the construction route, schedule and methodology:

- showy madia (low to medium potential; grassland, can be in weedy areas)
- San Joaquin pocket mouse (low)
- California red-legged frog (low)
- salt-marsh harvest mouse (low)
- San Joaquin kit fox (low)
- California tiger salamander (low)
- Silvery legless lizard (low)
- short-eared owl (low)
- burrowing owl (low to medium)
- San Joaquin spearscale (low; found in alkaline soils)
- big tarplant (low to medium; grassland, can be in weedy areas)
- vernal pool fairy shrimp (low)
- San Joaquin dune beetle (?)
- western pond turtle (low)

In summary, it is staff's opinion that the use of reclaimed water from the Delta Diablo Wastewater Treatment Plant is a potentially viable alternative to the use of once-through cooling effluent for the operation of Contra Costa Power Plant Unit 8, and that suitable mitigation measures could be developed for any impacts to these species due to the construction of the reclaimed water pipeline.

CONTRA COSTA

Location of the Contra Costa Power Plant and Proposed Project



CALIFORNIA ENERGY COMMISSION, SYSTEMS ASSESSMENT & FACILITIES SITING DIVISION, JUNE 2006

JUNE 2006

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July 13, 2006

John L. Geesman
Commissioner
California Energy Commission
1516 Ninth Street, MS-2000
Sacramento, CA 95814

Re: **Contra Costa Unit 8 Power Project**
Docket No. 00-AFC-1C
Second Revised Verified Statement Attesting To Compliance with Conditions of Certification

Dear Commissioner Geesman:

On April 6, 2006, Pacific Gas & Electric Company (PG&E) submitted a Verified Statement to the California Energy Commission (Commission). On June 29, 2006 PG&E submitted a Revised Verified Statement to clarify its understanding and agreement with the Statements of Understanding contained in the Staff Analysis dated June 16, 2006, entitled "Contra Costa Power Plant Unit 8 (00-AFC-1C), Staff Analysis of the proposed addition of PG&E as an owner, extension of the construction milestones, and four facility enhancements" (Staff Analysis). Shortly prior to the July 5, 2005 Business Meeting the Staff issued an errata making minor modifications to the Statements of Understanding and adding a new Statement of Understanding 3. At the Business Meeting on July 5, 2006, the Commission directed PG&E to file this Second Revised Verified Statement to formally reflect its agreement to the changes contained in the Staff's Errata and to address the policy guidance contained in the 2003 and 2005 Integrated Energy Policy Reports (IEPR).

The Asset Transfer Agreement

On June 10, 2005, PG&E entered into an Asset Transfer Agreement (ATA) with Mirant Delta, LLC and Mirant Special Procurement, Inc. (Mirant) that provided for PG&E to acquire certain assets associated with the planned development of Contra Costa Unit 8 (CC8 Assets). The ATA established a timeline that would allow PG&E to exercise its option to acquire the CC8 assets as late as June 30, 2008. The reason for this long option period was to provide the greatest amount of flexibility for PG&E. On June 15, 2006, the California Public Utilities Commission (CPUC) approved PG&E's acquisition of the CC8 assets. With the CPUC approval, PG&E is currently working toward closing in the near future as the CC8 asset will be a much needed generation asset in PG&E's portfolio. If

closing under the ATA occurs as PG&E intends, PG&E will acquire ownership of the CC8 Assets, and will own, construct, use, operate and maintain Contra Costa Unit 8 Power Project in accordance with all applicable CEC requirements and in compliance with all applicable laws, ordinances, regulations and standards. While PG&E is currently working to close under the ATA and acquire CC8, it is not currently the owner.

Water Policy Guidance

PG&E understands the Commission policy articulated in the 2003 IEPR that favors use of cooling technology that does not rely on fresh water for cooling. PG&E further understands the ongoing policy debate within the State concerning the use of one-through cooling for power plants.

While the Commission granted the license for CC8 prior to the formal establishment of these policy guidance documents, PG&E believes that if it acquires the CC8 asset, it will be developed in such a manner as it will comply with spirit and intent of that guidance. While the current configuration of CC8 relies on the use of river water that either has been already used by CC Units 6 and/or 7, or is diverted from the river for use by CC8 only, that current method of operation is subject to resolution of biological issues associated with intake of river water and discharge to the river under existing permits currently held by Mirant. Mirant has taken the lead to resolve the biological issues with the resource agencies.

Staff proposed Statement of Understandings 1, 2 and 3 to ensure that CC8 will only use river water for cooling if a new biological opinion and associated biological permits are obtained authorizing the use of river water.

If PG&E acquires CC8, and if the biological authorizations are not in place, Statement of Understanding 2 specifically acknowledges that PG&E may seek alternative cooling methodology. The Staff Analysis included a preliminary evaluation of the use of reclaimed water for cooling as an alternative to use of river water. PG&E and Mirant are investigating this option further. Preliminary research into the availability of treated waste water appears somewhat favorable. PG&E is committed to actively pursuing waste water as an alternative if becomes a feasible and economic option.

Statement of Understanding 3 further prevents CC8 from being constructed in a manner that will prevent the switching to an alternative cooling technology. PG&E's understanding of this option is that construction could commence as long as certain components were not constructed in a manner that would rely solely on river water for cooling. PG&E agrees with this approach.

Construction Timeline

PG&E desires to close on the ATA as soon as possible and desires to begin construction as soon as possible. Once PG&E acquires the asset, PG&E will immediately begin preconstruction activities. PG&E will continue to evaluate the use of reclaimed water during the preconstruction activities and, if such reclaimed water proves feasible as Staff suggests, PG&E will take steps to modify the project design to use reclaimed water for cooling.

Required Compliance Statement

PG&E submits this Second Revised Verified Statement attesting as follows: (1) PG&E understands the conditions of certification set forth in the Commission Decision for the Contra Costa Unit 8 Power Project (Docket 00-AFC-1); (2) PG&E understands the Staff Analysis; and (3) PG&E agrees that, if it acquires the CC8 Assets, PG&E will comply with and be bound by those conditions of certification and the Statements of Understanding 1, 2 and 3 contained in the Staff Analysis and errata.

I am an officer of PG&E and I hereby attest under penalty of perjury to the truth and accuracy of the required verified statement above.

Executed By:

Name: Fong Wan
Title: Vice President, Energy Procurement
Date: July 13, 2006

cc: Jeffrey S. Russell
President, Mirant Delta, LLC.