

MINUTES OF THE 87TH MEETING OF THE FORUM OF REGULATORS (FOR)

Venue: Agartala, Tripura

Date: 25th August, 2023 (Friday)

Time: 14:00 hrs

List of participants: Annexure-I

1. At the outset, the Chairperson, Tripura ERC (TERC), welcomed the Chairperson, FOR/CERC and the Chairpersons / Members of all the State and Joint Commissions for visiting Agartala to attend the 87th FOR meeting being hosted by TERC. Giving a brief overview of the power sector in Tripura, he informed the attendees that approximately 80% of the consumers in the State are domestic consumers, and the State has one of the highest power purchase costs in the country. Over the period, the State Commission has been taking several measures to reduce the power purchase cost in the State.
2. Thereafter, welcoming the members of FOR to the 87th FOR meeting, the Chairperson, FOR/ CERC informed the Forum that he has a personal connection to the State, having lived in Agartala for several years in 1970s. He also welcomed Shri Arvind Kumar, Chairperson, UPERC, and Shri R.K. Joshi, Chairperson, Arunachal Pradesh SERC, who were attending the FOR meeting for the first time. He also lauded the crucial role the FOR Working Groups played in addressing the important issues in the power sector and in framing the Model Regulations. He applauded Tripura ERC's commendable efforts in harnessing the potential of renewable energy and contributing to India's NDC targets. He also thanked the Chairperson, TERC, for his exceptional enthusiasm, praiseworthy dedication, and meticulous arrangements made in hosting the FOR meeting in Agartala.
3. Thereafter, as proposed by the Chairperson, TERC, the CMD and Director (Finance), Tripura State Electricity Corporation Ltd (TESCL) made a presentation (**Annexure-II**) on the power sector in Tripura. Delivering the presentation, the Director (Finance) informed the audience that Tripura is a power surplus State and that after meeting the demand of 500 MW, Tripura is exporting 170 to 190 MW to Bangladesh. He added that the State has unbundled its generation, transmission and distribution segments while also striving to reduce its dependency on conventional sources of electricity. He

conveyed that the Secretary (Power), the Government of Tripura has expressed gratitude to FOR for convening the 87th FOR meeting in Tripura. He hoped that the meeting would be purposeful, with a particular focus on the North Eastern States.

AGENDA ITEM. NO. 1:

A) MINUTES OF THE 86TH FOR MEETING HELD ON 26th JUNE 2023

4. Dy Chief (RA), CERC apprised the Forum of the constitution of a Working Group to address matters concerning renewable energy (RE) policies and regulations in response to the request from the Ministry of New and Renewable Energy (MNRE).
5. Chief (RA), CERC informed that the existing FOR Standing Technical Committee (STC) focusing on RE integration remains relevant and that the STC's terms of reference include addressing technical aspects of RE integration, such as forecasting, scheduling, deviation settlement for wind and solar power stations at the State level, as well as developing frameworks for ancillary services, automatic generation control, primary control, and implementation of the Availability Based Tariff (ABT) framework at the State level. In view of the formation of the WG on RE policy, he informed the Forum that there is a need to revamp the existing composition of the STC and broaden it to have representation from all the regions. The STC may continue to be headed by Member (Technical), CERC with Technical Members from SERCs of each region. STC may co-opt any other Member as deemed fit. It was decided that the STC would be reconstituted with the approval of the Chairperson, FOR/CERC.
6. Thereafter, the Forum approved the minutes of the 86th FOR meeting.

B) MODIFICATION IN THE MINUTES OF SPECIAL FOR MEETING HELD ON 14TH JUNE 2023 - REFERENCE FROM ISGF

7. Dy Chief (RA),CERC, apprised the Forum of the reference received from ISGF regarding a slight modification in the minutes of the special meeting of the FOR, which

were editorial in nature with reference to the replacement of the name of a distribution licensee.

8. Accordingly, the Forum approved the modifications and directed that the same be revised and updated.

AGENDA ITEM NO. 2:

A) DIFFICULTIES IN IMPLEMENTATION OF ELECTRICITY (RIGHTS OF CONSUMERS) AMENDMENT RULES, 2023 ISSUED ON 14TH JUNE 2023 - REFERENCE FROM MPERC

9. The Forum was apprised about the reference received from MPERC regarding the Electricity (Rights of Consumers) Amendment Rules, 2023, issued by the Ministry of Power on June 14, 2023, wherein if there is an increase in recorded maximum demand, the revised sanctioned load would be automatically reset from the billing cycle in the next financial year. In this regard, Member MPERC highlighted several challenges posed by the automatic increase of the sanctioned load and other billing and technical feasibility issues.
10. In the discussion that followed, the Chairperson, APERC added that it was necessary to follow a procedure that includes giving notice to consumers before automatically increasing the load. During the meeting, the procedure from the Andhra Pradesh ERC was circulated for the members to note. The Forum, after discussions, decided that all SERCs may frame similar procedures by adapting suitable provisions so that implementation and operational aspects could be addressed through procedures.

B) REQUIREMENT OF MODIFICATIONS IN MODEL REGULATION ON METHODOLOGY ON CALCULATION OF OPEN ACCESS CHARGES AND BANKING CHARGES ON GREEN ENERGY OPEN ACCESS CONSUMERS–REFERENCE FROM KERC.

11. The Forum was appraised about the reference received from KERC highlighting some of the issues raised by MoP in its letter dated 23th March, 2023, regarding Model Regulation on Methodology for calculation of Open Access charges and Banking charges for Green Energy Open Access Consumers vis-à-vis the decision taken by the Forum on these issues in its 85th meeting held on 18th April, 2023.
12. Chairperson, KERC informed the Forum that KERC has addressed the issues raised by the MoP in the relevant Regulations and the Order in line with the methodology specified by FOR. He further mentioned that while the proposal for levying transmission and wheeling charges/ losses only once is acceptable, the transmission and wheeling charges/ losses should be levied on the quantum of energy injected and not on the quantum of energy banked.
13. In this matter, Chief (RA), CERC also referred to a communication from the Energy and Petrochemicals department, Government of Gujarat seeking modifications to the Model Regulations on Green Open access as some of the provisions would lead to unavoidable financial implications of Discoms. They had also requested MOP to constitute a Committee to analyse such issues so that Discoms can present their views.
14. After discussion, the Forum noted the suggestion. Further, it was observed that, in view of several issues cropping up in the context of difficulty in implementing various Rules being issued by the Ministry of Power from time to time, the Forum decided to constitute a Working Group on “Harmonisation of Rules and Regulations”. The composition of the Working Group would be as follows:
 - a) Chairperson, GERC - Chairperson of the Working Group
 - b) Chairperson, CSERC - Member
 - c) Chairperson, HPERC - Member
 - d) Chairperson, KERC - Member
 - e) Chairperson, MPERC - Member

- f) Chairperson, MERC – Member
- g) Chairperson, OERC - Member
- h) Chairperson, RERC - Member
- i) Chairperson, TERC - Member

C) CLARIFICATION IN RESPECT OF AMENDMENT TO RULE 3 OF ELECTRICITY RULES 2005 VIDE ELECTRICITY (AMENDMENT) RULES 2023 AND MODIFICATION REQUIRED IN MODEL REGULATION ON VERIFICATION OF CAPTIVE GENERATING PLANTS AND CAPTIVE CONSUMERS - REFERENCE FROM KERC AND MPERC RESPECTIVELY.

