

### **FERC AND DOE ACT TO DEVELOP ELECTRICITY GRID OF THE FUTURE**

FERC for the first time recently approved a rate request under its new Smart Grid interim rate policy. And on December 18, DOE announced federal grant awards to organizations to develop broad regional transmission plans with an eye toward a low-carbon electricity system, and a Memorandum of Understanding with FERC detailing how the two agencies will coordinate in their roles as lead federal agencies for the planning effort.

#### **SMART GRID COST RECOVERY**

In a declaratory order issued on December 18, 2009, FERC applied its new Smart Grid policy for the first time in approving Pacific Gas & Electric Company's request to recover in rates the costs of transmission facilities that are part of a "synchrophasor project" that will be developed in conjunction with the Western Electricity Coordinating Council (WECC).

Synchrophasor technology uses time-synchronized measurements of grid parameters to inform operators of reliability concerns and to identify actions to address them. In addition, the project will also help PG&E integrate intermittent and energy-limited renewable generation resources. In short, the project will help achieve a more responsive, interactive and transparent electric transmission grid throughout the Western Interconnection. PG&E plans to invest \$50 million for the project but WECC is seeking grants from the Department of Energy to fund one-half of the cost.

FERC found that PG&E made all four required showings under its interim rate policy for Smart Grid devices.

*(1) The smart grid facilities advance the policy and goals of the Energy Independence and Security Act (EISA)*

FERC agreed that the synchrophasor project will provide real-time data on key operating measurements, enabling operators to identify problems earlier and take action to avoid widespread system disturbances. Future smart grid applications will leverage synchrophasor-provided data to support reliability, security and efficiency, including separation of the power system into islands to confine disturbances. These features are consistent with or support the goals of EISA § 1301.

*(2) The smart grid facilities do not adversely affect the reliability and cybersecurity of the bulk power system*

BEIJING

BRUSSELS

LONDON

NEW YORK

SAN DIEGO

SAN FRANCISCO

SILICON VALLEY

WASHINGTON

The following factors were cited by FERC:

- The project will be developed, installed, and maintained in accordance with Commission-approved reliability standards.
- The initial use of the synchrophasor data is for after-the-fact analysis. FERC noted that synchrophasor data today seldom if ever feeds directly into operational decisions.
- The project is part of the necessary process to learn how to reliably and securely make use of synchrophasor data and communications to improve the reliability, security, and efficiency of the electric grid, as envisioned by EISA §1301(1).
- Because, in the future, the smart grid will almost certainly make direct operational use of synchrophasor data, PG&E's must designate the substations where the phasor measurement units and the phasor data concentrators are located as critical cyber assets under NERC standards. Future "real-time" applications of synchrophasor data and communications will require their own detailed demonstration of no adverse reliability and cybersecurity impact.

*(3) The possibility of stranded investment in smart grid equipment has been minimized.*

FERC noted the following factors in finding that this showing had been made:

- PG&E's participation and collaboration with WECC and NIST in developing and applying this smart grid technology.
- The synchrophasor project could itself be a driver in the development of national smart grid standards. It is an early smart grid project and will be implemented as part of an interconnection-wide effort led by WECC and partially funded by the Department of Energy for that very purpose.
- PG&E's selection of product vendors, component testing for ease of integration, and implementing an open and modular architecture that is not vendor-specific.

*(4) Information will be provided to the DOE Smart Grid Clearinghouse.*

PG&E committed to sharing information with the Department of Energy Smart Grid Clearinghouse.

Although the order allows PG&E to recover project costs when the facilities are operational, PG&E must still file a rate request and other parties will be able to review the level and allocation of those costs.

## **INTERCONNECTION-WIDE TRANSMISSION PLANNING**

DOE Secretary Chu recently announced award selections for \$60 million in funding from the American Recovery and Reinvestment Act to support transmission planning for the country's three interconnection transmission networks. He also announced a Memorandum of Understanding (MOU) between DOE and FERC to coordinate efforts related to interconnection-level electric transmission planning.

### *The interconnection-wide planning awards*

The six awards will fund a first-ever effort at comprehensive, long-term analysis and planning across each of the Eastern, Western and Texas electricity interconnections. The open, transparent, and collaborative process will involve participants from industry, federal, state and local government agencies, universities, and non-governmental organizations.

The awards are divided into two topic areas: (1) funding for transmission planners to work with stakeholder organizations within an interconnection to develop options for alternative electricity supplies and the associated transmission requirements, and (2) funding for state agencies to develop coordinated interconnection priorities and planning processes.

The following organizations were selected for awards:

- Eastern Interconnection
  - Eastern Interconnection Planning Collaborative - \$16 million
  - Eastern Interconnection States' Planning Council - \$14 million
- Western Interconnection
  - Western Electricity Coordinating Council - \$14.5 million
  - Western Governors' Association - \$12 million
- Texas Interconnection
  - Electric Reliability Council of Texas (ERCOT) - \$2.5 million
  - ERCOT for work with Texas government agencies - \$1 million

Each of the awardees will produce long-term resource and transmission planning studies in 2011, with updated documents in 2013. The knowledge and perspective gained from this work will inform policy and regulatory decisions and provide information to develop a modernized, low-carbon electricity system.

#### *The FERC-DOE MOU*

The MOU notes that "a new electric system is evolving with the potential to provide a different resource mix, sophisticated new digital components, a better managed load profile and more efficient use of existing generation. Integrating substantial amounts of renewable generation will require transmission grid upgrades and expansion, thereby necessitating a new perspective on electric transmission infrastructure and greater collaboration across industry and government at the State and Federal levels."

The MOU states that DOE and FERC are the lead federal agencies under the interconnection planning program and are to provide technical assistance to the entities in forming the interconnection-wide plans. Under the MOU, DOE will lead electricity-related research and development activities, including research and demonstrations for hardware and software technologies that help operate the country's transmission networks. Consistent with its Federal Power Act authority and its expertise, FERC will address whether the interconnection-wide planning happens in an open, transparent and non-discriminatory manner and results in service that is just and reasonable, secure, adequate and reliable. FERC will provide findings to DOE. The two agencies will meet as necessary to share relevant information and keep each other apprised of activities under the MOU.

If you have any questions concerning the material discussed in this client alert, please contact the following members of our clean energy and climate group:

Robert Fleishman	202.662.5523	<a href="mailto:rfleishman@cov.com">rfleishman@cov.com</a>
William Massey	202.662.5322	<a href="mailto:wmassey@cov.com">wmassey@cov.com</a>
Bud Earley	202.662.5434	<a href="mailto:bearley@cov.com">bearley@cov.com</a>

This information is not intended as legal advice, which may often turn on specific facts. Readers should seek specific legal advice before acting with regard to the subjects mentioned herein.

Covington & Burling LLP is one of the world's preeminent law firms known for handling sensitive and important client matters. This promotional communication is intended to bring relevant developments to our clients and other interested colleagues. Please send an email to [unsubscribe@cov.com](mailto:unsubscribe@cov.com) if you do not wish to receive future emails or electronic alerts. Covington & Burling LLP is located at 1201 Pennsylvania Avenue, NW, Washington, DC 20004-2401. © 2010 Covington & Burling LLP. All rights reserved.