

# INTEGRATED SAFEGUARDS DATA SHEET CONCEPT STAGE

Report No.: ISDSC15423

**Date ISDS Prepared/Updated:** 23-Sep-2015

**Date ISDS Approved/Disclosed:** 21-Sep-2015

## I. BASIC INFORMATION

### A. Basic Project Data

<b>Country:</b>	India	<b>Project ID:</b>	P154283
<b>Project Name:</b>	Shared Infrastructure for Solar Parks (P154283)		
<b>Task Team Leader(s):</b>	Mohua Mukherjee		
<b>Estimated Appraisal Date:</b>	23-May-2016	<b>Estimated Board Date:</b>	23-Aug-2016
<b>Managing Unit:</b>	GEE06	<b>Lending Instrument:</b>	Investment Project Financing
<b>Sector(s):</b>	Transmission and Distribution of Electricity (20%), Other Renewable Energy (80%)		
<b>Theme(s):</b>	Infrastructure services for private sector development (80%), Other public sector governance (20%)		
<b>Financing (In USD Million)</b>			
<b>Total Project Cost:</b>	400.00	<b>Total Bank Financing:</b>	200.00
<b>Financing Gap:</b>	0.00		
<b>Financing Source</b>		<b>Amount</b>	
Borrower		200.00	
International Bank for Reconstruction and Development		200.00	
Total		400.00	
<b>Environmental Category:</b>	B - Partial Assessment		
<b>Is this a Repeater project?</b>	No		

### B. Project Objectives

The proposed development objective is “to develop solar park internal infrastructure in order to mobilize investment for setting up of utility-scale solar energy generation in the country”.

### C. Project Description

GoI is specifically targeting 20GW of solar power from such solar parks and has allocated solar

parks in different states to ADB and the World Bank, respectively. During the identification phase, consultations about the Bank financing going to solar parks were carried out with various stakeholders like MNRE, SECI and relevant state agencies. It was requested that the World Bank should fund internal infrastructure in the selected solar parks along with building capacity of the involved stakeholders (SECI and JVs).

Principally, the proposed project will have the following two components:

(a) Solar Park Infrastructure (Estimated Cost - US\$ 195 million). This will cover financing for shared infrastructure such as security, access roads, water supply and drainage, telecommunications, and pooling stations (with 220/66/33 kV or as may be suitable switchyard and respective transformers) inside the solar parks and transmission lines connecting these internal pooling stations to 400/220 kV sub-station (to be located by POWERGRID or STU at the periphery of the solar park for evacuation of power to either National Grid or the state grid). Solar project developers will be responsible for the interconnection of each plot in the solar park with pooling stations through suitable voltage underground or overhead cable.

The first set of Solar Parks, to be financed under this proposed project, has been identified at Pavagada (Tumkur District) in Karnataka (the land is adequate to support total solar generation capacity of 2000 MW) and Rewa Solar Park in Madhya Pradesh (the land to support total solar generation of 750MW has been identified). Additional parks may also be identified in these states during the course of project preparation. Further, the solar parks are also being identified in other states, especially Andhra Pradesh (AP) and Telangana, under MNRE solar park scheme that will be supported appropriately for park development.

(b) Technical Assistance (Estimated Cost - US\$ 5 million). The technical assistance will be towards the following activities:

(i) Institutional Strengthening of SECI and JVs: SECI was formed in 2011 as the main agent for the management and implementation of the JNNSM Phase II. As part of this mandate, SECI is to invest in JV Companies for solar power plants and solar site developments. But given the challenge of the massive solar deployment in India by 2022, SECI's organization and institutional practices need to be strengthened. Similarly, SNAs and JVs, which have just been formed, are also not fully equipped to take on the challenges of meeting their mandate in solar energy. The Technical Assistance component will aim to enhance core competencies of these organizations across functions such as human resource, project management and monitoring, procurement and contract management, operations and maintenance, financial management and implementation of enterprise wide IT based on the comprehensive business plan/capacity building and institutional strengthening plans to be carried out during the preparation of the project.

(ii) Project implementation support to SECI and JVs: This component will provide project management support in implementation of the investment components indicated above. This will entail setting up of project management unit (PMU) within MNRE or SECI to facilitate coordination between different agencies and to supplement project implementation wherever necessary. For instance, in Karnataka where a JV between Karnataka Renewable Energy Development Limited (KREDL) and SECI has been formed to oversee the development of solar parks in the state, is keen on getting exposure to the latest tools and technologies in the area of solar power development and using the association with the Bank to improve its technical and organizational capacity as well as adopting the highest standards of safeguards and fiduciary compliance and management. The specific

interventions will be designed and agreed with respective implementing agencies during project preparation.

