

# Project Administration Manual

Project Number: 51308-009  
Loan Number(s): {LXXXX}  
September 2022

## India: Tripura Power Distribution Strengthening and Generation Efficiency Improvement Project

## ABBREVIATIONS

ADB	–	Asian Development Bank
CAG	–	Comptroller and Auditor General
CCGPP	–	combined cycle gas power plant
CCGT	–	combined cycle gas turbine
COVID-19	–	coronavirus disease
EMP	–	environmental management plan
PMU	–	project monitoring unit
RIPP	–	resettlement and indigenous peoples plan
TERC	–	Tripura Electricity Regulatory Commission
TPGL	–	Tripura Power Generation Limited
TSECL	–	Tripura State Electricity Corporation Limited
TTAADC	–	Tripura Tribal Areas Autonomous District Council

km	–	kilometer
kV	–	kilovolt
kWh	–	kilowatt hour
MW	–	megawatt
GWh	–	gigawatt hour

## NOTES

- (i) The fiscal year (FY) of the Government of India and its agencies ends on 31 March. "FY" before a calendar year denotes the year in which the fiscal year ends, e.g., FY2022 ends on 31 March 2022.
- (ii) In this report, "\$" refers to US dollars unless otherwise stated.

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### **Project Administration Manual Purpose and Process**

The project administration manual (PAM) describes the essential administrative and management requirements to implement the project on time, within budget, and in accordance with the policies and procedures of the government and Asian Development Bank (ADB). The PAM should include references to all available templates and instructions either through linkages to relevant URLs or directly incorporated in the PAM.

The Tripura Power Generation Limited and the Tripura State Electricity Corporation, the executing and implementing agencies, are wholly responsible for the implementation of ADB-financed projects, as agreed jointly between the borrower and ADB, and in accordance with the policies and procedures of the government and ADB. ADB staff is responsible for supporting implementation including compliance by the executing and implementing agencies of their obligations and responsibilities for project implementation in accordance with ADB's policies and procedures.

At loan negotiations, the borrower and ADB shall agree to the PAM and ensure consistency with the loan agreement. Such agreement shall be reflected in the minutes of the loan negotiations. In the event of any discrepancy or contradiction between the PAM and the loan agreement, the provisions of the loan agreement shall prevail.

After ADB Board approval of the project's report and recommendations of the President (RRP), changes in implementation arrangements are subject to agreement and approval pursuant to relevant government and ADB administrative procedures (including the Project Administration Instructions) and upon such approval, they will be subsequently incorporated in the PAM.



## I. PROJECT DESCRIPTION

1. The project targets improving energy security, power quality, efficiency, and resilience of power sector in Tripura. The project will finance the upgradation of Rokhia power plant with a highly efficient and a state-of-the-art power plant together with investments in the power distribution network to increase capacity, efficiency, and resilience of power sector against climate change and disasters. The project will also support to strengthen the institutional capacity and overall business process of the project's executing agencies and promote gender equality through pilot testing of gender and socially inclusive workplace practices.

2. The impact of the project is aligned with the following impacts: enhanced energy security, financial sustainability, and resilience of power sector in Tripura improved. The project will have the following outcome: efficiency and reliability of power supply to consumers in Tripura improved.

3. **Output 1: Generation capacity of Rokhia power plant increased.** The project will replace the 63 MW inefficient open cycle gas turbines in the Rokhia power plant with a 120 MW climate proofed, highly efficient modern CCGT technology. This will (i) increase the plant's efficiency from 26% to 53%, thereby doubling electricity output yet consuming the same amount of natural gas, (ii) increase capacity from 63 MW to 120 MW without corresponding increase in gas consumption,<sup>1</sup> (iii) reduce the state's dependency on power purchase, (iv) increase the flexibility of the system in integrating larger renewable energy capacity, and (v) enhance system resilience against climate risks by incorporating climate proofing measures in project design.

4. **Output 2: Distribution network strengthened, modernized and climate proofed.** To improve reliability, climate, and disaster resilience, and reduce technical losses and system constraints, the project will (i) modernize 27 existing substations, (ii) install 1,560 km of covered conductors and 140 km of underground cables at medium voltage level (33 kV and 11 kV), and 900 km of aerial bunched cables at low voltage level, and (iii) install modern monitoring and control devices in distribution network. These will facilitate reliable supply of electricity in remote and rural areas of Tripura. These will be complemented by gender equality and social inclusion (GESI) and culturally sensitive awareness programs on energy-efficient electrical appliances, safe use of electricity for household chores (including lighting and cooking), and energy conservation, for community members, including women and girls, from villages under the Tripura Tribal Areas Autonomous District Council (TTAADC) project area.

5. **Output 3: Smart meters and advanced metering infrastructure established.** The output will replace existing outdated electromechanical meters with smart meters in 100,000 households and establish an advanced metering infrastructure with online meter reading, billing, and collection. This will increase the collection rates of state-owned distribution company, leading to the improvements of their financial viability and operational efficiencies. It will also send fair and transparent pricing signals and other useful information to the consumers to allow them to better manage their electricity consumption. This will also make meter reading and bill collection in the community more efficient.

6. **Output 4: Institutional capacity for planning, implementation, financial management, and gender mainstreaming improved.** The project will support the long-term sustainability of TPGL and TSECL through (i) preparation of a renewable energy and distribution sector roadmap that will outline the policies, strategies, and investment plans to adopt renewable

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<sup>1</sup> TPGL will decommission the existing 63 MW open cycle gas turbines after the commissioning of proposed 120 MW CCGT power plant. Thus, the plant will keep the same level of fuel consumption.

energy, meet future demand and service standards; and (ii) support in the implementation of FMAP activities as described in para 13. The project will support the preparation of gender sensitive workplace policy for TSECL and TPGL and conduct necessary trainings (footnote 46).<sup>2</sup>

**7. Output 5: Gender and socially inclusive energy-based livelihood activities promoted.** The project will support at least 15 selected women self-help groups (SHG) under Tripura rural livelihood mission targeting socio-economic empowerment of the rural poor and women of the state in the farming sector. The envisaged activities include (i) 150 women from 15 SHGs provided training in certified skills (based on need assessment) for livelihood generation activities and business development skills (e.g., market linkages, access to finance and credit) to develop and operate energy-based micro enterprises, and (ii) at least 15 SHGs provided equipment to enhance livelihood opportunities in farm sector.

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<sup>2</sup> The TA 9813-IND will provide TPGL and TSECL with additional resources to support the implementation of gender sensitive activities in the project. ADB. 2019. [Technical Assistance to India for Enhancing Capacity to Design and Implement Energy Sector Projects](#). Manila.



## II. IMPLEMENTATION PLANS

### A. Project Readiness Activities

Indicative Activities	2021												2022												2023		Responsibility
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	
Advance Contracting Actions	█												█														TPGL, TSECL and GOT
Retroactive Financing Actions																											TPGL, TSECL and GOT
Establish Project Implementation Arrangements			█												█								TPGL, TSECL and GOT				
ADB Board Approval																											ADB
Loan Signing																											GOI, GOT and ADB
Government legal opinion provided																											GOI, GOT, TPGL and TSECL
Government budget inclusion																											GOT
Loan effectiveness																										█	ADB, GOI and GOT

ADB = Asian Development Bank, GOI = Government of India, GOT = Government of Tripura, TPGL = Tripura Power Generation Limited, TSECL = Tripura State Electricity Corporation Limited.  
Source: Asian Development Bank.

## B. Overall Project Implementation Plan

Activities	2020				2021				2022				2023				2024				2025				2026				2027				2028			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>A. DMF</b>																																				
<b>Output 1 - Generation Capacity of Rokhia power plant increased</b>																																				
1.1 Commence tendering of generation efficiency packages (Q1 2022 – Q4 2022)																																				
1.2 Award contract of generation efficiency packages (Q1 2023 – Q2 2023)																																				
1.3 Undertake detailed survey and quantity estimates by contractor (Q2 2023 – Q4 2023)																																				
1.4 Construct generation efficiency packages (Q4 2023 – Q1 2027)																																				
<b>Output 2 - Distribution network strengthened, modernized and claimate proofed</b>																																				
2.1 Commence tendering of distribution network packages (Q2 2021 – Q1 2022)																																				
2.2 Award contract of distribution network packages (Q2 2022 – Q3 2022)																																				
2.3 Undertake detailed survey and quantity estimates by contractor (Q3 2022 – Q4 2022)																																				
2.4 Construct distribution network packages (Q2 2022 – Q4 2026)																																				
<b>Output 3 - Smart meters and Advanced Metering Infrastructure (AMI) established</b>																																				
3.1 Commence tendering of smart meter and AMI packages (Q2 2022 – Q4 2022)																																				
3.2 Award contract of smart meter and AMI packages (Q1 2023 – Q3 2023)																																				
3.3 Undertake detailed survey and quantity estimates by contractor (Q2 2023 – Q3 2023)																																				
3.4 Install and integrate smart meter and AMI infrastructure (Q3 2023 – Q4 2025)																																				
<b>Output 4 - Institutional capacity of utilities for planning, implementation, financial management, and gender mainstreaming improved</b>																																				
4.1 Commence recruitment of consultancy firm for implementation support (Q2 2022 – Q3 2022)																																				
4.2 Prepare submission 1 for consultancy firm for implementation support (Q3 2022– Q4 2022)																																				
4.3 Commence recruitment of consultancy firms for organizational capacity assessment of TSECL, technical (distribution and renewable energy) and financial roadmap (Q3 2022 – Q4 2022)																																				
4.4 Prepare submission 2 and 3 for consultancy firm for implementation support (Q4 2022 – Q1 2023)																																				
4.5 Prepare submission 1 for consultancy firms for organizational capacity assessment of TSECL, technical (distribution and renewable energy) and financial roadmap (Q4 2022 – Q1 2023)																																				
4.6 Prepare submission 2 and 3 for consultancy firm for for consultancy firm organizational capacity assessment of TSECL, technical (distribution and renewable energy) and financial roadmap (Q1 2023 – Q2 2023)																																				
<b>Output 5 - Gender and socially inclusive energy-based livelihood activities promoted</b>																																				
5.1 Recruit consultants to support awareness activities, needs assessment and livelihood activities (Q3 2022 - Q1 2023)																																				
5.2 Commence shopping of items to support awareness activities,needs assessment and livelihood activities,for women self-help groups (Q3 2022 - Q2 2023)																																				
5.3 Monitor the livelihood activities with the support of consultants and Tripura rural livelihood mission (Q3 2023 - Q2 2025)																																				
<b>B. Management Activities</b>																																				
Procurement plan key activities to procure contract packages																																				
Consultant selection procedures																																				
Environment management plan key activities																																				
Gender action plan key activities																																				
Communication strategy key activities																																				
Annual and/or midterm review																																				
Project completion report																																				

AMI = Advanced Metering Infrastructure, DMF = design and monitoring framework, Q = quarter.  
 Source: DMF

### III. PROJECT MANAGEMENT ARRANGEMENTS

#### A. Project Implementation Organization: Roles and Responsibilities

Project Implementation Organization	Management Roles and Responsibilities
Power Department, Tripura	Overall responsibility for ensuring the project implementation on behalf of Government of Tripura
Finance Department, Tripura	<p>Providing ADB loan disbursements in timely manner to the project executing agencies</p> <p>Providing periodic equity injections to TPGL and TSECL to meet its counterpart fund requirement</p>
Executing agencies: TPGL and TSECL	<ul style="list-style-type: none"> <li>(i) Overall responsibility for the execution of the project</li> <li>(ii) Overseeing satisfactory safeguards implementation for the project</li> <li>(iii) Chair cum Managing Director               <ul style="list-style-type: none"> <li>(a) Coordinating the communication with the government of India and the government of Tripura with respect to the project;</li> <li>(b) Timely approval of bid documents, bid evaluation reports and contract award by TSECL and TPGL Board;</li> <li>(c) Periodic monitoring of the project implementation activities in coordination with the management of generation and distribution utilities including director, finance;</li> <li>(d) Ensuring coordination between technical department responsible for project implementation and finance department to ensure timely availability of counterpart funds.</li> </ul> </li> </ul>
Ministry of Finance (Department of Economic Affairs)	<ul style="list-style-type: none"> <li>(i) Access, negotiate and coordinate external financing for the economic development of the country. All the project proposals from the state government are routed through MOF (DEA).</li> <li>(ii) Responsible for reviewing and approving any major change in the project scope and implementation arrangements during implementation.</li> </ul>
Ministry of Power	<ul style="list-style-type: none"> <li>(i) Reviews the project proposal from executing and implementing agencies.</li> <li>(ii) Preliminary project reports are routed through MOP for their review, comments, and endorsement before DEA approval.</li> </ul>
Project management unit (within the executing agencies)	<ul style="list-style-type: none"> <li>(i) Periodic review of the project activities to ensure timely implementation of the project</li> <li>(ii) Ensuring compliance with loan covenants including social and environmental safeguards, financial, economic and others</li> <li>(iii) Timely submission of bid documents, bid evaluation reports and contract awards ensuring that the EMP is included in the contract documentation</li> <li>(iv) Responsible for preparation and submission of withdrawal applications and meeting reporting requirements including audit reports and financial statements</li> </ul>

Project Implementation Organization	Management Roles and Responsibilities
	<ul style="list-style-type: none"> <li>(v) Responsible for finalizing surveys and detailed designs, update of safeguard documents to reflect detailed designs as needed, safeguards monitoring and preparation of safeguard monitoring reports and timely submission to ADB.</li> <li>(vi) Responsible for implementation of safeguard measures and supervising contractor's implementation of delegated safeguard measures</li> <li>(vii) Responsible for operationalizing the GRM for addressing grievances raised by affected persons in a timely manner, address any grievance raised by affected persons including via ADB's accountability mechanism</li> <li>(viii) Disclose relevant information to affected people and undertake ongoing consultations</li> <li>(ix) Update the safeguards documents as needed in case of any change in scope or unanticipated impacts; prepare corrective action plans to ensure safeguards implementation remains on track</li> <li>(x) Responsible for requesting budgetary allocations from the counterpart fund</li> <li>(xi) Responsible for the preparation of annual contract awards and disbursements projections</li> <li>(xii) Shall provide information to ADB missions as necessary</li> </ul>
ADB	<ul style="list-style-type: none"> <li>(i) Monitor implementation including compliance by the executing and implementing agencies of its obligations and responsibilities for project implementation in accordance with ADB's policies and procedures;</li> <li>(ii) Monitor the status of compliance with all loan covenants including safeguards by undertaking periodic site visits to the project site, following requirement set forth in ADB's Safeguard Policy Statement (2009);</li> <li>(iii) Timely approval of bid documents, contract award and withdrawal applications.</li> <li>(iv) Provide overall project administration</li> <li>(v) Disburse ADB loan proceeds</li> <li>(vi) Conduct safeguards supervision and monitoring on an as needed basis.</li> </ul>

ADB = Asian Development Bank, DEA = Department of Economic Affairs, EMP = environmental management plan, GRM = grievance redress mechanism, MOF = Ministry of Finance, MOP = Ministry of Power, TPGL = Tripura Power Generation Limited, TSECL = Tripura State Electricity Corporation Limited.  
Source: ADB.

## B. Key Persons Involved in Implementation

### Executing Agency

Tripura Power Generation Limited

Officer's Name: Mr. Debashis Sarkar  
Position: Managing Director  
Telephone: 0381-2318001  
Email address: [cmdtpgl@gmail.com](mailto:cmdtpgl@gmail.com)

Tripura State Electricity Corporation Limited

Officer's Name: Mr. Debashis Sarkar  
Position: Managing Director  
Telephone: 0381-2318001  
Email address: [managing.director@tsecl.in](mailto:managing.director@tsecl.in)

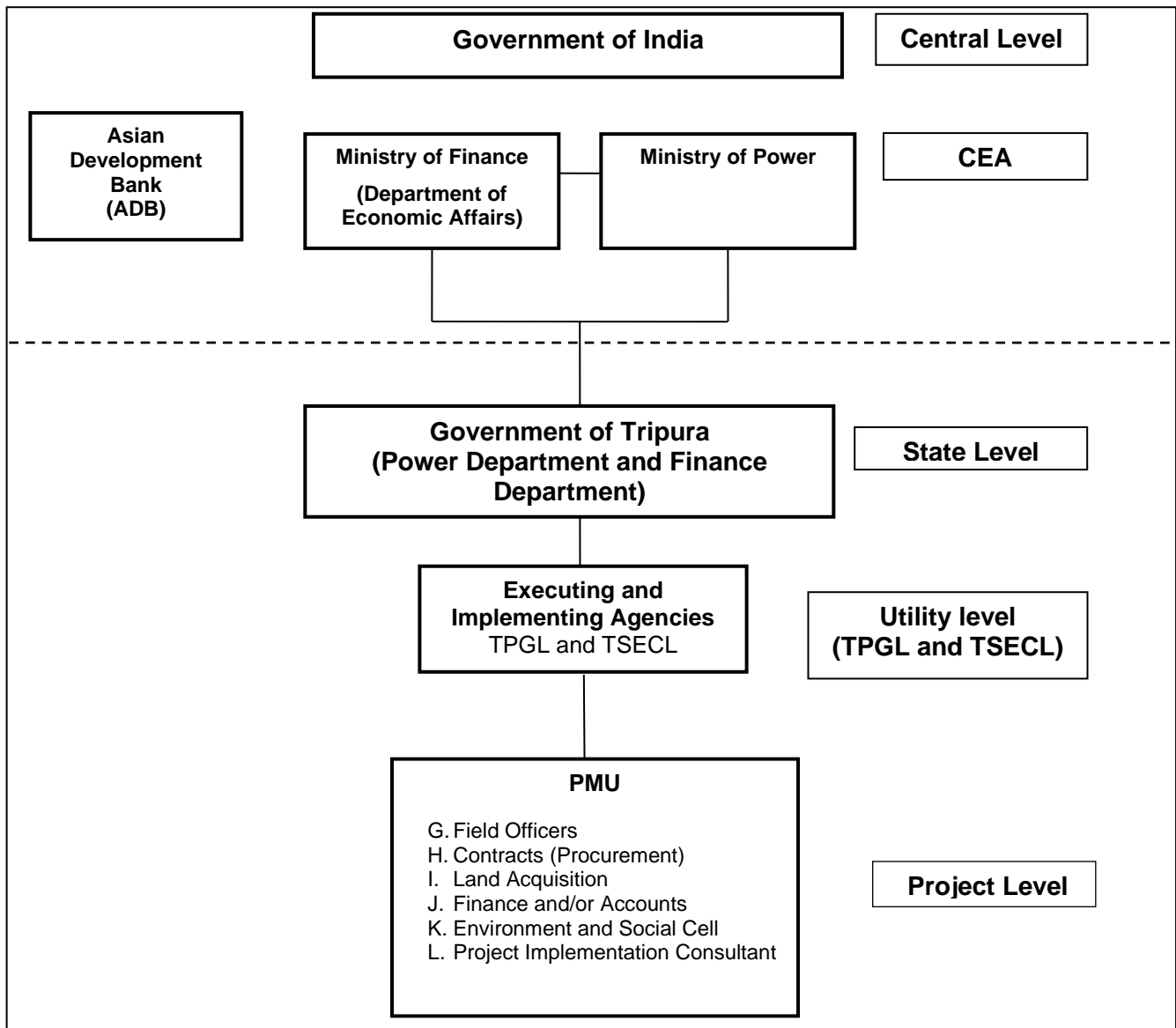
**Asian Development Bank**  
Energy Division

Staff Name: Pradeep Perera  
Position: Officer-In-Charge  
Telephone No. 632-8632-4444  
Email address: [pperera@adb.org](mailto:pperera@adb.org)

