



# Combined Project Information Documents / Integrated Safeguards Datasheet (PID/ISDS)

Appraisal Stage | Date Prepared/Updated: 12-Apr-2018 | Report No: PIDISDSA23992



**BASIC INFORMATION**

**A. Basic Project Data**

Country India	Project ID P162086	Project Name Jharkhand Power System Improvement Project	Parent Project ID (if any)
Region SOUTH ASIA	Estimated Appraisal Date 29-Mar-2018	Estimated Board Date 28-Jun-2018	Practice Area (Lead) Energy & Extractives
Financing Instrument Investment Project Financing	Borrower(s) Republic of India	Implementing Agency Jharkhand Urja Sancharan Nigam Ltd., Jharkhand Bijli Vitran Nigam Ltd.	

Proposed Development Objective(s)

The project development objective (PDO) is to increase the transmission capacity of electricity network in the state of Jharkhand and strengthen the institutional capacity of state-owned power transmission and distribution utilities.

Components

- a. Component 1: Intra-state transmission system strengthening
- b. Component 2: Technical assistance for institutional development and capacity building of JUSNL
- c. Component 3: Technical assistance for institutional development and capacity building of JBVNL

**Financing (in USD Million)**

Financing Source	Amount
Borrower	155.20
International Bank for Reconstruction and Development	310.00
<b>Total Project Cost</b>	<b>465.20</b>

Environmental Assessment Category

B - Partial Assessment

Decision

The review did authorize the preparation to continue



Other Decision (as needed)

## B. Introduction and Context

### Country Context

1. **India has been one of the world's fastest-growing large economies.** In the past three decades, per capita incomes have quadrupled, illiteracy rates have tumbled, and health conditions have improved. The pace of poverty reduction accelerated threefold in 2005–12, relative to the previous decade, and India halved the share of the population in extreme poverty from 45 percent in 1994 to 22 percent in 2012<sup>1</sup>. India lifted more than 160 million people out of poverty in recent years<sup>2</sup>.
2. **Even though India is the world's third-largest economy in purchasing power parity (PPP) terms, most Indians are still relatively poor compared to people in other middle income or rich countries and income inequality is rising.** The rapid economic growth and positive human development has not been widely shared as the Indian society remains highly segmented and income inequality is rising with some states performing better than others. Jharkhand, located in the eastern part of the country and carved out of erstwhile Bihar in the Year 2000, is the 14<sup>th</sup> most populous state in India and home to 33 million people. It lags the rest of the country on most human and social indicators. Poverty (at 37 percent) is among the highest in the country today<sup>3</sup> and the share of workers with salaried jobs is the lowest in the country.
3. Despite being resource rich in minerals, the state is yet to realize its full potential, and one of the reasons is a significant infrastructure gap, which constraints the state's ability to provide reliable basic services to its citizens and hinders growth. In 2017, the state of Jharkhand was ranked thirteenth in 'ease of doing business'. Recognizing the challenge of growth, the state is now focusing on developing infrastructure particularly in roads, energy, education, industry and health sectors.

### Sectoral and Institutional Context

4. **India's power sector is going through sustained growth to fuel the economy and meet the needs of its population.** India's annual Gross Domestic Product (GDP) growth rates over the last decade have averaged at above 7 percent, accompanied by rising power and energy demand at 4.9 percent and 5.3 percent annually, respectively since 2008. Energy demand is expected to continue to increase rapidly with rising incomes and rapidly urbanizing populations purchasing more electrical appliances, contributing about a quarter of the increase in global energy demand by 2040.
5. **Per capita consumption in India at 1,075 kilowatt-hours (kWh) is only one-third of the global average.** Generation capacity at 334 GW (February 2018) now exceeds connected demand. There is steady growth in the quantity (and competitiveness) of renewables in the generation mix (especially wind and

<sup>1</sup> Estimates are for 1993-94 and 2011-12, based on national poverty lines and data from the National Sample Survey (NSS) consumption expenditure surveys

<sup>2</sup> Based on the \$1.90 per person a day line (in 2011 purchasing power parity, PPP)

<sup>3</sup> <http://documents.worldbank.org/curated/en/767291467992476557/pdf/105854-BRI-P157572-PUBLIC-Jharkhand-Proverty.pdf>



solar). Renewables (excluding large hydropower) currently represent about 18.8 percent of power generation capacity, and their share is expected to only go further as the country has set an ambitious target for itself of increasing renewable energy (RE) based generation capacity to 175 GW by 2022.

