

SUCCESS STORY IN RESPECT OF NEC FUDNED POWER PROJECTS.

1. Name of the project: Construction of 132kV S/C line on D/C tower from Bairabi to West Phaileng via Mamit with associated bays (74 Ckm) in Mizoram:

Sl. No	Particulars	Details to be Filled by Ministry/Department
1	Name of Ministry / Department	MDoNER / NORTH EASTERN COUNCIL SECRETARIAT
2	Name of Scheme	Scheme of NEC
3	DAPST Component / Intervention	<u>Construction of 132kV S/C line on D/C tower from Bairabi to West Phaileng via Mamit with associated bays (74 Ckm) in Mizoram:</u> The project is for enhance power transmission capacity and reliability, improve grid stability and efficiency and support economic growth and development.
4	State / District / Location	Mizoram /Mamit & Kolasib Dsitriacts /Bairabi, Mamit & W. Phaileng
5	Target Beneficiaries	ST
6	Number of ST Beneficiaries Covered	This project is for evacuation of power from Bairabi power plant to other part of State and hence, consumers of entire state are benefitted.
7	Brief Background / Problem Addressed	The brief detail of the project: 1. Project Cost: Rs 54.95 crore (90% NEC share & 10% State share) 2. Date of Sanction: 19-06-2017 3. Implementing Agency: Power Deptt., Govt of Mizoream 4. Fund released by NEC: Rs 49.46 crore 5. Date of Completion: 13-11-2025 6. Brief write-up: Constructed of 132 KV Line is between Bairabi and W.Phaileng via Mamit and passing through 2 districts namely Kolasib and Mamit Districts. Mamit district is in the western part of Mizoram bordering Bangladesh in the South West and the state of Tripura in the North West and Assam in the North. The River Tlawng, the longest river of the state which is a tributary of River Barak of Assam separates this district from the districts of Kolasib and Aizawl. Bairabi is a town situated in Kolasib District and is in the Northern end of Mizoram. It is the only rail head available in Mizoram; hence the place develops rapidly and the town has great potential growth in Agriculture and small industries. The only Thermal Power generating station of 20MW is also installed in Bairabi. Due to the high price of fuel for the thermal plant, the plant is operated only at emergency. At Bairabi, there is 132kV switchyard adjoining the Thermal plant equipped with 2x15MVA 11/132KV step up transformer and 1x3MVA 132/33KV transformer. Power requirement at Bairabi and the surrounding area is fed from Bawktlang 132KV Sub-Station by 132kV S/C LINE (30.01 Km) to this 132kV Sub-Station. From

this Sub-Station, power flows at 33kV level to 33/11kV Bairabi Sub-Station at Bairabi town by 33kV line (pole type) of 2.2Km. which is 1MW load. From the 33kV Sub-Station at Bairabi town, another 33kV line of 38Km feed Zamuang 33kV Sub-Station which is 1.75MW load.

Mamit, the district headquarter of Mamit district is situated on a hill top between Tut and Teirei rivers having a population of 7876 in 2011 census. The town was electrified by connecting it to the 33/11kV Sairang Sub-Station around 100Km away by extending 11kV line on steel tabular poles from Dapchhuah village. Later with the commissioning of 33/11kV Sub-Station at W. Phaileng, a 36Kms 33kV line was constructed on steel tabular poles through dense forest connecting 33/11kV 2.5MVA Mamit Sub-Station to W. Phaileng which is taking care of the power requirement of this town. Being on the Fag-end of the line and since the main transformer at Luangmual is already overloaded, power supply to the town is always interrupted either by load shedding or by snapping of conductors by falling trees and quality power supply is still a distant dream to the consumers in this area.

With all the development activities brewing up in the town and in the district as a whole, lack of reliable and quality power supply is the major deterrent for development. To overcome the limitations and difficulties in providing reliable and adequate power supply to the district which is having a restricted peak demand of 1.5 MW and which is expected to increase, it is felt that a new 132kv line has to be constructed to draw power from Bairabi from the 132kV Sub-Station at Bairabi by upgrading the transformation capacity at Bairabi Sub-Station which will avert all determinants in providing reliable power supply to the Mamit.