Mission Leader

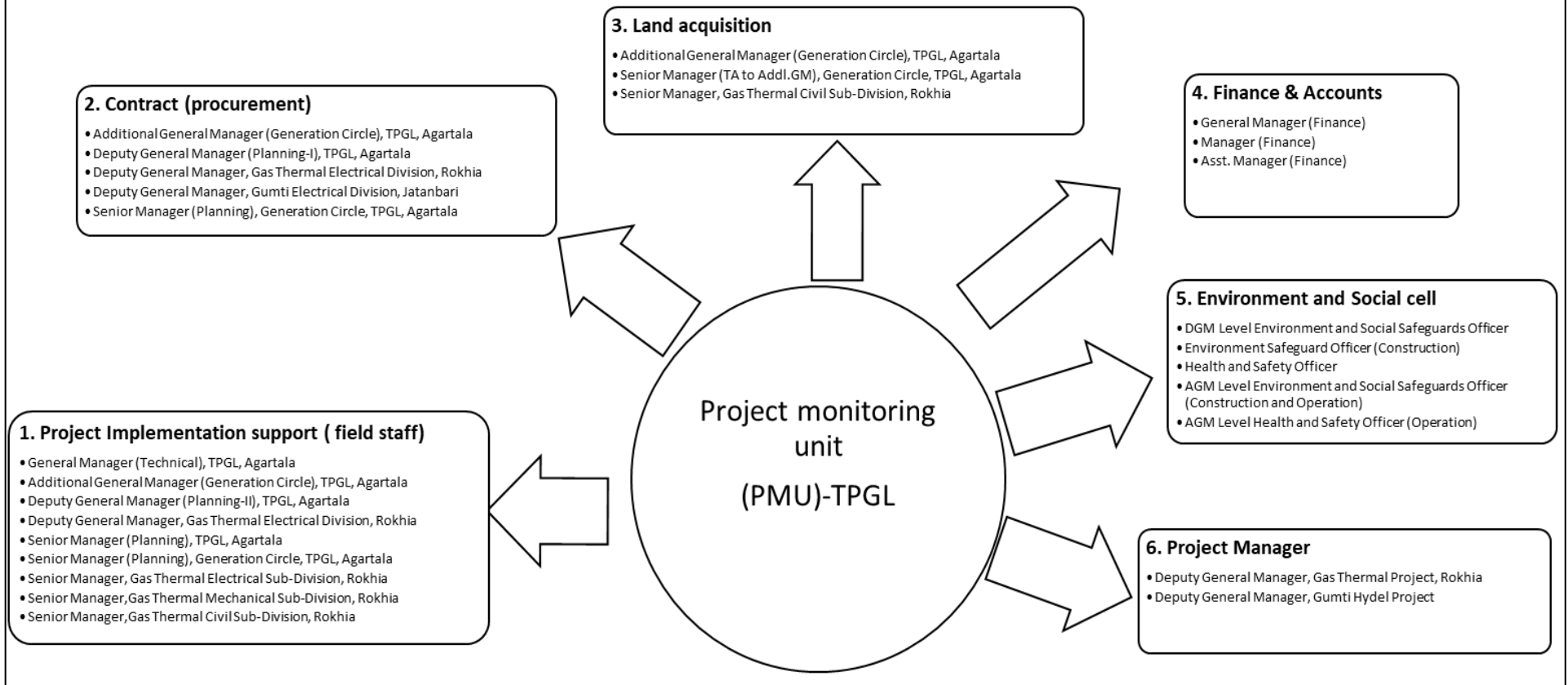
Staff Name: Jaimes Kolantharaj  
Position: Senior Energy Specialist  
Telephone No.: 632-8632-4308  
Email address: [jkolantharaj@adb.org](mailto:jkolantharaj@adb.org)

### C. Project Organization Structure



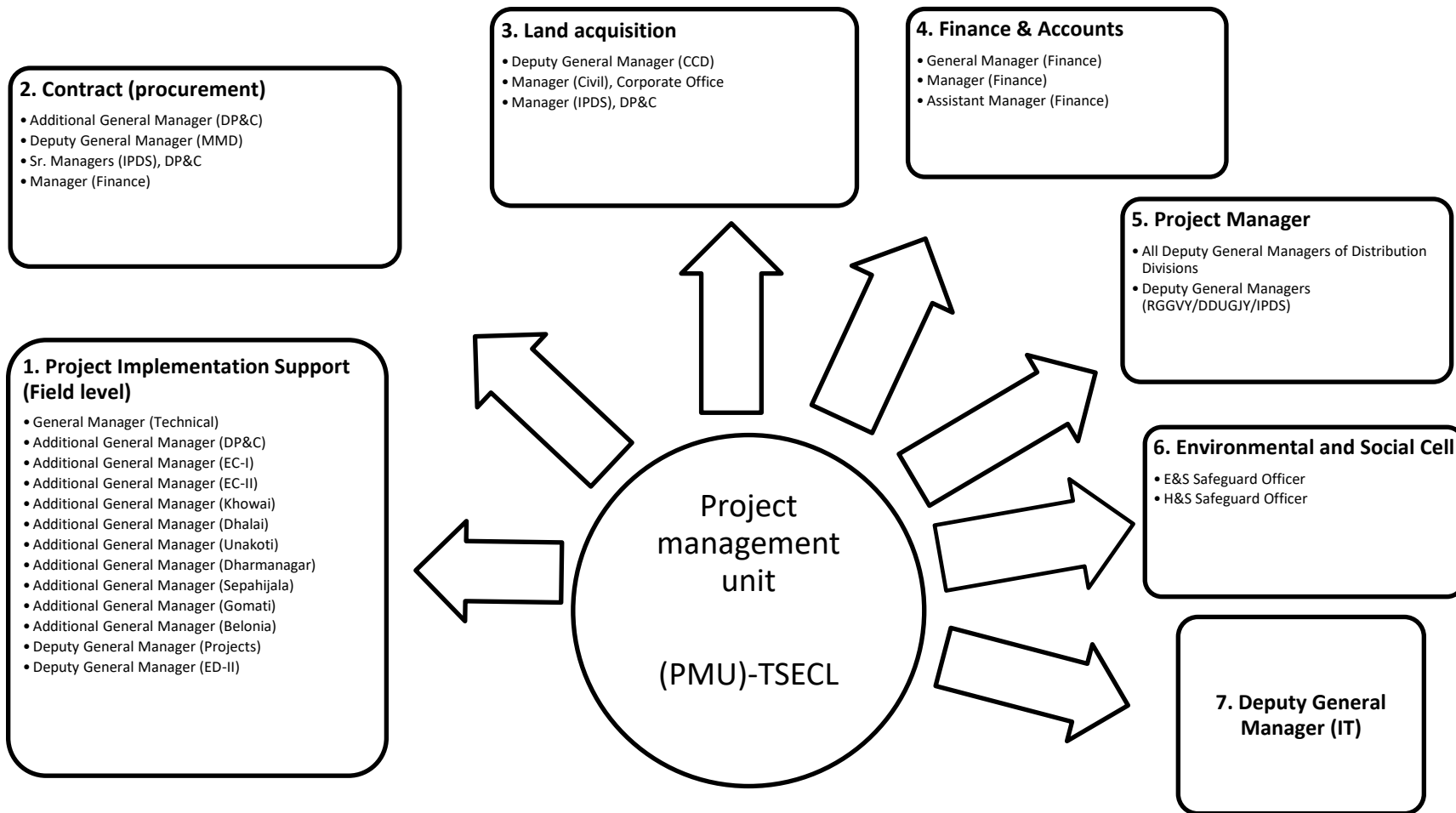
CEA = Central Electricity Authority, PMU = project monitoring unit, TPGL = Tripura Power Generation Limited, TSECL = Tripura State Electric Corporation Limited.

Project Management Unit structure at utilities  
**TPGL (Generation)**



AGM = additional general manager, DGM = deputy general manager, GM = general manager, PMU = project management unit, TA = technical assistant, TPGL = Tripura Power Generation Limited.

### TSECL (Distribution)



CCD = Central Civil Division, DDUGJY = Deen Dayal Upadhyaya Gram Jyoti Yojana, DP&C = Distribution Planning and Coordination, EC = electrical circle, ED = electrical division, E&S = environment and safety, H&S = health and safety, IPDS = Integrated Power Development Scheme, IT = information technology, PMU = project management unit, RGGVY = Rajiv Gandhi Grameen Vidyutikaran Yojana, TSECL = Tripura State Electricity Corporation Limited



#### IV. COSTS AND FINANCING

8. The project is estimated to cost \$277.4 million. The investment plan is summarized in the Table 1 below.

**Table 1: Summary Cost Estimates**

Item	Amount <sup>a</sup>
<b>A. Base Cost<sup>b</sup></b>	
1. Output 1 Generation capacity of Rokhia power plant increased	110.5
2. Output 2 Distribution network strengthened, modernized, and climate proofed	119.1
3. Output 3 Smart meters and advanced metering infrastructure established	16.3
4. Output 4 and 5 Institutional capacity for planning, implementation, financial management, and gender mainstreaming improved and gender- and socially inclusive energy-based livelihood activities promoted. <sup>b</sup>	3.1
<b>Subtotal (A)</b>	<b>249.0</b>
<b>B. Contingencies<sup>c</sup></b>	<b>20.7</b>
<b>C. Financing Charges<sup>d</sup></b>	<b>7.7</b>
<b>Total (A+B+C)</b>	<b>277.4</b>

<sup>a</sup> Includes goods and service taxes of \$34.7 million to be financed by the government fund.

<sup>b</sup> Includes cost for output 4 (\$2.8 million) and output 5 (\$0.3 million)

<sup>c</sup> In end-2021 prices as of February 2022.

<sup>d</sup> Physical contingencies computed at 2.5% of base costs. Price contingencies computed at average of 1.7%–1.8% for foreign exchange costs and 4.0%–5.6% at average of local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

<sup>e</sup> Includes interest and commitment fee. Interest during construction for the ordinary capital resources loan has been computed at the 5-year forward-looking secured overnight financing rate plus an effective contractual spread of 0.5%. Commitment charges for the ordinary capital resources loan are 0.15% per year to be charged on the undisbursed loan amount.

Source: Asian Development Bank estimates.

9. The government has requested a regular loan of \$220 million from the Asian Development Bank's (ADB) ordinary capital resources to help finance the project. The loan will have a 20-year term, including a grace period of 5 years; an interest rate determined in accordance with ADB's Flexible Loan Product; a commitment charge of 0.15% per year and such other terms and conditions set forth in the draft loan and project agreements. Based on the straight-line method, the average loan maturity is 12.75 years, and there is no maturity premium payable to ADB.

10. ADB will finance eligible expenditures in relation to the turnkey contracts, consulting services and contingencies. Counterpart funding will be provided by the government of Tripura in the form of equity. The government will finance taxes and duties in relation to turnkey contracts, land acquisition and resettlement cost, environmental and social mitigation cost, project administration cost, portion of contingencies and interest during construction. The government has assured ADB that it will cover any shortfall in financing required to meet the agreed outputs. The summary financing plan is in Table 2.

**Table 2: Summary Financing Plan**

Source	Amount (\$ million)	Share of Total (%)
Asian Development Bank		
Ordinary capital resources (regular loan)	220.0	79.3%
Government counterpart fund	57.4	20.7%
<b>Total</b>	<b>277.4</b>	<b>100.0%</b>

Source: Asian Development Bank estimates.

## A. Cost Estimates Preparation and Revisions

11. Detailed cost estimates were obtained from the detailed project report, the government's document prepared for approval of the project. The cost estimates are based on costs of similar projects executed in the recent past.

## B. Key Assumptions

12. The following key assumptions underpin the cost estimates and financing plan:
- (i) Exchange rate: ₹75.16 = \$1.00 (as of 16 February 2022)
  - (ii) Price contingencies based on expected cumulative inflation over the implementation period are as follows:

**Table 3: Escalation Rates for Price Contingency Calculation**

Item	2022	2023	2024	2025	2026	Average
Foreign rate of price inflation	1.7%	1.7%	1.8%	1.8%	1.8%	1.76%
Domestic rate of price inflation	4.8%	4.5%	4.0%	4.0%	4.0%	4.5%

Source(s): ADB estimates.

- (iii) In-kind contributions were calculated based on the requirements and details as outlined in the draft of development project proposals.

### C. Detailed Cost Estimates by Expenditure Category

**Table 4: Detailed Cost Estimates by Expenditure Category**

Item	₹ million			\$ million			% of Total Base Cost
	Foreign Exchange	Local Currency	Total Cost	Foreign Exchange	Local Currency	Total Cost	
<b>A. Investment costs <sup>a</sup></b>							
1 Turnkey Contract for Generation Plant	0.0	8,074.9	8,074.9	0.0	107.4	107.4	43.16%
2 Turnkey Contract for Distribution	0.0	8,209.9	8,209.9	0.0	109.2	109.2	43.88%
3 Turnkey Contract for Smart metering	0.0	1,142.5	1,142.5	0.0	15.2	15.2	6.11%
4 Consulting Services	492.3	0.0	492.3	6.6	0.0	0.0	2.63%
5 Land Acquisition and Resettlement Cost	0.0	10.5	0.0	0.0	0.1	0.1	0.06%
6 Environment and Social Mitigation Cost	0.0	66.2	7.0	0.0	0.9	0.9	0.35%
<b>Subtotal (A)</b>	<b>492.3</b>	<b>17,504.0</b>	<b>17,996.2</b>	<b>6.6</b>	<b>232.9</b>	<b>239.5</b>	<b>96.2%</b>
<b>B. Recurrent costs</b>							
1 Project Management cost	0.0	711.7	711.7	0.0	9.5	9.5	3.80%
<b>Subtotal (B)</b>	<b>0.0</b>	<b>711.7</b>	<b>711.7</b>	<b>0.0</b>	<b>9.5</b>	<b>9.5</b>	<b>3.80%</b>
<b>Total Base Cost (A+B)</b>	<b>0.0</b>	<b>18,215.7</b>	<b>18,708.0</b>	<b>6.6</b>	<b>242.4</b>	<b>248.9</b>	<b>100.0%</b>
<b>C. Contingencies</b>							
1 Physical	0.0	473.6	473.6	0.0	6.3	6.3	2.53%
2 Price	0.0	1084.5	1084.5	0.0	14.4	14.4	5.80%
<b>Subtotal (C)</b>	<b>0.0</b>	<b>1,558.1</b>	<b>1,558.1</b>	<b>0.0</b>	<b>20.7</b>	<b>20.7</b>	<b>8.33%</b>
<b>D. Financing Charges During Implementation</b>							
1 Interest during construction	529.1	0.0	529.1	7.0	0.0	7.0	2.83%
2 Commitment charges	49.4	0.0	49.4	0.7	0.0	0.7	0.26%
<b>Subtotal (D)</b>	<b>578.5</b>	<b>0.0</b>	<b>578.5</b>	<b>7.7</b>	<b>0.0</b>	<b>7.7</b>	<b>3.09%</b>
<b>Total Project Cost (A+B+C+D)</b>	<b>1,070.8</b>	<b>19,773.8</b>	<b>20,844.6</b>	<b>14.2</b>	<b>263.1</b>	<b>277.4</b>	<b>111.42%</b>

Note: Numbers may not sum precisely due to rounding.

1. Environment and social mitigation include all costs associated with implementing relevant safeguards, gender, and social dimension action plans.
2. The project management cost includes estimated audit fees of \$20,000 for the audit of the annual project financial statements for the period 2023–2027 to be financed from government resources.

Sources: Detailed project report and ADB estimates.

#### D. Allocation and Withdrawal of Loan Proceeds

**Table 5: Allocation and Withdrawal of ADB OCR Loan Proceeds**

Category		Total Amount Allocated for ADB Financing (\$ million)	ADB Financing Basis
Number	Item		Basis for Withdrawal from the Loan Account
1	Turnkey Contract	198.40	100% of total expenditure claimed <sup>a</sup>
2	Consulting Services	6.60	100% of total expenditure claimed <sup>b</sup>
3	Unallocated	15.00	
	<b>Total</b>	<b>220.00</b>	

ADB = Asian Development Bank, OCR = ordinary capital resources.

<sup>a</sup> Exclusive of taxes and duties imposed within the territory of the Borrower.

<sup>b</sup> Inclusive of taxes and duties imposed within the territory of the Borrower.

Source: Asian Development Bank estimates

## E. Detailed Cost Estimates by Financier

Table 6: Detailed Cost Estimates by Financier

Item	ADB OCR Loan		Counterpart Fund		Total Cost		
	Amount	% of cost	Amount	% of cost	Amount	Taxes	
<b>Investment Costs</b>							
<b>A.</b>							
1	Turnkey Contracts for Generation plant	91.1	84.75%	16.4	15.25%	107.4	16.4
2	Turnkey Contracts for Distribution	92.5	84.75%	16.7	15.25%	109.2	16.7
3	Turnkey Contracts for Smart metering	14.8	97.09%	0.4	2.91%	15.2	0.4
4	Consulting Services	6.6	100.00%	-	-	6.6	1.0
5	Land Acquisition and Resettlement cost	-	-	0.1	100.00%	0.1	0.0
6	Environment and social mitigation cost	-	-	0.9	100.00%	0.9	0.1
	<b>Subtotal (A)</b>	<b>205.0</b>	<b>85.59%</b>	<b>34.5</b>	<b>14.41%</b>	<b>239.5</b>	<b>34.7</b>
<b>B. Recurrent Costs</b>							
1	Project management cost	-	-	9.5	100.00%	9.5	-
	<b>Subtotal (B)</b>	<b>-</b>	<b>-</b>	<b>9.5</b>	<b>100.00%</b>	<b>9.5</b>	<b>-</b>
	<b>Total Base Cost</b>	<b>205.0</b>	<b>82.33%</b>	<b>44.0</b>	<b>17.67%</b>	<b>248.9</b>	<b>34.7</b>
<b>C. Contingencies</b>							
1	Physical	5.2	<b>82.33%</b>	1.1	17.67%	6.3	-
2	Price	9.8	<b>68.62%</b>	4.5	31.38%	14.4	-
	<b>Subtotal (C)</b>	<b>15.0</b>	<b>72.79%</b>	<b>5.6</b>	<b>27.21%</b>	<b>20.7</b>	<b>-</b>
<b>D. Financing Charges During Implementation</b>							
1	Interest during construction	-	-	7.0	100.00%	7.0	-
2	Commitment charges	-	-	0.7	100.00%	0.7	-
	<b>Subtotal (D)</b>	<b>-</b>	<b>-</b>	<b>7.7</b>	<b>100.00%</b>	<b>7.7</b>	<b>-</b>
	<b>Total Project Cost (A+B+C+D)</b>	<b>220.0</b>	<b>79.33%</b>	<b>57.3</b>	<b>20.67%</b>	<b>277.4</b>	<b>34.7</b>

ADB = Asian Development Bank, OCR = ordinary capital resources.

Note: Numbers may not sum precisely because of rounding.

Sources: Detailed project report and ADB estimates.

## F. Detailed Cost Estimates by Outputs and/or Components

**Table 7: Detailed Cost Estimates by Outputs and/or Components**

Item	Total Cost	Component 1		Component 2		Component 3		Component 4/5 <sup>a</sup>	
		Amount	% of cost	Amount	% of cost	Amount	% of cost	Amount	% of cost
<b>A. Investment Costs</b>									
1 Turnkey Contracts for Generation plant	107.4	107.4	100.0%	-	-	-	-	-	-
2 Turnkey Contracts for Distribution	109.2	-	-	109.2	100.0%	-	-	-	-
3 Turnkey Contracts for Smart metering	15.2	-	-	-	-	15.2	100.0%	-	-
4 Consulting Services	6.6	2.0	30.5%	1.5	22.9%	-	-	3.1	46.6%
5 Land Acquisition and Resettlement cost	0.1	0.1	100.0%	-	-	-	-	-	-
6 Environment and social mitigation cost	0.9	0.9	100.0%	-	-	-	-	-	-
<b>Subtotal (A)</b>	<b>239.5</b>	<b>110.5</b>	<b>46.1%</b>	<b>110.7</b>	<b>46.2%</b>	<b>15.2</b>	<b>6.3%</b>	<b>3.1</b>	<b>1.3%</b>
<b>B. Recurrent Costs</b>									
1 Project management cost	9.5	-	-	8.3	87.9%	1.1	12.1%	-	-
<b>Subtotal (B)</b>	<b>9.5</b>	<b>-</b>	<b>-</b>	<b>8.3</b>	<b>87.9%</b>	<b>1.1</b>	<b>12.1%</b>	<b>-</b>	<b>-</b>
<b>Total Base Cost</b>	<b>248.9</b>	<b>110.5</b>	<b>44.4%</b>	<b>119.1</b>	<b>47.8%</b>	<b>16.3</b>	<b>6.6%</b>	<b>3.1</b>	<b>1.2%</b>
<b>C. Contingencies</b>									
1 Physical	6.3	2.6	41.2%	3.3	51.6%	0.5	7.2%	-	-
2 Price	14.4	6.4	44.2%	7.1	49.0%	1.0	6.8%	-	-
<b>Subtotal (C)</b>	<b>20.7</b>	<b>9.0</b>	<b>43.3%</b>	<b>10.3</b>	<b>49.8%</b>	<b>1.4</b>	<b>6.9%</b>	<b>-</b>	<b>-</b>
<b>D. Financing Charges During Implementation</b>									
1 Interest during construction	7.0	3.0	42.5%	3.6	50.5%	0.5	7.0%	-	-
2 Commitment charges	0.7	0.3	44.2%	0.3	49.0%	0.0	6.8%	-	-
<b>Subtotal (D)</b>	<b>7.7</b>	<b>3.3</b>	<b>42.6%</b>	<b>3.9</b>	<b>50.4%</b>	<b>0.5</b>	<b>7.0%</b>	<b>-</b>	<b>-</b>
<b>Total Project Cost (A+B+C+D)</b>	<b>277.4</b>	<b>122.7</b>	<b>44.2%</b>	<b>133.3</b>	<b>48.0%</b>	<b>18.3</b>	<b>6.6%</b>	<b>3.1</b>	<b>1.1%</b>

<sup>a</sup> Includes cost for output 4 (\$2.8 million) and output 5 (\$0.3 million)

Note: Numbers may not sum precisely because of rounding.