15. The members of the Forum deliberated on changes brought in the Electricity Rules, 2005 by way of amendments in the Electricity Rules, 2023 with respect to the definition of captive user and user(s) as well as with respect to the definition of affiliate in captive generating plants. Member MPERC requested that the Model Regulations be amended suitably to reflect the provisions in the Electricity Rules.
16. The Forum decided that the Electricity Rules need to be interpreted by the ERCs regarding the context in which an issue is raised for consideration.

D) IMPOSITION OF GST ON LICENCE FEE COLLECTED BY SERCS - REFERENCE FROM CSERC

17. In response to the reference made by the Chairperson, CSERC the imposition of GST on license fees by the GST authorities, the Forum was apprised that further to the decision taken during the 85th meeting that the Chairperson, FOR / CERC would write to the GST Council, Ministry of Power and Secretary, Ministry of Finance informing them of the functions of the Regulatory Commission and the need for a clarification regarding the imposition of service tax on license fees etc, a letter has been sent to the Secretary, Ministry of Finance who, in turn, forwarded it to the Department of Revenue for further action .

18. In this regard, the Chairperson, APERC informed the Forum that in a similar reference from them to the GST Council, they had received a non-affirmative response from the GST Council. Chairpersons of AERC and UPERC informed that they had obtained a stay order on the decision of the GST council through writ petitions.

19. Following thorough discussions, the Forum agreed that the ERCs may take legal recourse on lines of some of the SERCs contesting in the court the demand notices sent by GST authorities.

E) INCLUDING CERTAIN PROVISIONS REGARDING CRISIS MANAGEMENT PLANS IN THE LICENSING TERMS AND CONDITIONS OF PRIVATE POWER UTILITIES – REFERENCE FROM MPERC

20. The members were informed that the Central Electricity Authority (CEA) under the Disaster Management Act has recommended setting up a disaster management plan for the power utilities. As per the Plan, Private Power Utilities must establish a Crisis Management Fund equivalent to 1.5% of their annual revenue. In addition, the plan also recommends creating a core corpus that would be replenished annually and used for immediate relief and rehabilitation work during a crisis. The plan also allows the utilities and the State governments to seek funding from the specialised agencies during such emergency needs.

21. The members deliberated whether this fund can be part of the license condition or should be factored in the ARR. It was highlighted that factoring this 1.5% fund into the ARR of the utility will impact consumer tariffs.

22. After discussion, the Forum noted the observations and decided that SERCs may take suitable action as deemed fit.

AGENDA ITEM NO. 3: REFERENCES FROM MINISTRY OF POWER

A) CHANGES SUGGESTED IN MODEL TARIFF REGULATION FOR MULTI YEAR DISTRIBUTION TARIFF

23. Chief (RA), CERC apprised the Forum about the Electricity (Second Amendment) Rules, 2023 notified by the Ministry of Power on 26th July, 2023 which referred to changes in essential provisions wrt ROE, AT&C losses etc and the request from MOP to FOR Secretariat to give a presentation on the Model MYT Regulation in its RPM Meeting held on 11th July'2023 and in a subsequent meeting with the Hon'ble Minister of Power on 25th July 2023. He further apprised the Forum about various issues that were highlighted during the meeting and the directions that were conveyed, specifically on the requirement of MYT tariff for every year to be fixed at the beginning of the control period with yearly true-up (a compilation of the same as reflected in the latest tariff orders of all ERCs was presented by the FOR Secretariat) and other parameters such as mandatory allowance of ROE, Interest on working capital, AT&C losses, and subsidy accounting to be in line with the Rules, etc.
24. After detailed discussion, the Forum decided that the provisions in the aforementioned Amended Rules and the concerns raised by the Hon'ble Minister of Power be referred to the Working Group on "Harmonisation of Rules and Regulations" for examination and further action.

B) FORMATION OF ANNUAL CAPACITY BUILDING PLANS (ACBPS) FOR ALL SERCS AND JERCS.

25. The Forum was informed about a reference from the Ministry of Power (MOP) regarding the preparation of an annual capacity-building plan, to facilitate the training of personnel in State Electricity Regulatory Commissions (SERCs) and Joint Electricity Regulatory Commissions (JERCS), in alignment with the process manual provided by the Capacity Building Commission on its website. The process manual in its approach paper details how organizations, officers, and staff at different levels within ERCs can identify skill gaps and training needs. This approach involves creating an individualized programme with specified durations and a corresponding budget. It was also informed

that the Ministry had requested FOR for a budget to take up capacity-building programs for the SERCs.

26. After detailed deliberations, it was decided that each SERC shall prepare their individual annual capacity-building plan in line with the process as per the approach paper available on the website of the Capacity Building Commission and share the details with FOR secretariat for compilation and subsequent sharing with MoP.

C) NOTIFICATION OF THRESHOLD LIMIT BY SERCS FOR AWARD OF TRANSMISSION PROJECTS THROUGH TBCB

27. The Forum was apprised about the reference from the Ministry of Power vide letter dated. 21.08.2023 regarding notification of the threshold limit by SERCs for the award of transmission projects through TBCB. Chief (RA), CERC briefed the Forum that each ERC has a provision in the Tariff Policy to define a threshold limit beyond which the transmission projects should be awarded through competitive bidding. The list of SERCs notified of the threshold limits is placed at **Annexure-III**.
28. The Forum agreed that all the SERCs/JERCs should define the threshold limit as the same is mandatory as per the Supreme Court judgement of 23.11.2022 and was also agreed to, by the FOR in its Special FOR meeting held on 5.12. 2022.

ANEGDA ITEM NO. 4: REPORT OF FOR SECRETARIAT ON CERTAIN COMPLIANCES BASED ON DATA CAPTURED ON REGULATORY WEBTOOL MAINTAINED BY IITK - REFERENCE FROM FOR SECRETARIAT

29. The Forum was informed that the Regulatory web tool was designed under the PSR program – a program under the Ministry of Power, Government of India, and the Department for International Development of the Government of the UK. Post closure of the PSR program, as approved by the FOR, the regulatory web tool was handed over to IIT-Kanpur (IIT-K) to maintain the Web tool. The Forum was also apprised of various elements of the tool, which included aspects related to OP 1 compliance with APTEL.

30. In this respect, Dy Chief (RA), CERC informed that, as decided by the Forum, each ERC would assign a nodal officer to update the data for their respective ERC directly on this web tool instead of sending individual submissions to the FOR secretariat, and that the FOR secretariat had already communicated login credentials to such nodal offices. However, the data on the web tool remains to be updated.

31. Members of the Forum were informed that as the data is received from the multiple Discoms/ utilities in their jurisdiction, a nodal officer from each of the utilities may also be provided with a user id and password can upload the data on the regulatory web tool. After discussions, it was agreed that the responsibilities of data up-dation shall lie with the SERCs and they can choose to nominate an officer from a utility, if they deem fit. Decisions to this effect need to be communicated by the SERCs to the FOR Secretariat. The Forum also decided that in every alternate meeting of the Forum, the FOR secretariat shall provide a status report related to data availability on the web tool.

