

**Brief report on progress of transmission works covered under North-eastern Region Power System Improvement Project (NERPSIP) in Meghalaya and Assam (site visit from 5.5.2017 to 10.5.2017)**

**A. Meghalaya**

- Date of visit: 5<sup>th</sup> to 6<sup>th</sup> May 2017.
- The details of packages are enclosed at Annexure-I.

Transmission and distribution works in Meghalaya covered under NERPSIP has been divided into 7 nos. packages consisting of Sub-stations packages(2nos), Transmission Lines packages(2nos) and Distribution Management System (3 nos.). All the packages have been awarded. The site visits of following transmission works was conducted along with Shri Vikram Chand, DGM(PGCIL) and Shri Vikas Chand, DM(PGCIL) who are supervising construction work in Meghalaya and brief detail of progress is as under;

**1. 220/132/33 KV New Shillong GIS:**

Work has been awarded to M/s Techno Electric Engineering Company Ltd, Kolkata. Land for Substation has been acquired by PGCIL and handed over to M/s Techno. The site office in the form of Portacabin has been established. Cement Container has been reached at site. The Contour Survey works has been completed and report submitted to PGCIL. The Soil Investigation works has been completed and report is yet to be submitted to PGCIL. M/s Techno advised to submit the soil investigation report within a week to PGCIL required for finalisation of foundation drawing, finalization of Finished Ground Level (FGL), boundary wall etc.

**2. 220 KV D/C Transmission Line from Killing to New Shillong via Mawangap S/s**

Work has been awarded to M/s USTL, Bhilai. Route alignment survey has been completed. Total length of line is 122 Km. To avoid the Right of Way (RoW) issues, habitations, Reserve Forests and shifting of earlier identified land location for proposed 220 KV New Shillong Substation, the route length has increased from earlier approved route length. It was noted that survey work for this transmission line was done 8 years back. The detailed survey for 220 kV line from New Shillong to Mawangap is under Progress.

**3. 220/132/33 KV Upgradation of Mawangap GIS:**

Work has been awarded to M/s Techno Electric Engineering Company Ltd, Kolkata. M/s Techno has established site office. The levelling of S/s land is under progress and rock is encountered during excavation to maintain FGL. The General Arrangement (GA) drawings is being submitted by M/s Techno Electric to PGCIL. Photograph of site is attached.

**4. 33/11 KV New Shillong Substation:**

Work has been awarded to M/s Necon Power & Infra Ltd, Guwahati. Site levelling is in progress. Boundary wall, Control Room building, Construction of Random Rubble Masonary (RRM) wall is under progress. Photograph of site is attached.

**5. 33/11 KV New Mawrenkneng Substation:**

Work has been awarded to M/s Necon Power & Infra Ltd, Guwahati. Site levelling is in progress. Construction of Boundary wall, Control Room building is under Progress. Photograph of site is attached.

**6. 132/33 KV Mynkre Substation:**

Work has been awarded to M/s Necon Power & Infra Ltd, Guwahati. Site levelling works is under progress. As per Contour Survey drawing, 2 nos levels have been approved and construction of Substation in two Levels (101.5 and 104) has been finalized. Boundary wall works is yet to start. Photograph of site is attached.

**7. LILO of MLHEP- Khelrihat 132 KV D/C Transmission Line at Mynkre:**

Work has been awarded to M/s Unique Structures, Bihilai. Preliminary survey for route alignment has been Completed. As the site falls under coal bearing area, MePTCL has requested for Soil investigations at all locations to form an opinion on extent of mining carried out underneath for safety of proposed line. PGCIL representative informed that existing MLHEP - Khelrihat 132 kV line belongs to MePTCL and modalities adopted by MePTCL while constructing their line, would be considered during construction of LILO line.

**8. 33/11 KV Rymbai Substation:**

Work has been awarded to M/s Necon Power & Infra Ltd, Guwahati. Site levelling has been completed. Construction of boundary wall and Control Room Building is under progress. Photograph of site is attached.

**9. 33/11 KV Byndihati Substation:**

Work has been awarded to M/s Necon Power & Infra Ltd, Guwahati. Site levelling has been done. Construction of Boundary wall and Control Room Building is under Progress. Photograph of site is attached.