Sources: Detailed project report and ADB estimates

## G. Detailed Cost Estimates by Year

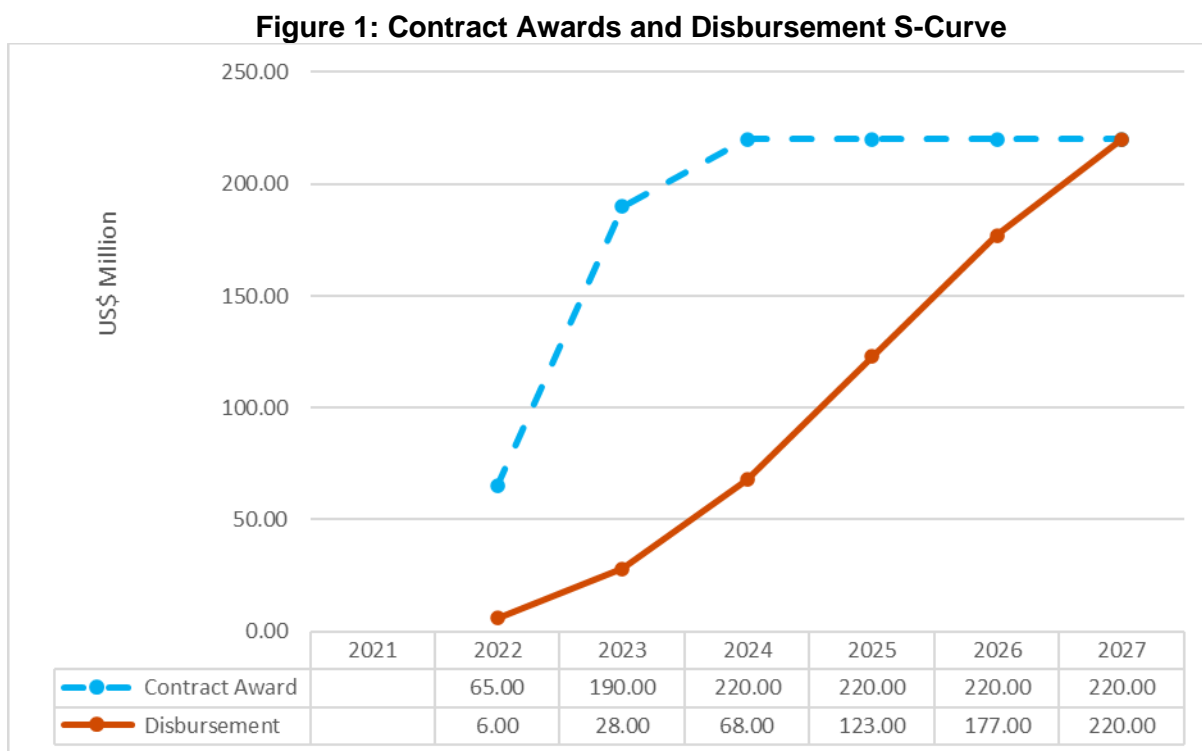
**Table 8: Detailed Cost Estimates by Year**

Item	Total Cost	Year 1	Year 2	Year 3	Year 4
<b>A. Investment Costs</b>					
1 Turnkey Contracts for Generation plant	107.4	7.5	25.8	31.2	43.0
2 Turnkey Contracts for Distribution	109.2	7.6	26.2	31.7	43.7
3 Turnkey Contracts for Smart metering	15.2	1.1	3.6	4.4	6.1
4 Consulting Services	6.6	0.5	1.6	1.9	2.6
5 Land Acquisition and Resettlement cost	0.1	0.07	0.07	-	-
6 Environment and social mitigation cost	0.9	0.1	0.2	0.3	0.4
<b>Subtotal (A)</b>	<b>239.5</b>	<b>16.8</b>	<b>57.5</b>	<b>69.4</b>	<b>95.7</b>
<b>B. Recurrent Costs</b>					
1 Project management cost	9.5	0.7	2.3	2.7	3.8
<b>Subtotal (B)</b>	<b>9.5</b>	<b>0.7</b>	<b>2.3</b>	<b>2.7</b>	<b>3.8</b>
<b>Total Base Cost</b>	<b>248.9</b>	<b>17.5</b>	<b>59.8</b>	<b>72.1</b>	<b>99.5</b>
<b>C. Contingencies</b>					
1 Physical	6.3	0.4	1.5	1.8	2.5
2 Price	14.4	1.0	3.5	4.2	5.8
<b>Subtotal (C)</b>	<b>20.7</b>	<b>1.5</b>	<b>5.0</b>	<b>6.0</b>	<b>8.3</b>
<b>D. Financing Charges During Implementation</b>					
1 Interest during construction	7.0	0.2	0.9	2.2	3.8
2 Commitment charges	0.7	0.1	0.2	0.2	0.2
<b>Subtotal (D)</b>	<b>7.7</b>	<b>0.3</b>	<b>1.1</b>	<b>2.3</b>	<b>4.0</b>
<b>Total Project Cost (A+B+C+D)</b>	<b>277.4</b>	<b>19.2</b>	<b>65.8</b>	<b>80.5</b>	<b>111.8</b>
<b>% of Total Project Cost</b>	<b>100.0%</b>	<b>6.9%</b>	<b>23.7%</b>	<b>29.0%</b>	<b>40.3%</b>

Note: Numbers may not sum precisely because of rounding.  
Sources: Detailed project report and ADB estimates.

## H. Contract and Disbursement S-Curve

13. The projections for contract award and disbursement for the project are in Figure 1.



14. Table 9 indicates the same details of contract awards and disbursements for the allocated amounts over the life of the project, on a quarterly basis, based on projections of contract awards and disbursements.

**Table 9: Contracts and Disbursements (ADB OCR)**

	Contracts (\$ million)					Disbursements (\$ million)				
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total
2022		0.00	40.00	25.00	65.00			3.00	3.00	6.00
2023		20.00	15.00	90.00	125.00	8.00	6.00	4.00	4.00	22.00
2024		20.00	10.00		30.00	10.00	8.00	12.00	10.00	40.00
2025					0.00	15.00	15.00	10.00	15.00	55.00
2026					0.00	14.00	10.00	15.00	15.00	54.00
2027					0.00	10.00	13.00	20.00	0.00	43.00

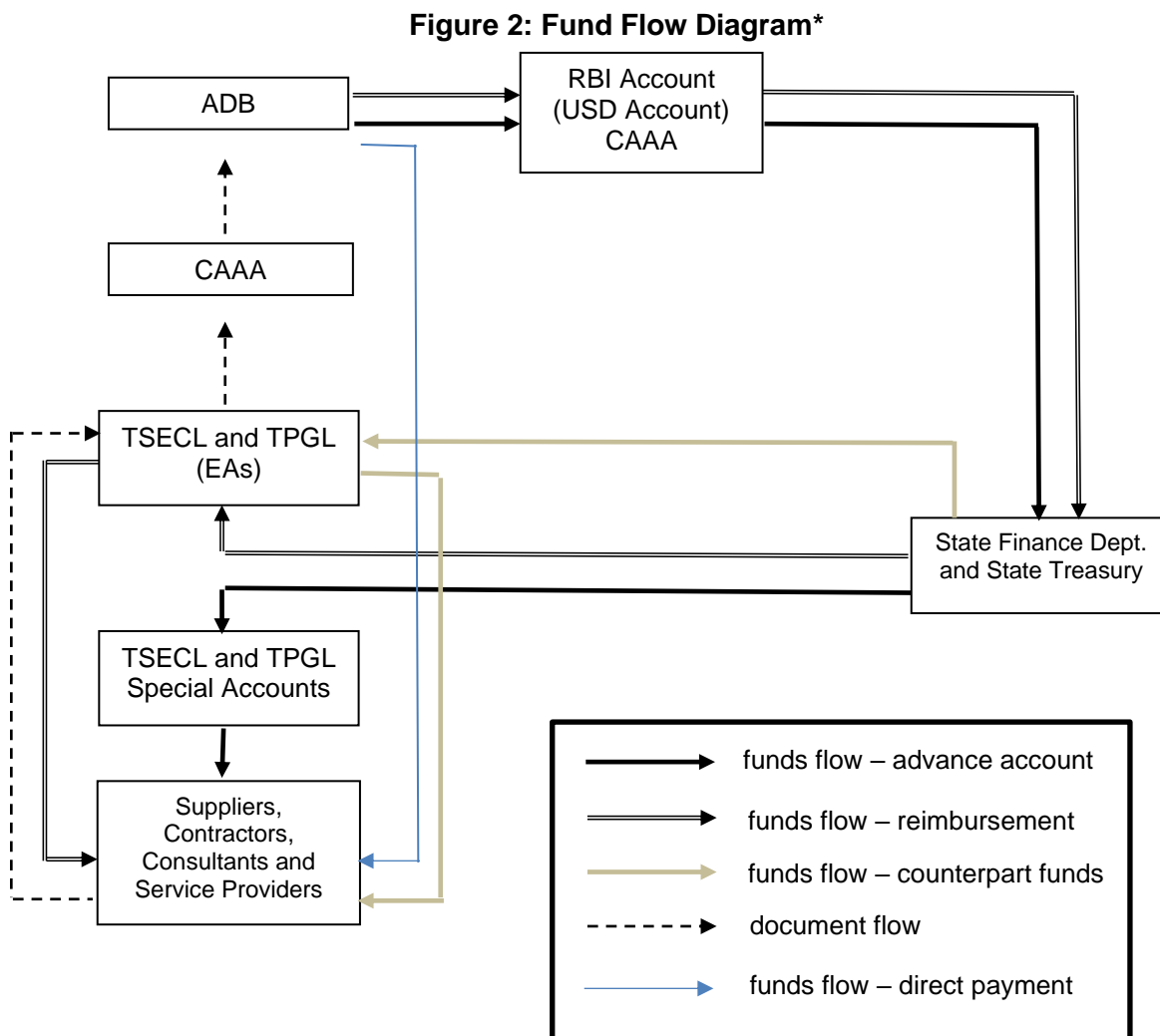
ADB = Asian Development Bank, OCR = ordinary capital resources, Q = quarter.

Source: ADB estimate



## I. Fund Flow Diagram

15. Figure 2 shows how the funds will flow from ADB to TSECL and TPGL to implement project activities, and how documents for requests for disbursement will flow to ADB.



ADB = Asian Development Bank, CAAA = controller of aid accounts and audit, EA = executing agency, TPGL = Tripura Power Generation Limited, TSECL = Tripura State Electricity Company Limited, RBI = Reserve Bank of India.  
\* the advance account to be opened and maintained by CAAA.

Source: Asian Development Bank.

## V. FINANCIAL MANAGEMENT

### A. Financial Management Assessment

16. The financial management assessment was completed in February 2022 in accordance with ADB's guidelines.<sup>1</sup> The financial management assessment (FMA) considered the capacity of the Tripura State Electricity Company Limited (TSECL) and Tripura Power Generation Company Limited (TPGL), including funds-flow arrangements, staffing, accounting and financial reporting systems, financial information systems, and internal and external auditing arrangements. Based on the assessment, it was concluded that TSECL and TPGL have adequate financial management capacity to: (i) record the required financial transactions, (ii) provide reliable annual financial statements and audit reports, (iii) safeguard the financial assets, and (iv) administer the statement of expenditure (SOE) procedure in accordance with ADB's disbursement procedures. The overall pre-mitigation financial management risk was assessed as *substantial*, primarily due to lack of experience of implementing foreign funded projects, delays in finalization of financial statements of TSECL which also lead to corresponding delays in filing of tariff true-up petitions as well as disallowance of expenditure by Tripura Electricity Regulatory Commission (TERC), lack of administrative and financial segregation of TPGL from TSECL including absence of comprehensive financial statements of TPGL, qualified audit opinion on TSECL financial statements, and weak controls over fixed assets management. TSECL has reasonable human resource and financial management systems in place. Implementation of a comprehensive enterprise resource planning (ERP) system is in progress. Under ADB's capacity development component, TSECL will be supported by qualified and experienced financial management consultants for implementation of various actions agreed in the Financial Management Action Plan. TSECL has agreed on implementation of a comprehensive financial management action plan to address the identified risks. Key mitigation measures agreed with TSECL include accelerated finalization of financial statements of TSECL, timely submission of tariff petitions (including true up and subsidy claims), preparation of roadmap for complete autonomy of TPGL from TSECL, improving financial management systems through update of finance manual and implementation of ERP system and preparation of comprehensive fixed assets register after completion of physical verification. In addition, the project staff will be provided trainings on ADB financial management requirements and disbursement procedures. The risk management assessment is in Table 10 and the financial management action plan is provided in Table 11.

**Table 10: Financial Management and Internal Control Risk Assessment**

Risk Description	Risk Assessment	Risk Mitigation Measures
<b>Inherent Risk</b>		
<b>A. Country Specific Risks</b>		
<b>1. Country Specific PFM</b> Strong PFM is one of the key elements of the Government of India's strategy for strengthening governance, optimizing outputs from public resources, and ensuring inclusive and broad-based development. The 2010 Public Financial Management Performance Assessment Report for India identified that the public financial management system is well structured but unevenly implemented.	Moderate	Not required.

<sup>1</sup> ADB. 2019. [Financial Analysis and Evaluation](#). Manila; and ADB. 2015. [Financial Management Assessment](#). Manila.

Risk Description	Risk Assessment	Risk Mitigation Measures
ADB's 2018–2022 Country Partnership Strategy for India notes that public financial management at the state level needs to be improved to facilitate the strategic pillar of providing inclusive network infrastructure and services.		
<b>B. Entity-Specific Risks</b>		
<b>1. Foreign Exchange Risk</b> TSECL and TPGL are not exposed to foreign exchange risk. The foreign exchange risk would be borne by the government, as the on-lending of 10% of total loan to TSECL and TPGL will be in local currency.	Low	Not required
<b>2. Tariff Risk</b> TSECL and TPGL are regulated entities, and their operations and revenues are regulated by TERC. Being a regulated entity, it is required to maintain operational and financial efficiency, in accordance with rules and regulations of TERC, and its investments and financial performance are further scrutinized by the state electricity regulatory commission regularly. The allowed tariff is insufficient to recover costs undermining financial sustainability of TSECL and TPGL. TERC has consistently disallowed a proportion of revenue requirements claimed in TSECL and TPGL tariff petitions. Delays in finalization of financial statements of TSECL and TPGL result in delays in filing of tariff true up petitions. However, interstate energy trade and export of energy to Bangladesh compensate lower level of tariffs to a larger extent as these sales account to around 60% of total revenue in FY2020.	Substantial	TSECL and TPGL will (i) prepare the audited annual accounts for the respective accounting year in timely manner to claim the appropriate level of return on equity, (ii) submit timely tariff petitions and tariff proposals, providing detailed justifications of various costs and operational parameters higher than the regulatory benchmarks, to TERC. In case of significant disallowances, it should submit review petitions to TERC. TSECL should justify its annual capital expenditure and submit necessary details to TERC in its tariff fillings to TERC to ensure adequate tariff recovery.
<b>Overall Inherent Risk</b>	Moderate	
<b>Control Risk</b>		
<b>1. Executing Agency</b> TSECL and TPGL do not have any experience in implementing ADB projects.	Substantial	The TSECL and TPGL PMUs will be staffed with adequate staff under the overall supervision of general manager finance. Adequate trainings of finance staff in the PMUs and/or finance unit with respect to loan disbursement process and ADB financial management requirements will be provided.
<b>2. Funds Flow</b> Delays in receipt of funds or release of loan amount, on account of	Moderate	TSECL has reported that generally the contributions (equity, grant or government debt) from state and central

Risk Description	Risk Assessment	Risk Mitigation Measures
delays in forwarding requests or non-compliance of procedure.		government are received in a timely manner and without any issues. Adequate assurances are provided by state government and TSECL and TPGL for timely release of ADB and counterpart funds.
<p><b>3. Staffing</b> The project management workforce should include dedicated finance and account staff with accounting experience and minimize the change of PMU for efficient financial management in project level.</p>	Moderate	<p>The following qualified finance and accounts staff will be assigned for project PMUs, under the supervision of General Manager (Finance):</p> <p>Manager (Finance) Assistant Manager (Finance) - TSECL Assistant Manager (Finance) - TPGL</p> <p>Training in ADB's accounting and reporting requirements would be provided to TSECL and TPGL accounting staff to further mitigate this risk.</p> <p>TSECL and TPGL will minimize the change of PMU staff and if there are change of staffs, TSECL and TPGL will provide orientation programs for newly appointed personnel.</p> <p>In addition, a qualified and experienced financial management consultant (individual or firm) will be hired to support TSECL, TPGL and project PMUs in:</p> <ul style="list-style-type: none"> <li>- maintaining books of accounts and preparation of project financial statements.</li> <li>- preparation of financial management manual.</li> <li>- preparation of annual financial statements of TSECL and TPGL in accordance with IND-AS (FY2022) and facilitate completion of audits in a timely manner.</li> <li>- addressing audit qualifications by developing relevant procedures and controls, carrying out necessary reconciliations, advisory on maintaining party wise ledgers for various classes of transactions, etc.</li> <li>- reconciliation of company loan statements</li> </ul>

Risk Description	Risk Assessment	Risk Mitigation Measures
		<ul style="list-style-type: none"> <li>- carrying out physical verification and valuation of fixed assets and inventory, in collaboration with technical consultants engaged for distribution assets mapping.</li> <li>- preparation of roadmap for administrative separation of TPGL from TSECL (including development of organizational structure, segregation of accounting records and financial reporting, etc.)</li> </ul>
<p><b>4. Accounting policies and procedures</b></p> <p><b>Audit qualification.</b> Audit reports of TSECL has several qualifications. These audit qualifications indicate the need for strengthening of internal control procedures across TSECL and TPGL.</p> <p><b>Accounting manual.</b> TSECL has confirmed that it has accounting and financial manuals-disseminated adequately across the organization. However, the manuals need update or require supplementary manuals to stay relevant and contemporary, especially after implementation of ERP and adoption of IND-AS. In addition, TSECL does not have any formal chart of accounts. It uses non-standard or custom codes while accounting on Tally ERP 9.</p>	<p>Substantial</p>	<p>TSECL will prepare and submit a board-approved Audit Qualification Clearance Plan. The plan will clearly indicate timelines and responsibility matrix, and suggestive measures. TSECL and TPGL will hire financial management consulting service which will provide hand holding support in systematic data management to resolve the persistent observations of the auditor on lack of data. Financial statements are also prepared for TPGL for statutory compliance purposes. There are no audit qualifications on financial statements of TPGL.</p> <p>TSECL and TPGL will develop/update and approve financial management related manual with the support of consulting service. The updated financial management manual will include detailed guidance on adopting formal and comprehensive accounting codes (for project and entity levels) in line with the ERP modules and IND-AS. The manual will include but not limited to:</p> <ul style="list-style-type: none"> <li>- Streamlining timely budget preparation system and executing effective budgetary controls</li> <li>- Development of templates for recoding fixed assets and inventory at divisional offices, and preparation of fixed assets and inventory registers</li> <li>- Development of chart of accounts, particularly to remove duplicate account codes, add appropriate accounting codes to assist in preparation of project financial statements for ADB</li> </ul>

Risk Description	Risk Assessment	Risk Mitigation Measures
		<ul style="list-style-type: none"> <li>- Policy for conversion of CWIP to fixed assets</li> <li>- Policy for Cash Management</li> <li>- Detailed policies and procedures to ensure compliance with requirements of IND-AS.</li> <li>- Trainings to staff on policies and procedures developed</li> </ul>
<p><b>5. Cash and Bank</b></p> <p>TSECL and TPGL follow a systematic approach and maintains an adequate and up-to-date cashbook recording receipts and payments. TSECL and TPGL have a well-established cash management system, which maintains a large amount of cash in hand which has been noted and commented upon by the statutory auditors as well.</p>	Low	Not required
<p><b>6. Fixed Asset Management</b></p> <p>The audit reports indicated that TSECL did not carry out physical verification of fixed assets and inventory during the financial year. In addition, there is no defined procedure or frequency for physical verification of fixed assets and inventories at TSECL and TPGL.</p>	Substantial	<p>TSECL and TPGL will prepare and adopt the policy on physical verification, which covers methodology, frequency and scope on assets including the proposed ADB projects.</p> <p>Hiring of financial consultant for physical verification and preparation of fixed asset and inventory registers, in line with requirements of Indian Accounting Standards. The consultant will work in close coordination with technical consultants involved in mapping of distribution network assets and utilize technical surveys for preparation of fixed assets register. Completion of physical verification and preparation of fixed asset and inventory registers, in line with requirements of Indian Accounting Standards.</p>
<p><b>7. Internal Audit</b></p> <p>There is no in-house internal audit team in the company and the function is outsourced to a local chartered accountancy firm. Audit reports are submitted to the Finance Department.</p>	Substantial	<p>TSECL and TPGL to ensure establishment of internal audit section and hiring of head of internal audit.</p> <p>TSECL will also ensure formation of an audit committee of the board of directors, for overseeing internal audit section and review of internal audit reports.</p>
<p><b>8. External Audit</b></p> <p>TSECL and TPGL failed to finalize their accounts within the due dates. These delays led to corresponding delays in filing of truing-up petitions before TERC</p>	Substantial	TSECL and TPGL are currently subject to annual auditing conducted by a statutory auditor appointed by India's CAG. It is also subject to audit by CAG.