ANY OTHER AGENDA ITEM AND CONCLUSION

a) VENUE OF NEXT FOR MEETING

32. Chairperson, UERC, reiterated his proposal to host the next meeting of the Forum in Mussoorie, which was accepted by the Forum.

b) VOTE OF THANKS

33. Delivering the vote of thanks Secretary, FOR/CERC extended his heartfelt appreciation to all the members of the Forum for their interactive and energy-filled discussion during which significant decisions were made on diverse and challenging topics. He reiterated that the members' diverse knowledge and expertise are the Forum's major strengths.

34. Thanking the members of the Forum for their active participation, he extended his special thanks to the Chairperson, FOR / CERC for his positive attitude and desire to resolve the issues. He also took the opportunity to express special thanks for the

Chairperson, TERC and his team who made elaborate arrangement to ensure that the event was a success. He also extended his gratitude to the FOR secretariat for the efforts they have put into the compilation of comments/ suggestions and providing other knowledge support to the Forum.

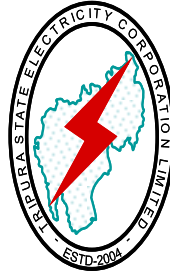
LIST OF PARTICIPANTS OF THE
87TH FORUM OF REGULATORS MEETING
HELD ON FRIDAY, THE 25TH AUGUST, 2023.
AT AGARTALA (TRIPURA)

S. No.	NAME	ERC
01.	Shri Jishnu Barua Chairperson	CERC/FOR – in Chair.
02.	Justice (Shri) C.V. Nagarjuna Reddy Chairperson	APERC
03.	Shri R.K. Joshi Chairperson	APSERC
04.	Shri Kumar Sanjay Krishna Chairperson	AERC
05.	Shri Hemant Verma Chairperson	CSERC
06.	Shri Anil Mukim Chairperson	GERC
07.	Shri D.K. Sharma Chairperson	HPERC
08.	Justice (Shri) Amitav Kumar Gupta Chairperson	JSERC
09.	Shri Alok Tandon Chairperson	JERC for State of Goa & UTs
10.	Shri Lokesh Dutt Jha Chairperson	JERC for UTs of J&K and Ladakh
11.	Shri P. Ravi Kumar Chairperson	KERC
12.	Shri T.K. Jose Chairperson	KSERC
13.	Shri Sanjay Kumar Chairperson	MERC
14.	Shri P. W. Ingty Chairperson	MSERC
15.	Shri Khose Sale Chairperson	NERC
16.	Shri Suresh Chandra Mahapatra Chairperson	OERC
17.	Shri Viswajeet Khanna Chairperson	PSERC
18.	Dr. B.N. Sharma Chairperson	RERC

19.	Shri K.B. Kunwar Chairperson	SSERC
20.	Shri T. Sriranga Rao Chairperson	TSERC
21.	Shri D. Radhakrishna Chairperson	TERC
22.	Shri Arvind Kumar Chairperson	UPERC
23.	Dr. M.V. Rao Chairperson	WBERC
24.	Shri D.P. Gairola Chairperson Incharge	UERC
25.	Shri Naresh Sardana Member	HERC
26.	Shri Prashant Kumar Chaturvedi Member	MPERC
27.	Shri K. Venkatesan Member	TNERC
28.	Shri Harpreet Singh Pruthi Secretary	CERC/FOR
29.	Dr. Sushanta Kumar Chatterjee Chief (Regulatory Affairs)	CERC
SPECIAL INVITEES		
ERC		
30.	Shri I.S. Jha Member	CERC
31.	Shri Arun Goyal Member	CERC
32.	Shri Pravas Kumar Singh Member	CERC
33.	Shri Jiban Krishna Sen Member	TERC
34.	Shri D. Sarkar Managing Director	TSECL
35.	Shri S.S. Dogra Director (Fin.)	TSECL
FOR SECRETARIAT		
36.	Ms. Rashmi Somasekharan Nair Dy. Chief (RA)	CERC

TRIPURA STATE ELECTRICITY CORPORATION LIMITED

(A Govt. of Tripura Enterprise)



Annexure-II

Presentation Before Forum of Regulator

Department of Power

Date : 25th August'2023

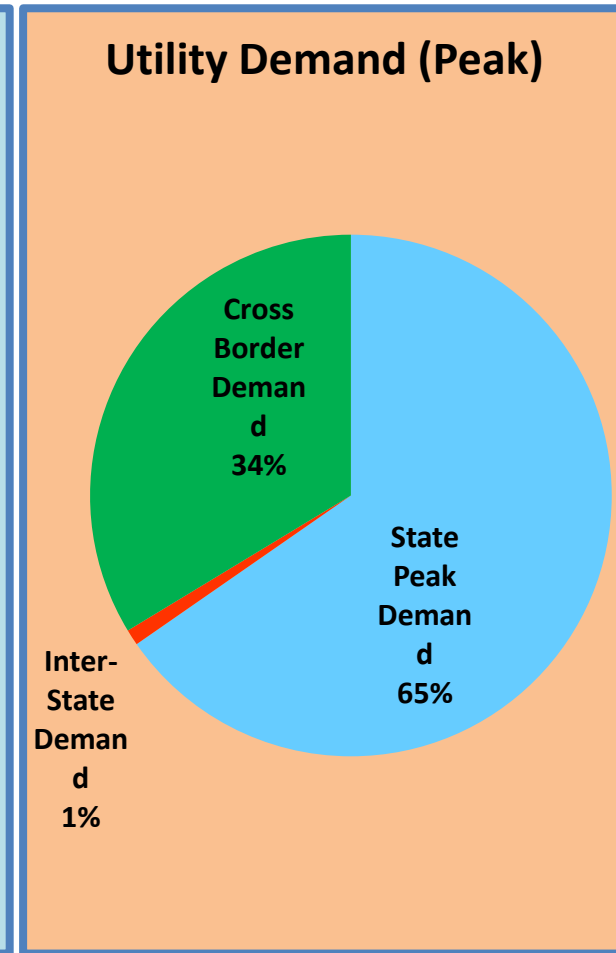
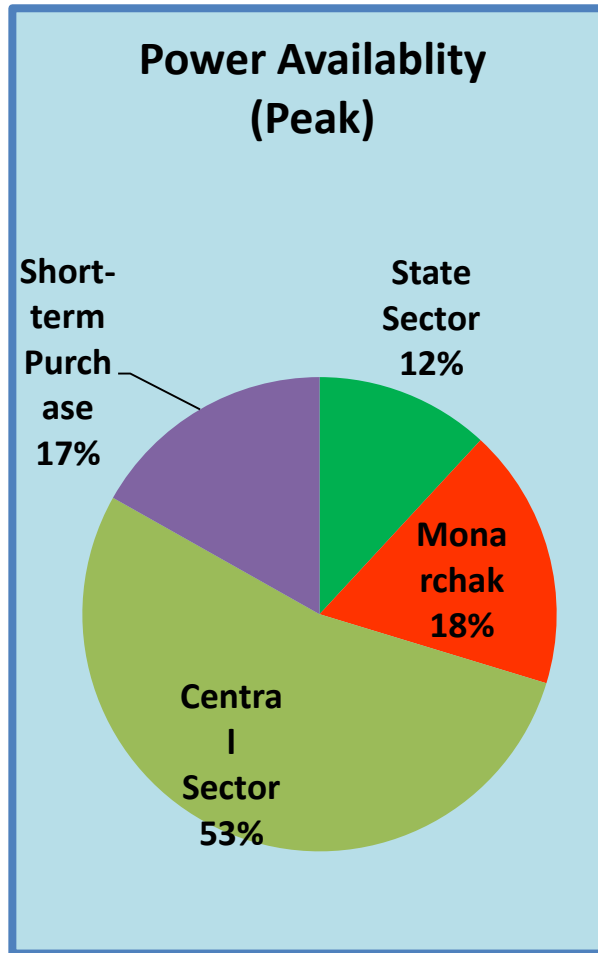
Table of Contents