Further this line can be extended to **W. Phaileng** which is located within Mamit District and is 48Km (road distance) from Mamit town. It is Rural Development Centre with 21173 population within the Block in 2011 census, with a load demand of 1.2 MW. W. Phaileng is receiving power at 33KV from 132KV Sub-Station Luangmual(Aizawl) through 132KV line, which was constructed in November, 1995. And Mamit town is presently receiving power from 33/11KV Sub-Station at W.Phaileng through Pole type 33KV line (36Km) which is un-reliable.

There is a Small Hydel Power Station namely – Teirei SHP having an installed Capacity of 3x1MW in the district and survey of Tut river for 20MW hydel power is underway. The power generated in the project is evacuated through a 33kV line to 33/11kV W. Phaileng Sub-Station. Being a new district, development works in the district are in full swing. The district is having eminent potential for Tourism and Industries based on Forest, Agriculture, Sericulture and Horticulture.

In view of the above, sanctioning of the project is to link Mamit and W.Phaileng from Bairabi(Thermal) 132 KV Sub-Station at 132KV level by constructing the following :-

		1) Additional 6.3 MVA,132/33KV Power Transformer with new Bay and additional one 33kV Bay at Bairabi 132/33kV Sub-Station. 2) 132KV S/C line on D/C lattice type tower – 74 Km which will be charge at 33kV with OPGW for ground wire. 3) 2 Nos. 33 KV bays at existing 33/11KV Sub-Station at Mamit. 4) 1 No. 33 KV bay at 33/11 KV Sub-Station W. Phaileng (Existing).
8	Key Intervention Made	Successful implementation of the project has catered to the need of the power demand for the consumers of two Districts, ie, Mamit and Kolasib. Apart from the two districts, people from the nearby districts are also benefitted as the project is mainly aimed for evacuation of power supply from the generation unit (Bairabi HEP) to various part of district of the State.
9	Outcome / Impact Achieved	Through this project, it provides quality and reliable and stable power supply not only to the population of two districts but also to other part of the district of the State.
10	Beneficiary Quote / Community Feedback, if any	The consumers are extremely grateful to the imitative taken up by the State Government and encouraged the State Govt to take up similar projects for the welfare and betterment of the people
11	Photographs / Media Links / Field Evidence, if any	 GPS Map Camera Mamit, Mizoram, India Unnamed Road, Mizoram 796441, India Lat 24.012222° Long 92.502592° 28/10/22 11:50 AM GMT +05:30 Google

		 The image shows a large, grey industrial transformer at a power plant. The transformer is mounted on a metal frame and has several high-voltage insulators on top. In the background, there are green hills and a clear blue sky. A Google Maps overlay is visible in the bottom right corner of the image, providing location details for Bairabi, Mizoram, India. Bairabi, Mizoram, India Thermal Power Plant, NH 154, Bairabi, Mizoram 788162, India Lat 24.199106° Long 92.543179° 28/10/22 02:06 PM GMT +05:30
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2. Name of the project: **Construction of 132kv S/C Transmission line on D/C Tower from Agia (Assam) to Nangalbibra, Meghalaya**

Sl. No.	Particulars	Details to be Filled by Ministry/Department
1	Name of Ministry / Department	MDoNER / NORTH EASTERN COUNCIL SECRETARIAT
2	Name of Scheme	Scheme of NEC.
3	DAPST Component / Intervention	<u>Construction of 132kv S/C Transmission line on D/C Tower from Agia (Assam) to Nangalbibra (Meghalaya):</u> Before sanctioning of the above project, the transmission line existing from Shillong to Nangalbibra was to cater demand of 20MW for Garo Hills along with an additional demand of 17.5MW for a major cement factory at Siju and other areas in Mendipathar. The load demand of the industrial growth centre was more than 10MW in the year 2000. Further, in the event of establishment of Garo Hills Thermal Power Station, this line can be used for evacuation of power from that project. Accordingly, construction of 132KV S/C transmission line on D/C towers from Nangalbibra to Agia was sanctioned by competent authority under NEC funding. This line can also be utilized for evacuating NTPC/ Eastern Region Power through Agia into the Meghalaya Grid to cater to the needs of the increasing demand in the order of 200/300 MW shortage caused by rapid Industrialization of the State of Meghalaya. This has resulted in a marked improvement in the overall operation of the North Eastern Grid and regulation of Power supply in the state
4	State / District / Location	Assam (Goalpara district / Agia) and Meghalaya (South Garo Hills / Nangalbibra) NBTL – Nangalbibra-Bongaigaon Transmission Line
5	Target Beneficiaries	ST
6	Number of ST Beneficiaries Covered	Entire population of Garo hills areas including bordering areas of Assam and Meghalaya
7	Brief Background / Problem Addressed	The brief detail of the project: 1. Project cost: Rs 43.32 crore (90% NEC share & 10% State share) 2. Date of sanction: 19-03-2007