Risk Description	Risk Assessment	Risk Mitigation Measures
<p>as well as disallowance of expenditure by TERC claimed in the petitions and consequent delay in recovery of revenue. Delay comes from (i) lack of staff in finance division and field offices, (ii) delay in receiving financial data from field offices, (iii) manual compilation of accounts in MS-Excel, (iv) lack of data on inventory management and assets, which is accompanied by delayed reporting of the account details.</p>		<p>TSECL and TPGL will improve timely completion of audited entity financial statements. Below are the targeted time for completion as below.</p> <p><b>TSECL:</b> FY2021: September 2022 FY2022 onwards: Within 6 months of completion of financial year</p> <p><b>TPGL:</b> FY2021: 31 May 2022 (completed, approved by Board on 8 Sept. 2022) FY2022 onwards: Within 6 months of completion of financial year</p> <p>TSECL and TPGL are in process of implementing an ERP system across the organization. Proposed ERP system will be capable of generating financial statements without any manual intervention and reconciliation, which will improve the quality of its financial statements and improve the confidence of the auditors and its stakeholders. TSECL and TPGL will deploy the finance and accounting module in the ERP package in timely manner.</p> <p>External audit of the project will be conducted by a firm of chartered accountants.</p>
<p><b>9. Budgeting</b> TSECL and TPGL have implemented a formal budgeting process in the organization. Budgets are prepared for all significant activities and allow for monitoring of subsequent performance. Budgets are prepared for both capital expenditure and revenue expenditure and include both physical and financial targets. The board of directors has the overall responsibility of responsible for preparation, approval and oversight/monitoring of budgets.</p>	Moderate	The state government and TSECL and TPGL to ensure adequate allocation of project in the annual budgets.
<p><b>10. Information Systems</b> Currently, Tally ERP 9 is used to record data and create initial trial balance and further adjustments. Consolidations are done manually using Microsoft Excel spreadsheets. TSECL and TPGL are preparing to adopt ERP. However, the project is still in initial</p>	Moderate	<p>TSECL and TPGL will expedite the finalization of ERP implementation as scheduled.</p> <p>Staffs in IT unit should be filled with qualified engineers. Key posts like project director (IT)-a general manager level position, and senior project</p>

Risk Description	Risk Assessment	Risk Mitigation Measures
stages and subject to implementation and project delay risk.		manager-a deputy general manager level position should be recruited immediately.  It will submit quarterly updates on ERP implementation to ADB.
<b>Overall Control Risk</b>	Substantial	
<b>Overall (Combined) Risk</b>	<b>Substantial</b>	

ADB = Asian Development Bank, CAG = Comptroller and Auditor General, CWIP = Capital Work in Process, ERP = enterprise resource planning, FY = fiscal year, IND-AS = Indian Accounting Standards, IT = information technology, TERC = Tripura Electricity Regulatory Commission, TPGL = Tripura Power Generation Limited, TSECL = Tripura State Electricity Corporation Limited, PFM = public financial management, PMU = project management unit.

6. TSECL and TPGL and ADB have agreed an action plan to address the following issues that the FMA identified.

**Table 11: Financial Management Action Plan**

Risk Description	Mitigation Actions	Responsibility	Timeframe
<b>Strengthen Financial Management</b>			
<b>PMU Staff.</b> The project management manpower should include dedicated finance and account staff with accounting experience and minimize the change of PMU for efficient financial management in project level.	Assign the following qualified finance and accounts staff for project PMUs, under the supervision of General Manager (Finance): Manager (Finance) Assistant Manager (Finance) - TSECL Assistant Manager (Finance) - TPGL	TSECL and TPGL	By loan signing
<b>Administrative separation TPGL from TSECL</b>	TSECL needs to prepare plan to provide financial and administrative autonomy to TPGL for performing its day-to-day functions. Following action items were agreed in this regard: a. Hiring of financial consultants, for preparation of roadmap for administrative unbundling of TSECL.  b. Appointment of separate senior managers for TPGL (including General Manager Technical, General Manager Human Resource and Chief Financial Officer).  c. Preparation and submission of a time bound roadmap to provide financial and administrative autonomy to TPGL (including preparation of comprehensive financial statements of TPGL).  d. Quarterly updates to ADB on	TSECL and TPGL	31 March 2023  30 June 2023  30 June 2023  Within 45 days



Risk Description	Mitigation Actions	Responsibility	Timeframe
	implementation of roadmap referred to in item "a" above, till full implementation of the roadmap.		of end of each calendar quarter starting from loan effectiveness
<b>Delays in finalization of audited financial statements and filing of tariff true up petitions</b>	<b>Audited Financial statements:</b> Improve timely completion of audited entity financial statements of TSECL and TPGL.	TSECL and TPGL	Within 6 months of completion of financial year
<b>Fixed asset management</b> The audit report of FY2017 has indicated that TSECL did not carry out physical verification of fixed assets and inventory during the financial year. In addition, there is no defined procedure or frequency for physical verification of fixed assets and inventories at TSECL and TPGL.	Hiring of financial consultant for physical verification and preparation of fixed asset and inventory registers, in line with requirements of Indian Accounting Standards. The consultant will work in close coordination with technical consultants involved in mapping of distribution network assets and utilize technical surveys for preparation of fixed assets register.  Completion of physical verification and preparation of fixed asset and inventory registers, in line with requirements of Indian Accounting Standards.  TSECL and TPGL will prepare and adopt the policy on physical verification, which covers methodology, frequency and scope on assets including the proposed ADB projects.	TSECL and TPGL	31 March 2023  By 31 March 2024  By 30 June 2023
<b>Action plan for addressing audit qualifications</b>	a. TSECL and TPGL will prepare and submit a board-approved plan for addressing audit qualifications on latest audited financial statements. The plan will clearly indicate timelines and responsibility matrix, and suggestive measures.  b. Quarterly updates to ADB on implementation of plan referred to in item "a" above, till full implementation of the plan.	TSECL and TPGL	By 31 March 2023
<b>Accounting manual.</b> Accounting manual of TSECL needs improvements and updates, particularly in view of implementation of ERP	TSECL and TPGL will update the accounting manuals by adopting formal and comprehensive accounting codes in line with the ERP modules and IND-AS.	TSECL and TPGL	By 30 June 2023

Risk Description	Mitigation Actions	Responsibility	Timeframe
<p><b>Internal audit.</b> There is no in-house internal audit team in the company and the function is outsourced to a local chartered accountancy firm. Audit reports are submitted to the finance department.</p>	<p>Establishment of internal audit section and hiring of head of internal audit.</p> <p>Formation of an audit committee of the board of directors, for overseeing internal audit section and review of internal audit reports.</p> <p>Internal audit of the project on semi-annual basis. Include summary of internal audit findings and actions taken/planned by management to address internal audit observations in quarterly progress reports to be submitted to ADB.</p>	<p>TSECL</p> <p>TSECL</p>	<p>By 31 March 2023</p> <p>By 31 March 2023</p> <p>Semi-annual from loan effectiveness till end of project implementation.</p>
<p><b>ERP implementation in timely manner.</b></p>	<p>TSECL and TPGL will expedite the recruitment process of 8–10 IT staffs (including key position of General Manager IT)</p> <p>Implement the ERP system with finance and accounting module to ensure timely preparation of audited accounts</p>	<p>TSECL and TPGL</p>	<p>By 31 March 2023</p> <p>The finance and accounting module for ERP system to be fully implemented by 31 March 2023</p>
<p><b>Capacity building</b> TSECL and TPGL lacks experience of implementing ADB funded projects</p>	<p>i. Training of TSECL and TPGL finance and accounts staff on ADB financial management requirements and disbursement procedures to be provided by ADB.</p> <p>ii. Hiring of qualified and experienced financial management consultant (individual or firm) to support TSECL, TPGL and project PMUs in:</p> <ul style="list-style-type: none"> <li>- maintaining books of accounts and preparation of project financial statements.</li> <li>- preparation of financial management manual.</li> <li>- preparation of annual financial statements of TSECL and TPGL in accordance with IND-AS (FY2019 to FY2022) and facilitate completion of audits in a timely manner.</li> <li>- addressing audit qualifications by developing relevant procedures and controls, carrying out necessary reconciliations, advisory on maintaining party</li> </ul>	<p>ADB, TSECL</p>	<p>Within six months of loan signing</p> <p>By 31 March 2023</p>

Risk Description	Mitigation Actions	Responsibility	Timeframe
	<p>wise ledgers for various classes of transactions, etc.</p> <ul style="list-style-type: none"> <li>- reconciliation of company loan statements</li> <li>- carrying out physical verification and valuation of fixed assets and inventory, in collaboration with technical consultants engaged for distribution assets mapping.</li> <li>- preparation of roadmap for administrative separation of TPGL from TSECL (including development of organizational structure, segregation of accounting records &amp; financial reporting, etc.)</li> </ul>		
<p><b>Financial reporting</b></p>	<p><b>Quarterly progress reporting:</b> Include comprehensive financial information to the QPRs in a format agreed with ADB, including reconciliation of project expenditure with ADB's loan financial information system (LFIS).<sup>2</sup></p> <p><b>Audited project financial statements:</b></p> <ul style="list-style-type: none"> <li>- Prepare project financial statements using accrual basis of accounting.</li> <li>- Engage CAG empaneled audit firm for the project audit using the audit TORs agreed between CAG, ADB and DEA<sup>3</sup>, as amended from time to time.</li> <li>- Submit the APFS including a management letter to ADB within six months after the end of the fiscal year.</li> <li>- Resolve all material audit observations and report the status of the observations in the QPRs.</li> </ul>		<p>Within 45 days after each quarter.</p> <p>Within 2 months after the end of each fiscal year.</p> <p>Within six months of loan effectiveness Within six months after the end of fiscal year. Within 6 months after</p>

<sup>2</sup> An indicative template for financial information to be included in the QPRs is included in Appendix 2 .

<sup>3</sup> Government of India, Ministry of Finance. 2013. [Terms of Reference for Audit of ADB Assisted Projects by the C&AG of India Reg.](#) Delhi.

Risk Description	Mitigation Actions	Responsibility	Timeframe
			the date of the audit report
<b>Improve financial sustainability</b>			
<b>Implementation of RDSS scheme (consultant to assist TSECL already hired, DPR submitted and tripartite agreement signed on 11 August 2022)</b>	Implement the tripartite agreement (including pre-qualification criteria) among state government, TSECL and the central government, signed on 11 August 2022, to undertake responsibilities as per provisions of the RDSS guidelines and ensure implementation of terms agreed in the tri-partite agreement.	State government and TSECL	As defined in the tripartite agreement
<b>Tariff reforms</b>	<p><b>A. Timely submission of tariff and true up petitions and subsidy claims</b></p> <p>With timely finalization of financial statements, TSECL and TPGL to ensure:</p> <p>i. Timely submission of tariff true up petitions for recovering the shortfall in revenue of the respective year through increase tariff.</p> <p>ii. Timely submission of subsidy claims to government of Tripura</p> <p><b>B. Reduce ACS-ARR gap</b></p> <p>i. Gradual reduction of ACS-ARR gap, to achieve zero gap by FY2026.</p> <p>ii. No new “Regulatory Assets” created in tariff determination cycle.</p>		<p>FY2023 onwards - as per TERC regulations</p> <p>By FY2026</p> <p>From FY2023 onwards</p>

ACS-ARR = average cost of supply-average revenue realized, ADB = Asian Development Bank, APFS = audited project financial statement, CAG = Comptroller and Auditor General, DEA = Department of Economic Affairs, ERP = enterprise resource planning, FY = fiscal year, IND-AS = Indian Accounting Standards, LFIS = Loan Financial Information Services, RDSS = Revamped Distribution Sector Scheme, TERC = Tripura Electricity Regulatory Commission, TPGL = Tripura Power Generation Limited, TSECL = Tripura State Electricity Corporation Limited, PFC = Power Finance Corporation, PFM = public financial management, PMU = project management unit, QPR = quarterly progress report.

## B. Disbursement Arrangements

### 1. Disbursement Arrangements for ADB

7. The loan proceeds will be disbursed in accordance with ADB’s *Loan Disbursement Handbook* (2017, as amended from time to time)<sup>4</sup>, and detailed arrangements agreed upon between the government and ADB. Online training for project staff on disbursement policies and procedures is available.<sup>5</sup> Project staff are encouraged to avail of this training to help ensure

<sup>4</sup> The handbook is available electronically from the ADB website (ADB. 2017. [Loan Disbursement Handbook](#). Manila).

<sup>5</sup> [Disbursement eLearning](#).

efficient disbursement and fiduciary control. ADB's reimbursement and advance fund procedures will be used where available. The PMU of TSECL and TPGL will be responsible for: (i) preparing disbursement projections, (ii) requesting budgetary allocations for counterpart funds, (iii) collecting supporting documents, and (iv) preparing withdrawal applications.

8. **Advance fund procedure.** The TSECL and TPGL may apply for the advance fund<sup>6</sup> procedure for the ADB loan to the Government of India. After approval from the Government of India, an advance account will be established and maintained by Controller of Aid, Accounts and Audit (CAAA) for the ADB loan. The TSECL and TPGL will be responsible for the preparation of liquidation/replenishment of the advance account. The currency of the advance account is United States dollar. The advance account is to be used exclusively for the ADB loan share of eligible expenditures. The CAAA, who established the advance account in its name, is accountable and responsible for proper use of advances to the advance account. In addition, a subaccount will be maintained in a commercial bank by the TSECL and TPGL, for the ADB loan, receiving the Indian rupee from CAAA through the treasury of government of Tripura. The state government will ensure funds received from CAAA are transferred in full to the respective subaccount within 5 working days of the receipt of the advance or replenishment.

9. The total outstanding advance to the advance account should not exceed the estimate of ADB's share of expenditures to be paid through the advance account for the forthcoming 6 months. The TPGL and TSECL may request for initial and additional advances to the advance accounts based on an Estimate of Expenditure Sheet<sup>7</sup> setting out the estimated expenditures to be financed through the accounts for the forthcoming 6 months. Supporting documents should be submitted to ADB or retained by the borrower, TPGL and TSECL in accordance with ADB's *Loan Disbursement Handbook* (2017, as amended from time to time) when liquidating or replenishing the advance account.

10. **Statement of expenditure procedure.**<sup>8</sup> The statement of expenditure (SOE) procedure may be used for reimbursement of eligible expenditures or liquidation of advances to the advance account with a ceiling of \$200,000 considering the substantial FM risk rating of the entities. This will be further reviewed during implementation and revised appropriately. Supporting documents and records for the expenditures claimed under the SOE should be maintained and made readily available for review by ADB's disbursement and review missions, upon ADB's request for submission of supporting documents on a sampling basis, and for independent audit.

11. Before the submission of the first withdrawal application, the borrower should submit to ADB sufficient evidence of the authority of the person(s) who will sign the withdrawal applications on behalf of the government, together with the authenticated specimen signatures of each authorized person. The minimum value per withdrawal application is stipulated in the *Loan Disbursement Handbook* (2017, as amended from time to time). Individual payments below such amount should be paid (i) by the TPGL and/or TSECL and subsequently claimed to ADB through reimbursement, or (ii) through the advance fund procedure, unless otherwise accepted by ADB. The borrower should ensure sufficient category and contract balances before requesting

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<sup>6</sup> There will be only one advance account common for both TSECL and TPGL.

<sup>7</sup> Estimate of Expenditure sheet is available in Appendix 8A of ADB's *Loan Disbursement Handbook* (2017, as amended from time to time),

<sup>8</sup> SOE forms are available in Appendix 7B and 7D of ADB's *Loan Disbursement Handbook* (2017, as amended from time to time).

disbursements. Use of ADB's Client Portal for Disbursements (CPD)<sup>9</sup> system is encouraged for submission of withdrawal applications to ADB.

## 2. Disbursement Arrangements for Counterpart Fund

12. The government counterpart funds will be sufficiently allocated in the budget annually. TSECL and TPGL will be responsible for preparing disbursement projections and requesting budgetary allocations for the project, including counterpart funds to the state government. All disbursements under government financing will be carried out in accordance with the regulations of the Government of India and state government and accounting principles acceptable to ADB.

### C. Financial Management Arrangements

13. **Financial Management capacity enhancement plan.** To ensure sufficient knowledge in ADB's Financial Management requirements, including procedures and related systems, TSECL and TPGL through its PMU will ensure that each financial and accounts staff assigned to the project undertake the following actions within the first three months working with the project:

- (i) Familiarize with ADB and national anticorruption policy and whistle blowing mechanisms;
- (ii) Obtain copies of and develop understanding of project legal agreements including the financial covenants, relevant sections of this project administration manual, and the ADB Loan Disbursement Handbook;
- (iii) Obtain user and reader rights (as required) to ADB's systems including: the CPD and the Loan Financial information Service (LFIS); and
- (iv) Familiarize with ADB's reporting requirements including the agreed format for project financial statements and Audit Terms of References (TOR) for audit of ADB assisted projects, agreed with the comptroller and auditor general (CAG), the Department of Economic Affairs (DEA) and ADB.

14. In addition, TSECL and TPGL should on a yearly basis liaise with ADB to take advantage of other financial management resources and training events organized by ADB, especially in the first 2 years of project implementation.

15. TPGL and TSECL will maintain, or cause to be maintained, separate books and records by funding source for all expenditures incurred on the project in accordance with government's accounting laws and regulations: accrual basis of accounting, which are consistent with international accounting principles and practices. TSECL will prepare project financial statements in accordance with government regulations and following the financial statements template provided in the Standardized Terms of Reference for audit of ADB assisted projects, agreed with the CAG of India, the DEA and ADB. Accordingly, the expected disclosures in the project financial statements should include the following:

- (i) Statement of financial position (balance sheet);
- (ii) Statement of comprehensive income ((by financing source: ADB loan, and state government) and payments (by expenditure category) for the current reporting period, past reporting period, and cumulative to date);
- (iii) Statement of cash flows;
- (iv) Statement of advance subaccount;

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<sup>9</sup> The CPD facilitates online submission of withdrawal application to ADB, resulting in faster disbursement. The forms to be completed by the Borrower are available online at ADB. 2016. [Guide to the Client Portal for Disbursements](#). Manila.

