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

Application of Pacific Gas and Electric Company to Recover Pumped Storage Study Costs (U39E).

Application 10-08-011 (Filed August 20, 2010)

## NOTICE OF EX PARTE COMMUNICATION OF PACIFIC GAS AND ELECTRIC COMPANY

Pursuant to Rule 8.4(a) of the Commission's Rules of Practice and Procedure, Pacific Gas and Electric Company (PG&E) hereby gives notice of the following ex parte communication. The communication occurred on Tuesday, August 30, 2011, at approximately 1:30 p.m. at the offices of the California Public Utilities Commission. The communication was oral and a handout was provided, which is attached to this notice. [(Rule 8.4(a)(c)]

David Poster, Manager-Regulatory Relations, PG&E, initiated the communication with Scott Murtishaw, Advisor to Commission President Michael Peevey. Also in attendance for PG&E were Michael Jones (Director-Power Generation), Antonio Alvarez (Manager-Intergrated Resource Planning), and Alan Soneda (Project Manager-PG Project Development). [Rule 8.4(b)]

Mr. Poster stated that PG&E's Application is not premature, given the extensive lead time for a pumped hydro project. Mr. Poster also stated that if the Commission does not approve the Application now, it is premature to dismiss the Application. [Rule 8.4(c)]

### Respectfully submitted,

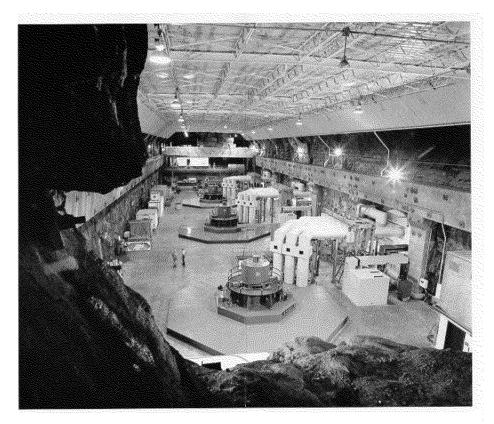
/s/ Brian K. Cherry
Brian K. Cherry Vice President, Regulatory Relations Pacific Gas and Electric Company P.O. Box 770000, Mail Code B10C San Francisco, CA 94177

Phone: 415-973-4977 Fax: 415-973-7226 E-mail: BKC7@pge.com

### Attachment

Dated: September 2, 2011





PG&E's Pumped Storage Application August 30, 2011



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## **Potential New Pumped Storage Project**

- Mokelumne River Watershed
  - Project could provide 400 1,200 MW of storage capability by 2020
  - Size will depend on need and feasibility, licensing and design efforts
- Long lead time for licensing process and Project construction
  - Start FERC licensing 2011
  - Complete FERC licensing and CPUC approval of Project
     – 2016
  - Construction 2017-2020
- PG&E Application (A.10-08-011) requests recovery of up to \$33.5 million:
  - Evaluate Project feasibility;
  - If found feasible, the costs of completing the FERC licensing process; and
  - Prepare detailed design studies to finalize a CPUC application seeking cost recovery for construction of the Project





### **Multiple Benefits of Pumped Storage**

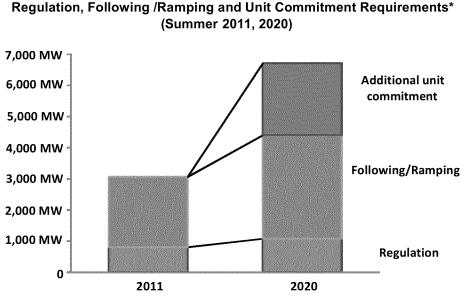
- A large amount of <u>fast</u> acting <u>spinning reserve and electric system</u> <u>regulation</u> capability, or generating capacity that is immediately available to meet fluctuations in electric demand and provide grid stability necessary to integrate intermittent renewable energy into the grid.
- Helps alleviate <u>over-generation</u> or minimum load condition by using excess energy to pump water into storage
- Reduces dependence on fossil fueled technologies and their associated greenhouse gas emissions otherwise needed to firm intermittent resources.
- Storage of <u>economy energy</u>, (surplus energy) that is sometimes available at night for daily cycling or during Spring snowmelt runoff conditions for seasonal storage.