- ❖ **Techno-Commercial Performance of TSECL**
- ❖ **Achievement in last 5 Years**
 - **Generation**
 - **Transmission**
 - **Distribution**
- ❖ **Action Plan in next 5 Years**
 - **Generation**
 - **Transmission**
 - **Distribution**
- ❖ **Issues & Challenges**
- ❖ **Way Forward**
- ❖ **TREDA**



Overview of Present Power Scenario in Tripura

Total Availability	State Sector	60 MW
	Monarchak	90 MW
	Central Sector	270 MW
	Short-term Purchase	85 MW
	Total Availability	505 MW
Total Demand	State Peak Demand	330 MW
	Inter-State Demand (Mizoram)	5 MW
	Cross Border Demand	170 MW
	Total Demand	505 MW

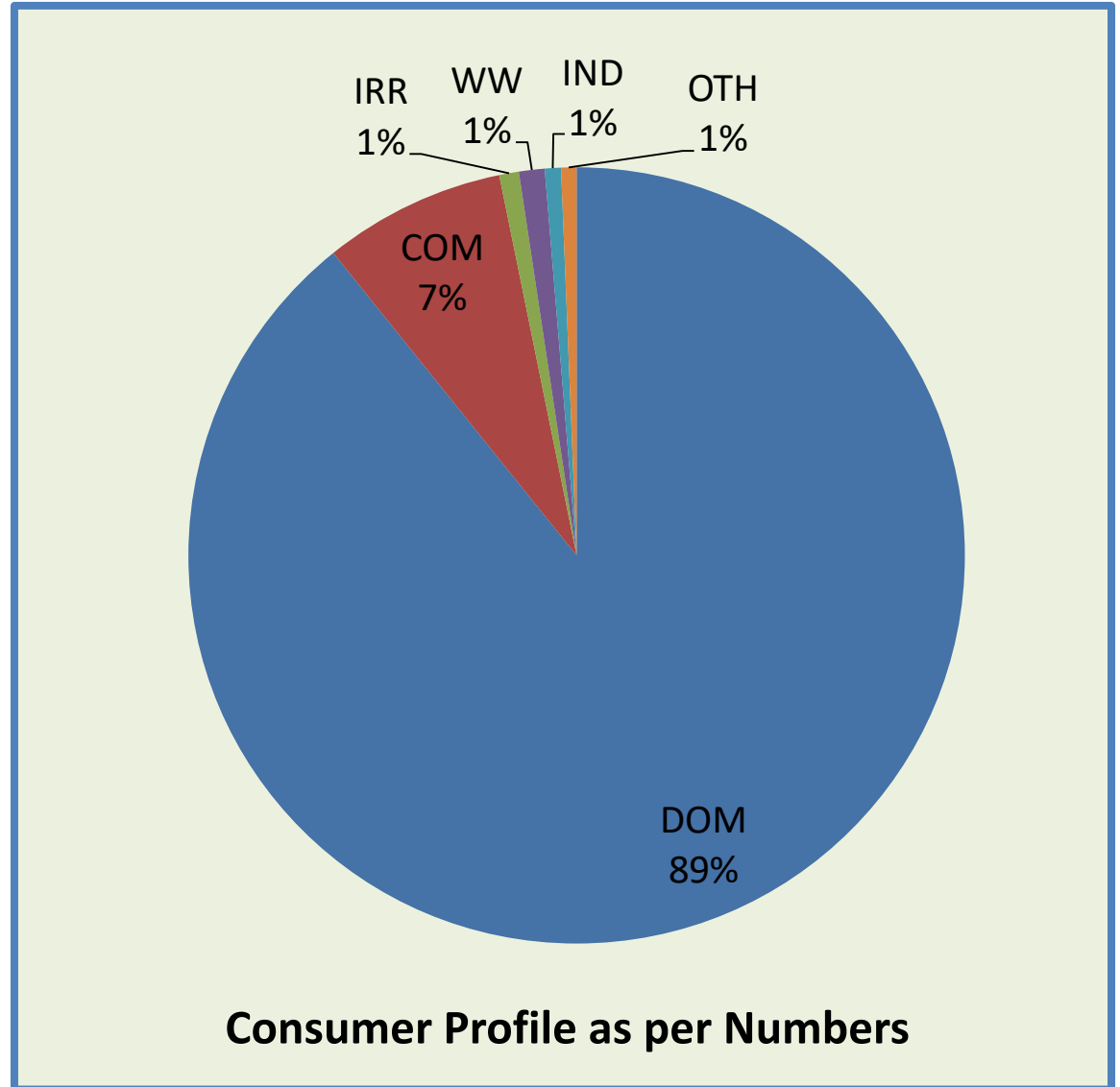


- ❑ **Maximum State Demand Observed 362.20 MW on 07/06 /2023**
- ❑ **Maximum Bangladesh Demand observed 192.42 MW on 11/05/2023**

