

## INDIA

# Madhya Pradesh Power Sector Investment Program



India's goal to establish universal power supply at an affordable price by 2012 required an estimated 100,000 megawatts (MW) of new generating capacity, as well as downstream networks to evacuate, transmit, and distribute the power. The main policy instrument in the power sector is the National Electricity Policy, which calls for power for all (including rural electrification) by 2012, reduced aggregate technical and commercial losses, better cost recovery, greater private sector participation, full development of hydropower, use of information technology for greater operational efficiencies, and protection of consumers' interests.

In December 2001, the Asian Development Bank (ADB) approved the Madhya Pradesh Power Sector Development Program that combined program lending with physical

investment financing that addressed key reform areas. It also increased delivery capacity of the power sector, including substantial reduction in transmission losses.

The project is in line with the strategic directions of ADB's South Asia Department. The strategy focuses on sustainable infrastructure, climate change mitigation and adaptation, human development, regional cooperation and integration, public-private partnership, and good governance.

To date, reform of the Madhya Pradesh power sector has progressed within the policy and legislative framework of India. The Government of Madhya Pradesh has demonstrated its commitment to reforms and has made encouraging progress. Tranche 1 of the Madhya Pradesh Power Sector Investment

## PROJECT RESULTS

**Increased transmission capacity.** At project completion, the transmission capacity increased to 8,170 MW in early 2012, and 8,809 MW in September 2012, that enabled meeting the peak demand of 8,546 MW in 2012. In 2012, system availability increased to 99.23% (from 97.5% in 2009) and technical losses decreased to 3.51% (from 5.2% in FY2006). The project's components were implemented based on the designs as originally formulated at appraisal, showing that the project design and formulation were appropriate and relevant.

The project helped to meet demand for power evacuation from existing stations, and for wheeling and transferring power, which ensured that the transmission system established under the project would be used.

**More efficient transmission sector.** The project sought to make the transmission sector more efficient. It will continue to be relevant in the future, primarily as a result of astute planning of the transmission system within Madhya Pradesh, and was highly relevant to the objectives of the Governments of Madhya Pradesh and India for the power sector.

Program was the first assistance provided by the investment facility. The output of the subproject was the construction of transmission lines for power evacuation and strengthening of transmission systems to meet the energy demand growth in Madhya Pradesh.

The main objectives of the Tranche 1 subproject were to improve the operational efficiency, voltage profile and power delivery capacity of the Madhya Pradesh Power Transmission System; to meet various parameters as defined in the Grid Code issued by the Madhya Pradesh Electricity Regulatory Commission after implementation of this scheme; and to create new 220 kilovolts (kV) and 132 kV substations and associated transmission lines to reduce overloading on the 132 kV and 33 kV systems.



Transmission capacity increased to 8,170 MW in early 2012, and 8,809 MW in September 2012, that enabled meeting peak demand.



The project will continue to be relevant in the future as a result of astute planning of the transmission system within Madhya Pradesh.

The investment program financed key components of the Madhya Pradesh transmission investment program during 2007–2012, which was based on building sufficient capacity for evacuation of power from existing and planned power stations and substations, and reliably and efficiently delivering power to consumers. The construction of new transmission lines was intended to remove constraints to power flow and to provide additional operational flexibility to Madhya Pradesh Power Transmission Company (MPTRANSCO) in its role as system operator in Madhya Pradesh.

**The project increased transmission capacity, which enhanced system availability and reduced technical losses**

## PROJECT AT A GLANCE

**Cost and financing:** Ordinary capital resources, \$106 million; Counterpart, \$11 million; Others, \$26.5 million

**Project approval date:** 4 April 2007

**Project themes:** Sustainable economic growth, governance, sector-wide capacity development, institutional and financial restructuring, and private sector development

**Status of project implementation:** Completed

**Loan closing date:** 31 January 2013

**Executing agency:** Madhya Pradesh Power Transmission Company

## FOR INFORMATION

India Resident Mission  
South Asia Department  
Project Officer: Jyotirmoy Banerjee  
jbanerjee@adb.org

Link to South Asia Project Briefs:  
<http://www.adb.org/publications/series/south-asia-project-briefs>

Sources: Project Data Sheet. <http://www.adb.org/projects/32298-023/main> and <http://www.adb.org/projects/32298-013/main>; ADB. 2013. *Completion Report: Madhya Pradesh Power Sector Investment Program (Tranche 1) in India*. Manila. <http://www.adb.org/projects/documents/mff-madhya-pradesh-power-sector-investment-program-tranche-1-pcr>; ADB. 2007. *Report and Recommendation of the President to the Board of Directors: Proposed Loan for the Madhya Pradesh Power Sector Investment Program in India*. Manila. <http://www.adb.org/projects/documents/madhya-pradesh-power-sector-investment-program-rfp>



Creative Commons Attribution 3.0 IGO license (CC BY 3.0 IGO)

© 2015 ADB. The CC license does not apply to non-ADB copyright materials in this publication.

Publication Stock No. ARM146825