

# **MEGHALAYA POWER POLICY 2024**

**POWER DEPARTMENT  
GOVERNMENT OF MEGHALAYA**



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# PRELIMINARY

## 1. Short title and commencement: -

- (i) This policy would be called "Meghalaya Power Policy, 2024"
- (ii) This shall come into force on the date of its publication in the Official Gazette.
- (iii) The present Power Policy supersedes the Power Policy 2007 which was published in the Gazette of Meghalaya dated 26<sup>th</sup> October 2007

## 2. Definitions: In this policy, unless the context otherwise requires,

- (1) 'AT&C' means Aggregate Technical and Commercial.
- (2) 'BOOT' means Build, Own, Operate and Transfer.
- (3) 'CPP' means Captive Power Producers.
- (4) 'COD' means Commercial Operation Date.
- (5) 'Central Government' means Government of India.
- (6) 'CERC' means Central Electricity Regulatory Commission.
- (7) 'CDM' means Clean Development Mechanism under Kyoto Protocol.
- (8) 'Degree Holder' means having a bachelor degree in respective discipline.
- (9) 'Diploma Holder' means having diploma in respective discipline.
- (10) 'DPR' means Detailed Project Report.
- (11) 'DISCOM' means Distribution Company.
- (12) 'Free Power' means % of power generated from the projects to be given to the State free of cost.
- (13) 'Force Majeure' means any unforeseen situation like earthquake, flood, fire, external invasion, civil commutation, landslide etc.
- (14) 'Grid mode' means small hydro power projects injecting power into the grid.
- (15) 'Grid quality power' means power maintaining reliability and stability of power supply as grid supply.
- (16) 'GOI' means Government of India.

- (17) 'High-Power Committee' means the committee notified under Section 9 of the Meghalaya Investment Promotion and Facilitation Act, 2024.
- (18) 'HEP' means Hydro-Electric Project.
- (19) 'High Voltage' means voltage level as defined in Act/Rules.
- (20) 'Isolation mode' means the small hydro projects without grid connections.
- (21) 'IPP' means Independent Power Producers.
- (22) 'ICB' means International Competitive Bidding.
- (23) 'ITI certificate' means having acquired diploma from a recognized Industrial Technical Institute.
- (24) 'Indigenous' means bonafide of Meghalaya.
- (25) 'JNNSM' means Jawaharlal Nehru National Solar Mission.
- (26) 'KW' means Kilo Watt.
- (27) 'KV' means Kilo Volt.
- (28) 'Low Voltage' means the voltage at 415 volts and below.
- (29) 'LCT' means Letter of Comfort on Transmission.
- (30) 'Local Area Development Fund' means the amount to be paid to the State Government by the developer for development of the area(s) affected by implementation of the project(s).
- (31) 'MW' means Mega Watt.
- (32) 'MU' means Million Units.
- (33) 'MOA' means Memorandum of Agreement.
- (34) 'MOU' means Memorandum of Understanding.
- (35) 'MSERC' means Meghalaya State Electricity Regulatory Commission.
- (36) 'MPP' means Merchant Power Producers.
- (37) 'MoE&F' means Ministry of Environment and Forests, Government of India.
- (38) 'MNRE' means Ministry of New & Renewable Energy, Government of India.
- (39) 'Moratorium on Free Power' means an incentive be given to the developer (s) by way of levying the realization of free power.

- (40) 'Meghalayans' means bonafide tribes of Meghalaya.
- (41) 'NCER' means Non-Conventional Energy Resources.
- (42) 'NAPCC' means National Action Plan on Climate Change.
- (43) 'NPV' means Net Present Value.
- (44) 'NGO' means Non-Governmental Organization.
- (45) 'Open Access' means transmission corridor.
- (46) 'PSP' means Pumped Storage Power Project.
- (47) 'Policy' means the Meghalaya Power Policy, 2024.
- (48) 'PPA' means Power Purchase Agreement.
- (49) 'PFR' means Pre-Feasibility Report.
- (50) 'Point of Sale' means the place of injection of power to the State Grid or as mentioned in Power Purchase Agreement for metering and measurement of power.
- (51) 'Retail Sale' means sale of power to the retail consumers.
- (52) 'R&R' means Rehabilitation and Resettlement
- (53) 'REC' means Renewable Energy Certificate.
- (54) 'R&D' means Research and Development.
- (55) 'RPO' means Renewable Purchase Obligation.
- (56) 'State Level Committee' means the committee notified under this Policy to monitor the implementation of the projects covered under this Policy.
- (57) 'Standalone' means small hydro projects without connecting to main grid.
- (58) 'STU' means State Transmission Utility or its agency assigned with transmission system in the State.
- (59) 'SPV' means Solar Photo Voltaic.
- (60) 'SPPs' means Solar Power Projects.
- (61) 'Upfront Premium' means onetime non-refundable commitment fee to be paid by the intending power developer.
- (62) 'Wheeling of Power' means transmission of power through state grid or national grid.



(63) 'WPP' means Wind Power Projects.

**3. Short Title and Commencement:** The Policy shall be called as "Meghalaya Power Policy 2024" and shall come into force from the date of publication in official gazette of the state and shall remain in force till 31<sup>st</sup> March 2030, unless otherwise notified separately.

#### **4. Aims and Objectives of the Power Policy 2024**

**Aim:** The overall aim of the Power Policy 2024 is to empower State of Meghalaya through Sustainable, Inclusive and Efficient Energy Development.

**Objectives:** The following objectives have been set out in the Policy:

- a. To form the State Power Trading company with the objective to execute power purchase agreements, undertake short-term purchase on behalf of State Distribution Utility, undertake PPA with new renewable Power Plants in the state and management of the power in an efficient manner.
- b. To encourage and promote the development of renewable energy.
- c. To address the environmental issues in line with the requirement of the Ministry of Environment, Forest and Climate Change, Government of India.
- d. To develop power projects through Hydro, Thermal, Pumped Storage, Solar, Wind etc., in a sustainable manner and to improve the efficiency of the operations of the existing Power Plants and the Generation Utility as a whole.
- e. To build, maintain & operate an efficient, coordinated & economical transmission system.
- f. To improve the Distribution System and reduce the system losses and to make a user-friendly system for the public, with respect to billing, resolution of complaints, etc.

#### **5. Overall Framework for Allotment & Review of Power Projects Under the Policy**

The High-Power Committee notified under the Section 9 of the Meghalaya State Investment Promotion and Facilitation Act, 2024 shall act as the Competent Authority to give clearance and approve all the projects under

this Policy.

In addition, for the identification and speedy development of the power projects, the Government of Meghalaya would set up a State Level Committee for monitoring of the projects.

The Committee shall be chaired by the Hon'ble Minister, Power Department, Government of Meghalaya, and senior most officer(s) from following departments:

- i. Planning, Investment Promotion & Sustainable Development Department
- ii. Law Department
- iii. Revenue and Disaster Management Department
- iv. Forests & Environment Department
- v. Power Department
- vi. Water Resources Department
- vii. Finance Department
- viii. District Council Affairs Department
- ix. Chairman cum Managing Director, Meghalaya Energy Corporation Limited.
- x. Director, Meghalaya New and Renewable Energy Development Authority.

The main functions of the State Level Committee would comprise of:

- a. Identifying the projects pertaining to all the technologies covered under this Policy.
- b. Overseeing the process of allotment of the projects including the bidding, negotiations with developers and review the progress of the awarded projects.
- c. Facilitating the transfer/ lease of the various categories of land identified for the development of the project.

The State Level Committee would be empowered to constitute various sub-committees as and when required, include experts in these committees and issue any other necessary directions as deemed fit from time to time.

The State Level Committee shall review the identified projects, prepare feasibility report of the project including proposed mode of allotment as detailed out in technology wise respective chapters in this policy, quantum of investment involved etc., along with intended benefits of the project to the state and take up the proposal to the High-Power Committee, which would be the final authority for according the approval for the project.

The Government of Meghalaya shall set up a dedicated portal for the power projects, which shall be updated regularly. The details of the project under consideration such as location, expected capacity etc. shall be displayed on the portal. The intending developers would have to register themselves on the portal.

- 6.** The provisions of the Electricity Act 2003 (as amended from time to time) would be the overall guiding principle for implementation of this policy. The High-Power Committee referred to in paragraph 5 above would be the final authority in taking any decision with respect to implementation of the Policy. Any legal dispute, in connection with the implementation of the policy, shall be subject to the jurisdiction of the Hon'ble High Court of Meghalaya at Shillong, Meghalaya.

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## **CHAPTER I - ABOUT MEGHALAYA**

- 1.1. Meghalaya, "the abode of clouds", became a full-fledged State on January 21, 1972. It is bounded on the north and on the east by the state of Assam. On the south and west is Bangladesh. Meghalaya lies between 20°1' N and 26°5'N latitude and 85°49'E and 92°52'E longitude.
- 1.2. The total area of the State is 22,429 square kilometers with a population of 29,66,889 (2011 census). The population density per square kilometer is 103. They are predominantly inhabited by the tribal communities namely the Khasi, the Jaintia and the Garo, who are the descendants of very ancient people having distinctive traits and ethnic origins. The principal languages in Meghalaya are Khasi and Garo with English as the official language of the State. The State has a unicameral legislature.
- 1.3. The State is divided into twelve administrative districts. The district-wise population breakup is as follows:

**Table 1: District Wise Area and Population**

<b>District Name</b>	<b>District Headquarter</b>	<b>Area(in sq. km)</b>	<b>Population (2011 Census)</b>
East Garo Hills	Williamnagar	1443	1,45,798
North Garo Hills	Resubelpara	1160	1,72,119
South Garo Hills	Baghmara	1887	1,42,334
West Garo Hills	Tura	2811	4,65,735
South West Garo Hills	Ampati	866	1,77,556
East Khasi Hills	Shillong	2748	8,25,922
West Jaintia Hills	Jowai	1779	2,72,185
East Jaintia Hills	Khliehriat	2040	1,22,939
South West Khasi Hills	Mawkyrwat	1401	99,171
West Khasi Hills	Nongstoin	3846	2,84,290
Eastern West Khasi Hills	Mairang		
Ri Bhoi	Nongpoh	2448	2,58,840
<b>Total</b>		<b>22,429</b>	<b>29,66,889</b>

- 1.4. The Khasi Hills and Jaintia Hills which form the central and eastern part of Meghalaya is an imposing plateau with rolling grassland, hills and river valleys. The southern face of the plateau is marked by deep gorges and abrupt slopes. Waterfalls rush down steep slopes and carve deep valleys through which swift flowing rivers descend to the plains. At the foot of these slopes, a narrow strip

of plain land runs along the international border with Bangladesh.

- 1.5. The northern section of the plateau has an undulating topography with a series of hills rising to almost the same height, extending northward to slope gradually, merging with the plains of Assam. The accordant summit of these hills varies from 170m to 820m. The Nongpoh town, lying half way on the Guwahati-Shillong Road, stands on a flat top of 70m high on this hill section.
- 1.6. The height of the central plateau of the Khasi Hills hovers around 1500m with the Shillong Peak (1965m), the highest point in the plateau, overlooking Shillong Town.
- 1.7. The Garo Hills which form the western part of Meghalaya are lower in elevation. The greater part of the Garo Hills ranges in height from 450m to 600m and drop steeply to the Brahmaputra valley on the north and to the plains of Bangladesh on the south. Nokrek Peak (1412m), east of Tura Town, is the highest peak in western Meghalaya.
- 1.8. A number of rivers, none of them navigable, drain this Mountainous State. In the Garo Hills, the Manda, the Damring flow towards the north and the Jinjiram towards south, while the Ringge and the Ganol flow in the westerly direction. Those that flow to the south are the Simsang, which is the biggest river in Garo Hills, and the Bhogai.
- 1.9. In the Khasi and Jaintia Hills, the rivers that flow in a northerly direction include the Khri, the Umtrew, the Umiam, the Umkhen besides the Kopli on the border between Jaintia Hills and North Cachar Hills. The Kynshi, the Umiam Mawphlang and the Umngot flow to the south into Bangladesh.
- 1.10. The state of Meghalaya is directly influenced by the south west monsoon and the north east winter winds. The four seasons of Meghalaya are: Spring - March and April, Summer (Monsoon) - May to September, Autumn - October and November and Winter - December to February. During March and April, the weather gradually warms up with the advent of Spring. From the middle of April, the temperature starts rising to the maximum in the month of June and then decreases gradually. This period may be termed as the Summer (Monsoon) season. The maximum temperature recorded is 39.4° Celsius at Tura in West

Garo Hills District and 30.2° Celsius at Shillong in East Khasi Hills District.

