MEGHALAYA STATE ELECTRICITY REGULATORY COMMISSION

1st Floor (Front Block Left Wing), New Administrative Building,
Lower Lachumiere, Shillong – 793 001
East Khasi Hills District, Meghalaya

CASE No 23/2023

In the matter of:

Approval of Business Plan for the MYT Control Period from FY 2024-25 to FY 2026-27.

And

State Load Dispatch Center (SLDC) of MePTCL..... Petitioner

Coram

P.W. Ingty, IAS (Retd),

Chairman

R.K. Soni, District Judge (Retd.),

Member

ORDER

Date:16.11.2023

1. Meghalaya Power Transmission Corporation Limited (herein after referred to as MePTCL) is a deemed licensee in terms of section 14 of the Electricity Act, 2003 (herein after referred to as Electricity Act 2003), engaged in the business of distribution of electricity in the State of Meghalaya. State Load Dispatch Centre works as a Strategic Business Plan unit under the Transmission licensee viz, MePTCL.
2. Commission has amended and substituted the sub-Regulation 1.4 of MYT Regulations, 2014 as reproduced below:

   "1.4. These Regulations shall be applicable for the determination of Tariff in all cases coveredunder MYT Regulations effective from 1st April, 2024 onwards to 31st March, 2027".
3. As per provisions of sub-Regulations 1.4 (amended) and Regulations 8 and 78 of MYT Regulations, 2014, MePTCL has filed the Petition for approval of its Business Plan for the 4th Control Period of FY 2024-25 to FY 2026-27 for State Load Dispatch Centre with details for each year of the Control Period.

4. As per provisions of sub-Regulations 8.1, 8.2 and 8.3, the Business Plan shall comprise of but not limited to details of demand projections, power procurement plan, capital investment plan, financing plan and physical targets.
5. In exercise of powers vested in Clause 8.1, 8.2, 8.3 & 8.4 of MYT Regulations 2014, this order is passed by the Commission, approving the Business Plan for the Control Period of FY 2024-25 to FY 2026-27, based on the information submitted by MePTCL for SLDC.
6. MePTCL shall submit the MYT Petition for SLDC for the Control Period for FY 2024-25 to FY 2026-27 on or before 30th November, 2023 in accordance with Regulation 18 of MYT Regulations, 2014.
7. This Order shall be placed on the website of the Commission and a copy shall be sent to MePTCL and MeECL.

Sd/-	Sd/-
Shri. R.K. Soni, District Judge (Retd.)	**Shri P.W.Ingty, IAS(Retd)**
Member	**Chairman**

1. SLDC Business Plan for 4th MYT Control Period FY 2024-25 to FY2026-27

1.1 Preamble

The petition for Business Plan for the Control Period (FY 2024-25 to FY 2026-27) is filed in accordance with the Meghalaya State Electricity Regulatory Commission (Multi Year Tariff) Regulations, 2014 (hereinafter referred to as "MYT Regulations, 2014") which have been notified by the Hon'ble Commission on 15th September 2014 and further amended on 3rd August 2023.

Based on the Business Plan, State Load Despatch Centre (SLDC) is required to forecast the Aggregate Revenue Requirement (ARR) for three years of control period from FY 2024-25 to FY 2026-27. As per the MYT Regulations, Business Plan should comprise of estimates for demand and supply forecast, capital investment plan, power procurement plan, financing plan, physical targets etc.

The afore mentioned Business Plan depends upon various factors such as historical data, current and future financial estimates, growth estimates, economic, financial and business- related assumptions, current operational requirements, other foreseeable changes/ requirements in future etc. SLDC has taken a rational and scientific approach while forecasting various components of Business Plan in order to arrive at a realistic forecast with minimal expected deviations.

The approach undertaken for preparation of various plans and forecasts is explained in detail in the relevant sections of Business Plan. This Business Plan, as submitted under MYT Regulations 2014 will be considered as a base for determination of ARR.

1.2 Business Plan

As per the regulations of the Hon'ble Commission, SLDC submits Business plan for the Fourth Control period FY 2024-25 to FY 2026-27.

A business plan is conventionally defined as:

"Business Plan is a formal statement of a set of business goals, the reasons why they are believed attainable, and the plan for reaching those goals. It may also

contain background information about the organization or team attempting to reach those goals."

Accordingly, this business plan is developed for the Control period bearing in mind the growth plan for the control period after considering the strength and weakness of SLDC and evaluating its business environment. SLDC has taken a rational and scientific approach while forecasting various components of Business Plan in order to arrive at realistic forecast with minimal expected deviations. The approach undertaken for preparation of various plans and forecasts is explained in detail in the relevant sections of Business Plan.

There are a number of internal and external factors which affect the planning of the company and thus it makes this document a very dynamic document and which calls for regular reviews of the plan with a view to introduce any mid-term corrections.

