



Memorandum of Understanding
Between
The Forum of Regulators, India
and
The National Association of Regulatory Utility Commissioners, USA
Concerning Collaborations in the Area of
Large-scale Grid Integration of Renewable Energy

This Memorandum of Understanding (MOU) is between the Forum of Regulators, India and The National Association for Regulatory Utility Commissioners (NARUC), USA.

The Forum of Regulators, India is a Government of India entity, having its office at New Delhi, India (hereinafter referred to as “FOR”), consisting of Chairperson of Central Electricity Regulatory Commission (CERC) and Chairpersons of State Electricity Regulatory Commissions (SERCs). NARUC is the national association in United States representing the State Public Service Commissioners who regulate essential utilities.

This MOU is under the terms of a larger bilateral agreement on Energy Efficiency Commercialization and Innovation, which has been signed between Government of United States and Republic of India on 20th August, 2015. The line ministry on the Indian side is the Ministry of Power.

For the purposes of this MOU, FOR and NARUC are collectively herein referred to as the “Participants” or separately as the “Participant.”

Have reached the following understanding:

1. Objective

The objective of this MOU is to explore potential future collaboration among the Participants in the field of Renewable Energy sources including, but not limited to grid integration of variable renewable energy (VRE) and associated frameworks.

2. Areas of Planned Cooperation

- i) The Participants express their intention to promote information exchanges in the following areas:
- Design of frameworks for RE procurement and relevant international experience;

- Regulatory interventions for renewables development, such as state and national RPOs, REC framework;
- Load forecasting techniques and processes;
- Contracting/Power Purchase Agreements;
- Renewables forecasting methods and how RE forecasts are used by operators;
- RE integration regulations and balancing using gas, storage, and demand-side approaches; energy imbalance markets;
- Regulatory framework for ensuring grid discipline by generators including deterrents in the form of penalty for breach of discipline;
- Ancillary services including physical mechanisms, regulations and markets;
- Data analytics and cost-benefit analysis for regulatory decision-making.

The scope of the above activities and cooperation may be changed or extended to other areas by written consent of the Participants.

- ii) The above activities and cooperation should be developed by:
- Peer-to-peer exchanges, visits and exchanges of regulators, practitioners, and experts;
 - Peer review of regulatory proposals;
 - Training focused on specific regulatory reform practices;
 - Joint workshops and seminars;
 - Preparation of focused analyses to facilitate regulatory decision-making.

3. Commencement, Modification and Discontinuation

- i) Cooperative activities under this MOU will commence from the date of its signature of the Participants and will continue for a five (5) year period, unless discontinued in accordance with paragraph (ii) of this Section.
- ii) The Participants may discontinue this MOU at any time in writing. A Participant that wishes to discontinue its participation in this MOU should endeavor to provide at least thirty (30) days written notice to the other Participants.
- iii) This MOU may be modified in writing by mutual consent of the Participants, and may be extended for additional periods by mutual written content of the Participants.

4. Exchange of Information

- i) The Participants do not expect to exchange any information that is considered business-confidential. If this expectation changes, the Participants may enter into a written non-disclosure agreement.
- ii) The Participants intend that nothing in this MOU should be interpreted to restrict their rights to make public any information or results of their collaboration and cooperation hereunder.

5. Designated Representatives

- i) To administer the implementation of this MOU, each Participant should designate one principal coordinator, through whom all requests and plans of that Participant are to be made.

- ii) The designated representatives may hold meetings at least twice every year to discuss matters related to cooperation and review progress under this MOU.
- iii) The designated representatives for NARUC and FOR to assist in the implementation of this MOU are listed below:

NARUC

- Erin B Hammel, Director International Programs, NARUC

CERC

- Secretary, CERC
- Head/Joint Chief (Regulatory Affairs), CERC

- iv) **Representatives from Ministry of Power shall participate in information exchanges programmes and various activities to be organized by NARUC as per this MoU.**

6. General Considerations

- i) Each Participant should conduct the activities contemplated by this MOU in accordance with all applicable laws, regulations and other requirements to which it is subject, including, without limitation, export control laws and environment, health and safety laws and regulations.
- ii) The conduct of cooperative activities contemplated by this MOU is subject to the availability of funding, personnel, and other resources.
- iii) This MOU does not create any legally binding obligations.
- iv) Any difference arising out of the interpretation on application of this MOU shall be settled amicably by mutual consultation or negotiation between the Participants.

Signed aton in two (2) originals in the English language.

NATIONAL ASSOCIATION OF
REGULATORY UTILITY
COMMISSIONERS

By: 
Name: Greg R. White

Title: Executive Director
Date 8-10-2017

THE FORUM OF REGULATORS,
INDIA

By: 
Name: Shri Sanoj Kumar Jha,

Title: Secretary, CERC/FOR
Date 10th August, 2017