1.11. October and November are the two months when the climate is cool and temperate. After November, the winter season sets in and continues up to the end of February. During these months the temperature comes down to as low as 2° Celsius in the Khasi Hills. Rainfall starts by the third week of May and continues right up to the end of September and sometimes well into the middle of October. The maximum rainfall occurs over the southern slopes of the Khasi Hills, i.e., over Cherrapunjee and Mawsynram platform, which receive the highest rainfall in the World. The average annual rainfall in the State is 12,000 mm.

1.12. Meghalaya's capital, Shillong and also the district headquarters of East Khasi Hills District is situated at an altitude of 1,496 meters above sea level. The capital city has a bracing climate throughout the year. This city has been the seat of the Government since the consolidation of the British administration in this part of India, over a century ago.

1.13. The city is one of the few hill stations in the country with motorable roads all around. Shillong has its own charm, different from other hill stations, and presents a natural scenic beauty with waterfalls, brooks, pine groves and gardens. The place, the people, the flora and fauna and the climate all combine to make Shillong an ideal holiday resort throughout the year. Shillong offers arrangements for tourists with good hotel accommodation, facilities for sports, fishing and hiking.

1.14. Shillong is connected by a good arterial road with the rest of the country through Assam. A good road connects Shillong with Sylhet in Bangladesh. It is also connected with other important towns of the state like Jowai and Tura. An airport at Umroi, about 30 kilometres from Shillong, connects Shillong by air with the rest of the country. Shillong is also the headquarters of the North Eastern Council, the Eastern Air Command, the Assam Rifles, the Assam Regimental Centre and 101 Command Zone, headquarters of NEEPCO and offices of institutions like PGCIL and NERPC.

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## **CHAPTER II- POWER SCENARIO IN THE STATE**

- 2.1. The first power project in Meghalaya is a mini hydel project in the northern part of Shillong which was named as the Sonapani Mini Hydel Project as it is now called was constructed and commissioned in 1922 by M/s Shillong Hydro Electric Supply Company Pvt. Ltd. which was owned by Late Dr. B.C. Roy, former Chief Minister of West Bengal by incorporating certain modifications. The Project, as commissioned in 1922, consisted of 2 Weirs, one on the Wah-Umkhrah and the other on the Umshyrpi River. The water from these two Weirs were carried by open channels to the Forebay at a distance of 634 meters and 1141 meters respectively. A drop of 172.42 M was utilized to run two machines of 100 KW each. Subsequently, since the water available was adequate and with the increasing demand for power, the capacity of the Sonapani Power Station was enhanced installing 4 additional generating sets of 100 KW, 250 KW, 320 KW and 640 KW in the years 1928, 1939, 1956 and 1960 respectively, thus increasing the total installed capacity of the Power Station to 1510 KW from the initial 200 KW.
- 2.2. The Sonapani Mini H.E. Project has proved to be a spectacular success and provided much needed Power to Shillong and its suburbs for almost six decades.
- 2.3. The sixties and seventies saw the commissioning of several medium sized Hydel stations in the Umiam-Umtru Basin, which substantially reduced the importance of the Sonapani H.E. Project.
- 2.4. The first small hydroelectric project in the North-East, the Umtru H. E. Project with 3 Units of 2.8 MW each, totaling to 8.4 MW, was constructed near Byrnihat in 1953 and was commissioned in July, 1957. Another unit of 2.8 MW was added in 1958 enhancing the installed capacity to 11.2 MW. Thereafter, Umiam Stage-I, Umiam Stage-II, Umiam-Umtru Stage-III (Kyrdemkulai) and Umiam-Umtru Stage-IV (Nongkhyllem) were also commissioned in Meghalaya. Until the commissioning of the Loktak H.E. Project in Manipur and Kopili H.E. Project in Assam, the state of Meghalaya pioneered the development of water power generation.
- 2.5. Prior to commissioning of the Umiam H.E. Project Stage-I in 1965 the electric power supply needs of Shillong were met from small hydro mentioned above and diesel power stations of capacity 1500 KW and 800 KW respectively. The diesel sets have since been disposed off and the small hydro sets have spent their life.

- 2.6. The electric energy generated by Meghalaya during the year 1975 was 176MU and 70% of that was supplied to Assam at a very nominal rate as envisaged in the terms of agreement during bifurcation. At that point of time, only Shillong, the capital city and few places like Sumer, Byrnihat and other towns / villages numbering only 261 enjoyed electricity. As a matter of fact, the consumers of the whole state numbered just 7400, while the rest of the population depended on fossil fuel and some diesel power generation for cooking, heating and even lighting.
- 2.7. The responsibility for power supply in the area of the present-day State of Meghalaya was under Assam State Electricity Board (ASEB) and after bifurcation in 1975, the Meghalaya State Electricity Board (MeSEB) came into existence on 21<sup>st</sup> January, 1975.
- 2.8. During the bifurcation, Meghalaya inherited 5 (five) power stations including one which was under construction. The names of the power stations, capacity and the year of commissioning are indicated below:

**Table 2: Hydro Power Projects in Meghalaya in 1975**

<b>Name of Plant</b>	<b>Capacity</b>	<b>Year of Commissioning</b>
Sonapani Mini Hydro Plant	1.305 MW	1925
Umtru Power Station	11.20 MW	1957
Uiam Stage-I Power Station	36.00 MW	1965
Uiam Stage-II Power Station	18.00 MW	1970
Nangalbibra Thermal Power Station	5.00 MW	1975
Uiam-Umtru Stage-III P/S	60.00 MW	(under construction)

- 2.9. Since 1975, much has happened. The 5 MW thermal power which is to serve as a base load station at Nangalbibra in Garo Hills was abandoned in 1981 due to uneconomic operation. The State's own generation can no longer cope up with the growing demand inside the State. The interstate transmission network is inadequate to enable the state to meet its own internal demand, even though, the Central power share is available in the NE grid. The position of state-owned generation in 2010 was as follows:

**Table 3: Hydro Power Projects in Meghalaya in 2010**

<b>Name of Plant</b>	<b>Capacity</b>	<b>Year of Commissioning</b>
Umtru Power Station	11.20 MW	1957
Uiam Stage-I Power Station	36.00 MW	1965



<b>Name of Plant</b>	<b>Capacity</b>	<b>Year of Commissioning</b>
Umiam Stage-II Power Station	18.00 MW	1970
Umiam-Umtru Stage-III P/S	60.00 MW	1979
Umiam Stage IV Power Station	60.00 MW	1992
Sonapani Mini Hydro Plant	1.50 MW	2009
Myntdu-Leshka H.E Project	126.00 MW	(Under Construction)

2.10. The Power Supply Industry in the state of Meghalaya has been under the governance of erstwhile Meghalaya State Electricity board (MeSEB) since 21st January 1975. The State Government on 31st March, 2010 notified "The Meghalaya Power Sector Reforms Transfer Scheme 2010" paving path for the un-bundling of the MeSEB into:

- Meghalaya Energy Corporation Limited (the holding company),
- Meghalaya Power Distribution Corporation Limited (Distribution Utility),
- Meghalaya Power Generation Corporation Limited (Generation Utility),
- Meghalaya Power Transmission Corporation Limited (Transmission Utility).

2.11. The aforesaid scheme was further amended on 31st March, 2012, which led to the transfer of assets and liabilities including all rights and obligation and contingencies with effect from 1st April, 2012 to the aforementioned four companies.

2.12. The Snapshots of the current scenario of power sector in the State of Meghalaya is depicted below:

**Table 4: Snapshots of Distribution Sector in Meghalaya as on March 2023**

<b>Particular</b>	<b>UOM</b>	<b>Value</b>
No of Consumers served	Nos.	6,82,030
Connected Load in KVA	KVA	13,40,867
Sales	MU	1719
33/11 KV Sub-Stations	Nos.	115
Transformation Capacity of 33/11 KV Sub-Stations	MVA	625.75
33/11 KV lines	CKM	2794
Number of 11/0.4 KV Sub-Stations	Nos.	12,951
Transformation Capacity of 11/0.4 KV Sub-Stations	MVA	9,22,714.50
Length of 11 KV Lines	CKM	19,361.24

**Table 5: Snapshots of Transmission Sector in Meghalaya as on March 2023**

<b>Details</b>	<b>UOM</b>	<b>Value</b>
Length of 400 KV lines	CKM	4.648
400KV/ 220KV Grid Substations	Nos.	1
400kV Bays	Nos.	6
Capacity of 400KV Transformers	MVA	630
Length of 220 KV lines	CKM	226.84
220KV/ 132KV Grid Substations	Nos.	1
Capacity of 220KV Transformers	MVA	520
220kV Bays	Nos.	10
Length of 132 KV lines	CKM	1263.524
132KV/33KV & 132/33/11KV Grid Substations	Nos.	18
Capacity of 132KV Transformers	MVA	645
132kV Bays	Nos.	112
33kV Bays	Nos.	82

**Table 6: Snapshots of Generation Sector in Meghalaya as on December 2023**

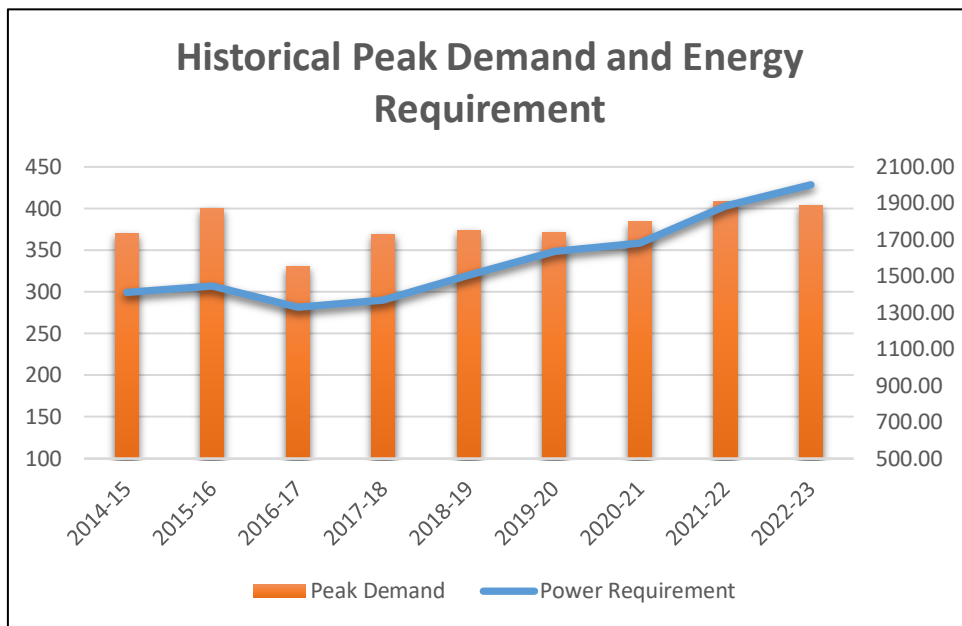
<b>Details</b>	<b>UOM</b>	<b>Value</b>
Installed Capacity	MW	367.50
Capacity Under Construction	MW	3
Hydro to Thermal Ratio	%	100
Generation in 2022-23	MU	1051.19

