



San Diego County Water Authority

**SPECIAL MEETING**  
**ENGINEERING AND OPERATIONS COMMITTEE**

**Board Room**

**APRIL 10, 2014**

**1:30 p.m.**

Brian Brady – Chair  
Marty Miller – Vice Chair  
Bud Pocklington – Vice Chair  
David Barnum  
Ron Morrison  
Vincent Mudd  
Jim Murtland

Ken Olson  
Halla Razak  
Dave Roberts  
John Simpson  
Yen Tu  
DeAna Verbeke  
Ronald Watkins  
Tom Wornham

1. Call to order.
2. Roll call – determination of quorum.
3. Public comment – opportunities for members of the public to address the Committee on matters within the Committee’s jurisdiction.
4. Chair’s report.

**I. CONSENT CALENDAR**

**II. ACTION/DISCUSSION**

**III. INFORMATION**

1. Presentation on San Vicente Pumped Storage Project update.

Frank Belock

**IV. CLOSED SESSION**



V. ADJOURNMENT

Doria F. Lore  
Clerk of the Board

**NOTE:** This meeting is also called and noticed as a meeting of the Board, but will be conducted as a meeting of the Engineering & Operations Committee. Members of the Board who are not members of the Committee may participate in the meeting pursuant to Section 2.00.060(g) of the Water Authority Administrative Code. All items on the agenda, including information items, may be deliberated and become subject to Committee action. All public documents provided to the Committee or Board for this meeting including materials related to an item on this agenda and submitted to the Board of Directors within 72 hours prior to this meeting may be reviewed at the San Diego County Water Authority headquarters located at 4677 Overland Avenue, San Diego, CA 92123 at the reception desk during normal business hours.



April 4, 2014

**Attention: Engineering and Operations Committee**

**San Vicente Pumped Storage project update. (Information)**

### **Background**

The raising of the San Vicente Dam not only provides additional emergency and carryover water storage capacity for the region, but could also serve as the lower reservoir for an up to 500 megawatt pumped storage project. In raising the San Vicente Dam, the reservoir's storage capacity was increased from 90,000 acre feet to 242,000 acre feet by increasing the reservoir elevation an additional 117 feet. This increase in storage provides an opportunity to generate revenue for both the City of San Diego and the Water Authority from such a pumped storage project. In anticipation of the increase to the San Vicente Reservoir, the Water Authority applied and obtained a preliminary permit from the Federal Energy Regulatory Commission to conceptually develop the San Vicente Pumped Storage project. To advance the project, in October 2013, the Water Authority and City, owner and operator of San Vicente Dam and Reservoir, entered into a Memorandum of Understanding and jointly procured the Black and Veatch Corporation to study the economic and financial requirements for the San Vicente Pumped Storage project. The Water Authority also hired Navigant Consulting, Inc. to provide an independent review of the initial study and offer technical advice in terms of how best to position the project within the power market.

The economic and financial study evaluated project risks and mitigation strategies, and contemplated the potential candidates' competitive advantages, power purchase opportunities, power purchase agreement terms, funding opportunities, licensing requirements, legal considerations, energy market demand forecast, return on the investment, and project delivery approach. Collectively, these criteria assisted Black and Veatch Corporation in determining project sizing and viability. The results of this study demonstrated that the project is economically and financially viable and were presented at the February 27, 2014 Engineering and Operations Committee meeting.

*Previous Board Actions: In October 2013, the Board authorized the General Manager to award a professional services contract to Black & Veatch Corporation, for \$149,920, to perform an economic and financial study for the San Vicente Pumped Storage project; award a professional services contract to Navigant Consulting, Inc., for \$59,667, to provide independent reviews and technical advice for the San Vicente Pumped Storage project; to enter into a Memorandum of Understanding with the City of San Diego for the implementation of the economic and financial study for the San Vicente Pumped Storage project.*

### **Discussion**

Staff has been actively meeting with the City of San Diego in accordance with the MOU regarding the initial study. The Hydropower Task Force, chaired by Director Mike Hogan, has also been engaged in the project and is in place to track operations of existing hydro facilities, provide guidance on the San Vicente Pumped Storage Project, and oversee the planning and

installation of in-line hydro facilities. In addition to Water Authority staff, Bob Mulvey, the City's Assistant Director of the Public Utilities Department, is assisting with supporting the Task Force. To date, the Task Force has met three times, recently on March 21, 2014 to discuss the project requirements and questions posed by Board members at the February 27, 2014 Engineering and Operations Committee meeting. In March, the Task Force discussed:

- Continued coordination with the City in the development of subsequent principles of understanding and the project as a whole
- Results of the March 13, 2014 meeting with the City to discuss how the San Vicente Pumped Storage project and the City's Indirect Potable Water Reuse project need to be coordinated
- Different project delivery options in regard to risk versus reward
- Timing of the California Independent Systems Operator interconnection application submission process as it relates to new legislation and new energy projects

The purpose of the Special Meeting of the Engineering and Operations Committee is to update the Board on the above items and other central issues regarding the project.

Prepared by: Kelly Rodgers, Principal Engineer  
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