The primary objectives for developing the business plan are as follows:

- Providing a tool for Strategic Planning: The Business Plan is intended to chart the SLDC's way forward. The key objective for developing the business plan is to analyze and anticipate the major requirements of operation of SLDC with the expected performance for maintenance of stable grid in line with the Electricity Grid Code and other rules and regulations of CERC & MSERC. Business Plan may prove to be a tool to strategically plan for capital investments and it's financing. Further, it may help in timely execution and monitoring of the work.
- For the regulatory compliance of submission of Business Plan as mandated by MSERC MYT Regulations, 2014.
- Aid in Decision Making and better operational efficiency: The Business Plan may aid in decision making while planning and in the execution of the project. Further, proactive actions may be taken during the execution of the project in order to achieve the SLDC's goal. This may help in improving the operational efficiency by running the transmission network in accordance with the set performance target.

2 Company Profile

2.1. Background and profile of SLDC

The State Load Dispatch Centre is under the administrative control of the MePTCL. Section 32(2) of the Electricity Act 2003 mandates that "The State Load Dispatch Centre shall –

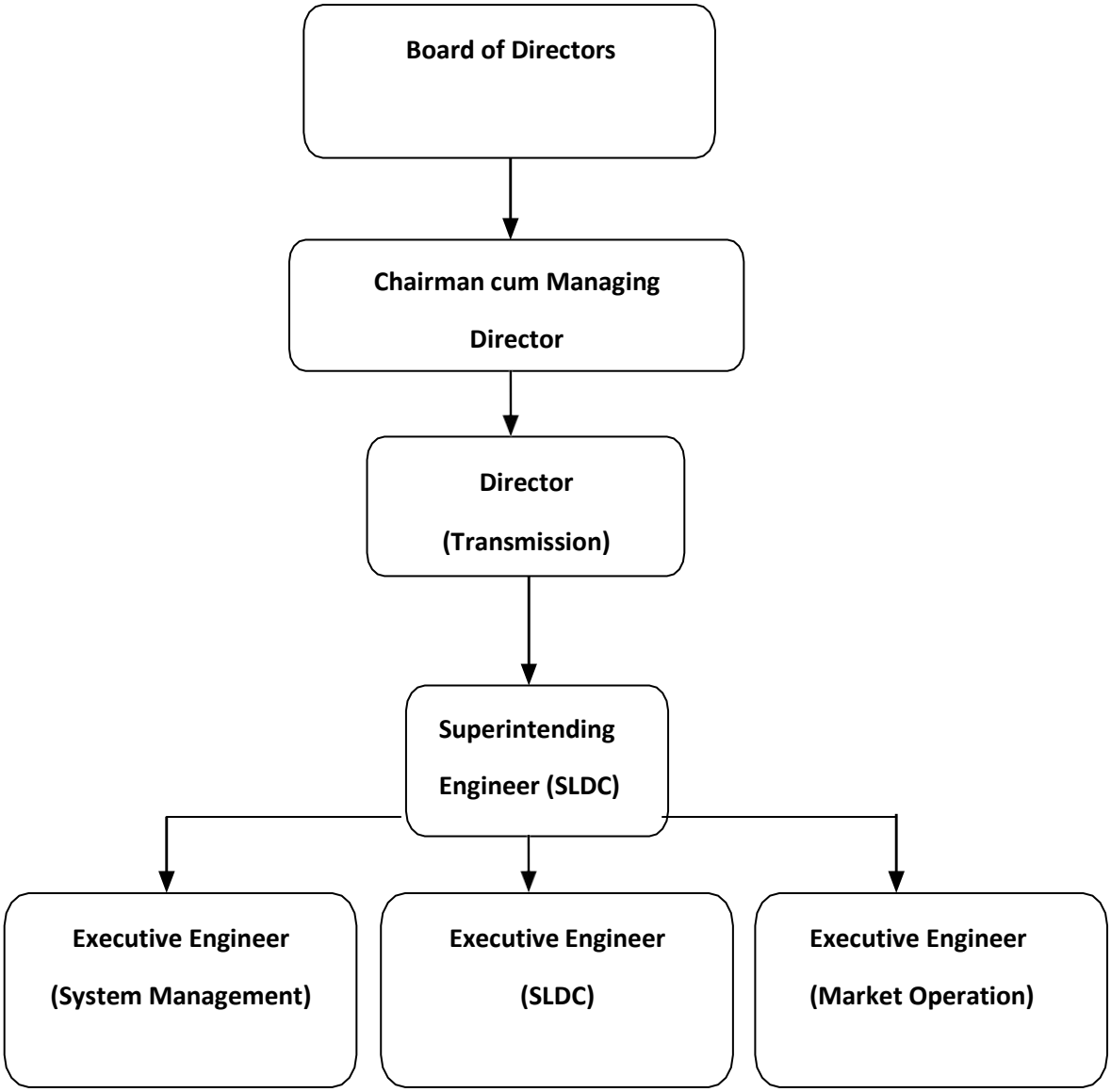
- Be responsible for optimum scheduling and despatch of electricity within a State, in accordance with the contracts entered into with the licensees or the generating companies operating in that State
- To monitor the grid operations
- To keep accounts of the quantity of electricity transmitted through the State grid
- Supervision and control over the intra-state transmission system and be responsible for carrying out real time operations for grid control and despatch of electricity within the State through secure and economic operation of the State grid in accordance with the Grid Standards and the State Grid Code.
- To comply with the directions of the Regional Load Dispatch Centre.
- To provide non-discriminatory open access to its transmission system for use by any licensee or generating company or any consumer as and when such open access is provided by MePTCL on payment of the transmission charges and a surcharge thereon, as may be specified by the State Commission.
- To secure the SLDC from Cyber Security breaches of confidentiality, integrity and availability of critical real time as well as historical data. This principle will be supported by the provision of a mix of policies, standards, guidelines, technical measures, upgrading of infrastructure with a robust cyber security framework, training, support, audit and review
- To establish a strategic framework and guide actions to prepare for, respond to and co- ordinate recovery from a cyber incident. It is also to ensure that interruption or manipulation of critical functions of SLDC due to cyber incidents are brief, infrequent, manageable and cause least possible damage.