On 5.5.2017 a meeting was taken up with Shri K N War, Chief Engineer, MePDCL along with other officials of MePDCL and PGCIL and issue of Gazette Notification for waiver of State entry tax was discussed. Due to non-issuance of waiver of entry tax, the contractors are facing problems in supplying the materials resulting hampering of construction progress. Chief Engineer, MePDCL assured that issue will be taken up with Govt of Meghalaya for its early resolve. Chief Engineer, MePDCL informed that under the scope of NERPSIP there is no provision of 11 KV outgoing feeder lines as a result the purpose for construction of New 33/11 KV Substations would be forfeited. Chief Engineer, MePDCL wanted to know about whether there is provision for inclusion of 11 KV out going from the all DMS Substations to be constructed under NERPSIP, Meghalaya. Deputy Director, CEA suggested issue may be raised during Steering Committee meeting, scheduled on 26<sup>th</sup> May 2017 at Gangtok. Chief Engineer, MePDCL was requested to extend all necessary assistance to PGCIL in completion of T&D project in Meghalaya.

**B. Assam:**

- Date of visit: From 8<sup>th</sup> May 2017 to 9<sup>th</sup> May 2017.
- The details of packages are enclosed at Annexure-II.

Transmission and distribution works in Assam covered under NERPSIP has been divided into 16 nos. packages consisting of Sub-stations packages(04 nos), Transmission Lines packages(06nos), Distribution Management System (04 nos.) and one pile foundation package. The SS and DMS packages have been awarded. The tower and pile foundation package are likely to be awarded by july2017. The site visits of following transmission works was conducted along with Shri J Bardhan, DGM(PGCIL) and Shri J Kakoti AGM(AEGCL) and Shri N Hazarika DM(AEGCL) who are supervising construction work in Assam and brief detail of progress is as under;

**1. 220/132kV Amingaon GIS**

Work has been awarded to M/s Techno Electric & Engineering Company Ltd. Kolkata. Land for substation has been acquired and handed over to M/s Techno. Contour survey is under progress. Photograph of site is attached.

**2. 132/33 KV Tangla Substation:**

Work has been awarded to M/s Necon Power & Infra Ltd. Third & final layer of soil filling and levelling is under progress. Boundary wall completed up to Plinth Beam level and brick work of boundary wall is under progress. Control Room PCC work is completed. RCC work (up to raft) is completed. Transit Camp PCC work is completed. Photograph of site is attached.

**3. 132/33 KV Tezpur Sub- Station:**

Work has been awarded to M/s Necon Power & Infra Ltd. Earth filling and site levelling upto 4<sup>th</sup> layer completed. Boundary wall PCC work is in progress. Control Room foundation work is in progress. Photograph of site is attached.

**4. 132/33 KV Teok Substation:**

Work has been awarded to M/s Necon Power & Infra Ltd. Earth filling and site levelling work up to 2<sup>nd</sup> layer completed. Construction of boundary wall is under progress. Control Room foundation work is under progress. Substation tower structure foundation is under progress. Photograph of site is attached.

**5. 33/11 KV Hatimurah Substation:**

Work has been awarded to M/s Necon Power & Infra Ltd. Site preparation and dressing completed. Boundary Wall footing excavation is in progress. Photograph of site is attached.

**6. 220/132/33 KV Samaguri Substation Bay Augmentation:**

Work has been awarded to M/s Necon Power & Infra Ltd. 2 Nos 50MVA 220/132kV Transformers would be replaced by New 3-phase 160 MVA 220/132kV transformers along with 220kV and 132kV bay equipment. As informed by AEGCL the

shutdown will be available from Oct-17 to April-18 for substation augmentation works. Augmentation work related to 50MVA 132/33kV transformer bay will be commenced after approval of foundation drawings.

On 10.5.2017 a meeting was taken up with Sh. Alarka Das, CGM (PP&D), APDCL, Sh. Pankaj Bhuyan, Director (PMU) APDCL, Sh. T.N.Sharma, GM (HQ) AEGCL, Sh T Mahanto, DGM(PMU) APDCL and Sh Jayanta Bardhan DGM(PGCIL) at AEGCL, Bijuli Bhawan, Paltanbazar Guwahati and following issues were discussed:

- i. Kamakhya GIS Extn: AEGCI has been informed to take up with GE regarding End Module details on immediate basis.
- ii. Shutdown schedule for augmentation works at 220kV Samaguri SS to be firmed up.
- iii. For resolving ROW issues representatives from AEGCL and APDCL to be identified for transmission and Distribution lines.
- iv. APDCL was informed to expedite 11kV Line Shifting at Hatimurah S/S.
- v. Land dispute for 33kV Dibrugarh S/S to be resolved on immediate basis by APDCL.
- vi. Demarcation for lands allocated for 33kV GIS S/S at Tarun Nagar & 33kV AIS Substation at Chabipool to be expedited by APDCL.