Consumer Profile

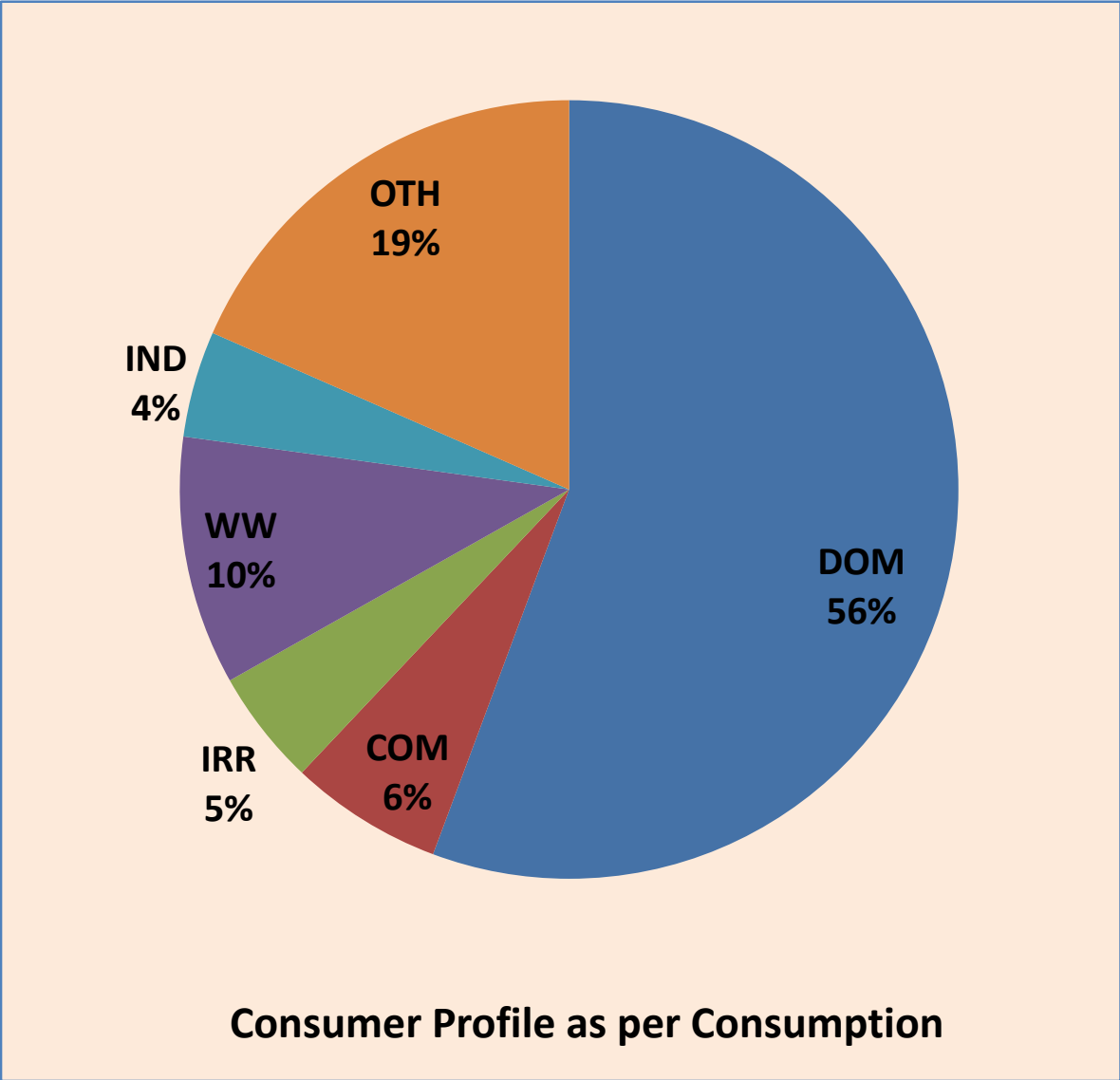
FY 2022-23

Category	Number of Consumers
DOMESTIC	8,66,513
COMMERCIAL	73,652
IRRIGATION	7,924
WATER WORKS	10,383
INDUSTRIAL	6,527
OTHERS	6,211
TOTAL	9,71,210



Consumer Energy Consumption Profile

FY 2022-23	
Category	MU Consumption
DOMESTIC	640.50
COMMERCIAL	73.13
IRRIGATION	55.21
WATER WORKS	118.86
INDUSTRIAL	50.75
OTHERS	211.81
TOTAL	1,150.27



Tripura Power Generation (Conventional)

Station	Installed Capacity	Present Generation
<u>TSECL OWN GENERATION</u>		
Rokhia Gas Thermal	3x21 = 63 MW	40 MW
Baramura Gas Thermal	2x21 = 42 MW	20 MW
Gumti Hydro Project	2x5 = 10 MW	2 MW
Roof Top Solar Project	4.29 MW	4.29 MW
Total Own Generation	119.29 MW	66.29 MW
<u>CENTRAL SECTOR GENERATION</u>		
Ramchandranagar Gas Thermal, NEEPCO	4x21+51 = 135 MW	110 MW
Palatana Gas Thermal, OTPC	2x363.30 = 726.60 MW	550 MW
Monarchak Gas Thermal, NEEPCO	¹⁸ 101 MW	81 MW

Tripura Power Generation (Renewable)

- ❑ Rooftop Solar Project already established in Tripura as on date under RTS Phase-I and other RESCO Model :

	Capacity (in KWp)
RTS Ph-I	321.00
RESCO Model	4,160.00
Off-grid Power Plant	2,009.00
Stand Alone System (421 Pumps + 19127 SLS)	2,007.00

- ❑ NEEPCO, Monarchak Solar PV of 5.00 MWp (100% used by TSECL).
- ❑ 5.00 MW capacity has been sanctioned under PM-KUSUM Component-A Phase-II for the state of Tripura. Out of 5 MWp, Agreement was done for 2 MWp and Agreement is under process for another 2 MWp Solar PV under PM-KUSUM Component-A
- ❑ 1.00 MW Capacity has been sanctioned under Rooftop Solar Program Phase-II for the state of Tripura. Till date 126 Nos. Application received out of which 72 Nos. Application Feasibility Approved, 7 Nos. already Grid connected and 7 Nos. installation completed and awaited for Net metering.
- ❑ TSECL already PPA with SECI for purchase of 100 MWp Solar power and expected commencement will June, 2024.

Operational Performance of TSECL

Sl. No.	Particulars	Unit	2018-19	2019-20	2020-21	2021-22	2022-23
(A)	Energy available at state DISCOM area	MU	1,207.15	1,305.63	1,373.07	1,460.58	1,527.48
(B)	Power Sold	MU	868.23	914.22	982.33	1,099.21	1,150.27
(C)	Efficiencies						
1.b	Billing (State Level) w.r.t. Net Input Energy	%	71.92%	70.02%	71.54%	75.26%	75.30%
2.b	Collection (State Level)	%	90.46%	91.93%	103.28%	93.90%	98.20%
3.b	AT&C Losses (State Level)	%	34.94%	35.63%	26.11%	29.34%	26.05%
(D)	ACS-ARR Gap	Rs./kWh	-0.13	0.19	-0.05	0.40	0.94
(E)	DT Failure	%	11.19	10.36	8.71	9.39	8.90

AT&C Loss = Aggregate Technical & Commercial Loss

ACS = Average Cost of Supply

ARR = Average Recoverable Rate

Action Plan for Next 5 YEAR : Generation

SL. NO	PROJECT	Scheme	STATUS	TARGET DATE
1	120 MW ROKIA CC Power Project with ADB Loan	ADB	NIT published on 09.03.2023, BOD on 23.05.2023	Oct. 2026
2	GUMTI HYDRO ELECTRIC PLANT (3 x 5 MW): To complete Renovation & Modernization of the Plant.	ADB	Proposal for NEC Funds (Rs. 68 Lakh) to prepare DPR, RLA and Bid Documents submitted on 06.03.2023	Jan. 2026
3	MAHARANI MICRO HYDEL (2 X 500 KW): Revival under Rehabilitate, Operate and Maintain (ROM) Model by the Private Sector.	PPP Model	Tender Floated, yet to be finalized.	Dec. 2025
4	84 MW Baramura CC Power Project: Replace existing Open Cycle Units with a Combined Cycle Plant.	Not yet decided	Proposal for NEC Funds (Rs. 60 Lakh) submitted on 06.03.2023 to conduct a feasibility Study and prepare DPR thereafter.	March 2027
5	Floating Solar Power Plant at Dumbur Lake of 100 MWp capacity	Joint venture with NTPC		March 2028
6	Setting up of Battery Storage for using Solar Power at Peak Hours.	Not yet decided		March 2028