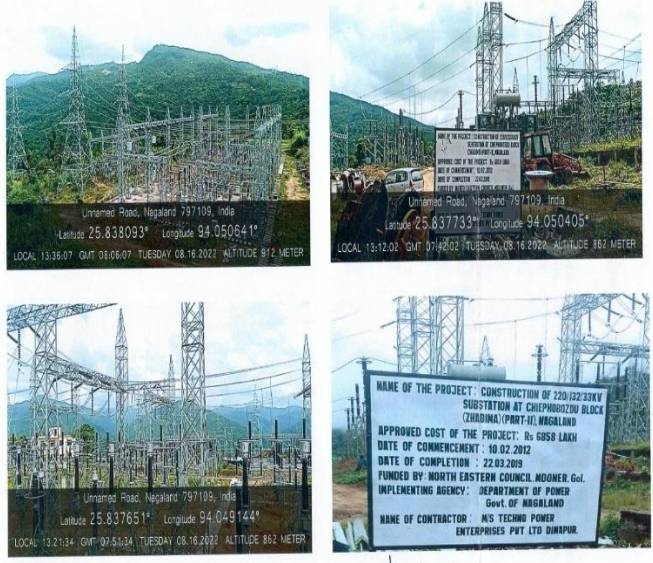
	3. Implementing Agency: Meghalaya Energy Corporation Ltd. Govt of Meghalaya. 4. Fund released by NEC: 38.99 crore 5. Date of completion: 01-08-2013 6. Brief write-up: The demand of electric power of the entire Garo Hills area and part of western Assam is met through a 132 KV S/C transmission line drawn from Shillong to Nangalbibra at Garo Hills. The existing line is passing through dense forest and hilly terrain. During monsoon, access to the transmission line becomes almost impossible. As a result, there are long duration interruptions of the transmission line in case of a fault especially in the Nongstoin – Nangalbibra section. Before sanctioning of the project, the existing transmission line from Shillong to Nangalbibra was to cater demand of 36 MW for Garo Hills as well as an additional demand of 17.50 MW for a major Cement Factory at Siju and an Industrial Growth Centre at Mendipathar. The load demand of the Industrial Growth Centre was around 15 MW in year 2000. As such, within a span of 2 to 3 years load demand of entire Garo Hills would be of the order of 70 MW. Further, with the coming up of the railway network and establishment of Thermal Power Station at Garo Hills area, there would be tremendous increase in industrial activity at the Garo Hills area. As a result, reliable and uninterrupted supply of power would be needed as major industries cannot afford to sustain frequent interruptions. Keeping these objectives in view it is proposed to have an alternate source of supply to Garo Hills area by interconnecting Nangalbibra Sub-Station of Meghalaya with Agia Sub-Station at Assam through a 132 KV single circuit transmission line on a double circuit tower. Agia Sub-Station at Assam is connected through a 220 KV D/C line with both Bongaigoan Thermal Power Station and Guwahati Sub-Station which is again interconnected to Umiam-Umtru Stage IV H.E. Project. As such, with the proposed arrangement, a reliable and almost uninterrupted transmission system can be ensured for Garo Hills area.
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		Further, in the event of establishment of Garo Hills Thermal Power Station, the above line can be used for evacuation of power from that project.
8	Key Intervention Made	Successful implementation of the project has catered to the need of the power demand by the industrialists as well as the consumers of the entire Garo Hills areas of Meghalaya.
9	Outcome / Impact Achieved	Through this project, it provides quality and reliable and stable power supply to the industrialists and consumers of the Garo Hills areas of Meghalaya.
10	Beneficiary Quote / Community Feedback, if any	The Industrialist and consumers are extremely grateful to the imitative taken up by the State Government and encouraged the State Govt to take up similar projects for the welfare and betterment of the people.
11	Photographs / Media Links / Field 3. Evidence, if any	