**Table 7: Details of Existing Power Plants of MePGCL**

<b>Name of Station</b>	<b>Capacity (MW)</b>	<b>Year of Commercial Operation</b>	<b>Design Energy (MU)</b>
Umiam Stage I	36.00	1965	116.00
Umiam Stage II	20.00	1970	46.00
Umiam Stage III	60.00	1979	139.00
Umiam Stage IV	60.00	1992	207.00
Sonapani Mini Hydel	1.50	2009	5.50
ML HEP	126.00	2013	486.00
New Umtru HEP	40.00	2017	235.00
Lakroh MHEP	1.50	2019	11.00
Ganol SHEP	22.50	2023	67.00
<b>Total</b>	<b>367.50</b>		

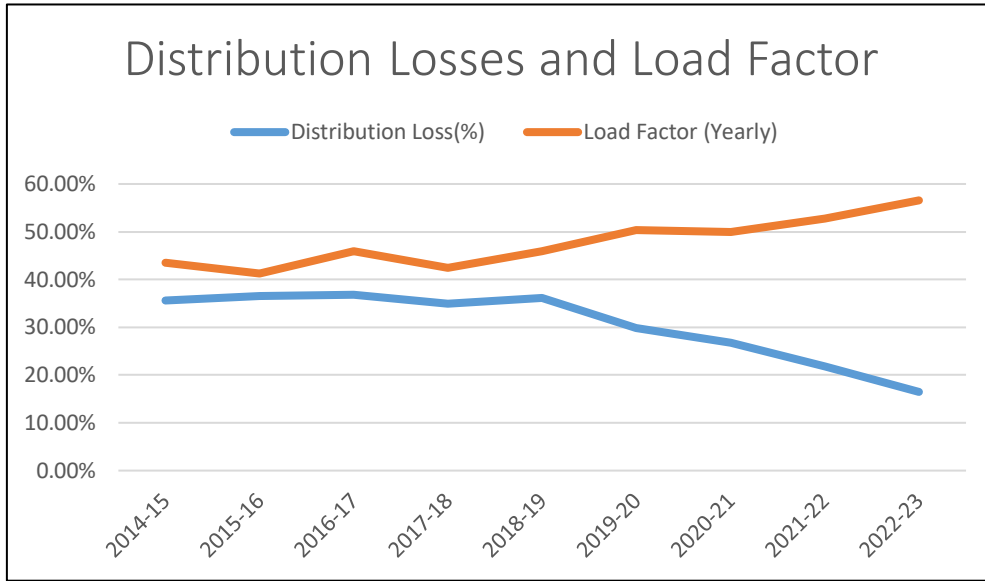
**Table 8: Details of Allocation from Central Generating Stations as 31.01.2024**

SI No	Name of the Generating Station	Company	Capacity up-to-date (MW)	Share of Meghalaya	
				MW	%
1	Khandong HEP	NEEPCO	50	8.51	17.02%
2	Kopli-I HEP	NEEPCO	200	35.05	17.53%
3	Kopli-II HEP	NEEPCO	25	3.45	13.80%
4	Doyang HEP	NEEPCO	75	8.69	11.59%
5	Ranganadi HEP	NEEPCO	405	47.1	11.63%
6	Pare HEP	NEEPCO	110	14	12.73%
7	Kameng HEP	NEEPCO	600	15	2.50%
8	AGTCCP (Gas)	NEEPCO	130	16.57	12.75%
9	AGBPP (Gas)	NEEPCO	291	34.74	11.94%
10	Loktak HEP	NHPC	105	13.00	12.39%
11	Palatana (Gas)	OTPC	726	78.99	10.88%
12	BgTPP (Bongaigaon) Thermal	NTPC	750	53	11.76%
13	Lower Subansiri HEP	NHPC	2000	49.41	11.23% of 440 Mw



**Figure 1: Historical Peak Demand and Energy Requirement**

2.13. It can be observed from the above graph that the peak demand for the state has been between 350 to 400 MW in the past years.



**Figure 2: Distribution Loss and Load Factor Trajectory**

2.14. It has been seen that there is significant improvement in terms of the both distribution losses and load factor in the recent years.

2.15. Based on the past trends, the demand projections have been done for the state till FY 2029-30 using the statistical methodologies such as regression analysis and least square method.

2.16. The projected demand for the state is tabulated below:

**Table 9: Demand Projection -Business As Usual Scenario (GDP Growth 8%)**

Sl. No.	FY	Power Requirement (MU)	Distribution Loss(%)	Actual Power Requirement (MU)	Average Load Factor	Peak Requirement (MW)
1	2023-24	1680.38	16.00%	2000.46	56.57%	403.70
2	2024-25	1795.21	16.00%	2137.16	57.70%	422.83
3	2025-26	1917.54	15.50%	2269.28	58.85%	440.17
4	2026-27	1743.85	15.00%	2051.58	60.03%	390.14
5	2027-28	1858.68	14.00%	2161.25	61.23%	402.94
6	2028-29	1981.01	13.00%	2277.02	62.45%	416.20
7	2029-30	2111.43	12.00%	2399.36	63.70%	429.96

**Table 10: Demand Projection- Optimistic Scenario (GDP Growth 10%)**

Sl. No.	FY	Power Requirement (MU)	Distribution Loss(%)	Actual Power Requirement (MU)	Average Load Factor	Peak Requirement (MW)
1	2023-24	1701.99	16.00%	2026.17	56.57%	408.89
2	2024-25	1842.30	16.00%	2193.22	57.70%	433.92
3	2025-26	1994.54	15.50%	2360.40	58.85%	457.84
4	2026-27	2159.89	15.00%	2541.04	60.03%	483.22
5	2027-28	2339.65	14.00%	2720.52	61.23%	507.20
6	2028-29	2535.27	13.00%	2914.11	62.45%	532.64
7	2029-30	2748.34	12.00%	3123.12	63.70%	559.65

**Table 11: Demand Projection- Pessimistic Scenario- (GDP Growth 5%)**

Sl. No.	FY	Power Requirement (MU)	Distribution Loss(%)	Actual Power Requirement (MU)	Average Load Factor	Peak Requirement (MW)
1	2023-24	1647.82	16.00%	1961.69	56.57%	395.88
2	2024-25	1725.85	16.00%	2054.58	57.70%	406.49
3	2025-26	1806.72	15.50%	2138.13	58.85%	414.73
4	2026-27	1890.58	15.00%	2224.21	60.03%	422.97
5	2027-28	1977.57	14.00%	2299.50	61.23%	428.71
6	2028-29	2067.86	13.00%	2376.85	62.45%	434.44
7	2029-30	2161.60	12.00%	2456.36	63.70%	440.17

2.17. In addition to the above, the total power consumption of Electric Vehicle also needs to be added in the total estimated as the Government of Meghalaya has already notified the Electric Vehicle Policy in 2021 with a rigorous target of achieving the target of 15% concentration of EV in the total Vehicle Population. In order to estimate the demand of EV following parameters have been considered.

**Table 12: Factors Considered for Demand Projection of EV Charging Stations**

Type of Vehicle	Numbers of Vehicle	Efficiency (kWh/km)	Avg. Running Km
Two Wheelers	3500	0.10	10000
Four Wheelers	2500	0.17	10000
Electric Buses	50	1.25	20000

2.18. Based on the above assumption the power requirement of EV in MU is estimated as follows:

**Table 13: Projections of EV Demand**

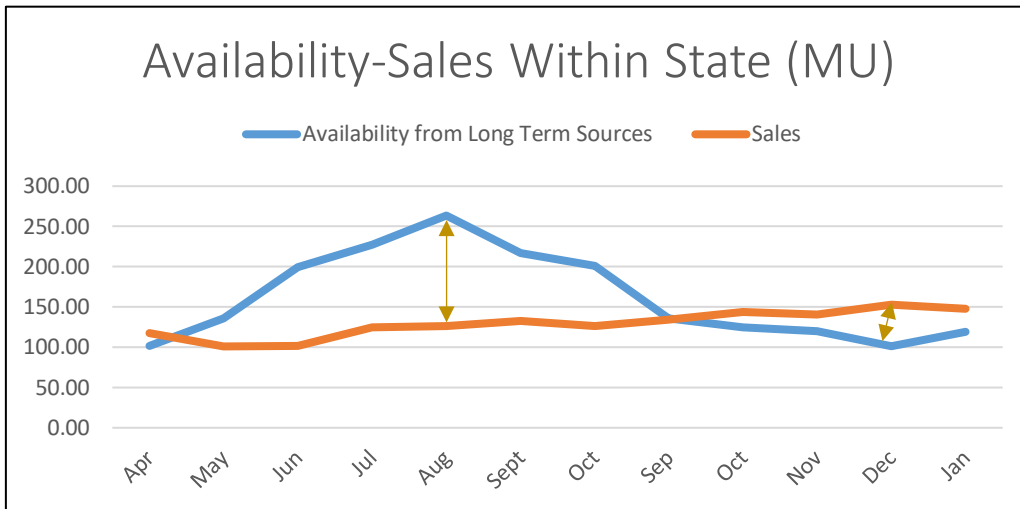
<b>Year</b>	<b>Energy Consumption (MU)</b>
2024-25	9.00
2025-26	9.45
2026-27	9.92
2027-28	10.42
2028-29	10.94
2029-30	11.49

2.19. At present, Meghalaya is having only hydro power generation. During non-monsoon period, availability of power becomes low and even the restricted load demand of the State has to be met through import of power from the NE grid. This is mainly due to the new liberalized industrial policy of Meghalaya that has triggered an unprecedented load growth in the industrial sector of Meghalaya, coupled with identical growth in other sectors due to accelerated power development and reform process.

2.20. The Current installed capacity of state-owned generation company is 378 MW and another 3 MW project is under construction. Apart from the state-owned generation capacity, Meghalaya has allocation of power from the Central generating stations of NHPC, NTPC, NEEPCO and also from OTPC. The total share of allocations from the generating stations of CGS is 377.51 MW out of which the share of 49.41 MW in the Subansiri Project of NHPC is expected to be come in 2024-25, which is the likely year of commissioning of the project. The Peak demand of the state in 2023-24 has been 404 MW.

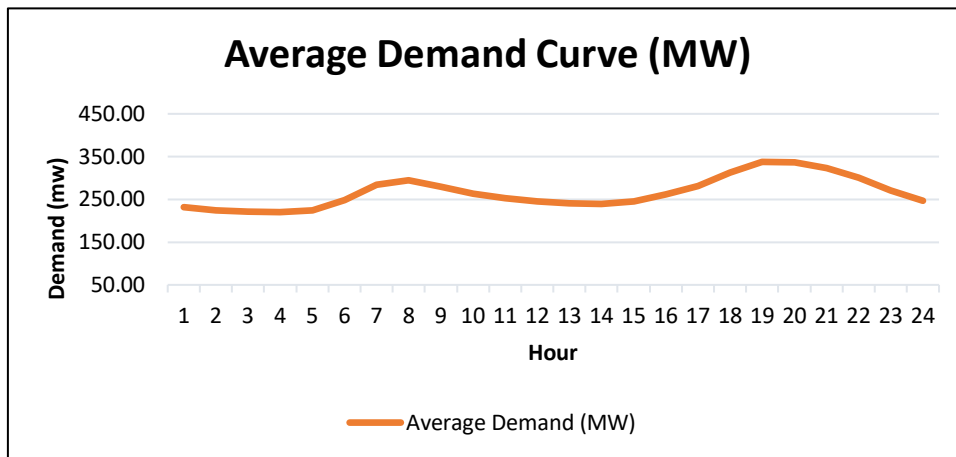
2.21. In spite of having installed capacity and allocations from the CGS, Meghalaya has to purchase power from energy exchanges to meet the shortfall in the energy requirement in the lean generation period and at the same time, has surplus energy in the monsoon period.