- (v) Statement of disbursement, disclosing all funds claimed from ADB by disbursement method, total expenditure claimed for the current reporting period, past reporting period, and cumulative to date. The notes of the financial statements should include a detailed list of all withdrawal applications submitted to, and the amounts paid by ADB as follows: (a) withdrawal application number; (b) the amount claimed and currency; (c) time period in which expenditures were incurred; (d) date submitted; (e) disbursement method; and (f) the amount disbursed by ADB;
- (vi) Disbursement claimed under SOE procedure for the reporting period;
- (vii) Statement of appropriation vs. actual expenditures. Any significant variances must be duly explained;
- (viii) Expenditure by output and components for the current reporting period, past reporting period, and cumulative to date; and
- (ix) Notes to the Financial Statements disclosing the used accounting standards and policies and other relevant information and explanations.

16. The expenditure categories and outputs used in the financial reports will be aligned with the expenditure categories of the PAM, as detailed in Table 4.

17. **Financial information in quarterly progress reports.** To provide timely information on the project's financial progress and the status of financial management to the project management, TSECL will ensure that the detailed financial information is included in the quarterly progress reports to be submitted to ADB within 45 days after the end of the quarter. The information will include at least the following:

- (i) Cumulative contract awards financed by the ADB loan, and counterpart funds (commitment of funds to date), and comparison with time-bound projections (compare actual contract awards with the contract award curve included in the PAM). Any significant variances between planned and actual contract awards are to be explained;
- (ii) Cumulative disbursements from the ADB loan, and counterpart funds (expenditure to date), and comparison with time-bound projections. Any significant variances between planned and actual disbursements are to be explained;
- (iii) Re-estimated costs to completion, need for reallocation within ADB loan and whether an overall project cost overrun is likely;
- (iv) Reconciliation of project records and ADB disbursement records for the ADB loan for the financial year to date and cumulative from project inception to end of the reporting period. Any discrepancies and outline follow-up actions required are to be explained;
- (v) Variance analysis including budget vs actual expenditures and physical vs financial progress, with significant deviations explained;
- (vi) Summary of the status of financial covenants (if any) as outlined in the legal agreement;
- (vii) Summary of the status of financial management in the project including (a) any problems in the existing financial management arrangements and /or flow of funds and (b) any significant changes occurred during the reporting period (e.g. financial management staff turnover, implementation of new financial systems, emerging financial management related risks etc.);
- (viii) Summary of the status of: (a) the financial management action plan outlined in the PAM; (b) recommendations and actions raised by ADB as part of the Audited Project Financial Statements (APFS) review (if any); and (c) financial management related recommendations agreed during ADB review missions (if any);

- (ix) Summary of the status of Status of past audit observations (resolved or pending).
- (x) Summary of status of roadmap for administrative separation of TPGL from TSECL (in accordance with FMAP); and
- (xi) Summary of status of action plan to address audit qualifications (in accordance with FMAP).

18. Detailed financial reports may be included as an annex to the progress report as agreed with ADB. Sample template for the financial information to be included in the quarterly progress report is included as Appendix 2.

19. To ensure the correctness and completeness of the project's disbursement records, the TSECL and TPGL will conduct quarterly reconciliation of the project accounts, and ADB's disbursement data available in the LFIS. Any discrepancies and/or reconciliation items will be promptly followed up on to ensure these are resolved in a prompt manner. The differences between amounts claimed and the amounts disbursed will be disclosed and explained in the withdrawal application register, in the quarterly progress reports and in the notes of the project financial statements.

#### **D. Auditing and Public Disclosure**

20. **Audited project financial statements.** TPGL and TSECL will cause the detailed consolidated<sup>10</sup> project financial statements (comprising all components of the project and all sources of funding) to be audited by an independent auditor<sup>11</sup> acceptable to ADB and in accordance with international standards on auditing or national equivalents<sup>12</sup> and the audit TORs agreed between ADB, CAG, and DEA. The audited project financial statements together with the auditor's opinion will be presented in the English language to ADB within 6 months from the end of the fiscal year by the TSECL and TPGL.

21. The audited entity financial statements, together with the auditor's report and management letter, will be submitted in the English language to ADB within 6 months after the end of each financial year, in accordance with requirements of the Companies Act, 2013.

22. The audit report for the project financial statements will include a management letter and auditor's opinions, which cover (i) whether the project financial statements present an accurate and fair view or are presented fairly, in all material respects, in accordance with the applicable financial reporting standards; (ii) whether the proceeds of the loan were used only for the purpose(s) of the project; and (iii) whether the borrower or executing agency was in compliance with the financial covenants contained in the legal agreements (TSECL will prepare calculation of financial ratios in accordance with definitions included in the loan and project agreements and provide to auditors, based on which the auditors will issue audit opinion on compliance with financial covenants). The annual project financial statements should include withdrawal application-wise reconciliation between amounts reported in the project financial statements and disbursement amounts appearing in the LFIS of ADB. The LFIS can be accessed online and ADB will provide LFIS access to project staff on request. The audit report must also be accompanied by a management letter containing audit observations and recommendations for improvements in internal control and other matters coming to the attention of the auditor during the audit examination. The management letter should also include management's response to the audit observations. From the second year onward, the management letter must also include a follow-

<sup>10</sup> TPGL is currently not independent administratively from TSECL. There is a common accounting and finance function for TSECL and TPGL.

<sup>11</sup> CAG or a chartered accountant firm empaneled by CAG.

<sup>12</sup> Audit standards promulgated by the CAG or the Institute of Chartered Accountants of India.



up on previous years audit observations. In case the auditor does not issue a management letter, the auditor must issue a written confirmation that no internal control issues were identified as part of the audit.

23. Compliance with financial reporting and auditing requirements will be monitored by review missions and during normal program supervision, and followed up regularly with all concerned, including the external auditor.

24. The government, TPGL and TSECL have been made aware of ADB's approach to delayed submission, and the requirements for satisfactory and acceptable quality of the audited project financial statements.<sup>13</sup> ADB reserves the right to require a change in the auditor (in a manner consistent with the constitution of the borrower), or for additional support to be provided to the auditor, if the audits required are not conducted in a manner satisfactory to ADB, or if the audits are substantially delayed. ADB reserves the right to verify the project's financial accounts to confirm that the share of ADB's financing is used in accordance with ADB's policies and procedures.

25. Public disclosure of the audited project financial statements, including the auditor's opinion on the project financial statements, will be guided by ADB's Access to Information Policy 2018.<sup>14</sup> After the review, ADB will disclose the audited project financial statements and the opinion of the auditors on the project financial statements no later than 14 days of ADB's confirmation of their acceptability by posting them on ADB's website. The management letter, additional auditor's opinions, and audited entity financial statements will not be disclosed.<sup>15</sup>

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<sup>13</sup> ADB's approach and procedures regarding delayed submission of audited project financial statements:

- (i) When audited project financial statements are not received by the due date, ADB will write to the executing agency advising that (a) the audit documents are overdue; and (b) if they are not received within the next 6 months, requests for new contract awards and disbursement such as new replenishment of advance accounts, processing of new reimbursement, and issuance of new commitment letters will not be processed.
- (ii) When audited project financial statements are not received within 6 months after the due date, ADB will withhold processing of requests for new contract awards and disbursement such as new replenishment of advance accounts, processing of new reimbursement, and issuance of new commitment letters. ADB will (a) inform the executing agency of ADB's actions; and (b) advise that the loan may be suspended if the audit documents are not received within the next 6 months.
- (iii) When audited project financial statements are not received within 12 months after the due date, ADB may suspend the loan.

<sup>14</sup> ADB. 2018. [Access to Information Policy](#). Manila.

<sup>15</sup> This type of information would generally fall under public communications policy exceptions to disclosure. ADB. 2011. [Public Communications Policy](#). Paragraph 97(iv) and/or 97(v).

## VI. PROCUREMENT AND CONSULTING SERVICES

### A. Advance Contracting and Retroactive Financing

26. All advance contracting and retroactive financing will be undertaken in conformity with ADB Procurement Policy (2017, as amended from time to time) and Procurement Regulations for ADB Borrowers (2017, as amended from time to time). The issuance of invitations to bid under advance contracting and retroactive financing will be subject to ADB approval. The borrower, TPGL and TSECL, have been advised that approval of advance contracting and retroactive financing does not commit ADB to finance the project.

27. Open competitive bidding procedure, single-stage two envelope was used for substation and distribution line packages. The combined cycle gas turbine (CCGT) power plant package and remaining distribution components will also use open competitive bidding with single-stage two envelope procedure. Shopping would be used for the goods and works to support the gender related activities. Consulting services to provide project implementation supervision services for TSECL and TPGL and distribution roadmap would use the quality- and cost-based selection method with a standard quality–cost ratio of 80:20. Consulting services to support preparation of financial and renewable energy roadmap would use the quality-based selection method. TSECL and TPGL has requested ADB’s support with the recruitment of consulting services process.

28. **Retroactive financing.** Except as otherwise agreed with ADB, the eligible expenses incurred for works will be eligible for retroactive financing, provided these are incurred before the effectiveness of the related loan agreement, but not earlier than 12 months preceding the signing of the related loan agreement, and if they do not exceed an amount of 20% of the loan.

### B. Procurement of Goods, Works, and Consulting Services

29. All procurement of goods and works will be undertaken in accordance with ADB Procurement Policy (2017, as amended from time to time) and Procurement Regulations for ADB Borrowers (2017, as amended from time to time).

30. **National competitive bidding.** Before the start of any procurement, ADB and the government will review the public procurement laws of the central and state governments to ensure consistency with ADB Procurement Policy (2017, as amended from time to time) and Procurement Regulations for ADB Borrowers (2017, as amended from time to time).

31. An 18-month procurement plan indicating threshold and review procedures, goods, works, and consulting service contract packages and national competitive bidding guidelines is in Section C.

32. All consultants will be recruited according to ADB Procurement Policy (2017, as amended from time to time) and Procurement Regulations for ADB Borrowers (2017, as amended from time to time).<sup>16</sup> The terms of reference for all consulting services are detailed in Section D.

33. An estimated 90 person-months (national) of consulting services are required to (i) facilitate project management and implementation, and (ii) strengthen the institutional and

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<sup>16</sup> Checklists for actions required to contract consultants by method available in e-Handbook on Project Implementation at: <http://www.adb.org/documents/handbooks/project-implementation/> ADB. 2018. [Access to Information Policy](#). Manila.

operational capacity of the executing agency. Consulting firms will be engaged using the quality- and cost-based selection (QCBS) method with a standard quality–cost ratio of 80:20.

### C. Procurement Plan

#### Basic Data

<b>Project Name:</b> Tripura Power Distribution Strengthening and Generation Efficiency Improvement Project	
<b>Project Number:</b> 51308-009	<b>Approval Number:</b>
<b>Country:</b> India	<b>Executing Agency:</b> Tripura Power Generation Limited, Tripura State Electricity Corporation Limited
<b>Project Procurement Risk:</b> Substantial	<b>Implementing Agency:</b> Tripura Power Generation Limited, Tripura State Electricity Corporation Limited
<b>Project Financing Amount:</b> \$277,400,000 <b>ADB Financing:</b> \$220,000,000 <b>Cofinancing (ADB Administered):</b> <b>Non-ADB Financing:</b> \$57,400,000	<b>Project Closing Date:</b> 31 December 2026
<b>Date of First Procurement Plan:</b> 5 January 2021	<b>Date of this Procurement Plan:</b> 5 January 2021
<b>Procurement Plan Duration:</b> 18 months	<b>Related to COVID-19 response efforts:</b> No
<b>Advance Contracting:</b> Yes	<b>Use of e-procurement (e-GP):</b> Yes <a href="https://tripuratenders.gov.in/">https://tripuratenders.gov.in/</a>

34. **Methods, review, and procurement plan.** Except as ADB may otherwise agree, the following methods shall apply to procurement of goods, works, and consulting services.

Procurement of Goods and Works	
Method	Comments
Open Competitive Bidding (OCB) for Works	International Advertising.

Consulting Services	
Method	Comments
Quality- and Cost-Based Selection for Consulting Firm	International Advertising. Full Technical Proposal. Quality Cost Ratio 80:20.
Quality-Based Selection for Consulting Firm	International Advertising. Biodata Technical Proposal
Individual Consultant	International Advertising

35. **Lists of active procurement packages (contracts).** The following table lists goods, works, non-consulting and consulting services contracts for which the procurement activity is either ongoing or expected to commence within the procurement plan duration.

Goods and Works							
Package Number	General Description	Estimated Value (in US\$)	Procurement Method	Review	Bidding Procedure	Advertisement Date (quarter/year)	Comments
A-1	Renovation and Modernization of Distribution Substation and its associated facilities	8,650,000.00	OCB	Prior	1S2E	Q2/2021	Non-Consulting Services: yes  Advertising: International  No. of Contracts: 1 Prequalification of Bidders: No  Domestic

							Preference Applicable: No  Advance Contracting: Yes  Bidding Document: Plant  High Risk Contract: No  e-GP: Yes  e-GP Type: e- Bidding  Covid-19 Response? No
A-2	Distribution Lines and its associated facilities	43,790,000.00	OCB	Prior	1S2E	Q2/2021	Non-Consulting Services: Yes  Advertising: International  No. of Contracts: 3  Prequalification of Bidders: No  Domestic Preference Applicable: No  Advance Contracting: Yes Bidding Document: Plant  High Risk Contract: No  e-GP: Yes  e-GP Type: e- Bidding  Covid-19 Response? No
	Lot 1: EC-I and II WEST	20,230,000.00					
	Lot 2: EC- KHOWAI	11,660,000.00					
	Lot 3: EC- DHARMANAGAR, UNAKOTI and DHALAI	11,900,000.00					
A-3	Distribution Lines	37,700,000.00	OCB	Prior	1S2E	Q2/2021	Non-Consulting

	and its associated facilities						Services: Yes Advertising: International No. of Contracts: 3 Prequalification of Bidders: No Domestic Preference Applicable: No Advance Contracting: Yes Bidding Document: Plant High Risk Contract: No e-GP: Yes e-GP Type: e-Bidding Covid-19 Response? No
	Lot 1: EC-SEPAIJALA Lot 2: EC-GOMATI Lot 3: EC-BELONIA	12,200,000.00 15,250,000.00 10,250,000.00					
A-4	High Voltage Distribution System and its associated facilities	8,000,000.00	OCB	Prior	1S2E	Q3/2022	Non-Consulting Services: Yes Advertising: International No. of Contracts: 1 Prequalification of Bidders: No Domestic Preference Applicable: No Advance Contracting: Yes Bidding Document: Plant

							High Risk Contract: No e-GP: Yes e-GP Type: e-Bidding Covid-19 Response? No
A-5	Supply, Installation, Commissioning and Integration of 100,000 AMI Smart Meters	10,750,000.00	OCB	Prior	1S2E	Q2/2022	Non-Consulting Services: Yes Advertising: International No. of Contracts: 1 Prequalification of Bidders: No Domestic Preference Applicable: No Advance Contracting: Yes Bidding Document: Plant High Risk Contract: No e-GP: Yes e-GP Type: e-Bidding Covid-19 Response? No
A-6	Supply and Construction of Transformer Testing Laboratory and its associated facilities	1,210,000.00	OCB	Prior	1S2E	Q3/2022	Non-Consulting Services: Yes Advertising: International No. of Contracts: 1 Prequalification of Bidders: No Domestic Preference Applicable: No Advance Contracting: Yes

							Bidding Document: Plant High Risk Contract: No e-GP: Yes e-GP Type: e-Bidding Covid-19 Response? No
B-1	Conversion of 63 MW Open Cycle Rokhia Gas Based Project to Combined Cycle	95,000,000.00	OCB	Prior	1S2E	Q2/2022	Non-Consulting Services: yes Advertising: International No. of Contracts: 1 Prequalification of Bidders: No Domestic Preference Applicable: No Advance Contracting: Yes Bidding Document: Plant High Risk Contract: Yes e-GP: Yes e-GP Type: e-Bidding Covid-19 Response? No
S-1	Equipment, instruments and training activities to support gender intervention	200,000	RFQ	Prior		Q4/2022	Non-Consulting Services: Yes No. of Contracts: 6 Prequalification of Bidders: No Bidding Document: shopping High Risk Contract: No
	Item-1	20,000					
	Item-2	20,000					
	Item -3	20,000					
	Item -4	20,000					
	Item -5	20,000					

	Item -6	20,000					e-GP: Yes
	Item-7	20,000					e-GP Type: e-Bidding
	Item-8	20,000					Covid-19 Response? No
	Item-9	20,000					
	Item-10	20,000					
<b>Consulting Services</b>							
Package Number	General Description	Estimated Value (in US\$)	Selection Method	Review	Type of Proposal	Advertisement Date (quarter/year)	Comments
C-1	Project Implementation Consultant for TSECL	1,500,000.00	QCBS	Prior	FTP	Q2/2022	Non-Consulting Services: No  Type: Firm  Assignment: International  Quality-Cost Ratio: 80:20  Advance Contracting: Yes  e-GP: Yes  e-GP Type: e-Bidding  Covid-19 Response? No
C-2	Consultant for Network Survey, Mapping and Distribution Roadmap Planning Report for TSECL	2,000,000.00	QCBS	Prior	FTP	Q3/2022	Non-Consulting Services: No  Type: Firm  Assignment: International  Quality-Cost Ratio: 80:20  Advance Contracting: Yes  e-GP: Yes  e-GP Type: e-Bidding  Covid-19 Response? No



C-3	Project Implementation Consultant for TPGL	2,000,000.00	QCBS	Prior	FTP	Q3 / 2022	Non-Consulting Services: No Type: Firm Assignment: International Quality-Cost Ratio: 80:20 Advance Contracting: Yes e-GP: Yes e-GP Type: e-Bidding Covid-19 Response? No
C-4	Preparation of renewable Roadmap for Tripura (TPGL)	350,000.00	QCBS	Prior	STP	Q3 / 2022	Non-Consulting Services: No Type: Firm Assignment: International/ National Advance Contracting: Yes e-GP: Yes e-GP Type: e-Bidding Covid-19 Response? No
C-5	Preparation of financial Roadmap for TPGL and TSECL	400,000.00	QCBS	Prior	STP	Q3/2022	Non-Consulting Services: No Type: Firm Assignment: International/ National Advance Contracting: Yes e-GP: Yes e-GP Type: e-Bidding Covid-19 Response? No
C-6	Organizational	250,000.00	QCBS	Prior	STP	Q3/2022	Non-Consulting

	structure and capacity assessment of TSECL.						Services: No Type: Firm Assignment: International/ National Advance Contracting: Yes e-GP: Yes e-GP Type: e-Bidding Covid-19 Response? No
C-7	External Environment Monitor	150,000.00	ICS	Prior	Individual	Q3/2022	Non-Consulting Services: No Type: Individual Assignment: International/ National Quality based selection Advance Contracting: Yes e-GP: Yes e-GP Type: e-Bidding Covid-19 Response? No
C-8	Gender specialist	75,000.00	ICS	Prior	Individual	Q3/2022	Non-Consulting Services: No Type: Individual Assignment: International/ National Advance Contracting: Yes e-GP: Yes e-GP Type: e-Bidding Covid-19 Response? No
C-9	Social specialist	75,000.00	ICS	Prior	Individual	Q3/2022	Non-Consulting Services: No

							Type: Individual Assignment: National Advance Contracting: Yes e-GP: Yes e-GP Type: e-Bidding Covid-19 Response? No
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AMI = advanced metering infrastructure, COVID-19 = coronavirus disease, e-GP = e-Government Procurement, ICS = Individual consultant selection, FTP = full technical proposal, MW = megawatt, OCB = open competitive bidding, Q = quarter, QCBS = quality- and cost-based selection, RFQ = request for quotations, STP = simplified technical proposal, TPGL = Tripura Power Generation Limited, TSECL = Tripura State Electricity Corporation Limited.

**36. List of indicative packages (contracts) required under the project.** The following table lists goods, works, non-consulting and consulting services contracts for which procurement activity is expected to commence beyond the procurement plan duration and over the life of the project (i.e., those expected beyond the current procurement plan duration).