Achievements in 5 yrs : Transmission

- ❑ 4 nos. of new 132 KV sub-station and 8 nos. of new 33 KV sub-stations have been commissioned under NERPSIP.
- ❑ Augmentation of 6 nos. of 132 KV sub-station and 7 nos. of 33 KV sub-stations under NERPSIP.
- ❑ Under NERPSIP 416CKm of 132 KV and 406CKm of 33KV transmission line have been constructed.
- ❑ For communication 532Km Optical Ground wire have been installed under NERPSIP.
- ❑ Augmentation by capacity addition of 132 KV sub-station, Garodtilla, Kamalpur under IPDS and completed on Oct-2020.
- ❑ Renovation and up-gradation of protection system in the sub-stations of Tripura under PSDF Fund and completed on April-2022.
- ❑ 132 kV transmission line from Ambassa to Gandacherra under NEC Project and completed on Dec-2022.

IPDS: Integrated Power Development Scheme

PSDF : Power System Development Fund

Future Project : Transmission

- ❑ Augmentation of 132 KV Surjamaninagar sub-station into 400 kV sub-station.
- ❑ 5 Nos. 132 KV New sub-station in Tripura.
- ❑ 7 Nos. 132 KV sub-station (Augmentation by capacity addition)
- ❑ Commissioning of 13 Nos. 268Km, 132 KV New line.1

Achievements in Last 5 Years : DISTRIBUTION

❑ Completed Centrally aided schemes :-

1) DDUGJY

i) RE-DDUGJY (XII Plan)

ii) DDUGJY (ph-I/New)

iii) DDUGJY (Ph-II/Addl. Infra)

2) IPDS (Integrated Power Development Scheme)

3) Pradhan Mantri Sahaj Bijli Har Ghar Yojna (Saubhagya)

❑ Infrastructure added :-

▪ 15 nos. of new 33/11 KV sub-station commissioned.

▪ Construction and extension of 3993 CKm HT Line.

▪ 2806 Ckm over-head, 6321 Ckm AB cable, 218 Ckm UG Cable have been constructed/augmented.

▪ 4118 nos of Distribution Transformer added.

▪ Electrification of 912 nos. Habitat has been completed, 214887 nos of on-grid household connections and 3601 nos of Solar connections were given, 184228 nos of pre-paid connections were given.

TSECL's initiatives

❖ **State Transmission Unit :**

Formation of the State Transmission Unit named as Tripura Power Transmission Limited (TPTL) through unbundling of Transmission and Distribution wing of TSECL as per guideline of Ministry of Power, Govt. of India. TPTL is the first company in the country of its kind to incorporate Power Substations of 33kV level.

❖ **Distribution Franchisee :**

Appointed 5 (Five) Input Based Distribution Franchisee in Public Private Partnership (PPP) model in 5 Nos Loss making Distribution Divisions.

- Name of Divisions : **Mohanpur, Sabroom, Kailashahar, Ambassa and Manu.**
- Improve in Billing Percentage : As billing is being done in 11kV level, thus Billing percentage is considered as 100% which results increase in billing percentage by 34%.
- Improve **in Revenue Collection by 22%.**

❖ **Smart Centralised Customer Care Centre :**

Introduced Smart Centralised Customer Care Centre for registration of consumer complaints from all corner of the state through **24x7 toll free number “1912”** along with highly equipped **“Fault Rectification Team”** in Agartala City for early redressal of complaints.

❖ **Enterprise Resource Planning (ERP) :**

Implemented Enterprise Resource Planning (ERP) to bring transparency in functionalities of TSECL.

Action Plan for Next 5 years : DISTRIBUTION

a. REVAMPED DISTRIBUTION SECTOR SCHEME (RDSS)

- ❖ To reduce Aggregate Technical & Commercial (AT&C) Loss up to **19%** by FY 2024-25.
- ❖ To reduce Avg. Cost of Supply – Avg. Revenue Realization (ACS-ARR) **Gap to Zero (0)** by FY 2024-25.
- ❖ Following works will be done under RDSS:-
 - Replacement of 8400 CKM LT bare line by AB Cable, implementation of 925 CKM High Voltage Distribution System (HVDS), 32 nos. Feeder Bifurcation is planned under loss reduction component of RDSS.
 - Installation of 4.47 lakh Smart Prepaid Meters and 1 lakh Prepaid Meter , metering of 14908 nos of Distribution Transformer and metering of 473 nos. of feeders(11kV) is planned under Smart Metering component of RDSS.
 - Implementing SCADA systems in 9 towns for real-time monitoring and control of the distribution network, 3 nos. of highly dense strategic locations are identified for GIS Substation, upgradation of 154 CKM of 33kV lines and 1410 CKM of 11kV line under modernisation component of RDSS.

b. Distribution Reliability Improvement Project funded by ASIAN DEVELOPMENT BANK (ADB)

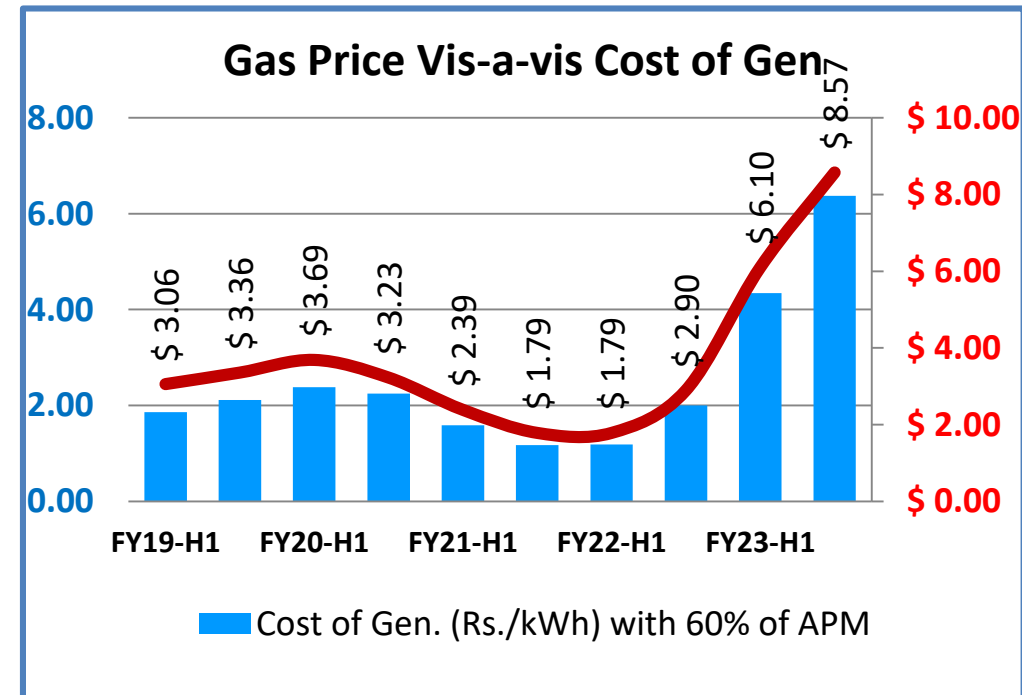
- ❖ **Funding Pattern** : Asian Development Bank (ADB) - 80% , Govt. of Tripura – 20%
- ❖ **Duration of Project** : 3 (Three) Years.
- ❖ Following works are to be done under ADB :
 - Construction of 143 KM under Ground Cable, 1650 KM Covered Conductor and 1800 KM of LT AB Cable
 - Installation of 1.2 Lakh Smart Meter.
 - Construction of 1262 KM High Voltage Distribution System (HVDS)
 - Renovation of 27 nos. of 33/11 KV Sub-station.
 - Distribution Automation (FPI/Sectionaliser/Auto Re-closure)
 - Setting up of a Transformer Testing Lab (1 Nos) at ESD-Bishalgarh.
 - Distribution Network Mapping and Consumer Indexing through GIS.