2.22. The indicative demand supply curve of the state around the year is presented below:

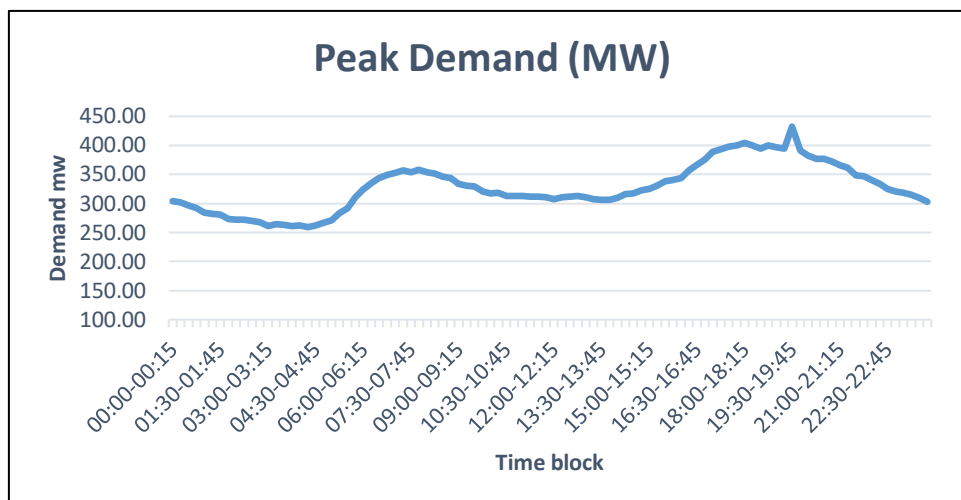


**Figure 3: Indicative Demand Supply Curve**

2.23. The average and peak demand curves of the state are depicted below:



**Figure 4: Average Daily Demand Curve**



**Figure 5: Hourly Peak Demand (MW)**

- 2.24. It can be observed from the above graphs that the base load of the state of Meghalaya has been around 250 MW. The base load available with state would be 140 MW by April 2024. Still, in terms of the base load, there will be a shortage of around 110 MW.
- 2.25. To meet the immediate shortage of base power and to protect the State from probable crisis of power supply due to failure of monsoon, it is of utmost importance to immediately develop thermal power stations in the State. In Meghalaya there is no thermal power station yet and hence the prescribed thermal - hydro mix is not available at all. This over-dependence on nature is a critical preposition in view of vagaries of monsoon and in the event of drought in this part of the region. A thermal project of suitable capacity to provide base load is necessary. This will also provide an ideal thermal: hydro mix at 60: 40 ratios which will provide better stability and security in the power system of Meghalaya throughout the year.
- 2.26. Further, need is to emphasized on encouragement and promotion of technologies like Pumped Hydro Energy Storage System which are capable of supplying power during the peak period.
- 2.27. Side by side, the development of hydro power in the State shall take place at a required pace to meet the power demand of the state and as per the power surveys and every suitable location in the state shall have a H.E. plant for overall development.
- 2.28. The development of mini, micro and small hydel projects has not taken off appreciably and therefore the State of Meghalaya intends to take up the task of developing the enormous potential of the mini, micro and small hydel project to produce and supplement cheap, reliable, unpolluted and non-wasting source of electric energy of the state to supply power to the isolated and remote areas of the State.
- 2.29. It is further emphasized that the state of Meghalaya is committed to contribute rigorously towards the Government of India targets of net zero. In order to fulfill its commitment, Meghalaya shall make all efforts to achieve the Renewable Purchase Obligations (RPO) targets set by Hon'ble Ministry of Power as tabulated below:



**Table 14: RPO Obligations for Meghalaya Till 2030**

<b>Sl. No.</b>	<b>Year</b>	<b>Wind RE</b>	<b>Hydro RE</b>	<b>DRE*</b>	<b>Other RE</b>	<b>Total</b>
1	2024-25	0.67%	0.38%	0.75%	27.35%	29.15%
2	2025-26	1.45%	1.22%	1.05%	28.24%	31.96%
3	2026-27	1.97%	1.34%	1.35%	29.94%	34.60%
4	2027-28	2.45%	1.42%	1.65%	31.64%	37.16%
5	2028-29	2.95%	1.42%	1.95%	33.10%	39.42%
6	2029-30	3.48%	1.33%	2.25%	34.02%	41.08%

*\*DRE shall mean Distributed Renewable Energy*

2.30. State Distribution Utility of Meghalaya has signed an MoU under various Schemes of Government of India for distribution system strengthening and 100% smart metering of the consumers which is under process. The scheme would result in significant reduction in AT&C losses in the state.

2.31. Thus, the policy has been prepared adopting a holistic approach to fulfill the demand of the state, keeping in mind the commitment towards green energy.

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**SECTION A**  
**Formation of Power Trading**  
**Company**

## **CHAPTER III- FORMATION OF STATE OWNED POWER TRADING COMPANY**

- 3.1. The Government of Meghalaya will facilitate formation of the state-owned power trading company. The Power trading company shall be incorporated as a separate entity under the provisions of the Companies Act, 2013.
- 3.2. As per the power portfolio of the state, majority of demand in the state of Meghalaya is met through hydro power generation and hence the state is surplus in terms of demand during the monsoon season and is deficit during the winter season, which last from the month of November to March. Hence, apart from the long term contracts, the state is depended on the procurement of power from short term and bilateral sources, which is carried out by the state distribution company Meghalaya Power Distribution Corporation, as of now.
- 3.3. In order to facilitate a dedicated entity for the management of power in short term, the need has arisen to outsource this responsibility to a dedicated entity which shall be incorporated in form of State Owner Power Trading Company.
- 3.4. The major objectives/ functions of the state power trading company shall be as under:
  - i) To execute power purchase agreements with other trading companies, central generating stations, other state utilities and companies.
  - ii) Undertake short-term power purchase and sale on behalf of the Meghalaya Power Distribution Corporation Limited.
  - iii) Undertake PPAs with new renewable power plants in the state and management of the power in efficient manner.
  - iv) To finalize tender and finalize contracts for power purchase from new generation plants (both under State and Central Sectors), including Independent Power Producers.
- 3.5. The formation of the Meghalaya Electricity Power Trading Corporation Limited and the subsequent assets and liabilities shall be notified by the Government of Meghalaya through gazette notification.

**SECTION B**  
**Power Generation**

## **CHAPTER IV- DEVELOPMENT OF HYDRO POWER PROJECTS**

- 4.1. Power is a critical infrastructure for the socio-economic development. Efforts at accelerating the rate of economic growth in the new globalize economy dependent on the availability of adequate, reliable and quality power at competitive rates. Therefore, the basic responsibility of the “Electricity Industry” is to provide adequate power at economical cost, while ensuring reliable and quality supply.
- 4.2. Development of power sector is essential for the sustainable development of the country. The Government of Meghalaya is committed to this onerous task and is doing its best to develop the hydro power potential in a phased manner in synchronization with the requirement.
- 4.3. Meghalaya has a huge Hydro power potential amounting to nearly 3000 MW, however, with the help of the Meghalaya Power Generation Corporation Limited (MePGCL), it has been able to harness 13% of the available potential. The power potential harnessed so far is only 378 MW (including the 11.5 MW Old Umtru Project) with another 3 MW under implementation. Thus, there is enormous scope for further development in the hydro potential and there is a need to give a policy push to harness the complete potential of hydro power in the state.
- 4.4. The salient features of the state Hydro Power Policy are enumerated below:
  - i. To achieve a continuous and steady development of power projects as per the requirement of the State, a four-pronged strategy has been adopted by way of participation of Central, State, Private Sectors & Joint Ventures. This participation shall be through open bidding/MOA Route.
  - ii. To attract private investment in power sector by laying down investor friendly incentives, in view of the constraints of limited financial resources available with the State Government.
  - iii. To make power sector a source of revenue for the State by way of allotting the projects on Build, Own, Operate & Transfer (BOOT) basis. Royalty shall be charged in the form of free power during that period.
  - iv. To generate and ensure employment opportunities even if power projects are handed over to Independent Power Producers (IPP), which include

Central & State agencies as well.

- v. An opportunity for **Self-identified projects** by IPP, apart from those projects which have already been identified by the Government, would be given. Such IPP's may submit an application or make a suo-moto proposal to the Government, after which Government may allot such projects after due consideration. The IPP shall be asked to sign an MOA with Govt. for development of such projects. The State Government would develop a Model MOA and implementation agreement accordingly. Such MOA shall be similar to other MOA projects, but additional time shall be given to the IPP to enable preparation of DPR for a period not exceeding 24 months after allotment of site.
- vi. **River basins wise development approach would be adopted** where projects have been identified on a stand-alone basis, with impact on downstream projects having been taken into consideration fully. If an IPP can reconfigure the projects in a specific river basin, bringing about better utilization of resources, such IPP may make such consolidated proposal for the consideration of Government. Such project will be evaluated at par with **Self-Identified Projects**, keeping in mind the amount of power likely to be generated in totality and the anticipated environmental impact. If such projects are considered by Government, the same may be allotted and the IPP may be asked to enter into an MOA with Government.
- vii. To protect the ownership and water usage rights of local people.
- viii. To address the problem of ecological imbalance and environmental degradation by adopting suitable remedial/mitigating measures and bearing the same from the cost of the project.
- ix. Other provisions of state policies pertaining to the registration, industries, trading and business operation in the state shall be applicable to the developers, bidders and other entities under this policy.

4.5. The various sectors are defined as under:

**(a) State Sector:**

4.5.1 The State Generating entity shall strictly follow the Government policy in terms of employment and other developmental activities.

**(b) Joint Sector:**

4.5.2 The State Generating entity shall also explore the possibility of joint

ventures with other generating companies to achieve its objectives in view of the constraints of limited financial resources available with the State Government.

4.5.3 The State Generating entity and the identified other generating company, selected by the process of bidding/MoA/MoU, shall enter into a joint venture agreement which will clearly define the extent of participation by each partner and sharing of risks relating to implementation and operation of the project.

**(c) Central Sector:**

4.5.4 Government of India undertakings such as NEEPCO, NHPC, NTPC, DVC, ONGC etc.

**(d) Private Sector:**

4.5.5 A registered private owned company/ consortium duly registered under the provisions of Companies Act. 2013 or Companies Act 1956 or any other relevant law.

4.6. The power projects have been divided into the following three categories for allotment to the eligible bidder i.e. a Company or a Consortium of Companies whether in the Public or Private sector.

**Table 15: Proposed Categories of Hydro Power Projects and Mode of Allotment**

<b>Category</b>	<b>Mode of Allotment</b>
Category-I: Large and Mega Projects above 100 MW capacity.	Projects to be allotted through ICB Route in a transparent manner, unless it is handed over to Government of India Undertakings or the state utility.
Category-II: Medium hydro Projects above 25 MW and below 100 MW capacity.	Projects to be allotted through ICB Route in a transparent manner, unless it is handed over to Government of India Undertakings or the state utility
Category-III: Small hydro projects up to 25MW capacity.	Projects to be allotted through MOA Route in a transparent manner. However, projects below 10MW which would be proposed to be implemented through local participation will be given preference

*Note- In case of the projects are awarded to Government of India Undertaking or state utility, the upfront premium shall be waived off on discretion of the High-Power Committee.*

4.7 The data pertaining to the proposed projects such as hydrology, geology shall be made available to the bidders on payment basis, wherever applicable. Meghalaya Power Generation Corporation Limited shall be the nodal agency for providing the data for the proposed hydro power projects.