#### **D. Project location and salient physical characteristics relevant to the safeguard analysis (if known)**

The first set of Solar Parks, to be financed under this proposed project, has been identified at Pavagada (Tumkur District) in the state of Karnataka (the land is adequate to support total solar generation capacity of 2000 MW) and Rewa Solar Park in the state of Madhya Pradesh (the land to support total solar generation of 750MW has been identified). Additional parks may also be identified in these states during the course of project preparation. Further, the solar parks are also being identified in other states, especially Andhra Pradesh (AP) and Telangana, under MNRE's Solar Park Scheme, that will be supported appropriately for development of shared infrastructure in the identified parks. During the project preparation, MNRE may add more states to the given list. Additional salient features of sites with key environmental and social aspects will be added as the locations are finally firmed up.

The environmental and social impacts will be mostly restricted to the solar parks area and its immediate surroundings. The transmission lines that will evacuate the power to the National Grid are also integral to the project and are being handled through another project supported by the Bank for the initial set of parks being funded under the Project. While government plans to utilize state-owned unproductive land for solar parks to the extent possible, resettlement of communities settled on government land may be required in one or more of the four states that have been assigned to the World Bank for support to solar park development. A detailed safeguards baseline/assessment study will be carried out to assess the magnitude of such aspects and mitigation plan will be charted out accordingly. In some cases, leasing of privately owned land is expected for solar parks and the transmission infrastructure. In Karnataka, the joint venture between SECI and State Nodal Agency of Karnataka (Karnataka Renewable Energy Development Limited, KREDL) plans to lease the land required for solar parks for 25 years from private landowners in Pavagada Taluk in Tumkur District of the state of Karnataka. For the Rewa solar park, safeguards baseline study already stands completed and detailed assessment of impacts and development of mitigation measures into a comprehensive environmental and social management plans will now be undertaken. Appropriate baseline/assessment studies will also be carried out for additional states and sites that will be included in the project.

#### **E. Borrowers Institutional Capacity for Safeguard Policies**

Though overall management of the project resides with SECI, for the solar park sites, safeguard actions will be managed by the respective state entities. These state entities are recently formed and have not implemented investment projects supported by the World Bank. Hence their capacity in safeguard policies implementation is weak. Moreover, project will require large land tracts to develop these solar parks. During preparation, an Environmental and Social Assessment (ESA) will be carried out to understand the impacts and an Environmental and Social Management Framework (ESMF) will be developed, which in turn will be applied to each solar park site. Based on impact evaluation, an Environmental Management Plan (EMP) as required will be put in place for each site.

During project preparation, strengthening of safeguard capacities of the implementing agencies, will be carried out through deployment of qualified and experienced Safeguard Specialists. A close and intensive engagement with stakeholders during the preparation will help in identifying the gaps on different aspects and accordingly prepare a suitable capacity building and action plan to address those gaps.

## F. Environmental and Social Safeguards Specialists on the Team

Gaurav D. Joshi (GENDR)

Parthapriya Ghosh (GSURR)

Pyush Dogra (GENDR)

## II. SAFEGUARD POLICIES THAT MIGHT APPLY

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	
Natural Habitats OP/BP 4.04	TBD	The relevance and applicability of this policy for the solar parks covered under this project will determined during project preparation. As necessary, appropriate mitigation measures will be put in place.
Forests OP/BP 4.36	TBD	The relevance and applicability of this policy for the solar parks covered under this project will determined during project preparation. As necessary, appropriate mitigation measures will be put in place.
Pest Management OP 4.09	No	
Physical Cultural Resources OP/BP 4.11	TBD	The relevance and applicability of this policy for the solar parks covered under this project will determined during project preparation. As necessary, appropriate mitigation measures will be put in place.
Indigenous Peoples OP/BP 4.10	Yes	
Involuntary Resettlement OP/ BP 4.12	Yes	
Safety of Dams OP/BP 4.37	No	
Projects on International Waterways OP/BP 7.50	No	
Projects in Disputed Areas OP/ BP 7.60	No	

## III. SAFEGUARD PREPARATION PLAN

**A. Tentative target date for preparing the PAD Stage ISDS:** 30-Nov-2015

**B. Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing<sup>1</sup> should be specified in the PAD-stage ISDS:**

The project will prepare site specific Environmental and Social Management Plans including Environmental Management Plan; Resettlement Action Plan and Indigenous Peoples Plan (if required). The project will also prepare Environmental and Social Management Framework for the project. These documents will be prepared by February 2016.

## IV. APPROVALS

<sup>1</sup> Reminder: The Bank's Disclosure Policy requires that safeguard-related documents be disclosed before appraisal (i) at the InfoShop and (ii) in country, at publicly accessible locations and in a form and language that are accessible to potentially affected persons.

Task Team Leader(s):	Name: Mohua Mukherjee	
<b><i>Approved By:</i></b>		
Safeguards Advisor:	Name: Maged Mahmoud Hamed (SA)	Date: 23-Sep-2015
Practice Manager/ Manager:	Name: Julia Bucknall (PMGR)	Date: 25-Sep-2015