2.2. Human Resource

2.2.1 Organization Structure

SLDC has its Office at NEHU 132/33kV Sub-station, Umjarain, Shillong. The broad organization chart is shown below:

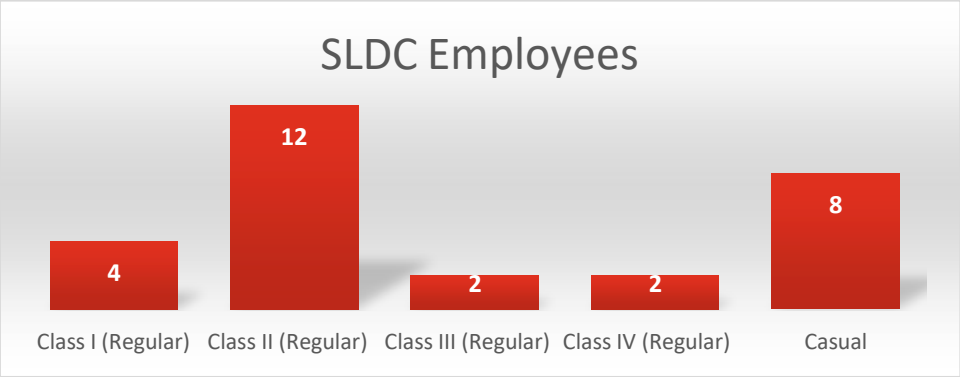
Figure 1: Organization Chart of SLDC



2.2.2 Existing Human Resource

As present, SLDC has 27 regular employees on regular payroll and 8 contractual employees as on 30.06.2023. The class-wise number of Regular & Casual employees of SLDC is highlighted in the graph below:

Figure 2: Employee Details of SLDC



2.2.3 Manpower Requirement and Recruitment Plans of SLDC

With the growing demand, the transmission lines, network and new sub-stations has increased as well as increasing quantity of power to be handled and compliance of several regulations and guidelines, SLDC would require additional employees to carry out their operation in an efficient manner.

Cyber intrusion attempts and cyber-attacks are carried out with a malicious intent. In Power Sector it is either to compromise the Power Supply System or to render the grid operation insecure. Any such compromise may result in mal-operations of equipment, equipment damages or even in a cascading grid brownout/ blackout. Government of India has necessitated that cyber security is of utmost importance in SLDCs. In line with guidelines from the CEA, the Cyber Crisis Management Plan (C-CMP) and the Information Security Policy (ISP) were prepared and are to be implemented in the Meghalaya SLDC. It may be mentioned that the Information Security Management System (ISMS) implemented in Meghalaya SLDC was independently assessed and audited resulting in the Certification in compliant with the requirement of ISO/IEC 27001:2013 which was issued on 9th July 2022 (copy enclosed). Needless to say, the ISP and C-CMP are exhaustive policies to determine vulnerability/threat/risk as well as the analysis of the cyber security architecture

of the protected system; periodic security audits according to ISMS; plan, develop maintain and review SLAs; establishment of a Cyber Security Operation Centre and Network Operation Centre as well as several other works related with cyber Security as mandated by NCIIPC. Implementation of the C-CMP and ISP will not be possible in the absence of a dedicated Information Security Division (ISD) with officers from the relevant fields i.e IT and Computer Science. One of the pre-requisites of a CII is the presence of a strong and independent Information Security Division so that various functions of the CII can be securely carried out in respect of Information Security. As such the manpower requirement of SLDC is projected below with emphasis on the requirement to recruit IT and Computer Engineers in addition to Electrical Engineers.

Manpower Requirement Plan of Meghalaya State Load Despatch Centre

The State Load Despatch Center has planned to recruit new personnel which would be required in the future for undertaking various activities of the SLDC.

