

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Application of Pacific Gas and Electric Company for Compliance Review of Electric Energy Resource Recovery Account Entries, Contract Administration, Economic Dispatch of Electric Resources, and Utility Retained Generation Fuel Procurement Activities for the Period January 1 through December 31, 2012

A. 12-02-023

(U 39-E)

**THIRD SET OF DISCOVERY REQUESTS OF
PACIFIC GAS AND ELECTRIC COMPANY TO
THE DIVISION OF RATEPAYER ADVOCATES**

Date Sent: September 9, 2013
Date Due: September 16, 2013

General Instructions

The following general instructions apply to all data requests propounded by Pacific Gas and Electric Company ("PG&E") on the Division of Ratepayer Advocates ("DRA") in this proceeding.

1. Responses to this discovery request should be transmitted to PG&E as they become available, but **no later than Friday, September 13, 2013**.
2. Responses to these discovery requests should be transmitted via email to the following recipients of PG&E's 2012 ERRRA Compliance Review project management team: Case Manager, [Redacted] Counsel for PG&E, Charles Middlekauff (charles.middlekauff@pge.com) and Matt Fogelson (matthew.fogelson@pge.com).
3. As to any discovery request consisting of a number of separate subdivisions, or related parts or portions, a complete response is required to each part or portion with the same effect as if it were propounded as a separate discovery request.

4. Any objection to a discovery request should clearly indicate to which part or portion of the discovery request the objection is directed.
5. If any document, in whole or in part, covered by this request is withheld for whatever reason, please furnish a list identifying all withheld documents in the following manner: (a) a brief description of the document; (b) the date of the document; (c) the name of each author or preparer; (d) the name of each person who received the document; and (e) the reason for withholding it.
6. If, in answering any of these discovery requests, there is deemed to be any ambiguity in interpreting either the discovery request or a definition or instruction applicable thereto, promptly contact PG&E's case manager or counsel to obtain a clarification.
7. If you have any questions regarding this data request, please email the Case Manager immediately Redacted. If DRA objects to any of the data requests, please contact the assigned PG&E attorneys, Charles Middlekauff (charles.middlekauff@pge.com) and Matt Fogelson (matthew.fogelson@pge.com), as soon as possible.

Definitions

- A. As used herein, the term "you," "your(s)" and "DRA" mean the Division of Ratepayer Advocates and any and all of its respective present and former employees, agents, consultants, attorneys, officials, and any and all other persons acting on its behalf.
- B. The terms "and" and "or" shall be construed either disjunctively or conjunctively whenever appropriate in order to bring within the scope of these discovery requests any information or documents which might otherwise be considered to be beyond their scope.
- C. The singular form of a word shall be interpreted as plural, and the plural form of a word shall be interpreted as singular whenever appropriate in order to bring within the scope of these discovery requests any information or documents which might otherwise be considered to be beyond their scope.
- D. The term "communications" includes all verbal and written communications of every kind, including but not limited to telephone calls, conferences, notes, correspondence, and all memoranda concerning the requested communications. Where communications are not in writing, provide copies of all memoranda and documents made relating to the requested communication and describe in full the substance of the communication to the extent that the substance is not reflected in the memoranda and documents provided.
- E. The term "document" shall include, without limitation, all writings and records of every type in your possession, control, or custody, including but not limited to the following

items, whether printed or reproduced by any process, including documents sent and received by electronic mail, or written or produced by hand, and whether or not claimed to be privileged or otherwise excludable from discovery: computer data files, information stored in electronic media, including on computer tapes, disks, or diskettes, tapes, inputs, outputs, and printouts; notes; letters; correspondence; communications; telegrams; memoranda; summaries and records of telephonic and telegraphic communications; summaries and records of personal conversations; diaries; appointment books; reports (including any and all draft, preliminary, intermediate, and final reports); surveys; studies (including, but not limited to, load flow, engineering, general economic, and market studies; comparisons; tabulations; budgets; workpapers; charts; plans; maps; drawings; engineering and other diagrams (including “one-line” diagrams); photographs; film; microfilm; microfiche; tape and other mechanical and electrical audio and video recordings; data compilations; log sheets; ledgers; vouchers; accounting statements; books; pamphlets; bulletins; minutes and records of meetings; transcripts; stenographic records; testimony and exhibits, including workpapers; copies, reports, and summaries of interviews and speeches; reports and summaries of investigations; opinions and reports of consultants; reports and summaries of negotiations; press releases; newspaper clippings; drafts and revisions of draft of documents; and any and all other records, written, electrical, mechanical, and otherwise. “Documents” shall also refer to copies of documents (even though the originals thereof are not in your possession, custody, or control), every copy of a document which contains handwritten or other notations or which otherwise does not duplicate the originals or any other copy, and all attachments or appendices to any documents.

- F. “Identification” of a document includes stating: (a) the identity of each person who wrote, dictated, or otherwise participated in the preparation of the document; (b) the location of the document; and (c) the identity of each person having custody of or control over the document.
- G. “Identification” of a person includes stating his or her full name, most recent known business address and telephone number, present position, and prior connection to or association with any party to this proceeding, including position at the time of connection to the information requested.
- H. “Justify,” “explain,” “support,” “state,” and similar terms call for a full explanation of all reasoning involved, identification of all documents, information, studies and reports relied upon, used or referred to, and a summary of all facts relied upon, stating the basis therefore.
- I. “Party” and “person” refer to, without limiting the generality of their meaning, every natural person, corporate entity, partnership, association (whether formally organized or

ad hoc), joint venture, unit operation, cooperative, municipality, commission, governmental body, or agency.

