# **Project Summary Information (PSI)**

Project No.: 000006

Project Name	Transmission System Strengthening Project (Tamil Nadu)	
Country	Republic of India	
Sector	Energy - Power	
Project No	000006	
Borrower	Power Grid Corporation of India Limited (POWEGRID)	
Implementation Agencies	POWERGRID	
Environmental and Social Category	Category B	
Date of PSI prepared or updated	February 15, 2017	
Estimated Date of Board Consideration	June 2017	
Concept Decision	Approved	

#### I. Introduction

Being one of the world's largest economies, India has made tremendous progress on many fronts in past decade. It has a nominal gross domestic product (GDP) of 2,051 billion US dollars and around 1.3 billion people in 2015, and also performed relatively good in the recent global economic slowdown – its GDP growth was 7.3% in fiscal year 2014/15 (FY2014/15), and is projected at 7.3% in FY2015/16 and 7.5% in FY2016/17 (at market prices). Looking ahead, India's medium-term economic outlook is expected to be positive and characterized by continued high GDP growth rate.<sup>1</sup>

Insufficient supply of infrastructure has been inhibiting India's economic growth potential. At present around one third of rural population still lack access to paved roads, the railway network is outdated, and ports and airports have inadequate capacity, etc. Although being one of the leading developing countries in providing electricity to both rural and urban populations, owing to its large population, India still has by far the world's largest number of households without electricity. To mitigate the development constraints, the Government of India (the Government) has prioritized infrastructure development, particularly electricity and transport, in its 12<sup>th</sup> Five Year Plan (2012-2017).<sup>2</sup>

The Government has been scaling up investments in the generation, transmission, and distribution subsectors to address the issues. As of 31 January 2016, India had an installed generating capacity of 288 gigawatt (GW), of which 38.8 GW was renewable energy.<sup>3</sup> India's national transmission grid is divided into five regions, i.e. Northern, Eastern, Southern, Western, and Northeastern regions. Southern region has been facing serious power supply shortage, mainly due to: (i) delay of anticipated generating projects, and (ii) insufficiency of gas supply for existing gas projects. Some estimates indicate that as of today maximum power demand of Southern region alone is about 39 GW. In spite of import capacity of approximately 5.9 GW from the north-east-west grid, the supply deficit in Southern region is still around 3.4 GW. The proposed Project is going to help mitigate the power supply deficit in Southern region.

<sup>&</sup>lt;sup>1</sup> International Monetary Fund (IMF), 2016. Country Report No. 16/75: Press Release (No. 16/85) – IMF Executive Board Concludes 2016 Article IV Consultation with India. March 2, 2016.

<sup>&</sup>lt;sup>2</sup> Government of India, Planning Commission. 2013. Twelfth Five Year Plan (2012-2017). New Delhi, India.

<sup>&</sup>lt;sup>3</sup> Government of India, Central Electricity Authority. 2015. All India Installed Capacity of Power Stations. New Delhi, India.

## II. Project Objective and Expected Results

The objective of the Project is to enhance capability of electricity supply in Southern Region. The impact of the Project will be increased availability and sustainability of power supply in India.

### **III.** Project Description

The Project is a subset of the "HVDC Bi-pole Link between Western Region (Raigarh, Chhattisgarh) and Southern Region (Pugalur, Tamil Nadu) – North Trichur (Kerala)", which comprises 3 related schemes to expand the interstate transmission network in western and southern India.

- Scheme 1: a +800 kV HVDC link from Raigarh (Chhattisgarh, Western Region) to Pugalur (Tamil Nadu, Southern Region).
- Scheme 2: 400 kV transmission segments from Pugalur to 5 other grid substations in Tamil Nadu state.
- Scheme 3: +320 kV HVDC link from Pugalur (Tamil Nadu) to Trichur (Kerala).

The 3 schemes combined will be able to wheel 6.0 GW of power from Chhattisgarh State to the Pugalur hub, then transfer 4.0 GW into Tamil Nadu and 2.0 GW into Kerala. Financing from the Asian Infrastructure Investment Bank (the Bank) is proposed only for the 400 kV lines included in Scheme 2 (the Project), while the related substations (and Schemes 1 and 3) have been financed by the Asian Development Bank (ADB).

#### IV. Environmental and Social Category

As per the Bank's Environmental and Social Policy, the Project is classified Environmental and Social Category B.

#### V. Estimated Project Cost and Financing Source

The Project is estimated to cost US \$303.5 million. The Government has requested a loan of US \$100 million from the Bank and a loan of US \$50 million from ADB to help finance the Project (ADB's Loan No. and Title: 3365-IND: Green Energy Corridor and Grid Strengthening Project). Any shortfall in the funds required would be covered by POWERGRID.

Sources	Amount (US \$ million)	Share of Total (%)
AIIB	100.00	32.9
ADB	50.00	16.5
Powergrid	153.50	50.6
Total	303.50	100.0

#### VI. Implementation

The implementation period of the Project will be 4 years (January 1, 2017 – December 31, 2020).

#### **Contact Point:**

### AIIB:

Hongliang Yang Team Leader/Senior Investment Operations Specialist Department of Investment Operation B-9 Financial Street, Beijing, China

Email: <a href="mailto:hyang@aiib.org">hyang@aiib.org</a>

#### **Borrower:**

Mr. Upendra Pande General Manager, Corporate Planning Power Grid Corporation of India Ltd.

Gurgaon 122 001, India Tel.: +91 124 2571987 Fax: +91 124 2571991

Email: upande@powergridindia.com