

**DOCKET****12-IEP-1D**DATE MAY 14 2012RECD. MAY 16 2012

**California Energy Commission
IEPR Lead Commissioner Workshop
Interconnection of Renewable Projects in California
May 14, 2012 – 9:00 a.m.
AGENDA**

Introduction - Suzanne Korosec, IEPR Lead

Opening Comments

Commissioner Carla Peterman, Lead Commissioner

Chair Robert B. Weisenmiller

Commissioner Michel Florio, California Public Utilities Commission (*Invited*)

Summary of Interconnection Issues in *Renewable Power in California: Status and Issues Report* - Suzanne Korosec

Resource Scenarios for the California ISO 2012-2013 Transmission Plan

Lorenzo Kristov, California Independent System Operator – Overview of the new Generator and Interconnection and Deliverability Allocation Procedures.

Kevin Dudney, California Public Utilities Commission – Base Case and Alternative Scenarios and their development

Roger Johnson, Energy Commission – Coordination of scenario development work and the Desert Renewable Energy Conservation Plan

Panel 1: Transmission Planning and the Generator Interconnection Process

The goal of this panel is to identify the next steps in the implementation of the new California ISO Generator Interconnection and Deliverability Allocation Procedures (GIDAP). The procedures were approved by the California ISO Board on March 23, 2012 and the California ISO expects to file new Tariff at the Federal Energy Regulatory Commission (FERC) in early May 2012. The new GIDAP coordinates the Transmission Planning Process with the Generator Interconnection Procedures (and effectively changes the Generator Interconnection Procedures to the GIDAP). The coordinated process places some responsibility on the utilities and developers to locate new generation where transmission is available, or can be upgraded, by limiting the types of transmission projects that would be approved by the California ISO and whose costs would be directly paid by ratepayers.

The modeling assumptions about the forecasted quantity and location of new generation are key components of the California ISO's identification and potential approval of new transmission for renewable resources or the achievement of other public policy goals. The California ISO relies on the California Public Utilities Commission and the Energy Commission to develop the Resource Scenarios used in the Transmission Planning Process. The development of appropriate Resource Scenarios is critical to the identification and approval of transmission in California.

Moderator: Mark Hesters

Panelists: Carl Silsbee, Southern California Edison
Jason Yan, Pacific Gas and Electric
Will Speer, San Diego Gas and Electric
Jaime Asbury, Imperial Irrigation District
Chifong Thomas, Brightsource Energy
Tony Braun, California Municipal Utilities Association
David Miller, Center for Energy Efficiency and Renewable Technologies
Kristin Burford, Large Solar Association
Chris Ellison, Pathfinder/Zephyr

Questions on working within the new California ISO framework:

- 1. What uncertainties should be considered in the Resource Scenarios?*
- 2. How can we improve the renewable calculator model?*
- 3. What policies or goals should be considered in the development of the scenarios? How should DG policies be reflected in the scenarios?*
- 4. How do we make the process work efficiently so that the identification and permitting of transmission in California facilitates the development of renewable generation?*
- 5. Are there incentives or penalties that can be incorporated into the procurement process that would encourage renewable generators to locate in desirable transmission areas?*
- 6. What information is needed by the stakeholders (Load Serving Entities, developers, regulators) to assist in decision making?*

LUNCH 12:30 – 1:30

Panel 2: Distribution Interconnection Updates

Challenges associated with increasing numbers of small and large renewable distributed generation (up to 20 MW) interconnection requests to utilities have been documented over the past two years at IEPR, California ISO and CPUC workshops. Over this same timeframe, regulators, utilities, developers and customers have been gaining experience with the process and new regulatory programs. The following presenters will provide updates on various issues related to the interconnection of distributed resources.

Moderator: Linda Kelly

Panelists: Rachel Peterson, California Public Utilities Commission – Update on Rule 21 Settlement and OIR
David Berndt, Southern California Edison – Update on renewable DG interconnection requests
Valerie Winn, Pacific Gas and Electric– Update on renewable DG interconnection requests
Ken Parks, San Diego Gas and Electric- Update on renewable DG interconnection requests
Dave Brown, Sacramento Municipal Utility Association– Update on renewable DG interconnection requests
Hans Isern, Silverado Power – PV developer perspective
Michael Coddington, National Renewable Energy Laboratory – Overview of NREL Technical Paper *Updating Interconnection Screens for PV System Integration*

Panel 3: Near term approaches, tools, and methods to address interconnection challenges

The goal of this session is to look at modeling and analysis which may better inform and support California's interconnection processes. The panel discussion will include an overview of several projects and approaches underway in California and other states, as well as an update of current Energy Commission funded research programs and partnerships which are looking to address interconnection issues. The Energy Commission supports the development of new and innovated approaches to better integrate and interconnect distributed generation resources in order to meet our state's policy goals.

Moderator: Rachel MacDonald

- Panelists:
- Ron Davis, DNV and Associates – Hawaii Electric Company's feeder modeling and validation
 - Peter Evans, New Power Technology – Regional distribution and transmission modeling of clustered renewable projects in the greater Fresno area
 - Alexandra von Meier, California Institute for Energy and Environment – Understanding the impacts of high-penetration renewables on distribution circuits and feeders
 - Jamie Patterson, Public Interest Energy Research Program – An overview of PIER R&D activities that may enable interconnection
 - Kristen Nicole, EPRI – Discuss EPRI's collaboration with Sandia, NREL, and San Diego Gas and Electric to monitor high penetrations of solar
 - Craig Lewis, Clean Coalition – Discuss the Clean Coalition's partnership with five utilities to model DG and Intelligent Grid solutions which comprise at least 25% of substation loads

Questions:

1. *In addition to power flow tools, what other system characteristics should be modeled? What validation studies are needed?*
2. *What data and information are needed to provide accurate analysis? How might utilities extract additional data while leveraging existing equipment? What R&D or innovative techniques might be explored to better utilize utility data?*
3. *What near term tools, technologies, and or R&D can be demonstrated to advance DG deployment?*
4. *How can results from these efforts yield actionable next steps?*

Public Comments

Adjourn