### **Efforts to Help Define Storage Need and Competitiveness**

- The grid of the future needs to be more flexible than it is today
- Studies show substantial increases in regulation, following/ramping, and increased unit commitment are needed to integrate renewable resources



- \* Source: CAISO for Regulation and Following estimates; PG&E's estimate of additional unit commitment requirement.
- The LTPP Settlement states that the CAISO should present additional study results on renewable integration in the first quarter of 2012
- The information developed next year by CAISO and the other parties in the LTPP proceeding should inform the need for this Project

  Pacific Gas and Electric Company.

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## The CPUC Should Not Dismiss PG&E's Application

- Application is not premature given the extensive lead time for pumped hydro; prudent to approve the Application now
- If the Commission does not approve the Application now, it is premature to dismiss the Application
  - The CAISO and other parties will be providing additional analysis on renewable integration and the need for additional capacity in early 2012
  - The development of a pumped hydro project for PG&E's customers has significant lead times
  - \$5 million DOE grant application is pending



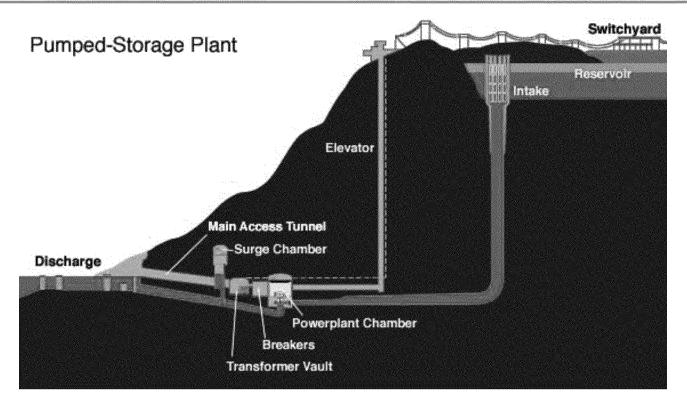


## **Appendix**





### **How Does Pumped Storage Work?**



A typical pumped-storage development is composed of two reservoirs ... situated to maximize the difference in their levels. These reservoirs are connected by a system of waterways along which a pumping-generating station is located (see illustration). Under favorable geological conditions, the station will be located underground, otherwise it will be situated on the lower reservoir. The principal equipment of the station is the pumping-generating unit. The machinery is reversible and is used for both pumping and generating; it is designed to function as a motor and pump in one direction of rotation and as a turbine and generator in opposite rotation.

http://en.wikipedia.org/wiki/Pumped\_storage\_showing Tennessee Valley Authority's Raccoon Mountain Pumped Storage Project; and http://www.answers.com/topic/pumped-storage?cat=technology

### CERTIFICATE OF SERVICE BY ELECTRONIC MAIL OR U.S. MAIL

I, the undersigned, state that I am a citizen of the United States and am employed in the City and County of San Francisco; that I am over the age of eighteen (18) years and not a party to the within cause; and that my business address is Pacific Gas and Electric Company, Regulatory Relations Department B10C, 77 Beale Street, San Francisco, California 94105.

I am readily familiar with the business practice of Pacific Gas and Electric Company for collection and processing of correspondence for mailing with the United States Postal Service. In the ordinary course of business, correspondence is deposited with the United States Postal Service the same day it is submitted for mailing.

On September 2, 2011, I caused to be served a true copy of:

## NOTICE OF EX PARTE COMMUNICATION OF PACIFIC GAS AND ELECTRIC COMPANY

**[XX]** By Electronic Mail – serving the enclosed via e-mail transmission to each of the parties listed on the official service list for A.10-08-011 with an e-mail address.

**[XX]** By U.S. Mail – by placing it for collection and mailing, in the course of ordinary business practice, with other correspondence of Pacific Gas and Electric Company, enclosed in a sealed envelope, with postage fully prepaid, addressed to all parties of record on the service list for A.10-08-011 who do not have an email address.

I certify and declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed on September 2, 2011 at San Francisco, California.

/s/ Sally Cuaresma
Sally Cuaresma
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### Last Updated on 02-SEP-2011 by: JVG A1008011 LIST

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