

MEMORANDUM OF
UNDERSTANDING

BETWEEN

THE FEDERAL ENERGY
REGULATORY COMMISSION

AND

THE HAWAII PUBLIC UTILITIES
COMMISSION

1. In recognition of the regulatory responsibilities and common interests of both the Federal Energy Regulatory Commission (FERC) and the Hawaii Public Utilities Commission (HPUC) and the benefits to both organizations that result from sharing information about regulatory experiences and practices, the FERC and the HPUC hereby declare their intent to cooperate in this Memorandum of Understanding (MOU).
2. This MOU identifies topics that the FERC and the HPUC intend to focus on in their initial exchange of information.
3. The initial topics under this MOU of interest to the FERC include the following areas:
 - i. Hawaii's successes and challenges associated with large-scale integration of renewable energy resources
 - ii. The value of distributed resources to the larger grid system in Hawaii
 - iii. Lessons learned in Hawaii with renewable integration, such as the limitations and barriers to optimum deployment of distributed resources including –
 - 1) Demand Response (DR)
 - 2) Energy Efficiency (EE)
 - 3) Distributed Generation (DG)
 - 4) Combined heat and power (CHP) and waste heat generation
 - iv. The Hawaii experience with batteries and other storage devices in large scale renewable integration
 - v. The role of smart meters in Hawaii's utility-scale photo-voltaic systems
 - vi. The experience on Maui with 70 MW of wind deployed in a 170 MW system
 - vii. The use of microgrids in Hawaii's Department of Defense facilities.
4. The initial topics under this MOU of interest to the HPUC include the following areas:
 - i. Transmission regulatory policy related to inter-island cable systems to interconnect either remotely sited generation (gen-tie) and island electrical grids (grid-tie):
 - 1) Development and operation of independent transmission companies
 - 2) Regulatory policies related to generator interconnections from remote sited generation (i.e., open access)
 - 3) Ratemaking practices related to independent transmission companies
 - 4) Order 1000 related issues applicable to the Hawaii situation (i.e., cost allocation among separate island utilities, "regional" planning)

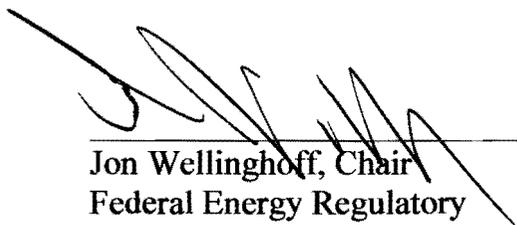
- ii. Establishment and enforcement of mandatory reliability standards
 - 1) Creation and oversight of a Hawaii electricity reliability organization
 - 2) Creation of open transparent processes to establish or modify existing reliability standards and interconnection requirements
 - 3) Critical infrastructure requirements
- iii. Regulatory issues associated with the import and utilization of natural gas in Hawaii
 - 1) Regulation of import terminal facilities
 - 2) Certification and regulation of gas transmission lines
 - 3) Gas pipeline safety issues
- iv. Policies to facilitate integration of renewable energy resources with Hawaii's island electrical grids
 - 1) Deployment of storage resources
 - 2) Ancillary services including unbundling and pricing as well as utilization of non-fossil generation resources
 - 3) Interconnection requirements for renewable energy resources including generator performance standards
 - 4) Bulk power system (generation and transmission) operational practices to facilitate greater renewable energy penetration
- v. Regulatory issues associated with development and deployment of demand response (DR).
 - 1) Types of DR applications and services
 - 2) Pricing methods for DR services
 - 3) Use of DR resources to provide ancillary services.

5. Cooperation under this MOU may include, but is not limited to, the following:
- i. Information sharing and discussion of energy issues and topics related to regulatory practices;
 - ii. Joint visits that could include the FERC, the HPUC, and other regulatory entities;
 - iii. Meetings, webinars, workshops, teleconferences and/or email exchanges;
 - iv. Studies on agreed-upon topics that could include the participation of experts in the industry; and
 - v. Training activities.

The FERC and the HPUC may decide to cooperate in other areas of mutual interest.

6. This MOU is not intended to be a binding contract enforceable in a court of law or in an administrative forum. It is intended only to establish a process for further cooperation between the governmental entities signing this document.

7. Nothing contained in this MOU requires either the FERC or the HPUC to take any action that would be inconsistent with any existing or future laws, regulations, and policy directives applicable to it. Activities by the FERC and the HPUC under this MOU are to be subordinate to their regulatory activities and interests and should be met depending on each commission's resources and priorities.
8. The FERC and the HPUC, unless otherwise decided upon, intend to bear their own share of financial costs of participating in the activities under this MOU. All activities are subject to approval of funding by each entity involved.
9. This MOU will take effect when signed by all the parties hereto. This MOU may be modified at any time by the mutual written agreement of the parties. The FERC or the HPUC may terminate the MOU upon thirty (30) days written notice to the other. During this period, the parties shall make good-faith efforts to resolve any disagreement.



Jon Wellinghoff, Chair
Federal Energy Regulatory
Commission

11/11/12

Date



Hermina M. Morita, Chair
Hawaii Public Utilities
Commission

11-11-12

Date