Table 1 : Financial Year Wise Breakup of Employee Requirement for SLDC for theControl Period from FY 2023-24 to 2026-27

Sl. No.	Designation	Division	Requirement			
			FY 2023-24	FY 2024-25	FY 2025-26	FY 2026 -27
Class I						
1	**Addl. Chief Engineer**	**O/O Addl. Chief Engineer**	**0**	**0**	**0**	**1**
2	**Superintending Engineer**	**O/O The Superintending Engineer, SLDC**	**1**	**1**	**1**	**1**
		Sub-total (I)	**1**	**1**	**1**	**2**
Class II						
1	**Assistant Exe. Engineer** – Law & Regulatory Affairs	O/O The Superintending Engineer, SLDC	1	1	1	1
	Assistant Engineer – Law & Regulatory Affairs		1	1	1	1
		Sub-total (II)	**2**	**2**	**2**	**2**
Class IV						
1	**Driver**	O/O The Superintending Engineer, SLDC	1	1	1	2
		Grand Total (I+II +IV)	**4**	**4**	**4**	**6**
Class I						
1	**Executive Engineer**	**System Logistics**	**1**	**1**	**1**	**1**
		Sub-total (I)	**1**	**1**	**1**	**1**
Class II						
1	**Assistant Exe. Engineer** – Operation Technology,SCADA H/W and S/W	**System Logistics**	**1**	**1**	**1**	**1**
2	**Assistant Exe. Engineer** – Information Technology, Telemetery, Online and Offline database development and system Maintenance, applied R&D, System study, etc.		**1**	**1**	**1**	**1**

Sl. No.	Designation	Division	Requirement			
			FY 2023-24	FY 2024-25	FY 2025-26	FY 2026 -27
3	Assistant Engineer		**2**	**2**	**2**	**2**
4	**Junior Engineer** – IT		**1**	**1**	**1**	**1**
		Sub-total (II)	**5**	**5**	**5**	**5**
		Grand Total (I+II)	**6**	**6**	**6**	**6**
Class I						
1	**Executive Engineer**	**System Operation**	**1**	**1**	**1**	**1**
		Sub-total (I)	**1**	**1**	**1**	**1**
Class II						
1	**Assistant Exe. Engineer** – Reliability Coordinator, Planned Outage Coordination, System Protection Coordination, Analysis & Offline Simulations, Load Forecasting, Schedulling	System Operation	**2**	**2**	**3**	**3**
2	**Assistant Exe. Engineer /Assistant Engineer** – Grid Ancillary Services Coordinator	System Operation	**1**	**1**	**1**	**1**
3	**Assistant Exe. Engineer /Assistant Engineer** - Shift Duty Engineer	System Operation (Shift Duty)	**8**	**8**	**8**	**8**
4	**Assistant Exe. Engineer / Assistant Engineer** – Energy Management System, Dispatcher Training Simulator, Documentation, Management Information Services (MIS), Coordination Committee, IT related Matters	System Operation	**3**	**3**	**3**	**4**
5	Data Entry Operator	System Operation	**4**	**4**	**6**	**6**
		Sub-total (II)	**18**	**18**	**21**	**22**
Class III						
1	Junior Divisional Accountant	System Operation	-	-	-	-
2	Establishment Supervisor		-	-	1	1
		Sub-total (III)	**0**	**0**	**1**	**1**
Class IV						
1	Technician (Electrician,Water Supply)	System Operation	1	1	2	2
2	Chowkidar		1	1	1	1
3	Sanitation Attendant		2	2	3	3
		Sub-total (IV)	**4**	**4**	**6**	**6**
Grand Total (I+II+III+IV)			**23**	**23**	**29**	**30**

Sl. No.	Designation	Division	Requirement			
			FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Class I						
1	**Executive Engineer**	**Market Operation**	1	1	1	1
		Sub-total (I)	**1**	1	1	1
Class II						
1	**Assistant Exe. Engineer** – Scheduling, Open Access, User Registration, SLDC Fees & Charges,Billing & Collection	**Market Operation**	1	1	1	1
2	**Assistant Exe. Engineer** – Energy Metering, Trouble shooting of Hardware and software of Meters and SAMAST package, Energy Accounting, Settlement & Clearing		1	1	1	1
3	**Assistant Exe. Engineer** – Settlement & Clearing,SLDC Fees & Charges, Billing & Collection		1	1	1	1
4	**Junior Engineer** – Scheduling, Open Access, UserRegistration, SLDC Fees & Charges,Billing & Collection		1	1	1	1
5	**Junior Engineer** – Energy Metering, Trouble shooting of Hardware and software of Meters and SAMAST package, Energy Accounting, Settlement & Clearing		1	1	1	1
6	**Junior Engineer** – Settlement & Clearing, SLDC Fees & Charges, Billing & Collection		1	1	1	1
7	**Assistant Account Officer** - Compilation of Revenue Accounts, Monthly expenditure accounts,Bugeting,		1	1	1	1