- J. “Policy” or “position” means each rule, procedure, or directive, formal or informal, written or unwritten, and each common understanding or course of conduct which was recognized as such by you.
- K. “Providing copies” or similar phrases shall include the full identification of all requested documents, to the extent not already identified therein, as well as to the physical production of all such documents.
- L. “Relate to,” “concern,” and similar terms and phrases shall mean consist of, refer to, reflect, comprise, discuss, underlie, comment upon, form the basis for, analyze, mention, or be connected with, in any way, the subject of these discovery requests.
- M. When requested to “state the basis” for any analysis (including studies and workpapers), proposal, assertion, assumption, description, quantification, or conclusion, please describe every fact, statistic, inference, supposition, estimate, consideration, conclusion, study, and analysis known to you which you believe to support the analysis, proposal, assertion, assumption, description, quantification, or conclusion, or which you contend to be evidence of the truth or accuracy thereof.
- N. “Study,” “studies,” or “report(s)” denotes any document, as defined above, which reflects or was utilized in the collection, evaluation, analysis, summarization, or characterization of information in connection with the subject referred to.

Data Request

Chapter 2 – PG&E’s Management of Utility-Owned Generation - Nuclear and Hydro (Yakov Lasko)

1. DRA has asserted (page 2-16 at line 15) that PG&E should have tested the low level oil switch when other instrumentation in the system was out of service. Is DRA aware of a standard industry practice that calls for such testing? If so, please provide that standard, including the level of inspection and/or testing required.
2. Did DRA consider (page 2-20, line 23) the value of generation produced from water that was held back in Lake Almanor during the Belden outage and used to produce power after the Belden unit was returned to service?

3. On page 2-14, lines 10-12, DRA concludes with respect to the Belden outage that “the magnitude of the duration and the impact of the forced outage would have been significantly diminished if at least one of the alarms had been operational.” Please itemize and explain any and all facts DRA used to arrive at its conclusion that the duration of the Belden forced outage would have been significantly diminished if the liquid leak detection alarm had been operational. Please itemize and explain any and all facts DRA used to arrive at its conclusion that the impact of the Belden forced outage would have been significantly diminished if the liquid leak detection alarm had been operational.
4. Please explain DRA’s understanding of the location of where the Belden OSPP leak detection alarm is monitored by PG&E personnel. Please explain DRA’s understanding of the distance between the location of where the Belden OSPP leak detection alarm is monitored by PG&E personnel and the Belden Powerhouse.

Chapter 3 -- PG&E’s Management of Utility-Owned Generation – Fossil (Ravinder Mangat)

5. On pages 3-15 and 3-16, DRA describes their method for calculating foregone energy costs.
 - a. Please describe how H is used in the equation, $A * (P - F) = \text{Disallowance}$.
 - b. In the calculation of A, the average total net award that HBGS would have reasonably been able to receive for each hour during the duration of the outage, does DRA assert that $A = \text{NMC} * (\text{Service Hours} / \text{Available Hours})$? Does DRA assert that $\text{capacity factor} = \text{Service Hours} / \text{Available Hours}$?
 - c. In calculating foregone energy costs, did DRA consider whether another unit at HBGS could be used to fulfill any energy needs not met by the unit that was scheduled or forced out of service?
6. On page 3-16, line 21, please provide all workpapers and references used to calculate 128.48 hours.
7. On page 3-17, lines 20-22, DRA explains that it assumes that Unit 7 was out for the same amount of time as Unit 5 (eleven days) in order to repair the turbocharger turbine blades. Why didn’t DRA use the Unit 7 maintenance outage time of 79.2 hours that PG&E provided to DRA in its response to the Master Data Request Question 14?
8. On page 3-10, DRA concludes that PG&E failed to show that it prudently conducted maintenance activities on HBGS Unit 5. DRA states that if PG&E would have conducted daily routine inspections of the engine and engine components, as well as water cleaning of the compressor in the turbocharger, at intervals of every 50 operating hours, and water cleaning of the turbine in the turbocharger every 100 hours, then PG&E should have discovered the damage to the turbocharger turbine prior to the maintenance outages scheduled in response to the unrelated service bulletin from ABB.

- a. Please explain how performing daily routine inspections of the engine and engine components would have enabled PG&E to discover the damage to the turbocharger turbine.
 - b. Please explain DRA's understanding of whether daily routine inspections of the engine and engine components involve the disassembly of any equipment.
 - c. Please explain how water cleaning of the compressor in the turbocharger, at intervals of every 50 operating hours, would have enabled PG&E to discover the damage to the turbocharger turbine.
 - d. Please explain DRA's knowledge of how water cleaning of the compressor in the turbocharger is accomplished.
 - e. Please explain how water cleaning of the turbine in the turbocharger every 100 hours would have enabled PG&E to discover the damage to the turbocharger turbine.
 - f. Please explain DRA's knowledge of how water cleaning of the turbine in the turbocharger is accomplished.
9. On page 3-11, lines 5-8, DRA claims that PG&E failed to notice a difference in the operation of the engines during routine external monitoring of the engine components.
- a. What type of difference in the operation of the engines should PG&E have noticed during routine external monitoring of the engine components?
 - b. Please describe DRA's understanding of the sound level (in dB) in the HBGS engine room during the normal operation of an engine.