**A. Large and Medium Hydro Projects (Category I and II)**

**4.8 Bidding Process**

4.8.1 In order to ensure competitiveness in the sector of hydro power development, it is decided that the development of the medium and large hydro projects shall be mandatorily done through International Competitive Bidding Routes only.

4.8.2 The bid shall be invited on two criteria:

- i. Upfront Premium
- ii. Quantum of free power

4.8.3 In case the government calls for bid for the development of the medium and large hydro projects on the basis of upfront premium, the base premium would be as per the table below in this chapter. The bidder who quotes maximum premium over and above the base premium would be selected as the successful bidder.

4.8.4 Alternatively, in case the bids are called on the basis of quantum of free power, the base quantum of free power would be 12% and the bidder offering the maximum quantum of free power over and above the base quantum shall be selected as the successful bidder.

4.8.5 Provided in both the cases the base premium as well as free power shall be as follows:

**Table 16: Capacity Wise Minimum Upfront Premium and Quantum of Free Power**

<b>Capacity (MW)</b>	<b>Minimum Upfront Premium payment (Rs./MW)</b>	<b>Free Power (Minimum)</b>
25 MW to 99 MW	2,00,000	12%
100 MW to 499 MW	3,00,000	12%



<b>Capacity (MW)</b>	<b>Minimum Upfront Premium payment (Rs./MW)</b>	<b>Free Power (Minimum)</b>
500 MW and above	5,00,000	12%

4.8.6 The successful bidder shall be liable to pay the 50% of the upfront premium at the time of Letter of Award and the remaining 50% at the time of the financial closure.

4.8.7 On all projects governed by the current section of this policy an additional 1% free power from the project would be earmarked for Local Area Development Fund by the developer.

4.8.8 In case of the projects are awarded to Government of India Undertaking or state utility, the upfront premium shall be waived off on discretion of the Investment Clearance Committee referred under the Preliminary Chapter of this Policy.

#### 4.9 **Eligibility Criteria**

4.9.1 The Government of Meghalaya shall decide the financial and technical qualification criteria on case to case project specific basis. These criteria would include factors such as turnover of the bidder, experience in the development of the hydro projects of the capacity under bid, specific experience of working the north-eastern region of India.

#### 4.10 **Development of the Project**

4.10.1 The successful bidder shall be given a time of four years for the preparation and approval of the DPR. In case the developer is not able to prepare the DPR within the timelines, a penalty of delay of Rs. 50,000/Month/MW shall be charged to the developer.

4.10.2 The developer shall sign an undertaking to abide by the Dam Safety Act, 2021 and other safety related rules and regulations. There shall be no compromise in terms of the safety of the project.

4.10.3 The developer shall also abide by the time lines of the completion of the project as per the bidding documents. In case the bidder fails to complete the project within the timelines, penalty shall be charged as per the terms and conditions in the bidding document. In case the bidder is not able to demonstrate the improvement in progress after the imposition of penalty and serving of 3 notices at a gap of 3 months each, the bidder shall be terminated and the project shall be handed over to the state utility or any other agency identified for the purpose. In the event of the termination, the upfront premium paid by the bidder shall be forfeited.

4.10.4 All the projects developed under ICB route shall be on Build Own Operate and Transfer (BOOT) basis and after completion of useful life of 40 years, the project shall be transferred to the Government of Meghalaya, free of cost.

4.10.5 The bidder shall abide by the performance parameters at the time of handing over of the project such as auxiliary consumption, plant availability factor, remaining life without RMU etc.

4.10.6 In the 39th year of operation, the bidder shall deposit 1% of the project cost as the security deposit, towards the guaranteed parameters, having validity upto 5 years from the date of handing over of the project.

4.10.7 In case the guaranteed parameters are not met, the developer shall attend the shortcomings free of cost and if no improvement is noticed then the security deposit shall be forfeited.

#### 4.11 **Statutory Clearances & Support from Government of Meghalaya**

4.11.1 The State Level Committee as defined in the Preliminary Chapter shall be responsible for overall implementation and review of the projects.

#### 4.12 **Financial Assistance from Government of Meghalaya**

4.12.1 The Government of Meghalaya shall provide a financial assistance for development of hydro power projects as follows:

- a. 7.5% of the capital cost for projects upto 25 MW
- b. 5% of the capital cost for projects above 25 MW and upto 100 MW
- c. 2.5% of the capital cost for projects above 100 MW.

4.12.2 The release of the above financial assistance shall be done by the Government of Meghalaya during the operation phase of the plant.

4.12.3 The disbursement of financial assistance during the operation phase shall be done to the bidder over a period of 5 (five) years, comprising of 20% of the total assistance every year, starting from the first year from the COD.

4.12.4 Further, the benefits available for the industries under the Industrial Policy of the state shall also be available to the developers under this policy.

#### 4.13 **Land for the Project**

4.13.1 The identification and transfer/lease of land for Hydro Projects shall be in accordance with the provisions of Meghalaya Land Transfer Act and rules made there under as well as the provisions of Industrial Policy of the state.

4.13.2 In case the projects lie within the government land, the land shall be leased out to developer notional rate of Rs.1 /acre. The land shall be leased out for a period of 45 years including the period of construction.

4.13.3 In case the identified site for the project lies on a private land, the Government shall facilitate the transfer/leasing of land at the rates verified by the revenue authorities of the state. The state government shall facilitate the agreement between the developer and private land

owner in this regard.

4.13.4 However, in case the developer and the land owner arrive at a negotiation for the transfer/lease rent, the same shall prevail.

#### 4.14 **Evacuation of Power**

4.14.1 For the evacuation of power from the projects under this section, bidder shall be responsible for the construction of lines from the project switchyard to nearest pooling sub-station of the Meghalaya Power Transmission Corporation Limited. Further in case the developer wants to sell power outside the state, the developer will have to arrange for the connectivity with the state grid and CTU grid as per the relevant regulations of MSERC and CERC. Further, in case any augmentation of the existing transmission system is required, the cost of such augmentation shall be borne by the developer.

#### 4.15 **Purchase and Sale of Power**

4.15.1 After discharging the liability of free power to the state and power towards LADF, the developer shall be free to sell power anywhere it deems fit. The Government of Meghalaya shall not be liable to purchase of power from the plant until and unless specifically mentioned in the bid document.

4.15.2 In case the Government intends to buy the power from the plant, the quantum and base or peaking requirement shall be specified in the bid document. In such case the bidder shall sign a separate power purchase agreement with the State Power Trading Company or the Distribution Company at the decided rates.

4.15.3 Further, staggering of the free power shall be allowed to make projects economically viable as per the Government of India guidelines.

## **B. Small Hydro Projects upto 25 MW Capacity (Category III)**

### **4.16 Allocation Process**

4.16.1 In order to promote the development of the small hydro projects, the projects having individual capacity of upto 25 MW shall be allotted through a MoA route in transparent manner.

4.16.2 The Projects below 25 MW shall be further classified into following categories based on the capacity of the project as under:

**(a) Category-III.1:**

Projects having installed capacities of above 1 MW and upto 25 MW shall have the capability of operating in both Grid and Isolation mode. This category of projects will have all components and features of conventional hydro power projects providing Grid Quality Power.

**(b) Category-III.2:**

Projects having installed capacities of above 100 KW and upto 1000 KW shall be designed for stand-alone mode for providing dedicated power to a village or a habitat or a locality or a cluster of villages with or without connectivity to grid. The power supply to the consumers shall be provided either at High Voltage or Low Voltage systems as the case may be.

**(c) Category-III.3:**

Projects having installed capacities of upto 100 KW shall be designed for stand-alone mode dedicated to a village or a habitat directly distributing power to the households without high tension systems.

4.16.3 The state government may buy upto 35% of the power generated from the projects awarded through MoU in commensurate with the provisions of National Tariff Policy 2016.

4.16.4 Apart from the potential sites identified by the Government of Meghalaya, interested developers can identify the sites on their own and approach the Government for allotment of the project along with the full pre-feasibility reports.

4.16.5 The State Level Committee, as defined in the Preliminary Chapter, shall be responsible for overall implementation and review of the projects.

4.16.6 The interested parties will get into a MoA with the Government of Meghalaya on pre-decided terms and conditions.

4.16.7 The developer selected for the development of the project shall deposit an upfront premium of based on the capacity as detailed out as under:

**Table 17: Capacity Wise Processing Fees and Minimum Upfront Premium for Small Hydro Power Projects**

Category of Hydro Project	Processing fee	Minimum Upfront Premium payment
<b>Category—III.1</b>		
(a) Above 10 MW upto 25 MW	Rs.1 lakh per Project	Rs.100000 per MW
(b) Above 5 MW upto 10 MW	Rs.75,000 per Project	Rs.50000 per MW
(c) Above 1 MW upto 5 MW	Rs.50,000 per Project	Rs.30000 per MW
<b>Category—III.2</b>		
Above 100 KW upto 1000 KW	Rs.30,000 per Project	NIL
<b>Category—III.3</b>		
Upto 100 KW	Rs.20,000 per Project	NIL

4.16.8 The Upfront premium paid shall not form part of the project cost.

4.16.9 The selected developer shall be required to deposit the processing fee and Upfront Premium (both non-refundable) at the time of signing of the Memorandum of Agreement (MoA) with the State Government, failing which, the State Government shall have the exclusive right to re-allocate the project to any other eligible developer.

4.16.10 On commencement of the generation of the project the royalty shall be payable by the generating company at the rates defined below:

**Table 18: Capacity Wise Rate of Free Power**

Sl.No.	Category	Rate of Free Power
(i)	Projects up-to 1000KW	Nil

Sl.No.	Category	Rate of Free Power
(ii)	Projects above 1 MW up-to 5 MW	4%
(iii)	Projects above 5 MW up-to 10 MW	7%
(iv)	Projects above 10 MW up-to 15 MW	10%
(v)	Projects above 15 MW up-to 25 MW	12%

4.16.11 On all projects governed by the current section of this policy, an additional 1% free power from the project would be earmarked for Local Area Development Fund by the developer.

4.16.12 The developer shall be given a time of 3 years from the date of agreement for the preparation of DPR (Detailed Project Report). In case of the non-adherence of the time lines, penalty shall be imposed on the developer for delay, which shall be governed by the terms and conditions of the MoA.

4.16.13 The developer shall adhere to all the safety regulations issued by the Government of India/ CEA from time to time.

4.16.14 The Government of Meghalaya shall allocate projects to the eligible applicant for development on BOOT (Build, Own and Operate and Transfer) basis for a period of 40(forty)years and after that it shall be transferred back to the State Government in good and working condition.

4.16.15 Further, the benefits available for the industries under the Industrial Policy of the state shall also be available to the developers under this policy.

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## **Chapter V – DEVELOPMENT OF PUMPED STORAGE HYDRO PROJECTS**

### **5.1 Development of Pumped Storage Hydro Projects (PSPs)**

5.1.1As on now one of the barriers in Pumped Storage Hydro Projects is obtaining Environmental and Forest Clearances as they are treated at Par with the conventional hydro projects. However, this issued can be handled to large extent if the PSPs are constructed on existing reservoirs on on-the-river projects.

5.1.2This policy however, shall also be applicable for both closed loop and Generation bases PSP.

5.1.3Since the State of Meghalaya already has 378 MW (including the 11.5 MW Old Umtru Project) of the hydro projects, the Government of Meghalaya may nominate a nodal agency to carry out feasibility of setting up Pumped Storage Hydro Power at these existing sites.