6. **Reliable grid connected electricity supply in some states remains a challenge.** Compared to generally well governed Central institutions managing the generation and inter-state transmission sectors, the situation at the state level varies. While some states have robust and well managed intra-state transmission and distribution (T&D) networks, there are others where the network is inadequate and unreliable. It is estimated that about 200 million people are without grid connections, and of these many choose not to connect because electricity supply is unreliable. Many grid-connected consumers face unreliable supply, and, those who can afford it, use expensive, inefficient and polluting back-up generation. At the intra-state transmission level, the issue is of inadequate investments and/or poor maintenance of assets. At the distribution level, the issues lie with heavily-indebted loss-making state Distribution Companies or Discoms, which are for the most part publicly owned, and their limited resources leave them incapable to finance network investments and pay for the power purchases required to maintain a reliable supply.

7. **In 2014, GoI announced an 24x7 Power for All (PFA) program, in partnership with States, to ensure reliable electricity supply within the next five years.** This initiative aims at providing uninterrupted supply of quality power to existing consumers and ensuring access to electricity to all unconnected consumers by 2019. Roadmaps for 24x7 PFA have been prepared by each state and implementation is underway. To support the development of electricity transmission and distribution (T&D) infrastructure in states, the GoI is providing Central sector funds under three key schemes: Integrated Power Development System (IPDS) – for urban areas; Deen Dyal Upadhyaya Gram Jyoti Yojna (DDUGJY)- for rural areas; and the more recently launched Sahaj Bijli Har Ghar Yojana (Saubhagya), to support downstream electricity connections to all unconnected households. In 2015, GoI announced a program for financial and operational turnaround of the Distribution Utilities - Ujjwal DISCOM Assurance Yojna (UDAY), which seeks to restructure the debt of distribution companies', requiring State governments to take responsibility for part of this debt, in return for improvements in service delivery and commercial performance by the Discoms.

8. **Jharkhand completed the unbundling of its vertically integrated Jharkhand State Electricity Board (JSEB) in January 2014.** The development of electricity infrastructure and the performance of power sector in the State has lagged those of other states in India. The state's power sector faces challenges on multiple fronts, like:

i. **Large un-electrified population.** Although Jharkhand is endowed with rich mineral resources and is a potential hub for power generation, it has the lowest levels of rural electrification, as only 45 percent of the rural households have been electrified. About 3 million households, close to half the state's population, were without access to electricity at end of December 2017. The per capita consumption of electricity in Jharkhand at 552 kWh is roughly half of the national average.

ii. **Inadequate transmission and distribution infrastructure.** The poor financial performance of the state power sector has resulted in under investment in the T&D infrastructure of the state resulting in a significant supply constraint. The peak load met in Jharkhand state in FY16 was 3,255 MW, of which about 1,810 MW is served by JBVNL. With increases in electrification, the peak demand in JBVNL area alone is expected to more than double to 4.2 GW by FY22.



iii. **Poor operational and financial performance of the distribution sector.** Despite improvements over the last few years, the state discom (JBVNL) faces significant challenges on operational and financial performance as indicated by the high level of aggregate technical and commercial (AT&C) losses at 32 percent in FY17, and below cost retail tariffs. The financial pressures on JBVNL are expected to increase over the next few years due to rapid electrification of households, majority of whom are going to be Below Poverty Line (BPL) consumers and will be falling under the lowest tariff category.

iv. **Low institutional capacity of the unbundled power sector entities.** The unbundled utilities have inherited the limited capacity and institutional weaknesses of their parent organization, JSEB, which was one of the poorest performing utilities in the country on both operational and financial measures. The companies suffer from weaknesses in human resource management, financial management, project panning, procurement, and project implementation. The distribution company (JBVNL) suffers from poor commercial systems and processes, and low customer satisfaction.

