California Energy Systems for the 21st Century

Board Meeting – March 19, 2013

A meeting of the Board of Directors of the California Energy Systems for the 21st Century (CES-21) was held via teleconference and webinar on Tuesday, March 19, 2013, at 9:00 a.m. This Board meeting was open to the public.

Present on the teleconference were Directors Mani Chandy, T.J. Glauthier, Dan Kammen, Doug Kim, and Jane Yura. Director Jeff Nichols was not present at the beginning of the meeting, but attended after about half an hour. Also present was the CPUC's Non-Voting Liaison to the Board of Directors, Ed Randolph.

Erik Jacobson, Pacific Gas & Electric Company (PG&E), welcomed the participants to the Board meeting.

Mr. Jacobson opened up the meeting to public comments. No public comments were offered.

CES-21 By-laws

Chris Warner, Chief Counsel of PG&E, reviewed the proposed CES-21 By-laws. The Directors asked questions and discussed, among other matters, the provision for a secondary representative and the indemnification provisions.

On motion made and seconded, the Board approved on a 5-0 vote (Director Jeff Nichols being necessarily absent) the By-laws.

<u>Appointment of Executive Director</u>

Mr. Jacobson presented an overview of the Executive Director position, including a summary of roles and responsibilities. On behalf of PG&E, SCE, and SDG&E, Mr. Jacobson recommended

that Steve Larson be appointed Executive Director of CES-21. The Directors asked questions and discussed, among other matters, their support for the election of Mr. Larson, the importance of outreach, including to federal and state agencies on co-funding opportunities, determination of the Executive Director's salary, and how the Executive Director can act in a manner that furthers the efforts of CES-21. It was agreed to augment the description of the Executive Director's role and responsibilities to include preparation and management of the CES-21 budget and the ability to hire and supervise support staff, as well as to serve as point of outreach to other IOUs and PUCs that may be able to take advantage of innovations coming from the CES-21 research efforts.

On motion made and seconded, the Board approved on a 5-0 vote (Director Jeff Nichols being necessarily absent) the appointment of Mr. Larson as Executive Director.

Administration of CES-21

Mr. Larson discussed his vision as Executive Director of the CES-21 program, the challenges and opportunities of the CES-21 program, and how he intends to administer the program, including the development of a detailed budget.

Mr. Nichols joined the meeting at this point.

Board Chair Discussion

Ms. Yura nominated that Jeff Nichols be selected as the first CES-21 Board Chair and proposed that the Chair be rotated annually among the Board members.

On motion made and seconded, the Board approved on a 6-0 vote the election of Jeff Nichols as Board Chair for a one year term.

The Board discussed having the Board Chair designate a Secretary to support the administration of Board meetings, including taking meeting minutes.

On motion made and seconded, the Board approved on a 6-0 vote the Board Chair to appoint a Secretary that would support the Board meetings and take minutes.

Research Portfolio Discussion

Mr. Jacobson led a discussion with the Board on revisions to the CES-21 research projects. The Board expressed a desire for concrete project deliverables within the first year in order to demonstrate project benefits. The Board also expressed a desire to maintain flexibility in managing the annual budgets. The Board will consider a Petition for Modification to achieve greater project budget flexibility.

Patrick Dempsey, Lawrence Livermore National Laboratory (LLNL), discussed the advanced computing services of CES-21. Mr. Dempsey and Mr. Jacobson agreed to provide additional details to the Board on a project-by-project basis.

The Board members indicated that in general they would be comfortable to vote on the portfolio of proposed CES-21 research projects as a whole rather than on a project-by-project basis at the April 11 Board meeting.

Cooperative Research and Development Agreement (CRADA) Discussion

Mr. Warner reviewed the status of the proposed CRADA with the Board members, including a discussion on the treatment of intellectual property. Mr. Warner indicated that a copy of the finalized CRADA would be circulated to Board members in advance of the April 11 Board meeting.

Next CES-21 Board Meeting: April 11, 2013, 9:00 a.m. – 12:00 p.m. at Lawrence Livermore National Laboratory

Board meeting adjourned at 11:45 a.m.