

# MEMORANDUM OF UNDERSTANDING

among

The Regents of the University of California,

The California Energy Commission,

The California Public Utilities Commission,

and

The Forum of Regulators, India

Concerning Collaborations in the Areas of Electricity Demand and Supply and Efficiency Improvement

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# Concerning Collaborations in the Areas of Electricity Demand and Supply and Efficiency Improvement

This Memorandum of Understanding (MOU) is among The Regents of the University of California, in its capacity as the manager and operator of the Lawrence Berkeley National Laboratory (hereinafter referred to as "LBNL"), the California Energy Commission, the California Public Utilities Commission, and the Forum of Regulators, India. LBNL is a U.S. Department of Energy National Laboratory managed and operated by The Regents of the University of California pursuant to Contract No. DE-AC02-05CH11231 (Contract 31). The California Energy Commission is a California Government entity, having its office at Sacramento, California (hereinafter referred to as "CEC"). The California Public Utilities Commission is also a California Government entity, having its office at San Francisco, California (hereinafter referred to as "CPUC"). The Forum of Regulators, India is a Government of India entity, having its office at New Delhi, India (hereinafter referred to as "FOR").

For purposes of this MOU, LBNL, CEC, CPUC and FOR are collectively herein referred to as "Participants" or separately as "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 energy sector planning from various perspectives, including but not limited to providing energy access to all, ensuring affordability, enhancing energy security, and meeting environmental goals.

# 2. Areas of Planned Cooperation

- i) The Participants express their intention to endeavor to promote information exchanges and joint research and dissemination activities in the following areas:
  - a. Energy efficiency and demand-side management (DSM) policies and programs including consumer choice and satisfaction in retail supply;
  - b. Integrated resource planning with separation of carriage and content in the distribution of electricity;
  - c. Regulatory framework for facilitating DSM;
  - d. Training of the staff of the regulatory commissions and the utilities in the area of DSM:
  - e. Policy analysis for assessment of energy sector alternatives;
  - f. Renewable energy grid integration, policies and programs.

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:
  - a. Exchange of information, mainly data and publications;
  - b. Visits and exchanges of researchers and experts;
  - c. Joint workshops and seminars on energy issues that are of common interest to the Participants;
  - d. Implementation of future collaborative research, with any such future collaborative research to be undertaken pursuant to an appropriate written agreement therefore.

### 3. Commencement, Modification and Discontinuation

- i) Cooperative activities under this MOU may commence from the date of its signature of all Participants and continue for a five (5) year period, unless discontinued in accordance with paragraph ii of this Section 3.
- 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.

- i) The Participants do not expect to exchange any information that is considered business-confidential. If this expectation changes, the Participants intend to enter into
- 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

- 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
- ii) The designated representatives may hold meetings when necessary to discuss matters
- 4. Exchange of Information

  i) The Participants do not expect to exchange any information that is considusiness-confidential. If this expectation changes, the Participants intend to enter a written non-disclosure agreement.

  ii) The Participants intend that nothing in this MOU should be interpreted to restrict trights to make public any information or results of their collaboration and coopera hereunder.

  5. Designated Representatives

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

  ii) The designated representatives may hold meetings when necessary to discuss materiated to cooperation under this MOU.

  iii) The designated representative for LBNL is Ashok Gadgil, the Environmental Entrechnologies Division (EETD) Director, or another designated LBNL prince coordinator. Dr. Jayant Sathaye, Senior Scientist and Strategic Advisor, Internatic Energy Studies Group (IES), and Dr. Amol Phadke, Deptry Leader, Internatic Energy Studies Group (IES), and Dr. Amol Phadke, Deptry Leader, Internatic Energy Specialist; for the CPUC Carol Brown, Chief of Staff; and for the Foundard Considerations

  i) Bach Participant should conduct the activities contemplated by this MOU accordance with all applicable laws, regulations and other requirements to which subject, including, without limitation, export control laws and environment, he and safety laws and regulations.

  ii) The conduct of cooperative activities contemplated by this MOU is subject to availability of funding, personnel, and other resources.

  iii) Each Participant is to be responsible for the costs it incurs in participating cooperative activities under this MOU. iii) The designated representative for LBNL is Ashok Gadgil, the Environmental Energy Technologies Division (EETD) Director, or another designated LBNL principal coordinator. Dr. Jayant Sathaye, Senior Scientist and Strategic Advisor, International Energy Studies Group (IES), and Dr. Amol Phadke, Deputy Leader, International Energy Studies Group (IES), are to assist the above EETD Senior Scientists in this role. The designated representatives for the CEC is Brenda Sturdivant, Associate Energy Specialist; for the CPUC Carol Brown, Chief of Staff; and for the FOR,

- 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
- The conduct of cooperative activities contemplated by this MOU is subject to the
- iii) Each Participant is to be responsible for the costs it incurs in participating in

iv) This MOU does not create any legally binding obligations.

Signed at Berkeley, (A on Mary 28, 2014 in four (4) original in the English language.

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, LAWRENCE BERKELEY NATIONAL LABORATORY		THE FO	Come Prodem
Ву:		Ву:	em vasan
Name:	Paul Alivisatos	Name:	Gireesh B. Pradhan
Title:	Director, Lawrence Berkeley National Laboratory, USA	Title:	Chairman, Forum of Regulators, India
Date	March 28, 2014	Date	March 28, 2014
Assisted By:		Assisted By:	
By: Name:	Jayant Sathaye Senior Scientist and Strategic	By: Name:	Sushanta K. Chatterjee
Title:	Advisor International Energy Studies Group	Title:	Head of Department, CERC/ FOR
THE CALIFORNIA ENERGY COMMISSION, SACRAMENTO, CALIFORNIA By:		THE CALIFORNIA PUBLIC UTILITIES COMMISSION, SAN FRANCISCO, CALIFORNIA By:	
Name:	Robert Weisenmiller	Name:	Michael R. Peevey
Title:	Chairperson, CEC	Title:	President, CPUC
Date Assisted By: Name:	Morely 28, 2014  Drew Bohan	Date	Moule 28, 2014  Au Canon  Paul Clanon
Title:	Chief Deputy Director, CEC		Executive Director, CPUC