Goods and Works						
Package Number	General Description	Estimated Value (in US\$)	Procurement Method	Review	Bidding Procedure	Comments
None						

Consulting Services						
Package Number	General Description	Estimated Value (in US\$)	Selection Method	Review	Type of Proposal	Comments
None						

#### D. Consultant's Terms of Reference

37. TSECL will engage a qualified and experienced national consulting firm as project implementation consultant to assist the implementation of the distribution project component and provide consulting services for program management and monitoring of the overall project implementation activities. The firm will be selected in accordance with ADB Procurement Policy (2017, as amended from time to time) and its associated Staff Instructions through Quality- and Cost-Based Selection (QCBS) method where the proposed approach and methodology as well as the skills, experience and personnel aspects of the proposal will be assigned a weighing of 80%, while cost is assigned a weighing of 20%, using full technical proposal (STP). The firm shall be composed of the following experts:

38. **Project management specialist and team leader (national, 12 person-months).** The expert should be a graduate of electrical or power engineering, with a master's degree in management and engineering, and at least 12 years of consulting and/or utility experience in power distribution sector. He or she will have the following tasks:

- (i) **As team leader.** Lead the team for implementation of all tasks and ensure timely implementation of all tasks.
- (ii) **As project management specialist:**

- (a) Mobilize individual experts and other physical resources in time to ensure timely delivery of the outputs.
- (b) Coordinate all project activities with TSECL, PMU, project manager, contractors, ADB consultants and other stakeholders.
- (c) Assist PMU in resolution of any issues and disputes.
- (d) Establish and implement project management process, quality assurance management, and other management systems.
- (e) Carry out project planning, progress monitoring and contract management tasks.
- (f) Assume overall responsibility of for delivering consulting services for all packages as indicated in Part II in a timely manner.

**39. Distribution system expert and deputy team leader (national, 12 person-months).**

The expert should be a graduate of electrical or power engineering and should have at least 10 years of consulting and utility experience in power distribution sector. He/she should have at least 3 similar assignments related 11/33/low-tension kV power distribution network planning and design, construction, specifications, and procurement; should be experienced in distribution line reliability improvement equipment like auto-recloser and sectionalizers and experienced in the construction of MV covered conductor distribution line. He or she will have the following tasks:

- (i) Overall responsibility for carrying out all tasks relating to implementation of packages 1–4 and 6 including review of submittals, design review, coordination of project procurement process, supervision of implementation works, handling change orders, completion /certifications etc.
  - (a) Coordinate all activities relating to above packages with other experts.
  - (b) Assist the Team Leader in project planning, progress monitoring and other tasks.

**40. Substation and distribution line expert (national, 8 person-months).** The expert should be a graduate of electrical engineering and should have at least 10 years of consulting and/or utility experience in power distribution sector. He/she should be experienced in construction, augmentation and rehabilitation of 33/11 kV substations, construction of MV and low-tension overhead distribution lines, and medium voltage covered conductor lines and low-tension aerial bundled cable lines. The expert will have the following tasks:

- (i) Responsibility for carrying out all tasks relating to implementation of package 1.
- (ii) Assist Distribution System Expert in carrying out tasks related to packages 2–4 and 6.
- (iii) Coordinate all activities relating to above work with other experts.
- (iv) Assist team leader for project planning, progress monitoring and other tasks.

**41. Underground cabling expert (national, 8 person-months).** The expert should be a graduate of electrical or power engineering and should have at least 10 years of consulting/utility experience in power distribution sector. The expert should be experienced in 11 kV/33 kV underground power distribution network construction and rehabilitation; survey, design, erection, testing and commissioning of Underground cabling works in 33 kV/ 11 kV underground lines and should be experienced in horizontal directional drilling methodology for underground cable installation, testing, fault location and repair of underground cable lines. He/she will have the following tasks:

- (i) Overall responsibility for carrying out all tasks relating to implementation of package 2 underground cabling component.

- (ii) Coordinate all activities relating to above packages with other experts.
- (iii) Assist team leader for project planning, progress monitoring and other tasks.
- (iv) Supervise and evaluate underground Cable training provided by the Contractor.

42. **Civil engineering expert (national, 6 person-months).** The expert should be a graduate of civil engineering and should have at least 7 years of consulting and/or projects experience in power utility projects. The expert should have at least 2 assignments related to design, engineering, and construction of civil works in substation and distribution and/or transmission line projects. The expert will have the following tasks:

- (i) Carry out all tasks relating to civil works design and implementation for substation and other packages.
- (ii) Coordinate all activities relating to above packages with other experts.
- (iii) Assist team leader for project planning, progress monitoring and other tasks.

43. **Smart metering expert (national, 8 person-months).** The expert should be a graduate of electronics, electrical, or power engineering and should have at least 10 years of consulting/projects experience in power utility projects. The expert should have at least 2 assignments related to design, and development of smart metering solutions and implementation of complete advanced metering infrastructure system. The expert will have the following tasks:

- (i) Overall responsibility for carrying out all tasks relating to design and implementation of package 5.
- (ii) Coordinate all activities relating to above packages with other experts.
- (iii) Assist team leader for project planning, progress monitoring and other tasks.

44. **Information technology expert (national, 8 person-months).** The expert should be a graduate of B.E or B.Tech. in CSE/IT or MCA or Higher Diploma in Computer Applications and should have at least 8 years of experience in developing IT systems and web enabled IT tools. The expert should have at least 2 assignments in developing IT solutions and tools for project monitoring and project management including web and mobile based applications on physical/cloud server and should also have an experience in hosting and maintaining IT systems and applications. The expert should be an expert on database management system, extract, transform and loading functions for data integration with new or existing enterprise resource planning or master data management systems. The expert will have the following tasks:

- (i) Design and development of online property management system and web and mobile apps, testing and implementation of the same, hosting and maintaining the system, provide training to stakeholders, assist in resolving system and/or application issues, manage databases and provide general IT support for all project activities.
- (ii) Consult with environmental and social team to ensure system facilitates safeguards compliance tracking.
- (iii) Ensure that the project management system tracks community feedback and grievances and records pertinent information to demonstrate compliance with occupational health and safety requirements and core labor standards.

45. **Environment specialist (national, 12 person-months).** The expert should have a bachelor or master's degree in environmental science, environmental management, or other related field and should have at least 8 years of experience in carrying out environmental supervision, monitoring, and implementation of environmental management plans (EMP) with at least 6 years of experience in environmental impact assessment. He/she should be experienced in in relation to implementation of transmission and/or distribution line projects, should have an

understanding and demonstrated application of international good practice for environmental management. The specialist will have the following tasks:

- (i) Coordinate all activities relating to above work with other experts, TSECL and ADB.
- (ii) Assist team leader for project planning, progress monitoring and other tasks.

46. **Social development specialist (national, 8 person-months).** The expert should have a university degree in applied science with a master's degree in social science or related field. The expert should have at least 10 years overall relevant experience in social impact assessment, community and stakeholder engagement, and risk management. The expert will have the following tasks:

- (i) Tasks listed in clause 2.12.
- (ii) Coordinate all activities relating to above work with other experts, TSECL and ADB.
- (iii) Assist team leader for project planning, progress monitoring and other tasks.
- (iv) Overall responsibility for delivering on project social development commitments throughout pre-construction and construction phases of the project.
- (v) Monitoring project activities in a systemic and well-documented manner to demonstrate that implementation activities are carried out with compliance with ADB Safeguard Policy Statement (2009), ADB Access to Information Policy 2018, and other applicable standards, including legal requirements applicable to community and stakeholder engagement.
- (vi) Prepares regular reports on project status and activities in conformity with the provisions of the social safeguard documents and social provisions of environmental planning documents.
- (vii) Facilitated regular and ongoing engagement with affected communities and ensures affected people participate in project operations.

47. **Finance expert (national, 6 person-months).** The expert should be with chartered accountant or Institute of Cost and Works Accountants (ICWA) qualifications, with at least 7 years of experience in the field of accounting and financial management and Consulting experience in power utility. The expert will have the following tasks:

- (i) Tasks listed in clause 2.12.
- (ii) Coordinate all activities relating to above work with other experts, TSECL and ADB.
- (iii) Assist team leader for project planning, progress monitoring and other tasks.

48. **Health and safety expert (national, 8 person-months).** The expert should have a bachelor's degree in a field related to health and safety management or any other degree with Institution of Occupational Safety and Health (IOSH) or National Examination Board in Occupational Safety and Health (NEBOSH) certification or similar related to construction health and safety inspection and management. The expert should have at least 8 years of experience in carrying out health and safety supervision, monitoring and implementation of occupational and community health and safety plans for construction of major infrastructure projects. The expert will have the following tasks:

- (i) Coordinate all activities relating to above work with other experts.
- (ii) Assist team leader for project planning, progress monitoring and other tasks.

49. **Gender expert (national, 12 person-months).** The expert should have a master's degree in social science, gender or other related field. The expert should have at least 5 years

overall relevant experience in preparation and implementation of gender action plan in infrastructure projects. The expert will have the following tasks:

- (i) Coordinate all activities relating to gender with other experts, NGOs, TRLM, TSECL and ADB.
- (ii) Assist team leader for in carrying out activities related to implementation, monitoring and reporting of gender and gender equality and social inclusion (GESI) action plan.
- (iii) Overall responsibility for ensuring completion of all activities related to GESI action plan.
- (iv) Prepare quarterly progress reports on project status and activities in conformity with the provisions of the GESI action plan.
- (v) Ensure that all GESI indicators are included in the project performance management system and regularly updated with gender disaggregated data.
- (vi) Prepare combined GESI action plan completion report highlighting promising practices and lessons learnt be submitted upon project completion.

## VII. SAFEGUARDS

50. **Environment.** The project has been categorized as A for environment under ADB's Safeguard Policy Statement. An Environmental Impact Assessment (EIA) including Environment Management Plan (EMP) was disclosed on 8 March 2022 for the TPGL generation component (Rokhia combined cycle gas power plant [CCGPP]) as the most environmentally sensitive component of the project, with an Initial Environmental Examination (IEE) including EMP disclosed on 8 July 2022 for the TSECL distribution components which will have less adverse impacts than the TPGL generation component. These environmental assessment reports have been locally disclosed by TPGL and TSECL and were prepared in accordance with national requirements and ADB's Safeguard Policy Statement (2009). The Rokhia CCGPP is categorized as A under the Government of India's EIA Notification, and TPGL has initiated the required process to obtain the national environmental clearance prior to the commencement of CCGPP construction. TSECL distribution components are excluded from the Government of India's EIA Notification, so prior environmental clearance is not required.

51. Major impacts of the Rokhia CCGPP are greenhouse gas (GHG), air quality and noise emissions as well as the risk of fire and explosion. The EMP requires international good practice emission and discharge levels to be fully complied with in addition to national standards. Rokhia CCGPP will be designed and operated using best available technology and as zero discharge with rainwater harvesting for a life span of 25 years after which it will be decommissioned in line with the Paris agreement to reduce GHG emissions to net zero by 2050 which Government of India has pledged to achieve by 2070. There is a saving (offset) of 27,320.51 tons carbon dioxide per year due to the generation efficiencies of the CCGPP compared to the existing plant whilst it is fully operational plus a saving of at least 333,437.5 tons carbon dioxide per year from sourcing the additional power from the grid. Since the EIA is based on an indicative power plant design it will need to be updated following detailed design by the engineering, procurement, and construction (EPC) Contractor to demonstrate their final layout and design will comply with the standards and measures set out in the EIA and will have less or the same impact than the indicative power plant design. Since the project site supports forest habitat, compensatory plantation within the TPGL land holding of 10 trees planted for each one cut will be undertaken in addition to any compensation due to Tripura Forest Department. Decommissioning of the existing plant under a decommissioning EMP to be cleared by ADB is a condition of ADB's loan. Although the decommissioning works themselves are outside the scope of the ADB funded project, they

are associated with it and essential to ensuring project benefits related to climate change and air quality are realized.

52. For the distribution component, TSECL has confirmed routings of distribution lines will avoid internationally and nationally recognized biodiversity sites and physical cultural resources. Legally protected areas and their ecologically sensitive zones as well as key biodiversity areas and important bird areas will be avoided. Neither will any 33/11 kV distribution lines pass through notified forest lands (requiring forest clearance to be obtained) or the 200m buffer of Archaeological Survey of India or state government protected physical cultural resources. The distribution lines will be subject to site-specific assessment for clearance by ADB since actual routings will not be available until the EPC contractors are on board. Once mapped some existing low-tension distribution lines to be reconducted may be found to route alongside roads that pass through or adjacent to notified forest areas and protected monuments; in such circumstances site-specific assessment and management planning with full time ecological and/or archaeological supervision will be required with rerouting outside the area of concern or undergrounding rather than reconducting the preferred option in line with the IEE. Use of covered conductors and aerial bundled conductors (ABC) will reduce existing health and safety risks to local communities as well as the risk of bird and bat electrocution, additional design measures included in the EMP will further reduce electrocution risks to perching birds. Compensatory plantation will be undertaken through Tripura Forest Department for any tree cutting required. For 27 existing substations and a subdivision electrical office where construction works will be undertaken, TSECL will implement the corrective action identified following environmental audit. The most significant potential impact at existing substations is associated with old equipment, particularly transformers that leak and which may contain polychlorinated biphenyls (PCB) oil depending on the date of manufacture or oil replacement. Any removal, storage, and disposal of phased out transformers by TSECL will be done in accordance with international good practice and government regulations. TSECL is also required by government regulations to inventory and remove PCB contaminated transformers before 31 December 2025.

53. EMP implementation will be assured by a program of environmental supervision and monitoring to be conducted throughout project implementation by TPGL and TSECL who will report any unanticipated impacts or requirements for corrective action during implementation to ADB. Reporting to ADB will be through quarterly project progress reports with environment monitoring reports for each component submitted semi-annually up until the completion of construction. TPGL will be responsible for submitting the monitoring reports for the generation component whilst TSECL will be responsible for submitting the monitoring reports for the distribution components. During operation TPGL will continue to submit semi-annually up until decommissioning of the existing plant, or the project completion report is issued, whichever comes later. For TSECL submission during operation will be annually up until the project completion report is issued. Since this is a Category A project for environment, an external environmental monitor is to be appointed by TPGL.

54. **Social.** The project has been categorized as “B” for both involuntary resettlement and indigenous peoples. The involuntary impacts are not significant and are temporary in nature. Impacts on indigenous peoples are mostly positive in nature. Social due diligence and audits were conducted for CCGPP at Rokhia and among communities residing near the distribution substations. No potential adverse resettlement impacts were identified, and no litigation, legacy issues or any complaints were raised.

55. The project does not require additional land; hence no acquisition and no physical displacement is necessary. The CCGPP at Rokhia will be installed within the TPGL power plant



project complex, currently in possession of Power Department and TPGL. TPGL has a total of 56 acres of land in its possession that will accommodate all new facilities for the 120 MW CCGPP. The land is free of encumbrances and is not being used by any informal settlers. Renovation and modernization of 33/kV substations will be done within the pre-existing substation sites where land is available. The work related to auto closure will be installed in lines and is not assessed to involve any impact. The proposed testing facility will be built within the existing land of TSECL. The project work on distribution networks may have potential social safeguards impacts in terms of loss or damage to productive assets of people living near to project infrastructure, and therefore the project is categorized as “B” for involuntary resettlement safeguards. Some activities will occur in forest areas, including construction of new 33/11 kV low tension lines, installation of new distribution transformers, and upgrading and replacement of existing lines, and replacement with covered conductors. Replacement of old lines will follow the current right of way. Construction of 11 kV and 33 kV pole-based distribution lines or the underground cabling will follow existing communications pathways, mostly road right of ways, and will not require additional land clearances. Anticipated potential impacts are temporary in nature, including loss of crops and trees.

56. The project is situated in a tribal area recognized by the Constitution of India. As these are territories or natural or cultural resources that indigenous peoples own, use, occupy, or claim as an ancestral domain or asset, the project is categorized as “B” for indigenous peoples safeguards. A participatory impact assessment has been conducted. The project has indirect positive impacts on the Indigenous Peoples residing in the project area by providing better electricity supply. The project does not involve any land acquisition or physical displacement and no project lands are claimed as traditional lands by local communities. The project does not involve commercial development of any cultural resources that belong to the tribal community. Any negative impacts are foreseen are expected to be minor and temporary disturbances, and primarily assess to be noise and increased traffic during construction works. Community health and safety impacts are addressed in the project’s environmental management plan.

57. As the few potential negative impacts resulting from the project are potential temporary economic disruptions attributable to damaged or lost asset realized during distribution system works, the project prepared a combined draft Resettlement and Indigenous Peoples Plan (RIPP). The RIPP was disclosed on 26 September 2022. A summary of the RIPP will also be translated into local language and disclosed to the public. The RIPP has been prepared in consultation with stakeholders and in compliance with national and state regulation and with ADB’s Safeguard Policy Statement, 2009. The RIPP assesses potential positive and negative impacts and provides mitigation actions for any adverse impacts realized during implementation by the TSECL and TPGL. The RIPP includes a mechanism for sharing benefits with indigenous peoples. The RIPP includes a compensation and entitlement matrix to guide TSECL and TPGL in mitigating any involuntary resettlement impacts or any unforeseen or unanticipated impacts (though minor) during implementation. The RIPP also includes an action plan for benefit sharing among the indigenous peoples and mitigation measures that will be implemented by TSECL and TPGL. Indicative budgetary provisions have been made for RIPP implementation and such cost will be part of the counterpart funding from TPGL and TSECL. For any new distribution works, a turnkey contractor will finalize the alignment and will assess the temporary impacts on loss of crops and trees to be cut or any other asset to be affected. The RIPP will be finalized after the project has a final computation matrix for impacts to crops and trees. In case of any major change in the scope resulting to significant or unforeseen involuntary resettlement and indigenous peoples impacts, the RIPP will be updated. Social safeguards activities and evidence of compliance will be documented in each periodic monitoring report. Impacts on crops, trees, number of affected households, affected persons, and future consultations findings etc. will be recorded and

supervised by TSECL through its contractor and project implementation consultant and will be documented in the periodic monitoring report. TSECL and TPGL will ensure that contractors avoid adverse impacts through adequate alignment design and that they follow the tasks and conditions as set out in the RIPP.

**58. Information disclosure, consultation, and grievance redress.** The EIA for TPGL Rokhia CCGPP with its executive summary translated into local Bengali language will be made available in hard copy at TPGL's Agartala Offices and at the Rokhia Thermal Power Station; it will be disclosed to a wider audience via the TPGL (TSECL) and ADB websites. The IEE will be also made available to the public and will be disclosed to a wider audience locally (with executive summary translated into Bengali language) and via the ADB and TSECL websites, TSECL offices (Head Office, Circle and Division), all 27 substations, test laboratory and other construction site offices.

**59.** Meaningful consultations during project preparation included two public meetings for the TPGL Rokhia CCGPP as well as public consultation for the national environmental clearance and small group consultations for TSECL. The consultation process commenced during the EIA and IEE and RIPP preparation will be continued by TPGL and TSECL during project implementation to ensure that affected persons and other interested stakeholders are fully engaged and can participate in the project. For environmental safeguards, details of ongoing consultation requirements are included in the EIA and IEE. For social safeguards, a future consultation strategy has been prepared and put in the RIPP to guide TSECL and TPGL to continue the future consultation process. Salient concerns related to the generation component, these were construction traffic and local access routes, the risk of structural damage to properties, fire risk, air and noise pollution, the availability of groundwater, community-worker conflicts, and disturbances to fauna. For the generation component, advance notice will be provided to local communities about the private access road closure, commencement of works, high noise activities, major periods of traffic movement, and transport of oversized vehicles. Similarly, TSECL is to give advance notice to local communities about distribution works taking place in the public roads and the schedule of construction of distribution lines taking place near areas of habitation.

**60.** To address any environmental and social grievances of affected persons in the local community and workforce Grievance Redress Mechanisms (GRM) supported by Grievance Redress Committees will be established by TPGL and TSECL as set out in the EIA, IEE and RIPP, the details of which will be disseminated during the future consultations with GRM focal points—name, designation, contact numbers, address plus the timeline and process of redressal to be displayed at the project sites. Operationalization of the GRM upon loan effectiveness is a performance indicator monitored by ADB.

**61. Safeguards budget, staffing, and capacity development.** Costs will be associated with the implementation of environmental and social safeguards mitigation, monitoring and capacity development and so necessary budget provisions need to be planned and allocated by TPGL and TSECL to ensure satisfactory EMP and RIPP implementation. TPGL and TSECL will ensure adequate budget and other resources are made available to the project. For the TPGL Rokhia CCGPP, a budget of about \$3.45 million is required for EMP implementation during construction, during operation the annual EMP implementation cost will be about \$0.2 million. For TSECL a budget of about \$2 million is required for EMP implementation during construction, during operation the annual EMP implementation cost will be about \$0.03 million. Similarly, for implementation of the RIPP, including the action plan for project benefit sharing with indigenous peoples, the action plan for impact mitigation, and for the provision of compensation and benefits defined in the compensation and entitlement matrix, a budget of about ₹10.5 million (equivalent

to \$0.14 million) has been estimated. Budget allocations may be further updated by TSECL and TPGL.