5.1.4The requirement of the royalty in form of free power shall be governed by the policy guidelines issued by the Government of India from time to time.

5.1.5Currently, there will not be any requirement of the upfront premium for the Pumped storage hydro, however, the Government of Meghalaya may decide the applicability of the upfront premium based on the development of the PSP in the state in future.

5.1.6The State generating company may also form a joint venture with any firm having requisite technical and financial background to construct pumped storage hydro power projects at the aforementioned sites.

### **5.2 Objectives of the Policy for Pumped Storage Hydro Power Projects**

5.2.1The Policy for development of Pumped Storage Hydro Power Projects aims at following objectives:

- i. To facilitate development of Pumped Storage Hydro Project in the State.
- ii. To attract private investment, generating revenue for the government and boost the economy of the state.
- iii. To make power from pumped storage hydro projects available



peaking requirement as well as to fulfil the RPO obligations notified by MoP from time to time.

5.2.2 Meghalaya Power Generation Corporation Limited shall be the nodal agency for implementation of the Pumped Storage Hydro projects in the state.

5.2.3 The State Level Committee, as defined in Preliminary Chapter, shall be responsible for overall implementation and review of the projects.

### 5.3 **Allotment for the Projects**

5.3.1 Allotment of the Pumped Hydro Storage Projects shall be done in the following ways:

**(i) Allotment to CPSUs and State PSUs:** For early development, the State Government may award projects directly to CPSUs or State PSUs on a nomination basis.

- The PSPs identified by the State Government would be allotted to CPSUs/ State PSUs on first come first serve basis. Due consideration shall be given to the financial capability, experience and project management capabilities of such CPSUs/State PSUs.
- For the self-identified PSPs by the CPSUs/ State PSUs, first preference would be given to that CPSU/ State PSU after assessing the financial capability, experience and project management capabilities of such CPSUs/State PSUs.
- The above two categories of the projects may also be allotted to Joint Ventures (JVs) between CPSUs and/or State PSUs/State Government for development of such PSPs. Further the CPSUs/ State PSUs shall ensure that the Guidelines to Promote Development of Pumped Storage Projects, issued by the Ministry of Power, Government of India, vide F. No. 15-14/9/2022-H-II (Part) dated 10.04.2023 or any other guidelines issued from time to time, are adhered to by them.

**(ii) Allotment to Private Developer**

**a. PSPs identified by the State Government:**

- i. Allotment through Competitive Bidding:** PSP project would be awarded to private developers by following a two-stage competitive bidding process. The first stage shall be for pre-qualification based on criteria of financial strength, experience of developing infrastructure projects of similar size, past

track record of developing projects, turnover and ability to meet performance guarantees. The T1 selected in the first stage of the bidding process shall be allowed to conduct the pre-feasibility study of the project. The second stage of the bidding would be called on the basis of the concession period of the project. The bidder offering the least concession period, post which the project shall be transferred to the Government of Meghalaya, shall be selected as the successful bidder L1. In case the T1 and L1 are different the L1 bidder shall reimburse the cost of Pre-Feasibility study to the T1 bidder. At the end of the concession period arrived at through competitive bidding, the plant shall be transferred to the Meghalaya Power Generation Company Limited, free of cost. The developer shall guarantee all the technical parameters of the project for next five years after the concession period is over and in lieu of the same, the developer shall submit a performance bank guarantee of the amount as decided by the appropriate authority from time to time.

- ii. Allotment Through TBCB:** The Government of Meghalaya, might consider the Tariff Based Competitive bidding also as another criterion for the development of the Pumped Storage Hydro Projects. In such case a SPV would be created, which would be vested with the tasks of carrying out the pre-construction activities such as preparation of the project report, land acquisition, environment and forest clearances etc. The DPR prepared by the SPV shall be bid-out for the development of project on the basis of:
- a. Composite Tariff, i.e., where input power is to be arranged by the developer or,
  - b. Tariff for storage on a per Megawatt Hour Basis, if the input power is to be arranged by the procurer i.e., Government of Meghalaya.

**b. Self-Identified PSPs by the Private Developer**

In addition to the above methods, private developers may also self-identify potential sites for the development of the PSPs. The developer shall identify the areas for development of the pumped storage hydro project and approach the nodal agency with the detailed proposal covering the details of the projects, benefits to state, etc. The concession period, post which the project shall be transferred to the Government of Meghalaya, shall be one of the deciding criterion while evaluating the proposal. The Nodal Agency would ensure that the Guidelines to Promote Development of Pumped Storage Projects, issued by the Ministry of Power, Government of India, vide F. No. 15-14/9/2022-H-II (Part) dated 10.04.2023 or any other guidelines issued from time to time, are adhered to by the applicant private developer.

The developer shall also submit details in connection to the financial and technical eligibility etc. The Nodal Agency shall do a detailed scrutiny of the proposal and forward the same to State Level Committee for further appraisal and approval.

5.3.2 For all categories of the PSPs, the developers (CPSUs/State PUSs/Private Developers/JVs) shall have the option of setting up the Hybrid Pumped Storage Power Plants. In such case, the provisions of the free power commitment and LADF commitments on the hydro power projects and solar power projects, as per the relevant provisions of this policy shall be applicable.

#### 5.4 **Joint Venture Projects**

5.4.1 In case of Project Categories at para 5.3.1(i) ,5.3.2(ii)(b) as detailed out above the Government of Meghalaya may enter into a joint venture with the developers. In case of such joint venture the Government shall invest a certain percentage in the form of equity.

5.4.2 In such case the government would have the right on revenue from power sale to the extent to the percentage of the equity invested and shall also have the right on the peaking power to the extent of the percentage of equity invested, on first right of refusal basis. In case the right of refusal is exercised, the revenue from the sale of such power in the open market shall be shared with government to extent of the equity invested.

#### 5.5 **Timelines for the Projects**

5.5.1 The timelines for the completion of the project shall be governed by the relevant guidelines of Government of India/ CEA and at present shall be 5 (five) years from the date of approval from the State Level Committee for commencement of the project. The timelines for major milestones shall be as follow:

- Preparation of DPR- Within 2 Years from the date of approval
- Land Acquisition – Within 3 Years from the date of approval
- Financial Closure- Within 3 years from the date of approval
- Completion of works upto COD- Within 5 Years from the date of approval.

5.5.2 The State Level Committee, as defined in Preliminary Chapter, shall be responsible for overall implementation and review of the projects.

## 5.6 **Land for the Projects**

5.6.1 The identification and transfer/lease of land for Pumped Hydro Projects shall be in accordance with the provisions of Meghalaya Land Transfer Act and rules made there under as well as the provisions of industrial policy of the state.

5.6.2 In case the projects lie within the government land the land shall be leased out to developer notional rate of Rs.1 /acre. The land shall be leased out for a period of 45 years or for the concession period as arrived in bidding process.

5.6.3 In case the identified site for the project lies on private land, the Government shall facilitate the transfer/leasing of land at the rates verified by the revenue authorities of the state. The state government shall facilitate the agreement between the developer and private land owner.

5.6.4 However, in case the developer and the land owner arrive at a negotiation for the transfer/lease rent, the same shall prevail.

## 5.7 **Other Charges Payable by Developer**

5.7.1 The developer shall be pay one-time facilitation charges of Rs. 35000/MW as filling charges.

5.7.2 There shall be no Electricity duty and Cross Subsidy Charges on pumping power. However, the Electricity Duty and Cross Subsidy Charges shall be applicable on the final consumption.

## 5.8 **Evacuation of Power**

5.8.1 For the evacuation of power from the projects under this section, bidder shall be responsible for the construction of lines from the project switchyard to nearest sub-station of the Meghalaya Power Transmission Corporation Limited. Further in case the developer wants to sell power outside the state the developer will have to arrange for the connectivity

with the state grid and CTU grid as per the relevant regulations of MSERC and CERC.

5.8.2 The applicability of the transmission charges shall be governed by the relevant guidelines of the Government of India issued from time to time.

5.9 **Other Benefits**

5.9.1 Further, the benefits available for the industries under Industrial Policy of the state shall also be available to the developers under this policy.

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## **Chapter VI- DEVELOPMENT OF THERMAL POWER PROJECTS**

### **6.1 Thermal power projects development**

6.1.1 The State has a coal reserve of about 564 million tonnes, the calorific value of which ranges from 5694 kcal/kg to 9772 kcal/kg. The sulphur content of the coal ranges from 1.8 % to 7.1 % and the ash content ranges from 1.3 % to 62 %. The major coal reserves are in the southern belt of the State. Very close to these major coal reserves, there are huge quantities of limestone which is estimated about 1000 million tonnes. Thus, there is ample scope to develop thermal power stations to meet the base load demand of the State.

6.1.2 It has been observed that the state is in surplus in term of energy during the monsoon season and is in deficit during the winters i.e., from November to March.

6.1.3 This poses a challenge to energy security in the state, in case of a poor monsoon, which can leave the state thriving for power and increased dependency on the open market, the rates of which are uncontrollable.

6.1.4 Thus, the state intends to exploit the abundant coal resources to meet the base load requirement and avoid adverse impact of poor monsoon.

6.1.5 The state-owned Meghalaya Power Generation Corporation Limited, which has abundant experience in developing the hydro power projects, can also form a joint venture with a reputed firm having experience in development of thermal power projects of capacity 250-500 MW on revenue sharing basis.

### **6.2 Pre-Feasibility Stage**

6.2.1 The MePGCL shall call for bids for preparation of the project feasibility report from reputed consultants for construction of thermal power plant in the state, which would interalia include availability of land, water, sourcing of coal and evacuation. The scope of the consultant shall include identification of the area of development of projects, technical feasibility, financial feasibility and socio-economic feasibility.

6.2.2 Development of pit-head thermal power plant would be preferred as it would reduce the hazards involved in transportation of coal.

6.2.3 Meghalaya Mineral Development Corporation (MMDC) or any other agency authorized by Government of Meghalaya, shall be primarily responsible for making coal available for the thermal power project.

6.2.4 The Consultant appointed for conducting feasibility study shall submit a detailed report within 6 months of the appointment for that project.

6.2.5 The state government can also examine the pre-feasibility report submitted by any private developer and take appropriate decision as per this policy.

### 6.3 **Allotment and Execution**

6.3.1 The allotment and execution of the thermal project can be done through various modes as defined as under. The various sectors are defined as under:

**(a) State Sector:**

The State Generating entity shall strictly follow the Government policy in terms of employment and other developmental activities.

**(b) Joint Sector:**

The State Generating entity shall also explore the possibility of joint ventures with other identified generating companies, to achieve its objectives, in view of the constraints of limited financial resources available with the State Government.

The State Generating entity and the identified generating company, selected by the process of bidding/MoA/MoU, shall enter into a joint venture agreement, which will clearly define the extent of participation by each partner and sharing of risks relating to implementation and operation of the project.

**(c) Central Sector:**

Government of India undertakings such as NEEPCO, NHPC, NTPC, DVC, ONGC etc.

**(d) Private Sector:**

A registered private owned company/ consortium duly registered under the provisions of Companies Act. 2013 or Companies Act 1956 or any other relevant law.

6.3.2 The State Level Committee, as defined in Preliminary Chapter, shall be responsible for overall implementation and review of the projects.

**6.4 Sale of Power and Evacuation**

6.4.1 The power from the thermal power projects shall be sold to the State Power Distribution Company or through The Trading Company as per the provisions of the National Tariff Policy 2016 or as decided by the State Government on case to case basis. The tariff of the same shall be determined by the appropriate Regulatory Commission.