Sl. No.	Designation	Division	Requirement			
			FY 2023-24	FY 2024-25	FY 2025-26	FY 2026 -27
	BRS, Checking and Passing of all Divion bills(employess cost,A&G expenses, R&M, Capital Bills)					
		Sub-total (II)	**7**	**7**	**7**	**7**
Class III						
1	**Junior Divisional Accountant**- Maintenance of CashBook, Assisting AAO, Cashier)		1	1	1	1
2	**Head Assistant**- Maintenance of Service Book, Leave Account Record, Maintenance of Incumbency Lists.	**Market Operation**	1	1	1	1
3	**Lower Divison Assistant**- Establishment Works.		1	1	1	1
		Sub-total (III)	3	3	3	3
Class IV						
1	**Office Peon**	**Market Operation**	1	1	1	1
		Sub-total (IV)	1	1	1	1
Sl. No.	**Designation**	**Division**	**Requirement**			
			FY 2023-24	**FY 2024-25**	**FY 2025-26**	**FY 2026-27**
Class I						
1	**Executive Engineer**	**Information Security Division**	1	1	1	1
		Sub-total (I)	**1**	1	1	1
Class II						
1	**Assistant Exe. Engineer** – IT/Cyber Security		**1**	**1**	**1**	**1**
2	**Assistant Exe. Engineer** – System Support		**1**	**1**	**1**	**1**
3	Assistant Engineer	**Information Security**	**2**	**2**	**2**	**2**
4	**Junior Engineer** – IT	**Division**	**5**	**5**	**5**	**5**
		Sub-total (II)	**9**	**9**	**9**	**9**
		Grand Total (I+II)	**10**	**10**	**10**	**10**
GRAND TOTAL						
		ClassI	**5**	**5**	**5**	**6**
		Class II	**41**	**41**	**44**	**45**
		Class III	**3**	**3**	**4**	**4**
		Class IV	**6**	**6**	**8**	**9**
Grand Total (I+II+III+IV)			**55**	**55**	**61**	**63**

2.2.4 Revision of Pay for MeECL and its Subsidiaries.

Before corporatization, Meghalaya State Electricity Board (MeSEB) had a policy for considering revision of pay scale of employees every 5 years. This policy of revision of pay has continued till date even for the successor entities of MeSEB as per the decision taken by the Employees Association and the Management in the year 2010.

As per this policy, MeECL and its subsidiary companies are to implement a revised pay scale of employees effective from January 2025 with the following impact.

Table 2 : Impact of RoP 2025 on Employee Expenses

Particulars	Amount (INR Cr)
Existing Monthly Employee Costs before ROP 2025	0.2342
Revised Monthly Employee Costs after ROP 2025	0.2938
Total Financial Implications due to ROP 2025	0.0596
% Change in Employee Costs due to ROP 2025	25.47%

For the fourth control period MYT, SLDC will take into account the impact of ROP 2025 in its employee expense projections.

2.2.5 Capacity Building

The Central Electricity Authority (CEA) was constituted under the Electricity Act to promote measures for advancing the skill of persons engaged in electricity industry. CEA has already setup the standards for mandatory training required for various skill for the generation, transmission, distribution, etc. The CEA has recognized 74 (seventy-four) training institutes throughout the country under the Government and Private Sector, for providing such trainings at various levels. Three types of training infrastructures and facilities are available for personnel in the power industry:

- Training institutes recognized by CEA for imparting statutory induction training: These training institutes recognized by the CEA, cater to the training needs of personnel working in thermal power stations, hydro generating stations, transmission utilities and distribution utilities. For example, the National Power Training Institute (NPTI) has established a Centre for Advanced Management & Power Studies (CAMPS) at its Faridabad campus. In addition to several short-term courses on Technology-Management interface, NPTI also conducts professional courses,
- Integrating power-training experience with academics, like PDC & PGDC in Power Plant Engineering and B.E./ B.Tech. in Power Engineering etc. The other institution, the Central Board of Irrigation & Power (CBIP) also conducts power industry interfaced placement oriented long-term training programmes in generation, transmission and distribution, besides high-end short term programmes in advance technologies in all disciplines of power sector.

- Lineman Training Institutes: Most utilities are having at least one lineman-training center. These institutes are set up by the respective organizations for imparting training to their own employees.
- Other training facility include training program with academic institutions outside power sector.

Statutory training requirement: The Central Electricity Authority notifies the mandatory training (measures relating to safety and electricity supply) Regulations 2010, specifically the regulations 6 & 7 of the said CEA Regulations 2010. For implementing the above regulations effectively and on rational basis, the CEA has framed guidelines and norms to prescribe the procedure to be followed by CEA/ MoP for recognition and grading of the training institutes for power sector in the country. Presently, following types of training are provided to the workforce in SLDC which includes classroom training, Simulator training, Online training and On-the-Job training.

- Induction level training for new recruits for 1 month (Technical & Non-Technical).
- Refresher/Advanced training of 5 Days in a year to all existing personnel of varying degrees in various specializations in line with National Training Policy for Power Sector.
- Management training of 5 Days in a year to the senior Executives/Managers in India/abroad in line with National Training Policy for Power Sector.
- Certificate of Competency in Power Distribution (CCPD).
- SLDC

2.2.6 Proposed Training Plans of Meghalaya State Load Dispatch Centre

In the previous control period, various staffs of SLDC, have attended several training programs at (NPTI) Power Systems Training Institute, Bangalore, Faridabad and NPTI, Guwahati Campus on Basic Level Power System Operator examination. In continuation to this, the State Load Despatch Centre has proposed training programs for its personnel as presented below:

Table 3 : Training Details for FY 2022-23

Sl No	Name of Institute	Field Of Training(Thermal/ Hydro/Transmission/ Distribution/Management)	Total Training (Days/Man)
1	NPTI ,Faridabad	Cyber Security	12days /2 nos trainees
2	NPTI ,Guwahati	Transmission	20 days/2 nos trainees
3	C-DAC, Hyderabad	OT/ICS/SCADA Security	4 days/2 nos trainees
4	NERLDC	SCADA/EMS&DTS	2 days /3 nos trainees
5	NPTI ,Guwahati	OA/Tariff/PowerTrading	7 days/1 no trainee
6	NPTI ,Faridabad (Online)	Cyber Security	19 days/3 nos trainee
7	NPTI ,Faridabad (Online)	Cyber Security	12 days/3 nos trainee
8	NPTI ,Faridabad (Online)	Cyber Security	12 days/3 nos trainee
9	NPTI ,Faridabad (Online)	Cyber Security	12 days/2 nos trainee
10	NPTI ,Faridabad (Online)	Cyber Security	19 days/3 nos trainee

Table 4 : Training Details for FY 2023-24 (As on July 2023)

Sl No	Name of Institute	Field Of Training (Thermal/Hydro/Transmission/ Distribution/Management)	Total Training (Days/Man)
1	NPTI ,Guwahati	OA/Tariff/Power Trading	7 days/1 notrainee
2	Engineer Staff College of India, Telangana(Online)	CERC regulations including Tariff Regulations	4 days/1 notrainee

Table 5 : Training Plan for FY 2023-24, 2024-25, 2025-26 & 2026-27 & ExpectedExpenditure (Rs. lakhs)

Name of the Course	Expected ExpenditurePer Head	Number of Officers Proposed (A) & Expected Expenditure (B) (INR Lakhs)							
		FY 2023-24		FY 2024-25		FY 2025-26		FY 2026-27	
		(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)
Basic Level Power System Operator + Refresher** Power System Operator (every 3 years)		8	10	8	10	8	12	8	12
Specialist Level		-	-	3	5	3	5	3	5
Cyber Security (Basic Level)		**4**	**5**	**4**	**5**	**2**	**3**	**2**	**3**
Cyber Security (Intermediate Level)		**2**	**2.5**						
Cyber Security (Expert Level)				**2**	**2.5**	**2**	**3**	**2**	**3**
	Total	**16**	**17.5**	**17**	**22.5**	**15**	**23**	**15**	**23**

3 Capital Investment Plan (CIP)

3.1 Details of Capital Expenditure

3.1.1 Purpose of Capital Investment Plan (CIP):

The purpose of the Capital Investment Plan (CIP) is to provide Meghalaya SLDC with a roadmap for planning and implementation of proposed projects & schemes for the control period. The CIP has been prepared keeping in view various long-term needs and areas for capital expenditure as highlighted below:

- Strengthening and Upgradation of SCADA EMS Software and Hardware systems
- Establishment of a 24*7 Security Operation Centre for Cyber Security of SLDC assets.
- Establishment of VSAT communication system.
- Increased Quality and Reliability of Power Transmitted as per Grid Code
- Appropriate Loading of Transmission Network
- Increased Control and Protection for Grid Stability
- Scheduling, Accounting, Metering and Loss Assessment

3.1.2 Capital Investment Plan (CIP)

CIP includes schemes envisaged to be implemented in future. Several assumptions have been taken to project the various attributes such as scope of work, funding pattern, funding sources, project cost, commencement/ completion dates and construction period etc. The assumptions have been taken considering historical inputs and anticipated project attributes.

These attributes are expected to become clearer with preparation of Detailed Project Reports (DPR), Approval by concerned authority/ financial institution and commencement of execution. Similarly, to finance the capital expenditure, SLDC primarily depends on financial assistance provided by Government of Meghalaya and Government of India. Most of the funding is available/ expected to be available to SLDC in the form of Grants & Equity. Loan component is also expected to be provided by the Government of Meghalaya. The details of schemes which are part of the present investment plan along with their funding pattern is given below:

Table 6 : Details of Ongoing and Proposed Schemes (INR Cr)

Sr. No.	Schemes	Project Cost	Funding Pattern		
			Equity	Loan	Grant
New Schemes					
1	PSDF	65.30	0.00	0.00	65.30
2	NEC	17.58	0.00	1.76	15.82
3	State Plan	13.30	0.00	1.33	11.97
	Total SLDC	**96.18**	**0.00**	**3.09**	**93.09**
Ongoing/ Completed Schemes					
1	PSDF	8.48	0.00	0.00	8.48
	Total SLDC	**8.48**	**0.00**	**0.00**	**8.48**
	Grand Total	**104.66**	**0.00**	**3.09**	**101.57**

3.2 Details of Fund Requirement and Capitalization

3.2.1 Fund Requirement

Within Meghalaya, the objective of the schemes is to revitalize the power sector to achieve sustainable development in the long term. The Meghalaya SLDC has to implement the listed projects below on time to ensure safe and reliable grid operation for availability of transmission system for 24x7 supply and will monitor the loading of lines and substations on periodic basis keeping in view the actual growth in loading of the load centers along with changes in consumer mix. Given below is the capital expenditure proposed for FY 2023-24 to FY 2026-27 :