9. **New focus on improving the power sector in the State.** The current government accords a high priority to improving the availability and quality of power supply to support the state's economic development, as demonstrated by the following actions:

i. **Implementation of the 24x7 PFA roadmap for the State.** Jharkhand was one of the first states to sign the Memorandum of Understanding (MoU) for 24x7 PFA plan with the Central government. The plan envisages addition of over 4.5 GW generation capacities by 2022 (including a significant share of 1.5 GW from solar energy), through a mix of private and public-sector investments. GoI has allotted funds for the state under the Centrally sponsored schemes DDUGJY and IPDS for distribution network strengthening in rural and urban areas, respectively, and achieving 100 percent household electrification.

ii. **Augmentation of T&D networks to support universal access goal in the state.** To meet the expected growth in demand, the state needs an investment of close to US\$3.5 billion over the next five to six years to strengthen and augment the intra-state T&D network. A combination of resources will be involved – Central and state government funds, multilateral borrowings, and private funds mobilized through Public Private Partnership (PPP) mode.

iii. **Signing-up to UDAY.** Jharkhand was the first state to join the UDAY program of GoI in January 2016, to improve the operational and financial performance of the Discom. Under UDAY, the State has agreed to take over a substantial portion of the debt<sup>4</sup> of the Discom, and provide support for improving operational efficiency in the Discom. JBVNL has started implementation of several initiatives to improve systems and processes related to commercial aspects of meter reading, billing and revenue collection.

iv. **Strengthening institutional capacity of JUSNL and JBVNL.** GoJ recognizes that such a large capex program and improving the financial health of the sector, would require deep institutional development of its transmission and distribution utilities. Hence, one of the key elements of current project request to the World Bank has been to support this initiative.

10. **Considering the current challenges and the investment needs, Government of Jharkhand (GoJ) has requested the World Bank's support in financing investments in transmission sector and with**

---

<sup>4</sup> Under UDAY, the State has issued INR 61,360 million worth of bonds



**the institutional development of the transmission and distribution utilities.** This engagement will also support the national and state objective of achieving 24x7 Power-for-All and will be another step forward in replicating the practices followed by strong national institutions such as POWERGRID (with whom the Bank has had a long and fruitful engagement) at the state level and contribute towards setting up strong state-level institutions.

### C. Proposed Development Objective(s)

Development Objective(s) (From PAD)

11. The project development objective (PDO) is to increase the transmission capacity of electricity network in the state of Jharkhand and strengthen the institutional capacity of state-owned power transmission and distribution utilities.

#### Key Results

12. PDO level results indicators for the project are (a) the amount of electricity delivered at the boundary of the power distribution network in the state (gigawatt hour [GWh]), (b) the increase in transformation capacity (kilovolt-ampere [kVA]) of the transmission network in the state, (c) Commercial Systems (Billing, Collection and Customer Resource Management) of JBVNL upgraded; and (d) Financial, Procurement and Contract Management Framework in JUSNL strengthened.

### D. Project Description

13. The proposed project will support the implementation of the 24x7 PFA plan in the state of Jharkhand by providing financial and technical support for investments in expansion and strengthening of transmission network and institutional development of transmission and distribution utilities to improve operational efficiency in the sector. The project is designed to have following components:

**Component 1: Intra-state transmission system strengthening (US\$ 390.2 million of which IBRD US\$ 279.2 million).** This component would support the state transmission utility, JUSNL, in making priority investments in the following two areas:

- a. ***Construction of new substations and associated transmission lines***, for strengthening the intra-state power transmission system to increase the system's capacity and reliability to transmit additional power within the state (including renewable energy). This component will finance the construction of new sub-stations and transmission lines, primarily at 132kV voltage level (and a few 220kV voltage level components as well). A long list of twenty-five 132/33kV sub-stations and associated transmission lines (~2000 circuit km) have been identified to be financed under this sub-component.
- b. ***Strengthening scheduling, dispatch and communication systems***: This sub-component will support JUSNL in setting up systems for strengthening the State Load Dispatch Centre (SLDC) operations including financing Availability Based Tariff (ABT) meters and software solutions for improving scheduling and dispatch functions which will be particularly important for



integration of RE in the state grid. The component will also include and strengthening operational communication systems both at the network level and within the utility.

**Component 2: Technical assistance for institutional development and capacity building of JUSNL (IBRD US\$ 5 million).** This component will continue to build upon the institutional development activities undertaken during project preparation and support implementation of following key activities:

- a. *Improving the organization structure and Delegation of Financial Powers*
- b. *Strengthening project planning, procurement and contract management practices*
- c. *Strengthening financial management framework.*
- d. *Automating internal business functions like inventory management, maintenance, human resource management etc.*
- e. *Appointing Project Management Consultants (PMC) to supervise various contracts under Component 1;*
- f. *Building staff capacity through training, workshops, knowledge exchange visits etc.*

**Component 3: Improving operational efficiency and developing institutional capacity of JBVNL (US\$ 69.2 million of which IBRD US\$ 25 million).** This component will build upon the institutional development activities undertaken during project preparation and support implementation of JBVNL's action plan to reduce AT&C losses, improve revenue management systems and reduce power procurement costs through following activities:

- a. *Sub-component 3.1: Smart metering for high value and urban consumers:* Support smart metering of high value consumers and consumers in selected urban geographies, to reduce AT&C losses and improve revenue realization. To begin with, the component will finance smart metering (including back-end System Integration) for around 50,000 high value consumers (with connected load of higher than 10kW) across the state of Jharkhand, and around 350,000 consumers in Ranchi (the capital of the state).
- b. *Sub-component 3.2: Upgrading the commercial IT systems and processes related to billing, collection and customer relationship management:* Together with financing the billing, collections and customer relationship management systems, the component will also finance (i) Upgrading the Data Center and Data Recovery Center; (ii) Communication links required; (iii) Integration with other IT systems in the company.
- c. *Sub-component 3.3: Technical assistance for capacity building of JBVNL:* This component would support:
  - i. Improving human resource management
  - ii. Business Process Re-engineering especially related to commercial processes and capital project implementation.
  - iii. Support to optimize power procurement costs (including RE purchases) by deploying a software tool and setting up related business processes.
  - iv. Strengthening financial management framework: This would include support for improving the financial management and corporate governance practices and strengthening internal controls (improving internal audit functions) in the company.





- v. Building staff capacity through training, workshops, study tours etc.

## **E. Implementation**

### Institutional and Implementation Arrangements

14. The Project will be implemented in the state of Jharkhand, by — JUSNL and JBVNL - referred to as the Project Implementation Entities (PIEs). The two PIEs have set up dedicated Project Implementation Units (PIUs) to implement the project. Within the existing departmental structure (procurement, finance, etc.), the PIEs will have designated individuals with clear responsibility for dealing with all issues related to the proposed IBRD loan.

15. All the sub-projects envisaged under component 1 are being designed, procured, and implemented by JUSNL. Contractors engaged through national or international competitive bidding (NCB or ICB) will carry out the supply and installation works. To ensure that JUSNL develops the capacity required to operate and maintain the assets created through this project, PMC will be engaged during project implementation to work with JUSNL officials in implementing the schemes and thus help them develop an understanding of the technical and operational requirements of the assets created.