6.4.2 For the evacuation of power from the projects under this section, bidder shall be responsible for the construction of lines from the project switchyard to nearest sub-station of the Meghalaya Power Transmission Corporation Limited. Further, the evacuation of power can be done through Tariff Based Competitive Bidding (TBCB) route.

**6.5 Other Benefits**

6.5.1 Further, the benefits available for the industries under the Industrial Policy of the state shall also be available to the developers under this policy.

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# **Chapter VII- DEVELOPMENT OF SOLAR POWER PROJECTS**

## **7.1 Solar power projects development**

7.1.1. Economic growth of any country in the world mainly depends on energy sustainability. Fossils fuel such as coal, gas, oil, etc. for conventional power generation is fast depleting and will be exhausted in coming decades. The conventional generation is also the source of greenhouse gas emission attributing to global warming and has adverse impact on climate. Therefore, a global shift towards sustainable renewable energy generation is being witnessed. Investing in renewable energy makes more sense than ever before as it is not only clean and environment friendly but also because it is abundantly available and is affordable.

7.1.2. Solar energy is extremely beneficial as it is non-polluting and its generation can be decentralized.

7.1.3. Solar power sector in India has emerged as a fast-upcoming section in last few years. It supports the government agenda of sustainable growth, while, emerging as an integral part of the solution to meet the nation's energy needs and an essential player for energy security.

## **7.2 Objectives of the Policy:**

- i. To encourage, develop and promote Solar Power Generation.
- ii. To meet the Solar Renewable Purchase Obligation (RPO) mandate.
- iii. To achieve large scale reduction of GHG emissions.
- iv. To avoid procuring expensive fossil fuels to power Conventional Power Plants.
- v. To develop Meghalaya into an investor friendly State for implementation of Solar Power Projects.
- vi. To encourage public as well as private investment in Solar Power Generation.
- vii. To promote grid connected Solar Power.
- viii. To promote all technologies of harnessing solar energy.
- ix. To create direct and indirect employment opportunities.
- x. To promote R&D and innovations, skill development in the sector.

**7.3** For the Purpose of this policy the Solar Projects shall be categorized as under:

**(a) Category I** – The projects under this category shall be those projects where the prospective developer wants to setup the project within the state and is willing to enter into a PPA with the state government.

**(b) Category II**- The projects under this category shall be those projects where the prospective developer wants to set up the project in the state of Meghalaya and is willing to sell power outside the state.

**(c) Category III**- The projects under this category would be developed by the State Government through State Power Generation Company or Joint Venture.

#### **7.4 Allotment Framework**

7.4.1 The State Level Committee, as defined in the Preliminary Chapter, shall be responsible for overall implementation and review of the projects.

#### **7.5 Allotment of Category I Projects**

7.5.1 The category I projects shall be awarded through the Tariff Based Competitive Bidding. Such bids shall be called for on reverse auction basis. The base rate for the reverse auction shall be determined by the Government of Meghalaya in the tender document. The State Level Committee referred above shall oversee the process of the bidding. The successful bidder in the bidding shall enter into a power purchase agreement with the state power trading company or the distribution licensee as the case may be.

7.5.2 All Companies, firms registered under the provisions of the relevant acts shall be eligible to participate in the allotment process of the Category I projects.

7.5.3 The identification and transfer/lease of land for Solar Projects shall be in accordance with the provisions of Meghalaya Land Transfer Act and rules made there under as well as the provisions of industrial policy of the state.

7.5.4 In case the project lies within the government land, the land shall be leased out to developer notional rate of Rs.1 /acre. The land shall be leased out for a period of 30 years.

7.5.5 In case the identified site for the project lies on private land, the Government shall facilitate the transfer/leasing of land at the rates verified by the revenue authorities of the state. The state government shall facilitate the agreement between the developer and private land owner.

7.5.6 However, in case the developer and the land owner arrive at a negotiation for the transfer/lease rent, the same shall prevail.

## **7.6 Allotment of Category II Projects**

7.6.1 The category II projects shall be awarded by the State Level Committee on first come first basis.

7.6.2 In case the project lies within the Government land, the Government shall facilitate the leasing of land at the rates verified by the revenue authorities of the state, with a concession, as decided by the appropriate authorities from time to time.

7.6.3 In case the identified site for the project lies on private land, the Government shall facilitate the transfer/leasing of land at the rates verified by the revenue authorities of the state. The state government shall facilitate the agreement between the developer and private land owner.

7.6.4 However, in case the developer and the land owner arrive at a negotiation for the transfer/lease rent, the same shall prevail.

7.6.5 The developer shall contribute 1% of the power generated from the project towards Local Area Development Fund.

7.6.6 In case the developer is willing to sell some quantum of power within the state also, the State Government shall enter into PPA of maximum upto 35% of the installed capacity of the project as per the provisions of National Tariff Policy 2016 at the Tariff determined by the appropriate Commission.

## **7.7 Category III - Projects to Developed by Government of Meghalaya**

7.7.1 The Government of Meghalaya aims at setting up the Solar Power Projects of cumulative capacity of minimum 100 MW by 2030. To accomplish this target, the State Government would also develop the solar power projects in the state

through the State Power Generating Company.

7.7.2 Land for setting up of the Solar projects under this category will be identified by the State government. In order to provide for such a large tract of contiguous land with appropriate insolation levels, the State Government may prioritize the use of government waste/non-agricultural land in order to speed up the acquisition process. The use of private land may be minimized. The locations of the Projects would be preferred to be closer to the Transmission utility.

7.7.3 Meghalaya Power Generation Corporation Limited shall be responsible for preparation of DPR, Cost Estimates and Feasibility study for the project. There will be no land restrictions in terms of hectare/MW for development of the solar projects under this category, however, MePGCL shall make all efforts to minimize the land requirement by using state of art technologies.

7.7.4 All infrastructural requirements in the vicinity of the project such as connecting road, provision of water supply, construction power, etc. to make the park functional, will be the responsibility of the State Government.

7.7.5 Once the land acquisition is completed and DPR is approved, the State Government may infuse certain percentage of the capital cost as equity, through Meghalaya Power Generation Corporation and the balance amount shall be arranged by Meghalaya Power Generation Corporation as loans from the financial institutions.

7.7.6 The Government of Meghalaya, may also enter into a Joint Venture on pre-determined terms and conditions, with any CPSU or Private developer for the construction of the project. In such case the tariff from the project shall be determined by the State Regulator MSERC as per the relevant guidelines.

## **7.8 Power Purchase Agreement (PPA)**

7.8.1 The Distribution Company/Trading Company under this policy may enter in to a Power Purchase Agreement with developer for a period of 25 years for Category I and Category III of the solar projects under this Policy. However, if any eligible producer intends to enter into Power Purchase Agreement for shorter periods, the State DISCOM will consider such proposal on the merit of the case.

## **7.9 Exemptions and Support from Government of Meghalaya**

7.9.1 The following exemptions shall be available for the Solar Power Projects under this policy:

- i. Land for solar power projects shall be deemed to be converted to Non-Agriculture land.
- ii. 100% Transmission and Wheeling Charges waiver for initial 2 years of Commercial operations and increase of 25% per year thereafter. 100% Transmission and Wheeling charges shall be levied from the 7<sup>th</sup> year of the commercial operation of the Project.
- iii. Exemption of the cross-subsidy surcharge and additional surcharge.

## **7.10 Evacuation of Power**

7.10.1 The developer shall lay power evacuation line from generating station to the nearest substation or interconnection point. The power evacuation shall be done through state power transmission company limited. In case the power is intended to be sold outside the state the developer shall arrange connectivity to CTU at its own cost. Further, in case any augmentation of the MePTCL infrastructure is required for evacuation of power, the cost of such augmentation shall be borne by Category I and Category II developers under this policy.

## **7.11 Electricity Duty**

7.11.1 Electricity duty shall be exempted for captive consumption, sale to Distribution Licensee and third-party sale in respect of all SPPs set up within the state. Also, Electricity duty will be waived for the new manufacturing facilities and ancillaries of the Solar Power Projects.

## **7.12 Payment Security Mechanism**

7.12.1 The Distribution Licensee shall provide facilities of an irrevocable, divisible, revolving and confirmed standby Letter of Credit by any nationalized bank. The amount of the Letter of Credit shall be equal to the expected payment for two months by the Department.

## **7.13 Other Benefits**

7.13.1 Further, the benefits available for the industries under the Industrial Policy of the state shall also be available to the developers under this policy.

# **Chapter VIII- DEVELOPMENT OF WIND POWER PROJECTS**

## **8.1 Wind power projects development**

8.1.1. Wind Energy is one of the cleanest forms of energy having several benefits. There has been tremendous growth in wind power projects across the nation with the national installed capacity of wind power touching 44.73 GW in December 2023. One of the major benefits of the Wind Power is that the installation of wind turbines utilizes only 2% of the land of the wind farms, making the rest of the land available for agriculture, setting up hybrid solar power projects etc. Further, the gestation period of the wind turbine installation is substantially lower in comparison to other technologies. Further, it is pertinent to mention that the tariff from the wind power have reduced substantially in the current regime.

8.1.2. Another important benefit of wind power projects in the current scenario is that the utility of the wind power in the production of green hydrogen acting as source of power for electrolyzer for production of Green Hydrogen.

8.1.3. National Institute of Wind Energy has estimated a potential of 44 MW of Wind Energy in the state at 50 m level. This Potential further increases to 82 MW at 80 m level.

8.1.4. The Policy aims at harnessing the wind potential in the state to maximum level both at 50 m and 80 m by 2030.

8.2 The main objectives of the policy are as follows:

- i. Develop an investor friendly environment for development of the wind power in the state.
- ii. Harness the maximum potential of wind energy by converting it into the installed capacity.
- iii. Make cheaper wind power available to ensure that the overall power purchase cost is reduced.
- iv. To make clean wind power available to ensure contribution of state towards NDC and meeting the RPO targets set by the Ministry of Power, GOI from time to time.

8.3 For the Purpose of this policy the Meghalaya Power Generation Corporation

shall be the nodal agency for the development of the wind power projects in the state.

#### **8.4 Allotment Framework**

8.4.1 The State Level Committee, as defined in the Preliminary Chapter, shall be responsible for overall implementation and review of the projects.

#### **8.5 Modes of Allotment of Wind Power Projects**

8.5.1 The Wind power projects for the purpose of this Policy are classified into three categories:

**Category I** – The projects under this category shall be those projects where the prospective developer wants to setup the project within the state and is willing to enter into a PPA with the state government.

**Category II**- The projects under this category shall be those projects where the prospective developer wants to set up the project in the state of Meghalaya and is willing to sell power outside the state.

**Category III**- The projects under this category would be developed by the State Government through State Power Generation Company or Joint Venture.

#### **8.6 Conduct of Pre-Feasibility Study**

8.6.1 The Nodal Agency shall engage an expert consultant for identification of the areas for development of the wind power projects. The consultant shall submit the Pre-Feasibility Study Report of the identified areas. After the process of the pre-feasibility study has been completed and the preferable locations along with installable capacity is identified for the development of the wind power projects, the proposal shall be forwarded to the state level committee for further discussions and review. The PFR should also focus on the Environmental Impact Assessment of the setting up of the wind power projects.

#### **8.7 Allotment of Category I Projects**

8.7.1 The identified project as per the PFR shall be bid out through a Tariff Based

Competitive Bidding process on reverse auction basis. The base rate for the reverse auction shall be determined by the Government of Meghalaya in the tender document. The State Level Committee shall oversee the process of the bidding. The successful bidder in the bidding shall enter into a power purchase agreement with the state power trading company/ Distribution Licensee.

8.7.2 All Companies, firms registered under the provisions of the relevant acts shall be eligible to participate in the Competitive Bidding.

