

MEMORANDUM OF UNDERSTANDING
BETWEEN THE
U.S. DEPARTMENT OF ENERGY
AND
THE FEDERAL ENERGY REGULATORY COMMISSION

I. PURPOSE

The U.S. Department of Energy (Department or DOE) and the Federal Energy Regulatory Commission (Commission or FERC) (jointly, Participating Agencies) enter into this Memorandum of Understanding (Understanding or MOU) to set out their respective coordinated roles under existing authorities as lead Federal agencies for activities related to the Resource Assessment and Interconnection Planning project funded by the American Recovery and Reinvestment Act of 2009 (Recovery Act). Among the objectives of the project is to facilitate the development or strengthening of capabilities in each of the three interconnections serving the contiguous lower forty-eight States, to prepare analyses of transmission requirements under a broad range of alternative futures and develop long-term interconnection-wide transmission plans.

The Administration's announced commitment to implementing climate change policy includes challenges facing the electric system arising from the growing number of states with renewable portfolio standards. The resulting increase in variable generation from renewable sources is one aspect of how the Nation's electric system is changing. Distributed generation, energy storage, energy efficiency, demand resources and smart grid technologies also will play an increasing role in meeting the energy needs of consumers. 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. However, as mandated by law, these changes to the grid must not come at the expense of electric power system reliability.

Attainment of these goals, while ensuring reliability, will be facilitated by a comprehensive approach to electric transmission planning on an interconnection-wide basis.

II. ROLES OF THE PARTICIPATING AGENCIES

A. The mission of DOE includes advancing the national, economic, and energy security of the United States. The mission of DOE's Office of Electricity Delivery and Energy Reliability (OE) is to lead efforts to modernize the electric grid, enhance security and reliability of the energy infrastructure and facilitate recovery from disruptions to energy supply. OE also works to ensure that the Nation's energy delivery system is secure, resilient and reliable; identifies and examines barriers that hinder the efficient and secure operation of electric transmission systems; and protects national and economic security by ensuring a dependable electricity delivery system. OE also funds research to develop and deploy the next generation of models and other analytic tools needed to plan, operate, and maintain the reliability and security of more sophisticated transmission networks.

B. The Recovery Act appropriated \$80 million for transmission planning activities which are the subject of this MOU. These funds are to be used to conduct a resource assessment and an analysis of future demand and transmission requirements in consultation with FERC. OE, in coordination with FERC, is to provide technical assistance to the national and regional reliability entities, the States, and other transmission owners and operators for the formation of interconnection-based transmission plans.

C. FERC oversees the reliability of the bulk power system by establishing and enforcing reliability standards for every user, owner and operator in the United States (excluding Alaska and Hawaii) as described in section 215 of the Federal Power Act, as amended (FPA). As part of its regulatory oversight, FERC receives and reviews the short and long-term reliability and adequacy assessments of the power grid performed by the Electric Reliability Organization, its Regional Entities, the Planning Authorities, and the individual transmission organizations, generators, and utilities. FERC also regulates the transmission and sale for resale of electric

energy in interstate commerce for ultimate distribution to the public, as described in the FPA and other applicable statutes. The FERC has the authority under the FPA to ensure that the rates, terms and conditions of public utility transmission service in interstate commerce are just and reasonable and not unduly discriminatory or preferential. Under FERC regulations, public utility transmission providers are required to develop open and transparent, non-discriminatory transmission planning processes. These transmission planning processes provide for the involvement of states and interested stakeholders and the evaluation, on a comparable basis, of all alternatives (transmission, generation, demand resources) proposed to address transmission system upgrades and expansion needed for reliable, economic service.

III. ACTIVITIES

As DOE and the Commission are the Federal agencies concerned with transmission planning, they are the appropriate Federal agencies to ensure that electric sector planning is sufficiently coordinated, comprehensive, and adequate to meet and attain State and Federal goals and relevant statutory mandates. The Participating Agencies also recognize that opportunities for input from State agencies in transmission planning processes are critical to ensuring that these goals and mandates are met. The activities of DOE and the Commission with respect to their coordination for Recovery Act efforts for the development of the interconnection-wide plans are specified below.