Issues & Challenges

Generation:

- ❑ Non-availability of pollution clearance of our Rukhia Plant restrict us for using 2 out of 3 nos. 21 MW units and thus reducing our overall efficiency & increasing the cost of generation.
- ❑ Reason behind increase of Average Cost of Generation:-
 - Escalation in gas price from 1.74 USD to 5.142 USD from the period of 1st Oct 2022 to 31st March 2023 resulting in increase of generation cost for both of the gas based Power Plant ie. For GTPS, Rokhia PP and GTPS Barmura PP.

POWER STATION	PRESENT GENERATING CAPACITY (MW)	Total cost of Generation (Rs/ Kwh)		
		2020-21	2021-22	2022-23 (up to Dec.)
GTPS, Rokhia	19	2.61	2.82	7.66*
GTPS, Baramura	39	2.24	2.88	5.37*
HEP, Gumti	2	2.78	2.41	2.10



Transmission:

- ❑ ROW issues resulting non completion of long pending transmission lines & thus creating hindrance for proper evacuating of power.

Distribution:

- ❑ No tariff hike since 2014 rather reduction of 2.34% due to increase of rebate from 2% to 5%.
- ❑ Increase of POC charges impacting around Rs.80 Cr. additional per annum.
- ❑ Increase of APM Gas price around 196% impacting around Rs.202 Cr. additional per annum
- ❑ Delay in payment of cross border power because of Bangladesh internal issue. Present dues around Rs.122 Cr.
- ❑ AT&C Loss of TSECL gradually decreasing from 34.94% (FY19) to 26.05% (FY23). Though it is still high, TSECL is trying to reduce it to 19% as per RDSS set target by FY25.
- ❑ Unresolved issue of NEEPCO power purchase rate because of escalation of original project cost, matter pending at APTEL and status quo to be maintained as per the latest APTEL order.

Future Roadmap : Vision 2030

TSECL's own initiative

❖ **Separation of TPGL :**

TSECL is aiming to separate assets and functionalities of TPGL through formation of an independent organisation by FY 2025-26.

❖ **Conversion of existing Overhead Electrical lines by Under Ground Cables :**

Aiming to implement in Agartala and other District Head Quarters.

❖ **EV Charging Stations :**

TSECL is aiming to set up Charging Stations for Electrical Vehicle (EV) at different strategic locations though out the state.

❖ **Floating Solar Power Plant :**

Planning to set up a **Floating Solar Power Plant** at Dumbur Lake of 100 MWp capacity.

❖ **Battery Storage :**

Planning to set up **Battery Storage** for utilisation of Solar Power at Peak/Night Hours.

❖ **Asset Mapping :**

Asset Mapping up to the consumers level has been planned on GIS platform to facilitate proper energy auditing.

❖ **Installation of 130 MWp Flouting Solar Plant :**

TSECL plan for setting up 130 MW Flouting Solar Plant at Gomati Reservoir through NTPC.

Way Forward

GENERATION

- ❑ Taken up with State Pollution Control Board & MoEF for early Pollution Certificate of the existing Plant.

TRANSMISSION

- ❑ Already taken up with Administration to resolve the ROW issue jointly.

DISTRIBUTION

- ❑ Submitted tariff Petition for coming year tariff along with regularisation of past expenditures.
- ❑ Follow up with the concerned Govt. for settlement of dues.
- ❑ Converting from bare to cover conductors for LT lines to arrest pilferage.
- ❑ Taken up with Bangladesh Govt. & suggested for Rupee transaction.

Thank You

Status of Distribution Project under RDSS

(Physical Status)

Sl. No.	Description of Work	Name of Agency	Present Status
A Prepaid & Smart Metering			
1	11kV Outgoing Feeder Metering - 473 Nos (Fund allotted – Rs.2.00 Cr.)	Yet to be awarded	Tender has been cancelled due to high quoted price. RFP is under preparation for retender.
2	Distribution Transformer Metering - 14,908 Nos (Fund allotted - Rs.34.00 Cr.)		
3	Consumer Smart Prepaid Metering - 4.47 Lakh (Fund allotted - Rs.268.00 Cr.)		
4	Consumer Prepaid Metering - 1 Lakh (Costing : Rs.18.00 Cr., Fund Booked- Rs.12.00 Cr.)	Departmental Execution	Meters had already been purchased. Installation to be started shortly.
B Infrastructure Development for Loss Reduction			
1	Dhalai Package : LOA Value- Rs.22.22 Cr. LT AB Cable-332 KM, HVDS- 43 KM, Feeder Bifurcation- 10 CKM	Techno Power Enterprises Pvt. Ltd., Kolkata	90% GPS Survey works is completed. GTP & Drawings are approved . 15% major materials (Pole, Conductor) are reached at site.
2	Khowai Package : LOA Value- Rs.50.10 Cr. LT AB Cable- 854 KM, HVDS- 86 CKM, Feeder Bifurcation- 24 CKM		
3	Sepahijala Package : LOA Value- Rs.89.37 Cr. LT AB Cable- 1453 KM, HVDS- 79 CKM, Feeder Bifurcation- 42 CKM		
4	Gomati Package : LOA Value- Rs.72.09 Cr. LT AB Cable- 1190KM, HVDS- 134 CKM, Feeder Bifurcation- 28 CKM		
5	West Tripura Package : LOA Value- Rs.50.10 Cr. LT AB Cable- 723 KM, HVDS- 106 CKM, Feeder Bifurcation- 26 CKM	Enn Aar Poles, Guwahati	GPS Survey works in progress. Approval of Vendor, GTP & Drawings are in process.
6	North Tripura Package : LOA Value- Rs.72.43 Cr. LT AB Cable- 1109 KM, HVDS- 143 CKM, Feeder Bifurcation- 35 CKM		
7	Unakoti Package LT AB Cable- 440 KM, HVDS- 37 KM, Feeder Bifurcation- 10 CKM	Suhara Powerline Pvt. Ltd., Nagpur	BOD has advised to re-examine the tenders
8	South Tripura Package LT AB Cable- 760 KM, HVDS- 90 CKM, Feeder Bifurcation- 10 CKM	Bhattacharya Construction, Agartala	
C IT/OT Works for Loss Reduction			
1	Revenue Management System (in OPEX Mode) (Fund allotted- Rs.20.00 Cr.)	BCITS Ltd.	In Operation but REC has disallowed and instruct to float fresh tender.
2	Centralise Customer Care Centre (in OPEX Mode) (Fund allotted - Rs.10 Cr.)	Teleperformance Global Services Pvt. Ltd.	
3	Deployment of Cloud Server for existing ERP System inc. implementation of Project Execution Management System. (LOA Value- Rs.1.88 Cr.)	Tata Consultancy Services Ltd.	Preparation of Cloud Infrastructure is completed & Designing of PEMS is in progress.
4	Online Transformer Monitoring System (Fund allotted : Rs.10.00 Cr.)	Yet to be awarded	RFP is under preparation