8.7.3 The identification and transfer/lease of land for Wind Projects shall be in accordance with the provisions of Meghalaya Land Transfer Act and rules made there under as well as the provisions of industrial policy of the state.

8.7.4 In case the projects lie within the government land the land shall be leased out to developer notional rate of Rs.1 /acre. The land shall be leased out for a period of 30 years.

8.7.5 In case the identified site for the project lies on private land the Government shall facilitate the transfer/leasing of land at the rates verified by the revenue authorities of the state. The state government shall facilitate the agreement between the developer and private land owner.

8.7.6 However, in case the developer and the land owner arrive at a negotiation for the transfer/lease rent, the same shall prevail.

## **8.8 Allotment of Category II Projects**

8.8.1 The category II projects shall be awarded by the State Level Committee on first come first basis.

8.8.2 The Pre-feasibility reports already done by MePGCL shall be made available to developers under this category on payment basis.

8.8.3 In case the project lies within the Government land, the Government shall facilitate the leasing of land at the rates verified by the revenue authorities of the state with a concession as decided by the appropriate authorities from time to time.

8.8.4 In case the identified site for the project lies on private land the Government shall facilitate the transfer/leasing of land at the rates verified



by the revenue authorities of the state. The state government shall facilitate the agreement between the developer and private land owner.

8.8.5 However, in case the developer and the land owner arrive at a negotiation for the transfer/lease rent, the same shall prevail.

8.8.6 The developer shall contribute 1% of the power generated from the project towards Local Area Development Fund.

8.8.7 In case the developer is willing to sell some quantum of power within the state also, the State Government shall enter into PPA of maximum upto 35% of the installed capacity of the project as per the provisions of National Tariff Policy 2016 as per the Tariff determined by the appropriate Commission.

### **8.9 Category III - Projects to Developed by Government of Meghalaya**

8.9.1 The Government of Meghalaya aims at harnessing the maximum potential of wind energy in the state by 2030. To accomplish this target, the State Government would also develop the wind power projects in the state through the State Power Generating Company or through Joint Venture.

8.9.2 Land for setting up of the Wind projects under this category will be identified by the State government. The State Government may prioritize the use of government waste/non-agricultural land in order to speed up the acquisition process. The use of private land may be minimized. The Projects would be preferred to be closer to the Transmission utility.

8.9.3 Meghalaya Power Generating Corporation Limited shall be responsible for preparation of DPR, Cost Estimates and Feasibility study for the project. There will be no land restrictions in terms of hectare/MW for development of the solar projects under this category, however, MePGCL shall make all efforts to minimize the land requirement by using state of art technologies.

8.9.4 All infrastructural requirements in the vicinity of the project such as connecting road, provision of water supply, construction power, etc. will be the responsibility of the State Government.

8.9.5 Once the land acquisition is completed and DPR has been prepared and

approved, the State Government may infuse certain percentage of the capital cost as equity, through Meghalaya Power Generation Corporation and the balance amount shall be arranged by Meghalaya Power Generation Corporation as loans from the financial institutions.

8.9.6 The Government of Meghalaya, may at its discretion also enter into a Joint Venture on pre-determined terms and conditions, with any CPSU or Private developer for the construction of the project.

8.9.7 In such case the tariff from the project shall be determined by the State Regulator MSERC as per the relevant guidelines and the power shall be sold to the Distribution licensee of the state through State Power Trading Company.

### **8.10 Power Purchase Agreement (PPA)**

8.10.1 The Distribution Company/Trading company under this policy may enter into a Power Purchase Agreement with developer for a period of 25 years for Category I and Category III of the wind projects under this Policy. However, if any eligible producer intends to enter into Power Purchase Agreement for shorter periods, the State DISCOM will consider such proposal on the merit of the case.

### **8.11 Exemptions and Support from Government of Meghalaya**

8.11.1 The following exemptions shall be available for the Wind Power Projects under this policy:

- i. 100% Transmission and Wheeling Charges waiver for initial 2 years of Commercial operations and increase of 25% per year thereafter. 100% Transmission and Wheeling charges shall be levied from the 7<sup>th</sup> year of the commercial operation of the Project.
- ii. Exemption of the cross-subsidy surcharge and additional surcharge.

### **8.12 Electricity Duty**

8.12.1 Electricity duty shall be exempted for captive consumption, sale to Distribution Licensee and third-party sale in respect of all WPPs set up within the state. Also, Electricity duty will be waived for the new manufacturing facilities and ancillaries of the Wind Power Projects.

### **8.13 Evacuation of Power**

8.13.1 For the evacuation of power from the projects under this section, bidder shall be responsible for the construction of lines from the project switchyard to nearest sub-station of the Meghalaya Power Transmission Corporation Limited. Further, the evacuation of power can be done through Tariff Based Competitive Bidding (TBCB) route.

### **8.14 Other Benefits**

8.14.1 Further, the benefits available for the industries under the Industrial Policy of the state shall also be available to the developers under this policy.

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**SECTION C**  
**Transmission**

## **CHAPTER IX-TRANSMISSION**

9.1 The Power Supply Industry in the state of Meghalaya has been under the governance of erstwhile Meghalaya State Electricity board (MeSEB) since 21st January 1975. The State Government on 31st March, 2010 notified "The Meghalaya Power Sector Reforms Transfer Scheme 2010" paving path for the un-bundling of the MeSEB into:

- Meghalaya Energy Corporation Limited (the holding company),
- Meghalaya Power Distribution Corporation Limited (Distribution Utility),
- Meghalaya Power Generation Corporation Limited (Generation Utility)
- Meghalaya Power Transmission Corporation Limited (Transmission Utility).

9.2 Accordingly, the Meghalaya Power Transmission Corporation Limited was vested with the functions of the Transmission business. Currently, all the functions of transmission utility are being managed by the Meghalaya Power Transmission Corporation Limited.

9.3 The main features of the policy are as under:

- i. The Government of Meghalaya shall establish a State Transmission Utility by bifurcating the functions of MePTCL into that of transmission utility and licensee. The State Transmission Utility shall not engage in the business of generation or trading in electricity.
- ii. The State Transmission Utility shall build, maintain & operate an efficient, coordinated and economical transmission system within its territorial jurisdiction and shall be responsible for inter-connection arrangement between the generating company and distribution company/user.
- iii. The State Transmission Utility shall prepare a comprehensive transmission master plan for the State. The master plan shall be prepared to cover the period till the end of Five-Year Plan periods. Keeping in view the international standards and practices, the transmission capacity would be planned and built with sufficient redundancy levels and margins for security of the system. Strengthening and extension of existing transmission system commensurate with projected load demand shall also be given due consideration while formulating the transmission master plan.

- iv. The SLDC shall be formulated as a separate entity and incorporated as a separate company under the provisions of Companies Act 2013. The bifurcation of Transmission and SLDC business shall be done in form of a transfer scheme notified by Government of Meghalaya.
- v. The State Government shall encourage investment by the private sector in transmission projects to meet the policy objectives. The Government shall facilitate grant of right of way necessary for the projects.
- vi. To facilitate the above all the projects above Rs.50 Cr shall be awarded through Tariff Based Competitive Bidding (TBCB)\_route only.
- vii. Meghalaya Power Transmission Corporation Limited shall also fetch for opportunities of leasing out the fiber optics infrastructure to the network providers.

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**SECTION D**  
**Distribution**

## **CHAPTER X- DISTRIBUTION**

10.1 The Power Supply Industry in the state of Meghalaya has been under the governance of erstwhile Meghalaya State Electricity board (MeSEB) since 21st January 1975. The State Government on 31st March, 2010 notified "The Meghalaya Power Sector Reforms Transfer Scheme 2010" paving path for the un-bundling of the MeSEB into:

- Meghalaya Energy Corporation Limited (the holding company),
- Meghalaya Power Distribution Corporation Limited (Distribution Utility),
- Meghalaya Power Generation Corporation Limited (Generation Utility),
- Meghalaya Power Transmission Corporation Limited (Transmission Utility).

10.2 Accordingly, the responsibility of discharging the functions of the distribution licensee was vested with Meghalaya Power Distribution Corporation Limited (MePDCL).

10.3 Since 2007, a lot of schemes such Integrated Power System Development, Rajiv Gandhi Gramin Vidyutikaran Yojna, RAPDRP have been implemented and several schemes such ADB funded schemes for distribution strengthening are in process. However, there is still enough requirement and scope of improvement in the distribution sector. The AT&C losses and distribution losses for FY 2022-23 are 27.76% and 17% respectively which are still short of the desired level.

10.4 MePDCL has entered into the MoU with Government of India under the various scheme for reducing the AT&C losses and system strengthening. These schemes would cover replacement of meters with Smart meters and distribution infrastructure improvement related works. The scheme is expected to bring down the losses to desired level.

10.5 Main Features of the policy are as under:

- i. The distribution licensee shall prepare a comprehensive distribution master plan for the area of operation.
- ii. The distribution licensee shall prepare a forecast for the energy requirement in the state for a period of next 5 years in line with the CEA Guidelines for Power Demand Forecasting.
- iii. The distribution licensee shall prepare a master plan to achieve the



targets set in Meghalaya Electric Vehicle Policy 2021 for setting up the charging stations.

- iv. The Distribution Companies shall improve the HT & LT ratio to 1:1 especially in the urban areas to improve the distribution system and reduce the system losses.
- v. Energy conservation and demand side management shall be given priority to optimize utilization of available power. Energy conservation measures shall be adopted in all Government buildings.
- vi. The State Government shall encourage private investment in the distribution sector in the form of licensees to meet the policy objectives. The State Govt. shall support the sector during the transition period till the distribution entities become financially viable and self-sustaining. The transition period shall be determined by the Government.
- vii. It has been observed that the load factor in the state of Meghalaya has been low in comparison to the national average. Meghalaya Power Distribution Corporation Limited shall take Demand Side Management measures and shall ensure Time of Day metering to improve the load factor of the state resulting in the optimum utilization of resources.
- viii. Meghalaya Power Distribution Corporation Limited shall encourage the development of EV charging infrastructure in the state through preferential tariff with TOD metering in order to encourage demand side management.
- ix. Meghalaya Power Distribution Corporation Limited shall Implement digital platforms and technologies to streamline consumer interactions. This includes online bill payment, customer portals for services such as change in load, change in name, change in tariff correction in address etc. and online new service connection.
- x. Meghalaya Power Distribution Corporation Limited shall establish a responsive and effective mechanism for handling consumer complaints. Quick resolution of issues related to power outages, meter faults, and other service disruptions is essential for customer satisfaction.
- xi. Meghalaya Power Distribution corporation shall maintain accessible and well-equipped customer service centers where consumers can seek assistance, make inquiries, and resolve issues in time bound manner through IVRS, Chabot's & WhatsApp.

**SECTION E**  
**Development of**  
**Non-Conventional Energy**  
**Sources**

## **CHAPTER XI- DEVELOPMENT OF NON-CONVENTIONAL ENERGY SOURCES.**

- 11.1 The DISCOM shall search options for distributed energy generation in the rural areas to ensure the supply of quality power in these areas on 24X7 basis.
- 11.2 The projects commissioned in the rural areas should be closely monitored on continuous basis in order to ensure the full utilization of the resources.
- 11.3 The Government of Meghalaya in order to promote the energy generation from the non-conventional sources, shall create a corpus of funds for research and development of emerging technologies such as green hydrogen and battery energy storage systems and Biomass Generating Stations.
- 11.4 Government shall also promote PPP in setting up solar based EV charging station and BESS systems in Meghalaya.
- 11.5 The Government of Meghalaya shall appoint expert consultants for feasibility of harnessing the Green Hydrogen Potential in the state and also to develop a roadmap for development of Green Hydrogen in the state.

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