



**MINUTES OF THE SPECIAL MEETING OF THE
ENGINEERING AND OPERATIONS COMMITTEE
February 12, 2015**

CALL TO ORDER / ROLL CALL

Chair Williams called the Engineering and Operations Committee meeting to order at 1:30 p.m. Committee members present were Chair Williams, Vice Chairs Miller and Watkins, Directors Arant, Ayala, Brady, Hogan, Linden, Morrison, Olson, and Razak. At that time there was a quorum of the committee.

Staff present included General Manager Stapleton, General Counsel Hentschke, Deputy General Managers Belock and Kerl, Deputy General Counsel Gallien, Director of Engineering Rose, Director of Operations and Maintenance Eaton, Engineering Manager Bousquet, Water Resources Manager Roy, Principal Engineer Rodgers, and Principal Water Resources Specialist Gage. Also present were guest speakers: Kevin Davis, Project Director from Black and Veatch Corporation; Dr. David Victor, Director of Laboratory on International Law and Regulation at UC San Diego; and Jeff Pasek, City of San Diego Water Shed Manager.

ADDITIONS TO AGENDA

There were no additions to the agenda.

PUBLIC COMMENT

There were no public comments.

I. DISCUSSION

1. San Vicente Pumped Storage Study – Update and Next Steps.

Chair Williams reviewed the meeting agenda and introduced Director Hogan, Chair of the Hydropower Subcommittee. Director Hogan began the presentation by introducing the Hydropower Subcommittee members and continued with recaps of the December 15, 2014 and February 3, 2015 subcommittee meetings.

Mr. Bousquet continued the presentation with an overview of the San Vicente Pumped Storage project, project partners, traditional revenue streams for pumped storage projects, California's renewable mandate (AB 32), California Independent System Operator renewal resource forecast, excess renewable generation, curtailment, storage benefits, range of project value over 30 years, and project risk assessment. He then introduced Mr. Davis, Black and Veatch Corporation Project Director. Mr. Davis presented information on completed and on-going work, the inlet/outlet structure, upper reservoir alternatives summary, preliminary financial assumptions, and San Vicente pumped storage value and feasibility.

Mr. Bousquet introduced Dr. Victor, Director of Laboratory on International Law and Regulation at UC San Diego, and consultant to the City of San Diego for the project. Dr. Victor reviewed information including the duck curve (energy market projections), critical technical and strategic issues for further exploration, cohesion of partners, project delivery method evaluation, and strategic bargaining.

Mr. Bousquet introduced Mr. Pasek, Water Shed Manager for the City of San Diego. Mr. Pasek gave a presentation on the San Vicente Reservoir studies for Potable Reuse and Pumped Storage including an overview of the Pure Water San Diego project, role of the reservoir in a potable reuse project, density stratification, regulator criteria for reservoir augmentation, study approach, Pure Water model scenarios, key findings, independent advisory panel, CDPH concept approval, modeling for pumped storage project, initial results of modeling, and future San Vicente Reservoir modeling work.

Ms. Gage presented information regarding the regulatory process including regulatory context, Federal Energy Regulatory Commission (FERC) overview, FERC permit timeline and activities review, current status, preliminary permit vs. license, FERC order, and FERC licensing process and steps. Ms. Roy then made a presentation with answers to Board member requests from previous meetings regarding similar projects and emerging technologies. Her presentation included information on plants with similar criteria, pumped storage currently operational in California, projects under development, identified benefits of recent and proposed projects, proposed energy storage, types of energy storage, electrical energy storage capacity worldwide, current alternative to storage in San Diego, and other trends.

Mr. Belock stated that in the interest of time, he would not give his portion of the presentation regarding previous questions from the Board. The questions and answers from the current and previous meetings would be merged into one document/library and provided to the Board at a later date.

Ms. Rodgers concluded the presentation with information regarding previous board actions, work authorized to date, prior and current project phases, future project phases, timelines for each phase, recommended Phase 1 work, City/Water Authority agreement principles, owner's advisor team and scope, project delivery options, and next steps.

There were several lengthy discussions throughout the meeting with requests for further information. Staff would return to the Board at the next meeting with the requested information.

II. ADJOURNMENT

There being no further business to come before the Engineering and Operations Committee, Chair Williams adjourned the meeting at 4:08 p.m.

Ken Williams, Chairman