



## PROJECT STATUS REPORT FORM

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| <b>Project Number:</b> PGT-06-03 Best Practices for Demand Side Management Activity Plan  | <b>Task Force:</b> Power Generation & Transmission Task Force |
| <b>Title of Project:</b> Promoting Clean Energy Options in the Electricity Supply and Demand Sector in India  |   |
| <b>Lead Partner Country:</b> USA and India  |   |
| <b>Participating Partner Countries and Organizations:</b> All   |   |
| <b>Project Location</b> (Country, State/Province, City): Indian state of Maharashtra  |   |
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| <b>Project Start Date:</b> September 2007   | <b>Date of Project Status Update:</b> October 8, 2009         |
| <p><b>Actions Since Last Update:</b> As a result of extensive training and workshops since the project began in September 2007, in April 2008 the Maharashtra Electricity Regulatory Commission (MERC) approved a large budget for Demand Side Management (DSM) initiatives in conjunction with four major utility companies in the state. This was the first budget for DSM to be implemented in India and will make a significant contribution to energy efficiency in the state. With this funding, Reliance Energy, one of the largest utility companies in India, has completed extensive research on their load profile and has designed a program to promote the replacement of inefficient lighting in Mumbai.</p> <p>MERC issued a guidance document in May 2009 for general public comments. LBNL reviewed and assisted in the development of this document. Public comments were sent to MERC by organizations such as Prayas. The document proposes a 5-year DSM plan for Maharashtra to follow and implement. MERC is also issuing a new tariff order (Annual Revenue Requirement (ARR)) which will include additional funds for DSM programs.</p> <p>Delhi Electricity Regulatory Commission (DERC) has allocated \$7-8 million (Rs. 35 crores) for DSM programs in its June 2009 ARR. It provides guidance to the two major utility companies in Delhi to begin DSM programs. LBNL provided a draft order document to DERC, and is now assisting the utility companies in the implementation of DSM Programs both at the mass market and large customer level. LBNL staff also met twice with Sheila Dixit, Delhi Chief Minister in the past two weeks to explain the DSM opportunities in the state. As a consequence, she has issued an order to construct white roofs on all new government building flat roofs in Delhi. LBNL is helping write a guidance document which is to be prepared in the next 3 months.</p> |   |



LBNL is working with the Director General of the Bureau of Energy Efficiency (BEE) to help develop a multi-state DSM program in which both BEE and state regulatory commissions will participate. This is crucial since utility companies and customers need some confidence in the costs and viability of DSM technologies that they will be using.

LBNL staff has also visited the regulatory commissions and utility companies in the states of West Bengal, Chhattisgarh, Madhya Pradesh and Gujarat in June. Each state has expressed an interest in pursuing DSM programs, and we plan to work with them in the future.

LBNL gave a 2.5 hour DSM presentation to the FOR in June, which was followed by a 5-day DSM workshop. It was organized by the National Power Training Institute (NPTI) with support from the Forum of Regulators (FOR) in mid-June. It was a hands-on workshop which was attended by about 45 participants from 15 state commissions and utility companies and received very high marks from the participants.

The DSM program training program was followed by a training program on load research at NPTI.

Finally, the APP DSM meeting in Berkeley was attended by about dozen participants from India. These included commissioners, senior FOR and Ministry of Power staff, and staff from the Central Electricity Authority.

**Deliverables Since Last Update:**

1. Several CDs were compiled that provide information about DSM Load research, economic analysis, and monitoring and verification methodologies and past experiences.
2. Based on LBNL technical support and training, funding was approved by the respective commissions in the two states for DSM programs. Total funding amounts to \$20 million in Maharashtra and \$8 million in Delhi.
3. Technical assistance was provided to Delhi and Maharashtra utility companies to develop DSM projects in home, business, and street lighting, water pumping, water heating, refrigeration, and commercial buildings. Projects were submitted by utility companies to the commissions in each state and are awaiting commission approval.
4. A multi-state DSM program is being designed and a discussion paper is under preparation to evaluate alternative approaches for such a scheme.

**Date Completed:** Ongoing program.



**Milestones Reached:**

1. Signed MOUs with the Delhi Electricity Regulatory Commission and the Forum of Regulators (FOR) in March 2009. FOR is composed of the chairpersons of state electricity regulatory commissions.
2. DERC issued an order and allocated \$7-8 million for initiating DSM programs.
3. Conducted one-week training programs on DSM in March, June and September 2009.
4. Initiated national scale DSM programs in collaboration with BEE in August 2009.
5. Delhi government approved a program on white roofs based on consultation with LBNL staff.
6. Utility companies have submitted program designs for commission approval in each state.

**Next Steps:**

Assist utility companies and regulatory commissions in implementing DSM programs in Delhi and Maharashtra, and initiating programs in other states in coordination with BEE

Organize presentation material for the Dec, 10 side event at Copenhagen on US-India DSM cooperation.

**Proposed Project End Date:** TBD

**Project Already Complete:**  Yes  No

**Other Information:**

This project will provide technical assistance and training to build capacity in electricity regulatory commissions, public and private utility companies, consumers, and industries that manufacture energy efficient equipment. It will use Memorandums of Understanding between the Maharashtra and Delhi Electricity Regulatory Commission, Forum of Regulators, India, California Energy Commission, California Public Utilities Commission, and LBNL to (1) target power sector investments in supply and demand side options and (2) design, implement, monitor, and evaluate DSM policies and programs.