---

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

The project will be implemented in urban and rural areas of Jharkhand state, which is located in eastern India, with a population of 33 million (2011 census). Jharkhand state has carved out of the southern part of Bihar on November 15, 2000. Its geographical area is about 79,714 km<sup>2</sup> where, at present 29 percent of the state's total landmass is covered by forest, similar to Indian national average of 24 percent. Jharkhand state has a variety of flora and fauna and has one National Park (Betla), which also houses Palamau Tiger reserve. However, based on initial discussions with the implementing agencies, the IAs do not expect investments in the protected areas, and as also seen in previous projects of similar nature, power transmission investments provide some flexibility in sub-project locations, and hence, sensitive parameters can either be avoided or impacts mitigated. Of the total population of Jharkhand, the share of Scheduled Castes is quite high at 12 percent and Scheduled Tribes at 26 percent. In order to protect the interests of the Scheduled tribes, the provision of Fifth Schedule is enshrined in the Constitution under article 244 (2). Out of 259 blocks in the state of Jharkhand, 112 fall under the Fifth Schedule areas (spread across 15 districts out of 24 districts). Scheduled Castes and Scheduled Tribes are groups having distinct social and cultural identity and being normally "excluded", special attention will be required under the project to ensure their inclusion and equity.

## **G. Environmental and Social Safeguards Specialists on the Team**

Gaurav D. Joshi, Environmental Safeguards Specialist  
Parthapriya Ghosh, Social Safeguards Specialist  
Obaidullah Hidayat, Environmental Safeguards Specialist





**SAFEGUARD POLICIES THAT MIGHT APPLY**

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	<p>OP/BP 4.01 is triggered, since the civil works related to transmission line and substations may have negative impacts, which may be environmentally sensitive. The project is expected to have positive impacts on beneficiaries of the selected areas of intervention due to the rehabilitation/ upgradation of the power transmission system. However, the civil works under Component 1 of the project may pose potential negative impacts on forest where felling and cutting of trees within the right of way of transmission line could be foreseen as well as health and safety of workers and near-by residents during construction, any incidental impacts on local fauna, localized drainage issues where substation construction may impede drainage issues. The operational phase impacts could arise from indiscriminate use and disposal of batteries, old transformer and oil, cables, meters, changes in the normal transit in streets, sidewalks and public areas and generation of dust noise etc. Most of these Environmental impacts are likely to be short-term, modest, site-specific and reversible in nature where, mitigation measures are put in place through safeguards tools and can be managed to reduce these negative impacts. In view of this, the project is classified as Category B. These impacts will either be avoided, minimized and or mitigated by proper implementation of safeguards tools.</p> <p>Since, the details of full investment scope is yet to be determined, therefore a framework approach has been adopted and an ESMF or Environmental and Social Management Framework has been prepared. JUSNL has hired a professional firm which has assisted it in preparation of ESMF and conducting ESIA studies as well preparing the EMPs. The ESMF has consulted and disclosed. A detailed ToR of the ESIA has also been incorporated into the project ESMF. Further, the ESIA's and relevant management</p>



		plan for the first 30 percent of investments have also been prepared and disclosed. Major focus of the ESIA is on the analysis of alternative routes (to minimize environmentally sensitive areas), public/ stakeholders consultations and preparation of a site specific ESMPs to mitigate environmental risks associated with the project operations. ESMF will continue to serve as the guiding document/ manual for the entire project activities during implementation. To address health and safety issue the project will also follow the WBG EHS guidelines.
Natural Habitats OP/BP 4.04	No	This Policy is not been triggered since, the identified routes for the transmission line interventions are not expected in the identified national wildlife sanctuaries.
Forests OP/BP 4.36	Yes	The preliminary identified routes has indicated that there would be involvement of forests in the routes. Hence, this policy has been triggered. Mitigation aspects have been covered in the environmental impact assessment (part of ESIA), and scheme specific ESMPs. The country/state systems are robust to manage the impacts associated and will be followed for the project. Further to this, in the event of direct impacts if identified during subproject impact assessment, the borrower will also prepare a free-standing report e.g. Forest Management Plan.
Pest Management OP 4.09	No	Pesticides are not expected to be used during the project
Physical Cultural Resources OP/BP 4.11	Yes	Jharkhand State has some sites and structures that may have archaeological, historical, religious, or other cultural significance. The river Ganges, of which Jharkhand forms a stem state, is also an important cultural resource in the country. While it is not yet known if any of the project activities involve or are likely to impact, any physical cultural resources, the policy has still been triggered because of the reasons mentioned above. If any of the project activities, including sub-projects finalized during the project implementation phase, involve or are likely to impact physical cultural resources, a Physical Cultural Resources Management Plan will be prepared (as discussed in the ESMF). However, for the first 30% of the projects, there has not been any need identified to prepare such a plan.