62. The environment and social safeguards capacity of TPGL and TSECL is limited and needs to be strengthened through the appointment of suitably qualified and experienced safeguard staff, training activities and consultant support. These safeguard staff will be responsible to supervise and monitor EMP and RIPP implementation by TPGL, TSECL and their contractors day-to-day and then O&M team EMP implementation during the operational period. They will also be tasked to obtain permissions, prepare training plans, community liaison plans, consultation materials, as well as to maintain GRM records, update the EIA and IEE as needed, prepare the safeguard monitoring reports, and so on.

63. For TPGL a Safeguard Unit will be established as part of the PMU and project implementing unit (PIU) to support with EMP and RIPP implementation, supervision, and monitoring. This will be staffed with a suitably qualified and experienced Environmental and Social Safeguard Officer at PMU level having 15+ years of environment and social safeguards experience, and two suitably qualified and experienced officers at PIU level with 5-7 years of experience in environment safeguards, and 7–10 years of experience together with professional certification for health and safety, respectively. The TPGL project implementing consultant (PIC) will include a Senior Environment and Social Consultant, a Senior Health and Safety Consultant with professional certification, a Senior Ecologist, a Senior Labor Consultant, a Gender Consultant and on-site support. Once operational, the TPGL power plant operations team shall comprise an Environment Officer and a Health and Safety Officer (with professional certification) both with 12–15 years of experience. Further, the EPC Contractor for the TPGL Rokhia CCGPP will be required to have as part of their team suitably qualified and experienced, dedicated on-site counterpart staff including an Environmental and Social Manager, a Health and Safety Manager with professional certification supported by several Health and Safety Supervisors, an ecologist, a labor officer, and a community liaison officer.

64. For TSECL a Safeguard Unit will be established as part of the PMU to support with EMP and RIPP implementation, supervision, and monitoring. This unit will be staffed with a suitably qualified and experienced Environmental and Social Safeguard Officer and a Health and Safety Officer (with professional certification), each with 12–15 years of experience. The TSECL project implementing consultant will include an Environment Consultant, a Social Safeguard Consultant, Gender Consultant and Health and Safety Consultant with professional certification to assist site-specific assessment and provide on-site support. Further, the EPC Contractor will be required to have suitably qualified and experienced, dedicated on-site counterpart staff including a Social Manager, an Environment Manager and Health and Safety Manager with professional certification supported by several health and safety stewards on-site.

65. During pre-construction and construction, capacity development activities will be provided for PICs, TPGL and TSECL staff, and to EPC Contractor staff responsible for the implementation of the EMP and RIPP on a day-to-day basis. Training modules will be provided as set out in the EMP on the environmental, health and safety impacts and risks of the project components and their management. TPGL PIC and EPC Contractor will also support capacity building and training for TPGL's operational staff.

66. **Safeguards implementation.** TPGL, TSECL and their PIC and EPC contractors will comply with all applicable national and state environment, health, and safety (EHS) regulatory requirements, ADB's Safeguard Policy Statement (2009), the World Bank-IFC EHS general and sector guidelines for Thermal Power Plants and Power Transmission and Distribution. The EMP

sets out the measures to avoid, minimize, mitigate, and offset the predicted environmental impacts of the proposed plant during construction and operation, including emergency response procedures, as well as decommissioning of the existing plant for the generation component and a corrective action plan for existing facilities. TPGL, TSECL through its EPC contractor and PIC will be responsible for implementing the RIPP and will comply with national and state regulations related to involuntary resettlement and indigenous peoples and will also comply with the ADB's Safeguard Policy Statement (2009) requirements.

67. The PMU and PIU of TPGL and TSECL will be responsible for the overall day-to-day management of the environmental and social safeguard aspects of their respective project components and thus compliance with national regulatory requirements, ADB's Safeguard Policy Statement (2009) and the project's loan covenants, and the EMP and RIPP requirements. They will further be responsible for developing systems for monitoring and reporting on EMP and RIPP implementation and supervising implementation of the EMPs and RIPP for their respective project components as well as ensuring that the quantitative monitoring requirements - as set out in the environmental monitoring plans within the EMPs and the social monitoring requirements in the RIPP - are met, during the pre-construction, construction, operation and maintenance, and decommissioning phases of the project. Quantitative environmental monitoring activities including laboratory analysis for air quality, noise, surface water and groundwater quality, and soil contamination are to be carried out by National Accreditation Board for Testing and Calibration Laboratories (NABL) and/or Ministry of Environment, Forest, and Climate Change accredited or recognized, third-party laboratories. Further roles and responsibilities of the PMU and PIU are set out in the EMPs and RIPP.

68. During the pre-construction period, national environmental clearance will be obtained before any contract is awarded. The EMP will form part of all bidding and contract documents for construction and during detailed design, pre-construction, and construction the EPC contractors will be responsible for implementing all relevant measures under the supervision of the TPGL. Strictly no contracts will be awarded before the definitive version of the EMP has been incorporated into the contract documentation. This is a performance indicator that is monitored by ADB. The definitive version of the EMPs cleared by ADB and which the contractors will be required to follow are the versions disclosed on ADB's website. The EMP is dynamic and can be updated as appropriate during the project implementation. However, any update to the EMP will first need to be cleared by ADB and disclosed on the ADB's website. Further, no site establishment or construction activity is to take place before (i) ADB has reviewed and cleared the updated EIA or IEE reflecting detailed designs, (ii) TPGL or TSECL has received and approved the requisite EPC contractor's construction EMP (CEMP) including all EMP sub-plans, and (iii) all national permits, insurances and other requirements are obtained by TPGL, TSECL or the EPC contractor as required. Having these requirements in place prior to the start of works is a performance indicator monitored by ADB.

69. The implementation of the EMP measures during pre-construction and construction phase may be delegated through the contracts to the EPC Contractors and the latter are required to implement all relevant provisions in full. EPC Contractors will have primary responsibility for environmental and social management at project sites, and for the health and safety of contracted and subcontracted, formal and informal, workers as well as the affected community at all project sites under their control. During pre-construction and construction, the EPC Contractor's environment, health and safety staff will be required to supervise and monitor its own activities on a day-to-day basis and carry out continuous qualitative monitoring as well as quantitative monitoring as specified in the environmental monitoring plan; the contractors shall submit monthly progress reports to TPGL or TSECL detailing the status of EMP implementation, response to any

corrective action, log of any incidents or accidents recorded, log of any complaints received including their status and resolution, and, any change of the designs, etc. TPGL and TSECL with the support of the PICs will ensure that the EMPs are being duly implemented by their EPC Contractors.

70. For operation of the generation component, TPGL will develop an operational environmental and social management system (ESMS) for the CCGPP with the aim of getting it ISO 14001 and ISO 45001 accredited. TSECL will also develop standard operating procedures addressing the environment, health and safety impacts and risks of its substations, test laboratory and maintenance works.

71. Any unanticipated impacts, or requirements for corrective action due to non-compliance identified during project implementation will be reported to ADB, appropriate action will be agreed and taken by TPGL, TSECL and/or their contractors to address them and bring the project implementation back on track. Timely identification and implementation of corrective action is a performance indicator that is monitored by ADB.

72. TPGL will submit combined environmental and social monitoring reports to ADB semi-annually during construction and operation for ADB's review, clearance, and disclosure, up until decommissioning of the existing plant, or the project completion report is issued, whichever comes later. TSECL will submit combined environment and social monitoring reports to ADB semi-annually during construction and then annually during operation for ADB's review, clearance, and disclosure, until submission of the project completion report.<sup>17</sup>

73. The external environmental monitor is an independent environmental consultant appointed by TPGL in accordance with a TOR agreed with ADB to verify environmental monitoring information. They are not involved with the day-to-day management of EMP implementation but will be required to review of safeguards documentation and undertake periodic site visits to verify what TPGL or TSECL has reported. During implementation, ADB specialists and officers and/or staff consultants—or any third party selected on behalf of ADB—will also undertake periodic site visits and, if required, remote or on-site supervision missions to the project sites with detailed review by ADB's safeguard specialists and officers and/or consultants. To facilitate external environmental monitoring and ADB supervision, TPGL, TSECL and their EPC Contractors will need to provide the external environmental monitor and ADB with: (i) access to all projects sites, (ii) all environment and social safeguards documentation as and when requested, and (iii) a project site health and safety induction and adequate personal protective equipment for conducting site visits in accordance with the EMP requirements, the IFC environment, health, and safety guidelines on occupational health and safety and the latest World Health Organization guidelines in the context of COVID-19 pandemic.

74. **Prohibited investment activities.** Pursuant to ADB's Safeguard Policy Statement (2009), ADB funds may not be applied to the activities described on the ADB Prohibited Investment Activities List set forth at Appendix 5 of the Safeguard Policy Statement (2009).

## VIII. GENDER AND SOCIAL DIMENSIONS

75. **Gender.** The project is categorized as effective gender mainstreaming based on the Guidelines for Gender Mainstreaming Categories of ADB Projects (2021). A gender equality and social inclusion (GESI) action plan has been prepared that includes activities and measurable

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<sup>17</sup> There is no need of any semi-annual report on the social section during operation.

indicators for GESI mainstreaming. The gender equality and social inclusion activities are envisaged within the framework of the outputs proposed for the project and are supported with adequate budgetary and human resources. The activities include: (i) conducting awareness programs for tribal communities in the Tripura Tribal Areas Autonomous District Council areas on benefits of energy-efficient electrical appliances; safe use of electricity for household chores (including lighting and cooking); and energy conservation (ii) preparing and adopting a gender sensitive workplace policy for TSECL and TPGL; training TSECL and TPGL staff on gender sensitization, gender gaps in the energy sector, GESI sensitive workplace policy, opportunities/strategies for gender mainstreaming; and collection and use of sex- disaggregated data for provision of customer service; (iii) providing contractors with an advisory and training on enhancing female workforce participation and maintaining sex disaggregated data on labor; (iv) providing 15 women self-help groups with certified skills training to women (based on training needs assessment) for technical and business skills to develop and operate energy based microenterprises; (v) providing 15 women self-help groups with equipment to enhance livelihoods opportunities in farm sector; (vi) training PMU, PIUs, and other stakeholders in GESI action plan implementation, monitoring, and reporting; and (vii) nominating a gender focal point in the PMU to oversee the implementation and report on GESI indicators included in the project performance management system, regularly update gender disaggregated data, monitor and report on GESI action plan implementation.

76. **Poverty and social.** The project beneficiaries of the project are electricity consumers in both rural and urban area. The United Nations identifies access to electricity as being particularly beneficial for women and vulnerable people. The project will contribute towards the reliability of power supply among the existing consumers and will help in providing uninterrupted electricity supply to social infrastructure such as schools, hospitals, etc. Tripura's existing distribution network is aged, overloaded, and uses antiquated technologies making its operation and maintenance challenging and the lack of upstream distribution strengthening investments has further exacerbated network issues. The poor quality of supply is one of the contributory factors to low socio-economic development in Tripura compared to other states. Strengthening the distribution network will enable a reliable and quality electricity supply, which will promote economic development and poverty reduction through new employment and enterprise opportunities.

77. **HIV/AIDS.** Based on the poverty and social assessment, the risk that the project will increase HIV/AIDS incidence is not high. However, contractors will carry out HIV/AIDS awareness activities for their laborers at work sites, which will be monitored by the project implementation consultant. TPGL and TSECL will ensure compliance with national labor laws, with no child labor employed.

78. **Health.** TPGL and TSECL will ensure that contractors adequately provide health and safety measures for the construction workers and further ensure that bidding documents include clauses on how contractors will address this, including an information and awareness raising campaign for construction workers on sexually transmitted diseases, including HIV/AIDS and human trafficking.

79. **Labor.** TPGL and TSECL will ensure that civil works contractors comply with all applicable labor laws and regulations, including (i) not to employ child labor for construction and maintenance activities, (ii) provision of appropriate facilities for women and children in construction campsites, and (iii) do not differentiate wages between men and women for work of equal value. TPGL and TSECL will ensure that specific clauses ensuring these will be included in bidding documents.

## IX. PERFORMANCE MONITORING, EVALUATION, REPORTING, AND COMMUNICATION

### A. Project Design and Monitoring Framework

<b>Impact(s) the Project is Aligned with</b>			
(i) Financial sustainability and resilience of power sector in Tripura improved (24X7 Power for All Tripura) <sup>a</sup>			
(ii) Enhanced energy security (State action plan on climate change) <sup>b</sup>			
<b>Results Chain</b>	<b>Performance Indicators</b>	<b>Data Sources and Reporting Mechanisms</b>	<b>Risks and Critical Assumptions</b>
<b>Outcome</b> Efficiency and reliability of power supply to consumers in Tripura improved.	By 2028: a. AT&C losses reduced to 28.5% <sup>c</sup> (2020 baseline: 39.5%) (OP 3.1)  b. Generation efficiency of state-owned Rokhia power plant increased to 53% (2019 baseline: 26%) (OP 3.1)  c. Average duration of outages in project areas with total of at least 100,000 households reduced to 256 hours/consumer/year (2019 baseline: 340 hours/consumer/year) (OP 2.1.4; OP 5.1)	a.–c. TSECL and TPGL project progress reports or annual reports	R: Wind speed and pressure beyond extra high wind zone <sup>d</sup> may damage the project installations.
<b>Outputs</b>  1. Generation capacity of Rokhia power plant increased.  2. Distribution network strengthened, modernized, and climate proofed. <sup>e</sup>	By 2027: a. 120 MW Rokhia combined cycle gas turbine power plant, with climate proofing features <sup>e</sup> commissioned. <sup>f</sup> (2019 baseline: 63 MW open cycle gas turbine) (OP 3.1.3; OP 3.2.5; OP 5.1.1)  b. (i). 1,560 km of medium-voltage (33 kV and 11 kV) distribution lines (new and upgrades) constructed with covered conductors (2019 baseline: 0) (OP 3.2.5; OP 5.1.1)  (ii). 140 km of medium-voltage (33 kV and 11 kV) distribution lines (new and upgrades) constructed with underground cables	1a. TPGL project progress reports or annual reports  2a.–d. TSECL project progress reports or annual reports	R: Increases in prices of equipment and materials exceed contingency and inflation forecasts, resulting in cost overruns and delays in project completion.  R: Unpredictable trajectory of coronavirus disease outbreak causes disruptions to project implementation.

Results Chain	Performance Indicators	Data Sources and Reporting Mechanisms	Risks and Critical Assumptions
<p>3. Smart meters and AMI established</p> <p>4. Institutional capacity of utilities for planning, implementation, financial management, and gender mainstreaming improved</p>	<p>(2019 baseline: 0) (OP 3.2.5; OP 5.1.1)</p> <p>(iii). 900 km of low-voltage existing and proposed distribution lines upgraded with aerial bunched cables (2019 baseline: 0) (OP 3.2.5; OP 5.1.1)</p> <p>c.</p> <p>(i). 150 units of medium-voltage feeders installed with auto-reclosures and sectionalizing devices (2019 baseline: 0) (OP 3.2.5; OP 5.1.1)</p> <p>(ii). 2,000 units of fault passage indicators installed in the medium-voltage overhead lines (2019 baseline: 0) (OP 3.2.5; OP 5.1.1)</p> <p>d. High-voltage distribution system pilot commissioned in one electricity subdivision (2019 baseline: 0) (OP 5.1.1)</p> <p>e. At least 200 residents (50% women) in tribal communities under the TTAADC project area reported increased knowledge on climate- and disaster-resilient infrastructure and safe use of electricity for household chores including cooking and energy conservation (2019 baseline: 0) (OP 2.5)</p> <p>a. Electromechanical meter of 100,000 existing households replaced with smart meter (2019 baseline: 0)</p> <p>b. Advanced metering infrastructure with online meter reading, billing, and collection for 100,000 smart meters established. (2019 baseline: 0)</p> <p>a. Distribution sector and renewable energy road maps completed and submitted by TSECL and TPGL to the Power Department for endorsement and publication (2019 baseline: Not prepared)</p>	<p>2e. Pre- and post-exit survey and/or training records.</p> <p>3a.–b. TSECL project progress reports or annual reports</p> <p>4a.–c. Copy of distribution and financial road map, and gender-sensitive workplace policy submitted to the Power Department</p>	



Results Chain	Performance Indicators	Data Sources and Reporting Mechanisms	Risks and Critical Assumptions
5. Gender- and socially inclusive energy-based livelihood activities promoted	b. Financial road map for the power sector completed and submitted by TSECL and TPGL to the Power Department for endorsement (2019 baseline: Not prepared) (OP 6.2.3)		
	c. Gender-sensitive workplace policy prepared and submitted by TSECL and TPGL to power department for endorsement. (2019 baseline: Not applicable) (OP 2.3.2)		
	d. At least 100 staff of TSECL and TPGL (including at least 20 women staff) reported increased knowledge on (i) gender issues in risk mitigation strategies and social safeguards in power generation and distribution, and (ii) use and maintenance of sex-disaggregated data for provision of customer services. (2019 baseline: Not applicable) (OP 2.2, OP 6.1.1)	4d. Pre-and post-training assessment reports.	
	a. At least 150 women from 15 SHGs acquired certified skills in farm-based livelihood and business development <sup>g</sup> (2022 baseline: 0 women trained) (OP 2.2)	5a. Skills certification awarded by Tripura Rural Livelihood Mission	
	b. At least 15 women SHGs received equipment for farm-based livelihood activities <sup>h</sup> (2022 baseline: 0 women SHGs received equipment) (OP 5.1)	5b. TSECL and/or TPGL project progress reports or annual reports	

#### Key Activities with Milestones

##### 1. Generation capacity of Rokhia power plant increased

- 1.1. Begin tendering of generation efficiency packages (Q1 2022–Q4 2022)
- 1.2. Award contract for generation efficiency packages (Q1 2023–Q2 2023)
- 1.3. Undertake detailed survey and quantity estimates by contractor (Q2 2023–Q4 2023)
- 1.4. Construct generation efficiency packages (Q4 2023–Q1 2027)

##### 2. Distribution network strengthened, modernized, and climate proofed

- 2.1. Begin tendering of distribution network packages (Q2 2021–Q1 2022)
- 2.2. Award contract for distribution network packages (Q2 2022–Q3 2022)
- 2.3. Undertake detailed survey and quantity estimates by contractor (Q3 2022–Q4 2022)
- 2.4. Construct distribution network packages (Q2 2022–Q4 2026)

##### 3. Smart meters and AMI established

- 3.1. Begin tendering of smart meter and AMI packages (Q2 2022–Q4 2022)
- 3.2. Award contract for smart meter and AMI packages (Q1 2023–Q3 2023)
- 3.3. Undertake detailed survey and quantity estimates by contractor (Q2 2023–Q3 2023)
- 3.4. Install and integrate smart meter and AMI infrastructure (Q3 2023–Q4 2025)

**Key Activities with Milestones****4. Institutional capacity of utilities for planning, implementation, financial management, and gender mainstreaming improved**

- 4.1 Begin recruitment of consulting firm for implementation support (Q2 2022–Q3 2022)
- 4.2 Prepare submission 1 for consulting firm for implementation support (Q3 2022–Q4 2022)

**Key Activities with Milestones**

- 4.3 Begin recruitment of consulting firms for organizational capacity assessment of TSECL, technical (distribution sector and renewable energy), and financial road map (Q3 2022–Q4 2022)
- 4.4 Prepare submissions 2 and 3 for consulting firm for implementation support (Q4 2022–Q1 2023)
- 4.5 Prepare submission 1 for consulting firms for organizational capacity assessment of TSECL, technical (distribution sector and renewable energy), and financial road map (Q4 2022–Q1 2023)
- 4.6 Prepare submissions 2 and 3 for consulting firm for organizational capacity assessment of TSECL, technical (distribution sector and renewable energy), and financial road map (Q1 2023–Q2 2023)

**5. Gender- and socially inclusive energy-based livelihood activities promoted**

- 5.1 Recruit consultants to support awareness activities, needs assessment, and livelihood activities (Q3 2022–Q1 2023)
- 5.2 Begin shopping for items to support awareness activities, needs assessment, and livelihood activities for women SHGs (Q1 2023–Q3 2023)
- 5.3 Monitor the livelihood activities with the support of consultants and Tripura Rural Livelihood Mission (Q3 2023–Q2 2025)

**6. Administrative tasks**

- 6.1 Prepare and submit quarterly progress reports to ADB (Q3 2022–Q4 2027)
- 6.2 Prepare and submit audited project financial statements and audited entity financial statements to ADB (Q3 2023–Q4 2027)

**Project Management Activities**

Procurement plan key activities to procure contract packages (Q1 2021–Q4 2023)  
 Consultant selection procedures (Q2 2022–Q2 2023)  
 Environmental management plan and gender action plan key activities (Q1 2022–Q2 2027)  
 Communication strategy key activities (Q2 2022–Q1 2027)  
 Annual and/or midterm review (Q1 2023–Q3 2027)  
 Project completion report (Q4 2028)

**Inputs**

ADB: \$220.0 million (regular ordinary capital resources loan)  
 Government: \$57.4 million

ADB = Asian Development Bank, AMI = advanced metering infrastructure, AT&C = aggregate technical and commercial, km = kilometer, kV = kilovolt, MW = megawatt, OP = operational priority, Q = quarter, SHG = self-help group, tCO<sub>2e</sub> = ton of carbon dioxide equivalent, TPGL = Tripura Power Generation Limited, TSECL = Tripura State Electricity Corporation Limited, TTAADC = Tripura Tribal Areas Autonomous District Council.

