California Public Utilities Commission

TECHNICAL WORKSHOP UNDERSTANDING CURRENT STATE OF PUMPED STORAGE

Agenda

JANUARY 16, 2014 1:00 PM – 5:00 PM AUDITORIUM CPUC, 505 VAN NESS AVENUE, SAN FRANCISCO, CA 94102

Decision 13-10-040, Ordering Paragraph 9, directed Commission Staff to hold a technical workshop to "further explore the operational characteristics and uses for pumped storage projects." This technical workshop will focus on understanding the current state of pumped hydro storage in California, barriers to the development of pumped hydro, the potential uses and benefits of pumped hydro, and potential regulatory steps to address barriers and the future of pumped hydro storage in California.

Staff seeks to gain an understanding of the variety of issues that face pumped storage today and in the future, as well as an understanding of what the current state of pumped hydro is in California. In order to better understand the totality of these issues, this workshop will explore a range of the issues facing pumped storage in California, including those barriers outside of the Commission's jurisdiction.

<u>Workshop Format</u> – Commission Staff will lead the workshop throughout the day. The workshop will focus on the topics as listed in the attached agenda. Please note that it is possible that the workshop may end earlier than scheduled in the attached agenda if sufficient progress is made throughout the day.

1:00 p.m. – 1:15 p.m. Welcome and Opening Comments: Commission Staff

1:15 p.m. – 2:45 p.m. Discussion on barriers and benefits of pumped hydro, current state of pumped storage

Panelists: Utility Developers Government Land Use/Enviro

2:45 p.m. – 3:00 p.m. Break

3:00 p.m. – 4:00 p.m. Presentation on the technical potential and energetic implications of using pumped storage to support renewable resources

Presenter: Charles Barnhart, Stanford University

- 4:00 p.m. 4:45 p.m. Discussion with attendees on:
 - 1) Identification of priority issues;
 - 2) Detailed discussion of barriers and benefits;
 - 3) Are these projects viable in terms of needed transmission lines, *etc.*; and
 - 4) Identification of regulatory issues before the CPUC and elsewhere.
- 4:45 p.m. 5:00 p.m. Summary and closing thoughts