A. Using the Recovery Act funds, DOE solicited, under applicable procurement law, applications to develop comprehensive interconnection-wide analyses and interconnection-wide plans. The objective of the Funding Opportunity Announcement (FOA) DE-FOA-0000068 is to facilitate the development or strengthening of capabilities in the Western Interconnection, the Eastern Interconnection, and the Texas Interconnection serving the lower 48 states of the United States, to prepare analyses of transmission requirements under a broad range of alternative scenarios and develop long-term interconnection-wide transmission expansion plans. OE requested applications through the DOE solicitation process to undertake a portfolio of analyses of transmission within the Western, Eastern and Texas interconnections and facilitate development of comprehensive long-term transmission plans. OE asked applicants to produce analyses and long-term plans collaboratively developed by the transmission providers (individual transmission operators, independent system operators, and regional transmission organizations) and representatives of stakeholders

~~(particularly State agencies, if they choose to participate) in its interconnection.~~

In consultation with the FERC, DOE sought applications that will support and greatly expand ongoing resource assessment and regional and interconnection-level transmission analysis and planning. Each interconnection-wide plan is to build on existing planning processes and identify in general terms whether and where major new transmission capabilities and corridors (across agencies and jurisdictions) will be needed. The funding awarded will support analyses and models that can assist transmission providers and stakeholders to evaluate whether and where transmission facilities are needed to meet reliability, efficiency and other planning objectives. For each interconnection, a balanced portfolio of electricity supply futures will be produced, and the transmission requirements associated with each scenarios will be determined.

DOE and the FERC agreed that applicants must offer and implement interconnection-wide analyses and planning that are developed and performed in a transparent and collaborative manner, and the study processes must be open to participation by state and federal officials, representatives from independent system operators (ISOs) and regional transmission organizations (RTOs), utilities, and relevant stakeholder bodies or non-government organizations (NGOs), including appropriate entities in Canada and Mexico. The Applicant must establish a multi-constituency steering group that will provide strategic guidance to the Applicant's analysts on the scenarios to be modeled, the modeling tools to be used, key assumptions for the scenarios, and other essential activities. DOE, in consultation with FERC, will provide the lead Federal position pertaining to the scope of the interconnection plans including priorities and the range of analytical scenarios to be used in the development of the plans. DOE will also consult and coordinate with FERC when working with the other interested Federal agencies, State and local planning entities, and appropriate Canadian and Mexican entities in the course of acting as the lead agency in developing the requirements for the analyses and interconnection-level plans.

DOE and the FERC agree that the long-term transmission plans to be developed by the Applicant shall satisfy all reliability standards that have been approved by the Federal Energy Regulatory Commission. In addition, while the stakeholder process will guide the scenarios and analyses to be performed, DOE and the FERC agree that studies should be performed of the key issues

~~related to reliable integration of variable and non-variable renewable resources into the~~
interconnection, energy efficiency, energy use management and conservation efforts, carbon prices and other factors that can affect the analyses produced by the collaborative planning processes. DOE and the FERC further agree that the long-term transmission plans should achieve and balance the following objectives, while maintaining reliability:

- a. Identify transmission system needs affecting multiple systems and analyze the economic and environmental effects of regional and interconnection-wide solutions to these needs.
- b. Consider all available technologies (to the extent that they may become commercially viable and economic) for electricity generation, energy storage, efficient transmission, end-use energy efficiency, demand resources, and management of transmission- and distribution-level facilities.
- c. Satisfy all current state and federal requirements (as of the date of the analysis underlying the plan(s)) for renewable energy goals, energy efficiency goals, and goals for reducing greenhouse gas emissions.
- d. Minimize the long-term costs of producing and delivering electricity to consumers.
- e. Minimize the overall long-term impacts of electricity supply activities on the environment.
- f. Provide a path for efficient grid development (e.g., build fewer but larger long-distance transmission lines).

DOE further intends to seek applications from entities to facilitate dialogue and collaboration among the states in the respective interconnections (or among state agencies within the Texas Interconnection) and thus enable them to develop more consistent and coordinated input and guidance for and participation in regional and interconnection-level analyses and planning. The results of the collaboratively-developed assessments and analyses will inform stakeholders concerning the need for major new long-distance transmission facilities and networks.

To support stakeholder participation, the modeling tools and databases developed and used under an award by the Applicant will be public, and all events and meetings of study groups shall be open.