Table 7 : Capital Expenditure Plan

Sl. No.	Category	Fund Requirement (in INR Crs)				
		FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	Total
1	SLDC	1.18	40.62	38.00	17.56	97.36
Total FundRequirement		**1.18**	**40.62**	**38.00**	**17.56**	**97.36**

3.2.2 Capitalization in Fourth Control Period

The addition of new hardware, software and cyber security systems is required for ensuring real time grid management which is essential in the optimum utilization of the available transmission network while meeting the growing demand of the state. Given below is capital expenditure proposed for fourth control period under the various schemes mentioned above:

Table 8 : Details of Capitalization for the year FY 2023-24 to FY 2026-27

Sl. No.	Category	Capitalization (in INR Crores)				
		FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	Total as on 31.03.2027
1	SLDC	8.48	1.52	40.10	47.56	97.66
Total Asset Addition		**8.48**	**1.52**	**40.10**	**47.56**	**97.66**

3.3 Details of Schemes

The details of various schemes which are a part of the CIP are provided in the following sections.

3.3.1 Power System Development Fund (PSDF)

The Government of India has approved a scheme for operationalization of Power System Development Fund (PSDF) in the year 2014. PSDF is a fund constituted under Central Electricity Regulatory Commission (Power System Development Fund) Regulations, 2014 to be utilized for the following purpose:

- Transmission systems of strategic importance based on operational feedback by Load Dispatch Centers for relieving congestion in inter-State transmission system (ISTS) and intra-State Transmission Systems which are incidental to the ISTS.
- Installation of shunt capacitors, series compensators and other reactive energy generator for improvement of voltage profile in the Grid.
- Installation of special protection schemes, pilot and demonstrative projects, standard protection schemes and for setting right the discrepancies identified in the protection schemes and for setting right the discrepancies identified in the protection audits on regional basis.
- Renovation and Modernization (R&M) of transmission and distribution system for relieving congestion
- Any other scheme/ project in furtherance of the above objectives such as technical studies and capacity building.

Ongoing Schemes funded under PSDF to SLDC is as follows:

- Implementation of Scheduling, Accounting, Metering and Settlement of Transactions (SAMAST) in Electricity in the State of Meghalaya is Sanctioned (grant) under PSDF by MoP vide Letter No. 10/1/2014-OM dated 20.03.2020 for an amount of INR 8.48 Crores and is targeted to be completed by 2023-24.

Funding for the following SLDC projects shall be taken up under the PSDF scheme such as:

- Up gradation of Software, Hardware and associated systems for SCADA-EMS system in Meghalaya SLDC. This project will be taken up for funding under Power System Development Fund (PSDF) at an estimated cost of INR 44.46 crores and the matter will be pursued with the appraisal committee of PSDF for completion by 2026-27.
- Procurement for installation of Remote Terminal Units in selected stations for transmission of real time data to Meghalaya SLDC at an estimated amount of INR 5.52 Crores will be pursued with the appraisal committee of PSDF.
- Establishment of VSAT communication system in select stations of Meghalaya at an estimated amount of INR 0.32 Crores will be pursued for PSDF funding for completion by 2024-25.
- Establishment of 24*7 Security Operation Centre (SOC) for Cyber Security of SLDC assets and information security at an estimated amount of INR 15.00 Crores will be pursued with the NEC for completion by 2025-26.

3.3.2 NEC

- Expansion of Automatic Demand Management System (ADMS) at an estimated amount of INR 17.57 Crores will be pursued for completion by 2025-26

3.3.3 State Plan

A number of major infrastructures have been created in the State under this. The details of theproposed project under this scheme is:-

- Procurement of Load Forecasting tool at an estimated amount of INR 0.5 Crores will be pursued for completion by 2024-25.
- Procurement & Installation of Data Analytics Engine at an estimated amount of INR 0.70 Crores will be pursued for completion by 2024-25
- Procurement of 32 numbers of redundant firewalls for the Gateways at 16 grid substations with SAS facilities for secure data transmission to SLDC and 2 firewalls at SLDC. Estimated amount is INR 6.8 crore and the work will be

pursued for phase wise completion by 2026-27.

- Construction of SAMAST building at an estimated cost of INR 2.0 crore which will be pursued for completion by 2025-26
- Construction of Back Up SLDC Control Centre / Data Recovery Centre with requisite OPGW communication equipment at an estimated cost of INR 3.5 crore which will be pursued for completion by 2026-27.

3.4 New Schemes: Proposed/ to be Proposed for Implementation

There are several schemes which are envisaged to be implemented in future keeping in view objectives mentioned earlier. For the purpose of CIP, the cost estimates, completion period, start date etc. have been projected based on estimates. These schemes are highlighted in **Annexure I (b).**

3.5 Funding of Capital Expenditure

SLDC plans on funding majority of its capital expenditure through grants available under central sponsored schemes and state government funding. The funding for the works with a loan component is envisaged through State Government loans.