Status of Distribution Project under ADB Funded Project

(Physical Status)

SL No	Description	Name of Agency	Status
	Package-I (Renovation of Sub Station – 27 nos)		
1	Supply of items & Construction for R & M of 33/11KV Sub-station with supply & installation of FPI's/RMU/Auto reclosers, Supply of vehicle mounted Cable fault locator and Transformer repairing centre with testing Lab. LOA Value=Rs.56.83 Cr	T & T Project Limited, Kolkata	DGPS survey work is completed , GTP & Drawings is approved and agency offered for inspection of major materials & 24 nos RMU had already been installed.
	Package-II (UG CABLE- 143.46 KM, CC- 758.00 KM, ABC – 515.00 KM)		
2	Turnkey contract for Supply & construction of New / Augmentation of 33KV /11KV/LT lines, Lot-1, EC-I & II WEST LOA Value=Rs.119.72 Cr Lot-2, EC-KHOWAI LOA Value=Rs.70.20 Cr Lot-3, EC-DHARMANAGAR & UNAKOTI & DHALAI(Re-tender)	L & T Limited, Chennai	DGPS survey work is completed , GTP & Drawings is approved and agency offered for inspection of major materials . 412 nos Pole erected & 2.60 KM UG Cable laying work is completed & balance work is in progress. BOD has advised for re-tendering.
	Package-III (CC- 892.00 KM, ABC – 385.00KM)		
3	Turnkey contract for Supply & construction of New / Augmentation of 33KV /11KV/LT lines, Lot-1, EC-SEPAIJALA, LOA Value = Rs.75.84 Cr Lot-2, EC-GOMATI, LOA Value = Rs.91.86 Cr Lot-3, EC-BELONIA, LOA Value = Rs.62.88 Cr	Techno Electrical & Engineering, Kolkata	DGPS survey work is completed , GTP & Drawings is approved and agency offered for inspection of major materials & 7573 nos Pole erected & 3.50 KM Covered Conductor stringing work is completed & balance work is in progress.
4	Package-IV (Smart Meter) (1.50Lacs) Supply & installation works for Smart Metering		NOC received from ADB on 01/08/2023 which will be placed in the next BOD for approval.
5	Package-V [HVDS] (11KV – 1262.00 KM,16KVA – 582 Nos, 25 KVA - 547 Nos) Turnkey contract for Supply & construction of HVDS in selected areas or feeder		. After finalization of Package-I to Package-IV, re-allocation of cost of Package-V will be determined.
6	Package-VI i) Consultancy firm(Technical & financial roadmap) : Network Survey, mapping & distribution Roadmap Planning report ii) Consultancy firm: PIC		Shorting of Consultant by EOI has been done,now RFP will floated by 21/08/2023 NOC is received from ADB.(L1 bidder – WAPCOS)
7	Contingency @5%		

(Financial Status)

Status of Distribution Project under ADB Funded Project

LOA details


Sl. No.	Description	Name of Agency	LOA value excluding GST (in Rs)	LOA value including GST (in Rs)
1	Package-I			
	Supply of items & Construction for R & M of 33/11KV Sub-station with supply & installation of FPI's/RMU/Auto reclosers, Supply of vehicle mounted Cable fault locator .	T & T Project Limited,Kolkata	568372317.00	670679334.00
2	Package-II			
	Turnkey contract for Supply & construction of New / Augmentation of 33KV /11KV/LT lines,			
	Lot-1, EC-I & II WEST	L & T Limited, Chennai	1197296442.34	1412809802.00
Lot-2, EC-KHOWAI	702080295.28		828454748.00	
3	Package-III			
	Turnkey contract for Supply & construction of New / Augmentation of 33KV /11KV/LT lines,			
	Lot-1, EC-SEPAIJALA	Techno Electrical & Engineering, Kolkata	758474850.15	895000005.00
	Lot-2, EC-GOMATI		918644067.80	1084000000.00
Lot-3, EC-BELONIA	628813559.32		742000000.00	
TOTAL			4773681531.89	5632943889.00

Two agreements signed

1. **Loan Agreement signed on 30-12-2022**
2. **Project Agreement signed on 30-12-2022**

The Govt. of Tripura released **Rs.47.00 Cr. on 19/01/2023** and **Rs.74.00 Cr. 02/08/2023** i.e. **Rs.121.00 Cr.** which is disbursed among the awarded agencies.

Annexure-III

DETAILS OF SERCS WHO HAVE SPECIFIED THRESHOLD LIMITS				
Sl. No.	SERC	Threshold Limit (₹)	Remarks	Link
1.	Rajasthan	250 Cr.	RVPN must adhere to ₹ 250.00 Crore limit, prioritize TBCB process, prevent project splitting, and consider GSS + bays + lines as one to avoid cost reduction.	 Order.pdf
2.	Assam	100 Cr.	-	Order
3.	Bihar	100 Cr.	-	Order
4.	Gujarat	100 Cr.	Excluding land cost	Order
5.	Haryana	100 Cr.	-	Order
6.	Himachal Pradesh	45 Cr.	For Intra State Transmission Line or Sub-station or both Transmission Line and Sub-station as a package (where the proposed Transmission Line is associated with the proposed Sub-station)	Order
7.	Uttar Pradesh	-	Projects of 220 kV & above voltage level being part of STU shall be implemented through TBCB route. *	Order
8.	Jharkhand	175 Cr	Any deviation from the guidelines should have prior approval of the Commission	Order
9.	Madhya Pradesh	250 Cr.	-	Order
10.	Maharashtra	500 Cr	Excluding land cost	Order
11.	Orissa	100 Cr.	Except projects of 400kV and above voltage level and projects of strategic importance.	Order
12.	Punjab	250 Cr.	-	Order
13.	Uttarakhand	100 Cr.	-	Order
14.	J&K And Ladakh	100 Cr.	-	Order
15.	Chattisgarh	250 Cr.	State Govt. must get approval for strategic/critical transmission projects exceeding TBCB limit.	Order

* Certain greenfield intra-State transmission projects will be included in the RTM framework under Section 62 of the Act, subject to the Commission's approval. These projects include:

- (a) Strategic projects or urgent works supported by State Government recommendations.
- (b) Deposit-funded works.
- (c) Small schemes like LILO lines costing up to Rs. 100 Crores. Excess costs beyond this will be borne by the licensee, not through Regulated Tariff.