B. Consistent with its authorities under the FPA and using its extensive expertise, the Commission will be the lead Federal agency, with appropriate input from DOE, for addressing whether the interconnection-wide planning process is non-discriminatory, open and transparent and otherwise results in service by public utility transmission providers that is just and reasonable, secure, adequate and reliable. As part of its responsibilities under sections 205 and

206 and section 215 of the FPA, the Commission as appropriate may address whether: (1) the proposed plans integrate the planning efforts of individual Transmission Planners, transmission operators, the Planning Authorities, ISOs and RTOs, the Regional Reliability Organizations or Regional Entities to identify regional and interconnection-wide solutions to needs affecting multiple systems; and, (2) the transmission systems proposed in the interconnection-level plans will be adequate and reliable. The Commission will provide its findings to the Department for use in evaluating the analyses and plans submitted, consistent with the Commission's rules and regulations.

C. The Participating Agencies will meet as necessary to share relevant information and keep each other apprised of the activities under this MOU. The Participating Agencies agree to exchange information with each other regarding the availability of technical, programmatic, and other information that would be useful in the area of electric transmission planning, and to promote and encourage a free flow of such information. Both Participating Agencies agree that privileged information is excluded from this MOU. As information is verified and found to be necessary or important to findings upon which significant conclusions and recommendations are based, the Participating Agency holding such information will take appropriate and timely steps to remove it from the privileged or otherwise restricted status. However, neither Participating Agency is expected to provide information to the other that is required by law to be withheld.

Each Participating Agency recognizes the need, on some occasions, to be able to accept and protect privileged information where such information could not be made available otherwise. It is recognized that the Participating Agencies may not be fully aware of the extent of each other's knowledge and thus, this Understanding requires only each Agency's best efforts and a reasonable degree of care in assuring that significant planning-related information is provided in a timely manner to the other Agency.

IV. MISCELLANEOUS

This MOU is strictly for internal management purposes for each of the Participating Agencies. It is not legally enforceable, does not expand or alter the scope of the Participating Agencies'

respective authorities, and shall not be construed to create any legal obligation on the part of either agency or private right or cause of action for or by any person or entity. This MOU does not limit the right of the Participating Agencies to take any other actions as to transmission planning within the scope of their statutory authorizations.

This MOU is not intended to be an enforceable agreement or contract on either Participating Agency, notwithstanding the occasional use of the term "agree" or the use of mandatory language such as "shall" or "will" in the Memorandum. In particular, insofar as this Memorandum indicates that a Participating Agency will take or refrain from taking a particular action in discharge of its statutory or regulatory responsibilities such an indication is intended only to reflect the Participating Agency's current policy in this regard. Since this Memorandum is not legally binding, the Participating Agencies may depart from its terms whenever it is deemed necessary or appropriate to do so in the discharge of its regulatory responsibilities, except that in the interests of cooperation each Participating Agency, if appropriate and practical, agrees to advise the other Participating Agency of any intention to depart from the terms of this Memorandum prior to doing so.

This Agreement in no way restricts either of the Parties from participating in any activity with other public or private agencies, organizations or individuals.

This Agreement is neither a fiscal nor a funds obligation document. Nothing in this Agreement authorizes or is intended to obligate the Parties to expend, exchange, or reimburse funds, services, or supplies, or transfer or receive anything of value.

All agreements herein are subject to, and will be carried out in compliance with, all applicable laws, regulations and other legal requirements.

V. PRINCIPAL CONTACTS

Each party hereby designates the following as the initial principal contact for the agency. This contact may be changed at the Participating Agency's discretion upon written notice to the other Participating Agency.

DOE: Assistant Secretary, Office of Electricity Delivery and Energy Reliability

Commission: Director of the Office of Electric Reliability

VI. TERM OF THIS UNDERSTANDING

This MOU shall take effect on the date of the last approving signature specified in Section VII, below. The MOU may be modified only upon the written agreement of the Participating Agencies. The MOU may be terminated 120 days after a Participating Agency provides written notice to the other Participating Agency.

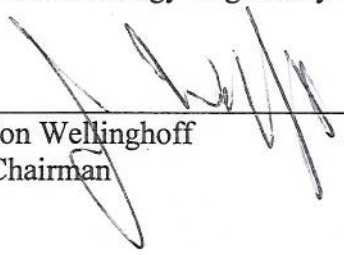
VII. SIGNATORIES

U.S. Department of Energy by:



Steven Chu
Secretary

Federal Energy Regulatory Commission by:



Jon Wellinghoff
Chairman