3.6 Detailed Investment Plan as per MSERC Formats

The detailed Capital Expenditure plan for the remaining control period is provided as **Annexure I** as per prescribed format of MSERC vide MYT Regulations, 2014. The CIP includes the ongoing and proposed works under different schemes, total project cost, start and end date of completion of works and its funding pattern.

4 Annexure I:

I (a): Investment Plan for ongoing schemes spilling into FY 2023-24 and FY 2024-25

Sl.No	Project Details Name of scheme	Project Start Date (DD- MM-YY)	Project Completion date (DD-MM-YY)	Total Capital Expenditure approved by MSERC/ Govt/DPR/ FI (INR Cr.)	Project outlayin FY 2023-24 (Projected) inINR Cr.	Project outlayin FY 2024-25 (Projected) in INR Cr.	Source of Financing for Scheme			Capital Subsidies/ Grants Component (INR Cr.)	Funding Agency
							Equity component	Debt Component			
								Loan amount (INR Cr.)	Loan source		
1	Implementation of Scheduling, Accounting, Metering & settlement of Transaction in electricity (SAMAST)	01.06.2019	2023-24	8.48	1.18					8.48	PSDF

I (b): Investment Plan for Proposed Schemes in FY 2024-25 to FY 2026-27

Sl No	Project Details Name of scheme	Project Start Date (DD-MM-Y)	Project Completion Date (DD-MM-YY)	Total Capital Expenditure Projected by Govt/ DPR/ FI (Rs. Cr)	Project outlay in FY2023-24 (Projected)in (Rs. Cr.)	Project outlay inFY 2024-25 (Projected) in Rs.Cr.	Project outlay in FY 2025-26 (Projected) in Rs.Cr..	Project outlay in FY 2026-27 (Projected)in in Rs.Cr.	Source of Financing forScheme			Capital Subsidies/ Grants Component (in Rs.Cr.)	Funding Agency
									Equity compo nent	Debt Component			
										Loan amount (in Rs.Cr..)	Loan source		
	SLDC												
1	Upgradation of Software, Hardware and associated systems for SCADA-EMS system in Meghalaya SLDC	2024-25	2026-27	44.46	-	15	15	14.46				44.46	PSDF
2	Expansion of Automatic Demand Management System (ADMS)	2024-25	2025-26	17.58	-	10	7.58			1.758	State Govt	15.822	NEC
3	Procurement for installationof Remote Terminal Units in selected stations for transmission of real time data to Meghalaya SLDC	2024-25	2025-26	5.52	-	2	3.52					5.52	PSDF

4	Establishment of VSAT communication system in select stations of Meghalaya	2024-25	2024-25	0.32	-	0.32						0.32	PSDF
6	Establishment of 24*7 Security Operation Centre (SOC) for Cyber Security ofSLDC assets and information security	2024-25	2025-26	15	-	8	7					15.00	PSDF
7	Procurement of Load Forecasting tool	2024-25	2024-25	0.5	-	0.5				0.05	State Govt	0.45	State Plan
8	Procurement & Installationof Data Analytics Engine	2024-25	2024-25	0.7	-	0.7				0.07	State Govt	0.63	State Plan
9	Procurement of Next Generation Firewalls for SAS substations & SLDC	2024-25	2026-27	6.6	-	1.60	2.40	2.60		0.66	State Govt	5.94	State Plan
10	Construction of SAMAST Building	2024-25	2026-27	2.0	-	1.0	1.0			0.2	State Govt	1.8	State Plan
11	Construction of back upSLDC Control Centre / Data Recover Centre	2024-25	2026-27	3.50	-	1.5	1.5	0.5		0.35	State Govt	3.15	State Plan
	Total			**96.18**		**40.62**	**38.0**	**17.56**		**3.088**		**93.092**	

Commission's Analysis

The Licensee MePTCL has submitted the status of SLDC for impending Directive no.03 of FY 2023-24 as noted below.

All the accounting records and data till FY 2017-18 are maintained separately for SLDC under MePTCL and presentation of Accounts for SLDC and Consolidation of the same with MePTCL, is assured to be taken up at the earliest.

Commission had directed the Utility to expedite the process as assured.

MePTCL has submitted petition for approval of the business plan separately for SLDC.

A capital investment of Rs.96.18 Crore is projected to be spent in the MYT control period FY 2024-25 to FY 2026-27 of which Rs.93.09 Crore shall be funded through PSDF, NEC & State plan and the balance fund projected to be loan component for Rs.3.09 Crore vide para 4 Annexure-1 (a) & (b) .

Commission after careful consideration, approves the Business plan for SLDC provisionally as projected in the para 4 Annexure – I (a) & (b).

MePTCL shall file separate petition for ARR of SLDC utility for the control period FY 2024-25 to FY 2026-27 as per the formats notified in the SLDC Regulations 2009.

This approval is part of the Transmission Business plan for the 4th control period FY 2024-25 to FY 2026-27.

Sd/-	Sd/-
Shri. R.K. Soni, District Judge (Retd.)	**Shri P.W.Ingty, IAS(Retd)**
Member	**Chairman**