3. Name of the project: **Construction of 220/132/33kV Substation at Chiephobozou Block (Zhadima) (Part-II), Nagaland:**

Sl. No	Particulars	Details to be Filled by Ministry/Department
1	Name of Ministry / Department	MDoNER / NORTH EASTERN COUNCIL SECRETARIAT
2	Name of Scheme	Scheme of NEC
3	DAPST Component / Intervention	<u>Construction of 220/132/33kV Substation at Chiephobozou Block (Zhadima) (Part-II), Nagaland:</u> The project is to strengthen the grid

		connectivity of the State for stable and reliable power supply to the entire areas of the State of Nagaland.
4	State / District / Location	Nagaland / Kohima District / Chiephobozou Block (Zhadima)
5	Target Beneficiaries	ST
6	Number of ST Beneficiaries Covered	The project is benefitted for the entire part of the State as the substation acted as State Grid connectivity for power supply to other part of the State
7	Brief Background / Problem Addressed	The brief detail of the project: 1. Project Cost: Rs 68.58 crore (90% NEC Share & 10% State share) 2. Date of Sanction: 21-08-2012 3. Implementing Agency: Power Deptt., Govt of Nagaland 4. Fund released by NEC: Rs 61.72 crore 5. Date of Completion: 05-09-2023. 6. Brief Write-up: Power supply to the whole state of Nagaland is fed at 132kV from 100 MVA, 220/132kV PGCIL, Dimapur. The 132kV transmission line from this substation after feeding 132/66/33 kV substation at Nagarjan, Dimapur extends up to Kohima to feed the remaining parts of the state. This 132kV line between Dimapur and Kohima constructed way back in the seventies has outlived its active service life leading to frequent breakdown of power supply to the state including the state capital. There is no alternative EHV line and in the event of natural calamity like land slide, the state will experience total blackout except Dimapur. Again, some other Major identified Hydro potentials (like Tizu-Zungki and Dikhu) are located in Tuensang / Kiphire and Phek Districts. With these generating stations coming in stream, a substation at Chiephobozou which is strategically located would ideally facilitate evacuation of power to high centres of Dimapur, Kohima and Mokokchung. The substation and transmission line can be also used for injecting surplus power to the grid through PGCIL substation Dimapur. Considering the above reasons, 100 MVA, 220/132/33kV Substation at Chiephobozou along 220 kV D/C transmission line from PGCIL substation, Dimapur to Chiephobozou (Zhadima) was sanctioned by the competent authority under NEC funding.
8	Key Intervention Made	Successful implementation of the project has catered to the need of the power demand for the entire part of the State. This substation acts also as state grid connectivity to augment intra-state transmission capacity and establish a robust link to the NE Grid.
9	Outcome / Impact Achieved	Through this project, the state has experienced substantially improved voltage profiles, reduced transmission and distribution

		losses and ensured reliable 24/7 power availability for successfully evacuated power from upcoming regional hydro projects.
10	Beneficiary Quote / Community Feedback, if any	The entire consumers of the State are extremely grateful to the imitative taken up by the State Government and encouraged the State Govt to take up similar projects for the welfare and betterment of the people.
11	Photographs / Media Links / Field Evidence, if any	Photographs of 220/132/33, 100MVA Sub-station at Chiephobozou Block (Zhadima)  Unnamed Road, Nagaland 797109, India Latitude 25.838093° Longitude 94.050641° LOCAL 13:36:07 GMT 08:06:07 TUESDAY 08.16.2022 ALTITUDE 862 METER Unnamed Road, Nagaland 797109, India Latitude 25.837733° Longitude 94.050405° LOCAL 13:12:02 GMT 07:42:02 TUESDAY 08.16.2022 ALTITUDE 862 METER Unnamed Road, Nagaland 797109, India Latitude 25.837651° Longitude 94.049144° LOCAL 13:21:34 GMT 07:51:34 TUESDAY 08.16.2022 ALTITUDE 862 METER NAME OF THE PROJECT : CONSTRUCTION OF 220/132/33KV SUBSTATION AT CHIEPHOBZOUB BLOCK (ZHADIMA) (PART-II), NAGALAND APPROVED COST OF THE PROJECT : Rs. 6950 LAKH DATE OF COMMENCEMENT : 10.02.2012 DATE OF COMPLETION : 22.03.2019 FUNDED BY: NORTH EASTERN COUNCIL, MOONER, Govt. of NAGALAND IMPLEMENTING AGENCY: DEPARTMENT OF POWER NAME OF CONTRACTOR : MS TECHN POWER ENTERPRISES PVT LTD DUMAPUR Chief Engineer (T&E) Department of Power Nagaland : Kohima