<sup>a</sup> Government of India and Government of Tripura. 2016. [24x7 Power for All](#). Delhi.

<sup>b</sup> Government of Tripura. Department of Science, Technology & Environment. [State Action Plan on Climate Change](#). Agartala.

<sup>c</sup> The AT&C loss reduction from 39.5% to 28.5% is only from the ADB project intervention. The state has submitted its proposal and finance requirements to participate in the revamped distribution sector scheme. Hence, the ADB project together with the revamped distribution sector scheme interventions will help TSECL achieve the AT&C loss target of 15%.

<sup>d</sup> Extra high wind zone refers to wind speed up to 55 meters per second and wind pressure up to 960 Newtons per square meter.

<sup>e</sup> TPGL will decommission the existing 63 MW open cycle gas turbines after the commissioning of the 120 MW CCGT power plant. Though the decommissioning of the existing power plant is not within the scope of ADB project, loan covenants are included to ensure government's commitment.

<sup>f</sup> Includes underground cabling, covered conductors, auto-reclosures, fault passage indicators, strengthening distribution structures, hermetically sealed transformers, high fault rating insulators, and lightning arresters to withstand extreme weather

<sup>g</sup> Includes training in certified skills (based on needs assessment) for livelihood generation activities and business development skills (market links and access to finance and credit) to develop and operate energy-based microenterprises.

<sup>h</sup> The equipment for farm-based activities will be identified based on needs assessment.

### Contribution to Strategy 2030 Operational Priorities

Expected values and methodological details for all OP indicators to which this operation will contribute results are detailed in Contribution to Strategy 2030 Operational Priorities (accessible from the list of linked documents in Appendix 2). In addition to the OP indicators tagged in the design and monitoring framework, this operation will contribute results for

OP 6.1: Entities with improved management functions and financial stability of entities (2)

Source: Asian Development Bank.

## B. Monitoring

80. **Project performance monitoring.** Overall monitoring of each project component in terms of progress will be undertaken by the power department, government of Tripura, which will review monthly progress reports submitted by TPGL and TSECL. The power department, acting on behalf of the government, will monitor progress, procurement, quality, and contract management. In addition, ADB, TPGL and TSECL management will undertake regular site visits and provide guidance to the project director, the project PMU, and to project consultants. ADB, TPGL and TSECL will conduct semiannual reviews throughout the implementation of the project and will regularly monitor the (i) project output quality, (ii) implementation arrangements, (iii) implementation progress, and (iv) disbursements. Performance will be monitored based on indicators and targets stipulated in the design and monitoring framework. These will be reported quarterly through TPGL's and TSECL's quarterly progress reports and after each ADB review mission. These quarterly reports will provide information necessary to update ADB's project performance reporting system.<sup>18</sup>

81. **Compliance monitoring.** The loans and project agreements specify undertakings and covenants that will be monitored through regular review missions and on a quarterly basis in discussion with TPGL and TSECL. Compliance with undertakings and loan covenants, social and environmental safeguards, and financial and economic aspects will be jointly monitored by ADB, TPGL and TSECL.

82. **Safeguards monitoring.** From loan effectiveness, TPGL and TSECL must submit combined environmental and social monitoring reports for their respective project component to ADB at the frequency stated in para. 81 for review, clearance, and disclosure. TPGL is responsible for reporting on the generation component, whilst TSECL is responsible to report on the distribution components. Monitoring reports are due within 15 days of the reporting period's end i.e., 15 June and 15 January each year; timely submission of monitoring reports is a performance indicator that is monitored by ADB. TPGL and TSECL will be responsible for responding to ADB's comments on their draft monitoring reports and resubmitting an updated version if required in a timely manner. Once the monitoring reports have been cleared by ADB, TPGL and TSECL will locally disclose each monitoring report through publication on their website and post notices of their availability in local language at the project sites. ADB will disclose the combined environmental and social safeguard monitoring reports on its website.

83. TPGL will also ensure that their external environmental monitor submits their verification reports within 15 days of their semi-annual environmental monitoring report being due, their reports are to be submitted concurrently to TPGL and ADB to maintain the independence of the external environmental monitor.

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<sup>18</sup> ADB's project performance reporting system is available at <http://www.adb.org/Documents/Slideshows/PPMS/default.asp?p=evaltool>

84. In the event of any breaches of performance standards or other non-compliances recorded by ADB, TPGL, TSECL, their EPC Contractors and/or the external environmental monitor, a time bound, and budgeted, corrective action plan will be provided and followed-up for its timely implementation, the corrective action and implementation progress will be reported in the safeguard monitoring reports.

85. For each reporting period, combined environmental and social safeguard monitoring reports will document: (i) all planning and management activities related to environmental and social safeguards; (ii) progress on EMP and RIPP<sup>19</sup> implementation (environmental and social performance) based on TPGL and TSECL's respective supervision activities, including any feedback provided by PMU and/or PIU to EPC Contractors and action taken; (iii) the results of quantitative monitoring required by the EMPs including health and safety incidents;<sup>20</sup> (iv) records of training activities, emergency drills, awareness raising activities, etc.; (v) details of ongoing consultations with project beneficiaries and affected persons, as and when needed; (vi) project-related environmental and social grievances received during reporting period and their resolution including for grievances received in previous reporting periods; (vii) compliance with the EMPs and RIPPs and progress towards the desired outcomes; and (viii) the identification of corrective and preventative actions with time-bound, budgeted corrective action plans, as applicable, for any breaches of performance standards or other non-compliances recorded. In the event of any health and safety fatalities or physical cultural resource chance finds at the project site these will be reported to ADB within 48 hours of occurrence together with a corrective action plan.

86. **Gender and social dimensions monitoring.** The gender and social inclusive targets will be monitored, collated, and analyzed to provide an indication of change in the life of beneficiaries, which in turn will be important for recording the outputs and performance of the project. The implementation status of GESI Action Plan will be reported to ADB by TPGL and TSECL through a gender consultant and in collaboration with TRLM with routine project progress reports and other monitoring reports. In addition, the inclusion and compliance with labor standards, health and gender aspects will be monitored through review of bidding documents, contract awards, and progress reports.

### C. Evaluation

87. ADB will undertake annual project review missions to evaluate the progress of project implementation. ADB, TSECL and TPGL will undertake a comprehensive midterm review of the project by Q2 2025, covering: (i) physical progress of project implementation; (ii) technical issues; (iii) environmental impact and safeguards; (iv) social impact including progress on GESI action and RIPP; (v) progress and issues on procurement and disbursement; and (vi) compliance with assurances in the loan and project agreements, and other relevant aspects that may have an impact on the performance of the project and its continuing viability. It will also include potential loan savings, identify areas of reallocation of loan proceeds and change disbursement percentages, as appropriate. Within 6 months of physical completion of the project, TPGL and TSECL will submit a project completion report to ADB.<sup>21</sup>

<sup>19</sup> RIPP monitoring scope broadly includes but not limited to (i) monitoring of impact assessment and mitigation measures, (ii) monitoring of consultation plan, (iii) monitoring of GRM functionality and (iv) monitoring of any involuntary resettlement impacts related to loss of crops, trees, other assets etc and compensation mechanism as set out in the entitlement matrix.

<sup>20</sup> For works affecting forest habitat and trees quantitative monitoring to include actual habitat and tree loss and compensatory reforestation progress.

<sup>21</sup> Project completion report format is available at: <http://www.adb.org/Consulting/consultants-toolkits/PCR-Public-Sector-Landscape.rar>

**D. Reporting**

88. TSECL and TPGL will provide ADB with (i) quarterly progress reports in a format consistent with ADB's project performance reporting system; (ii) combined environmental and social monitoring reports; (iii) consolidated annual reports including (a) progress achieved by output as measured through the indicator's performance targets, (b) key implementation issues and solutions, (c) updated procurement plan, and (d) updated implementation plan for the next 12 months; and (iv) a project completion report within 6 months of physical completion of the project. To ensure that projects will continue to be both viable and sustainable, project accounts and the executing agency audited financial statement together with the associated auditor's report, should be adequately reviewed.

## E. Stakeholder Communication Strategy

<b>Project Information to be Communicated</b>	<b>Means of Communication</b>	<b>Responsibility</b>	<b>Audience</b>	<b>Frequency</b>
Environmental Impact Assessment (TPGL)	Notice informing of availability at the project sites, hard copy at Rokhia Thermal Power Station and project site offices, electronic on website of TPGL (TSECL) and ADB website	TPGL, ADB	ADB, Government of India, Government of Tripura, affected communities, civil society, and other interested stakeholders	Once (initial reports) and then as needed for any update
Initial Environmental Examination (TSECL)	Notice informing of availability at the project sites, hard copy in local offices, substations, and project site offices, electronic copy on website of TSECL, ADB website	TSECL, ADB	ADB, Government of India, Government of Tripura, affected communities, civil society, and other interested stakeholders	Once (initial reports) and then as needed for any update
Resettlement and Indigenous Peoples Plan (TSECL and TPGL)	Notice informing of availability at the project sites, hard copy in local offices, substations, and project site offices  Summary of the RIPP at concerned project districts head quarter and offices of TTAADC project area including at the headquarter of TTAADC  Electronic copy on website of TSECL, ADB website	TSECL, TPGL and ADB	ADB, Government of India, Government of Tripura, affected communities, civil society, and other interested stakeholders	Once (initial reports) and then as needed for any update
Environment and Social Monitoring Reports	Notice informing of availability at the project sites, electronic copy on the websites of TPGL and TSECL, ADB website	TPGL, TSECL ADB	ADB, Government of India, Government of Tripura, affected communities, civil society, and other interested stakeholders	Semi-annual for TPGL  Semi-annual for TSECL during construction, annual during operation

## **X. ANTICORRUPTION POLICY**

89. ADB reserves the right to investigate, directly or through its agents, any violations of the Anticorruption Policy relating to the project.<sup>22</sup> All contracts financed by ADB shall include provisions specifying the right of ADB to audit and examine the records and accounts of the executing agency and all project contractors, suppliers, consultants, and other service providers. Individuals and/or entities on ADB's anticorruption debarment list are ineligible to participate in ADB-financed activity and may not be awarded any contracts under the project.<sup>23</sup>

90. To support these efforts, relevant provisions are included in the loan agreement and the bidding documents for the project. The government will (i) comply with ADB's Anticorruption Policy (1998, as amended to date), and cooperate fully with any investigation by ADB, and extend all necessary assistance, including providing access to all relevant books and records for the satisfactory completion of such investigation; (ii) ensure that relevant staff are trained in ADB's Anticorruption Policy; (iii) ensure that the audited annual project financial accounts under the project, project progress and procurement activities are disclosed on relevant government entities; and (iv) allow and facilitate ADB's representatives to conduct spot and random checks on (i) flow of funds, and their use for the projects in accordance with the legal agreements; (ii) work-in-progress; and (iii) project implementation under the project.

## **XI. ACCOUNTABILITY MECHANISM**

91. People who are, or may in the future be, adversely affected by the project may submit complaints to ADB's Accountability Mechanism. The Accountability Mechanism provides an independent forum and process whereby people adversely affected by ADB-assisted projects can voice, and seek a resolution of their problems, as well as report alleged violations of ADB's operational policies and procedures. Before submitting a complaint to the Accountability Mechanism, affected people should try in good faith to solve their problems by working with the concerned ADB operations department. Only after doing that, and if they are still dissatisfied, should they approach the Accountability Mechanism.<sup>24</sup>

## **XII. RECORD OF CHANGES TO THE PROJECT ADMINISTRATION MANUAL**

92. All revisions and/or updates during implementation should be retained in this section to provide a chronological history of changes to implemented arrangements recorded in the PAM, including revision to contract awards and disbursement s-curves.

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<sup>22</sup> Anticorruption Policy: <https://www.adb.org/documents/anticorruption-policy>

<sup>23</sup> ADB's Office of Anticorruption and Integrity website: <https://www.adb.org/site/integrity/main>

<sup>24</sup> Accountability Mechanism. <http://www.adb.org/Accountability-Mechanism/default.asp>.

**TERMS OF REFERENCE FOR AUDIT OF ADB ASSISTED PROJECTS BY COMPTROLLER  
AND AUDITOR GENERAL OF INDIA**

The terms of reference for audit of ADB assisted projects by comptroller and auditor general of India can be found in this link: [https://dea.gov.in/sites/default/files/16-Audit-TOR\\_0.pdf](https://dea.gov.in/sites/default/files/16-Audit-TOR_0.pdf)



## FINANCIAL MANAGEMENT REPORT TO BE INCLUDED IN THE QUARTERLY PROGRESS REPORT

### I. General Instructions

1. The financial information in the format outlined below are to be included in the quarterly progress reports (QPRs) to be submitted to ADB within 45 days after each quarter. In case of delays or incomplete information, ADB will submit a reminder to the executing agency/implementing agency. Repeated delays or incomplete information may have a negative impact on the project performance ratings and may be discussed during review missions.

### A. Section A. Utilization of Funds (ADB Loan, and Counterpart Funds)

2. In this section include the following information:

- (i) Overall status of project financing including the adequacy and timeliness of counterpart funds;
- (ii) cumulative contract awards financed by the ADB loan, and counterpart funds (commitment of funds to date), and comparison with time-bound projections (targets – for ADB financing compare the actual contract awards with the contract award curve included in the PAM). Include an analysis of significant variances between planned and actual contract awards; Provide contract-wise details as per annex 2
- (iii) cumulative disbursements from the ADB loan, and counterpart funds (expenditure to date), and comparison with time-bound projections (targets – for the ADB financing compare the actual disbursement with the disbursement projections as per the S-curve included in the PAM), Include an analysis of significant variances between planned and actual disbursements;
- (iv) Reconciliation of project records and ADB disbursement records (LFIS/GFIS) for the reporting period and cumulative from project inception to end of the reporting period. Explain reasons for discrepancies and outline follow-up actions required (if any). Attach a detailed reconciliation by WA as per Annex 1; and,
- (v) re-estimated costs to completion (if required), need for reallocation within ADB loan categories, and whether an overall project cost overrun is likely.

### B. Section B. Financial Management

3. In this section, include the following information:

- (i) Summary of the Financial management arrangements in the project including: a) any problems in the existing FM arrangements and/or flow of funds and b) any significant changes occurred during the reporting period (e.g. FM staff turnover, implementation of new financial systems, emerging FM related risks etc.);
- (ii) Summary of the status of each agreed action in the FM action plan outlined in the PAM. Attach a detailed log as per Annex 4;
- (iii) Outline the status of recommendations and immediate actions provided by ADB as part of the APFS/AEFS review (if any) and FM related recommendations agreed during ADB review missions (if any). Attach a detailed log as per Annex 5; and,
- (iv) Summarize the status of Status of past audit observations (if any). Attach a detailed log as per Annex 3.

**Annexes: Attach the following annexes to the report when submitting it to ADB:**

1. Annex 1: Statement of Cash Receipts and Payments by Category
2. Annex 2: Disbursement Report for the Fiscal Year to Date and Cumulative Including Detailed Reconciliation (by Withdrawal Application) of Project Records and ADB Disbursement Records (LGFIS)
3. Annex 3: Status of Signed Contracts Cumulative to Date
4. Annex 4: Status of External Audit Observations
5. Annex 5: Status of Financial Management Action Plan
6. Annex 6: Status of Financial Management-Related Actions Agreed During ADB Review Missions or TPRMs

### Annex 1: Statement of Cash Receipts and Payments by Category

	Reporting Period (Quarterly/Semi- annually)	Year to date	Cumulative	Hard commitments (contracts signed not paid)
	In the currency of the financial statements			
<b>Cash receipts</b>				
ADB Loan (No.XX): Advance/Replenishments				
ADB Loan (No..XX):Direct Payments				
ADB Loan (No:YY): Advance/Replenishment				
ADB Loan (No:YY): Direct Payments				
ADF grant: Advance/Replenishments ADF grant: Direct Payments				
Etc..				
Government				
<b>Total</b>				
<b>Payments*</b>				
Civil works				
Consultancy services				
Project administration				
Etc.				
<b>Total expenditures</b>				
<b>Opening cash balance</b>				
<b>Closing cash balance</b>				

\*The expenditure categories should be the same expenditure categories as outlined in the PAM.

**Annex 2. Disbursement Report for the Fiscal Year to Date and Cumulative Including Detailed Reconciliation (by Withdrawal Application) of Project Records and ADB Disbursement Records (LGFIS)  
 –Separate Reports to be Generated for Each Financing Source (e.g ADB loan, ADB grant etc. as applicable).**

<b>Statement of Disbursement by ADB Financing Source for the year ended DD/MM/YYYY</b>				
<b>Statement of Disbursement</b>	<b>Notes</b>	<b>Reporting period</b>	<b>Fiscal year to date</b>	<b>Cumulative Project toDate</b>
<b>ADB loan/grant-funds claimed during the year</b>	A			
Reimbursement				
Advance Fund				
Direct Payment				
<b>Subtotal</b>				
Expenditure incurred not yet claimed	B			
<b>Subtotal</b>				

**Note A: Detailed Reconciliation (by Withdrawal Application) of Project Records and ADB Disbursement Records (LFIS) for the Fiscal Year to Date and Cumulative**

**-Separate Reports to be Generated for Each Financing Source (e.g ADB loan, ADB grant etc. as Applicable**

WA Details			Per project records/APFS (Amount recorded in the project Financial statements as reimbursement, direct payment, etc.)				Per ABD disbursement records LFIS/GFIS (actualPaid)			Remarks
Withdrawal application No (WA)	Disbursement method (reimbursement, direct payment, etc..)	Time period covered in the WA	Date	In local currency(as recorded in project records/ financial statements)	Exchange Rate	USD equivalent (A)	Value date	In USD (B)	Difference (A-B)	Reason for difference (i.e. timing forex. Pending rejected)
1		1-31.3.2020								
2										
3										
etc..										
<b>Total</b>										
-										
<b>Fiscal year to Date</b>										
<b>Total</b>										
<b>Cumulative</b>										

**Note B: Provide a Breakdown of Expenditures Incurred But Not Yet Claimed From ADB Including the Eligible Portion for ADB.**

**Annex 3: Status of Signed Contracts Cumulative to Date**

Contract Information											
Description *	Contract Description	Contract Start	Contract End	Supplier/ Contractor Name	Contract No.	Total Contract Value	Total Contract Amount Invoiced to date	Total Disbursed on Contract	Total Undisbursed Amount	Responsible entity	Financing source (ADB loan, etc.)
1. Civil works											
2. Equipment/ supplies											
3. Consulting services											
<b>Total</b>											

\*Classified a per expenditure categories outlined in the PAM.

**Annex 4: Status of External Audit Observations  
-Cumulative from Inception to End of Reporting Period**

<b>Responsible Entity</b>	<b>External Audit Recommendation</b>	<b>Date of the Recommendation</b>	<b>Planned Actions to Address the Recommendation</b>	<b>Responsibility</b>	<b>Current Status of the Planned Action (pending /resolved)</b>	<b>Remarks</b>

**Annex 5: Status of Financial Management Action Plan**

<b>Key Risk</b>	<b>Risk Mitigating Activity</b>	<b>Timeline</b>	<b>Responsible Entity</b>	<b>Status (implemented/Pending)</b>	<b>Remarks (including an action plan in case of noncompliance)</b>



**Annex 6: Status of Financial Management-Related Actions Agreed During ADB  
Review Missions or TPRMs**

Date of the review mission	Agreed actions	Timeline	Responsible Entity	Status (implemented/Pending)	Remarks