Indigenous Peoples OP/BP 4.10	Yes	<p>The state has substantial share of Scheduled Tribe (ST) population and it is likely that transmission line may pass through tribal areas. To address this issue, project has prepared Indigenous Peoples Planning Framework (IPPF). During the preparation of IPPF, consultations were carried out in ST dominated areas. IPPF has the mechanism for their inclusion through preparation Indigenous Peoples Development Plan (IPDP) to address issues related to tribal population. Project has prepared an IPDP based on the ESIA's social impact assessment and consultations with the tribal community for the first 30% of the project, both for sub stations as well as for transmission line. IPDP has provision of community based infrastructure and convergence of several government run schemes in the project area. The IPDP however s may undergo some revisions during the project implementation phase.</p>
Involuntary Resettlement OP/BP 4.12	Yes	<p>Though, most of the 25 sub-stations (long-list) will be constructed on government land free of all encroachment and other encumbrances, for four sub-stations, project will acquire approximately 31 hectares of land. Sites for some of the phase-II (beyond first 30 percent) sub-stations are yet to be identified that may involve land acquisition and removal of encroachments resulting in loss of livelihood and involuntary resettlement. Since the exact locations of few sub stations is not known yet (of Phase II) and alignment of transmission line may change during project implementation phase, project has prepared Resettlement Policy Framework (RPF). The RPF provides guidance on the procedures to be followed to minimize involuntary resettlement where feasible through exploring all viable alternatives project designs; and assist displaced persons in improving their former living standards, income earning capacity, and production levels, or at least in restoring them; encourage community participation in planning and implementing resettlement; issues related to labour influx during construction period, and provide assistance to affected people regardless of the legality of title of land. The RPF shall provide guidelines for the preparation of Social Impact Assessment (SIA) and sub project specific Resettlement Action Plans (RAPs) as applicable. The</p>



sub project specific Social Impact Assessments along with Social Management Plans (SMPs) have been prepared for the sub stations and transmission lines of phase I (first 30 percent). SMPs includes measures for addressing labour influx and gender issues.

Safety of Dams OP/BP 4.37	No	This Policy is not triggered
Projects on International Waterways OP/BP 7.50	No	This Policy is not triggered
Projects in Disputed Areas OP/BP 7.60	No	This Policy is not triggered

**KEY SAFEGUARD POLICY ISSUES AND THEIR MANAGEMENT**

**A. Summary of Key Safeguard Issues**

1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:

While communities are expected to benefit from the project because of upcoming additional employment opportunity during construction phase and project’s contribution to increasing availability of power and resultant provision of power supply especially to vulnerable groups such as rural communities and urban poor. Issues related to sub stations includes loss of (i) private land (though not in phase I, but likely to be in phase II); (ii) livelihood; (iii) common property resources; and (iv) access to property, though temporarily; etc. Based on initial assessment of the proposed sub projects, although many land parcels are already available with JUSNL, there is requirement for securing over 30 acres of private land for four sub stations and there could be possible land acquisition for sub-projects not identified yet. Bank’s OP 4.10 on Indigenous People has also been triggered as the state has substantial tribal population and both siting of sub stations and transmission line passes through tribal areas. Issue with respect to stringing of transmission lines relates to crop damages and securing Right-of-Way leading to interface with the local communities and ensuring safety.

**Environment**

The project operations mainly include expansion and strengthening of power supply system of the Jharkhand intra-state including placement of new transmission line replacement of overhead wires, power transmission and distribution equipment, by the project implementing entities. Potential impacts identified during the implementation phase include impact on forest within the RoW of transmission line and substation sites, any incidental impacts on local fauna, localized drainage issues where substation construction may impede drainage, safety of workers and nearby residents. The operational phase impacts could arise from indiscriminate use and disposal of batteries, transformer oil, e-waste and in case of circuit breaker and handling of impacts form SF6.

The operational phase impacts could arise from indiscriminate use and disposal of batteries, old transformer and oil, cables, meters, changes in the normal transit in streets, sidewalks and public areas and generation of dust noise etc. Most of these Environmental impacts are likely to be short-term, modest, site-specific and reversible in nature where, mitigation measures are put in place through safeguards tools and can be managed to reduce these negative impacts of the interventions. In view of this, the project is classified as Category B.



2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:  
Nil

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.

Right at the screening stage, alternatives were analyzed for each sub stations. As a result all 9 sub stations under phase I are on government land that is free of encroachment and other encumbrances. In case of transmission lines, following criteria were adopted:

(a) Forest land as identified on the Survey of India topo-sheet should be as less as possible;

(b) Settlement along the alignment should be as low as possible;

(c) Technical constraints such as crossing e.g. rivers, railways , roads should be as low as possible

The alternatives were identified on the Survey of India 1: 50,000 toposheet by the project and was provide for analysis of the environmental and social concerns.

While carrying out the analysis of alternatives efforts were made to identify the line which would cause minimum disturbance to the forest area. In addition individual houses along the alignment within 50 m of proposed alignment were also enumerated along with other parameters e.g. Type of Forest, Sensitivities (e.g. National Parks, Wildlife sanctuaries within 10 km) of the proposed alignment.

The environmental and social information along the alternative alignments were collated and the Analysis of Alternative for each of the lines was carried out.

4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.

Jharkhand Urja Sanchar Nigam Limited (JUSNL) would implement the main investment component of the project involving construction of transmission sub-stations and transmission lines while, Jharkhand Bijli Vitran Nigam Limited (JBVNL) would implement the technical assistance component of the project. Both the companies have not worked with a multi-lateral institutions earlier and are newly formed. The Institution capacity of JUSNL, which is expected to handle most of the investments, is reasonably weak. The company has no previous experiences with the World Bank. However, JUSNL is practically involved in several similar activities where the prevailing Indian acts/policies are being applied, thus a required capacity to implement project related safeguards does exist. To address safeguards requirements, the project has prepared an Environmental and Social Management Framework SMF (including Resettlement Policy Framework [RPF] and Indigenous Peoples Planning Framework [IPPF]) and is preparing Environmental and Social Impact Assessments (ESIAs) for identified investments, and resultant Environmental and Social Management Plans (ESMPs). The ESIA for 9 sub stations prepared so far shows no no private land acquisition. The identified land parcels belongs to government that is free of encroachment and other encumbrances. The sub station sites and transmission line alignment do have tribal population and project has prepare a draft Indigenous Peoples Development Plan (IPDP) (to be disclosed as draft after Bank's review). The process followed for preparation of the safeguard documents is participatory and facilitative with emphasis on information sharing, consultation and feedback. In the long run, the entities will ensure training and capacity building of staff to undertake environmental and social development and safeguards activities. However, it will also require support in capacity in the operationalization of the ESMF, training and capacity building programs and establishing strong institutional arrangement for the safeguard management in the project.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies,



with an emphasis on potentially affected people.

“Stakeholder mapping” was carried out during to study the profile of the stakeholders identified and the nature of the stakes; understand each group’s specific issues, concerns as well as expectations from the project that each group retains; and gauge their influence on the project.

Consultations with the identified were carried out during the preparation of ESMF and ESIA at both district and village level. The consultations will be continued during the construction and operation phases of the project. Issues like land and resource damage, social disturbance, severance and increased congestion, noise and air pollution, employment opportunities, need for development of basic infrastructure, safe drinking water, sanitation facilities etc. were discussed during the consultations . The consultations also helped in developing preliminary understanding of the requirement of social development initiatives required.

The ESMF has been disclosed both in country on September 11, 2017 as well as on bank’s IDU on December 27, 2017.

**B. Disclosure Requirements**

**Environmental Assessment/Audit/Management Plan/Other**

Date of receipt by the Bank  16-Jan-2018	Date of submission for disclosure  15-Mar-2018	For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors
--	--	--

**"In country" Disclosure**

India  
11-Sep-2017  
Comments

**Resettlement Action Plan/Framework/Policy Process**

Date of receipt by the Bank 01-Sep-2017	Date of submission for disclosure 27-Dec-2017
--	--

**"In country" Disclosure**

India  
11-Sep-2017  
Comments



**Indigenous Peoples Development Plan/Framework**

Date of receipt by the Bank

01-Sep-2017

Date of submission for disclosure

27-Dec-2017

**"In country" Disclosure**

India

11-Sep-2017

Comments

**C. Compliance Monitoring Indicators at the Corporate Level (to be filled in when the ISDS is finalized by the project decision meeting)**

**OP/BP/GP 4.01 - Environment Assessment**

Does the project require a stand-alone EA (including EMP) report?

Yes

If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?

Yes

Are the cost and the accountabilities for the EMP incorporated in the credit/loan?

Yes

**OP/BP 4.11 - Physical Cultural Resources**

Does the EA include adequate measures related to cultural property?

Does the credit/loan incorporate mechanisms to mitigate the potential adverse impacts on cultural property?

**OP/BP 4.10 - Indigenous Peoples**

Has a separate Indigenous Peoples Plan/Planning Framework (as appropriate) been prepared in consultation with affected Indigenous Peoples?

Yes

If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?

Yes

If the whole project is designed to benefit IP, has the design been reviewed and approved by the Regional Social Development Unit or Practice Manager?

No





**OP/BP 4.12 - Involuntary Resettlement**

Has a resettlement plan/abbreviated plan/policy framework/process framework (as appropriate) been prepared?

Yes

If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?

Yes

**OP/BP 4.36 - Forests**

Has the sector-wide analysis of policy and institutional issues and constraints been carried out?

Yes

Does the project design include satisfactory measures to overcome these constraints?

Yes

Does the project finance commercial harvesting, and if so, does it include provisions for certification system?

No

**The World Bank Policy on Disclosure of Information**

Have relevant safeguard policies documents been sent to the World Bank for disclosure?

Yes

Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?

Yes

**All Safeguard Policies**

Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?

Yes

Have costs related to safeguard policy measures been included in the project cost?

Yes

Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?

Yes

Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?

Yes



## CONTACT POINT

### World Bank

Amol Gupta  
Energy Specialist

Bipulendu Narayan Singh  
Senior Energy Economist

Kavita Saraswat  
Sr Power Engineer

### Borrower/Client/Recipient

Republic of India  
Lekhan Thakkar  
Mr.  
lekhan.t@gov.in

### Implementing Agencies

Jharkhand Urja Sancharan Nigam Ltd.  
Niranjan Kumar  
Mr.  
mdjusnl@gmail.com

Jharkhand Bijli Vitran Nigam Ltd.  
Rahul Purwar  
Mr.  
mdvitran@gmail.com

## FOR MORE INFORMATION CONTACT

The World Bank  
1818 H Street, NW  
Washington, D.C. 20433  
Telephone: (202) 473-1000  
Web: <http://www.worldbank.org/projects>



**APPROVAL**

Task Team Leader(s):	Amol Gupta Bipulendu Narayan Singh Kavita Saraswat
----------------------	--

**Approved By**

Safeguards Advisor:		
Practice Manager/Manager:	Demetrios Papathanasiou	12-Apr-2018
Country Director:	Hisham A. Abdo Kahin	18-Apr-2018