**Details of packages of NERPSIP in Meghalaya**

**Annexure -I**

S.no	Name of Package	Details of Package	Land Available	Location ( District)	Executing Agency
1	MEG SS 01	(i) New 132/33 KV Mynkre Sub-Station (AIS)	Available	East Jaintia Hills	M/s Necon Power & Infra Ltd , Guwahati
		(ii) New 132/33 KV Phulbari Sub-Station(AIS)	Available	West Garo Hills	
		(iii) 132 KV Bay Extension at Ampati-Existing Sub-Station	Available	West Garo Hills	
2	MEG SS 02	(i) New Shillong 220 /132/33 KV GIS Sub-Station.	Available	East Khasi Hills	M/s Techno Electric, Kolkata
		(ii) Mawangap Existing 220/132 KV GIS Upgradation	Available	East Khasi Hills	
		(iii) 220 KV AIS Bay Extension at Killing ( Byrnihat ) Sub-Station	Available	Ribhoi	
3	TW 01	(i) 220 KV D/C Transmission Line from Killing to New Shillong via Mawangap Sub-Station.		Ribhoi & East Khasi Hills	M/s Unique Structures, Bhillai
4	TW 02	(i) 132 KV D/c Transmission Line from Ampati to Phulbari		West Garo Hills	
		(ii) LILO of 132 KV D/C Transmission Line from MLHEP- Khelrihat at Mynkre		East Jaintia Hills	
5	DMS 01	(i) 33/11 KV Mynkre Substation (ii) 33/11 KV Rymbai Substation (iii) 33/11 KV Byndihati Substation (iv) 33/11 KV Latyrke Substation (v) 33 KV lines	Available	East Jaintia Hills	M/s Necon Power & Infra Ltd , Guwahati
6	DMS 02	(i) 33/11 KV Chibinang Substation (ii) 33/11 KV Rajabala Substation (iii) 33/11 KV Raksambre Substation (iv) Extension at Phulbari Substation (v) 33 KV Lines	Available , Except Land at Rajabala Sub-Station.	West Garo Hills	
7	DMS 03	(i) 33/11 KV Mawpat Substation (ii) 33/11 KV Mawkynrew Substation (iii) 33/11 KV New Shillong Substation (iv) 33/11 KV Mawrenkneng Substation (v) 33 KV Bay Extension & Augmentation at SE Falls (vi) 33 KV Bay Extension at Jongsha Existing Substations	Available	East Khasi Hills	

**Details of packages of NERPSIP in Assam**

**Annexure-II**

Sl no	Name of Package	Details of Package	Land Available	Location ( District)	Executing Agency
1	ASM SS01	132/33KV Silapathar (New) S/S	Available	Dhemaji	M/s Necon Power & Infra Ltd , Jorhat
		132/33 kV Tezpur (New) S/S	Available	SONITPUR	
		Extn. of 132 kV Dhemaji S/S	Available	Dhemaji	
		Extn. of 132 kV sonabali S/s	Available	Sonitpur	
		Augmentation of 220/132KV Samaguri S/S.	Available	Nagaon	
2	ASM SS02	220/132KV Behiating(New) S/S	Available	Dibrugarh	M/s Necon Power & Infra Ltd , Jorhat
		Extn of 220 kV Tinsukia S/S	Available	Tinsukia	
		132/33 kV Chapakhowa (New) S/S	Available	Tinsukia	
		132/33 kV Sarupathar (New) S/s	Available	Golaghat	
		132/33KV Teok (New) S/S	Available	Jorhat	
		Extn of 132/33 KV Rupai S/S.	Available	Tinsukia	
3	ASM SS03	Extn of 220 kV Rangia S/S	Available	Kamrup-Rural	M/s Necon Power & Infra Ltd , Jorhat
		132/33 kV Tangla (New) S/S	Available	Udalguri	
		132/33 kV Hazo (New) S/S	Available	Kamrup Rural	
		Extn. of 132 kV Kahalipara S/s	Available	Kamrup Metro	
		Augmentation of 132/33KV Dhaligaon S/S	Available	Bongaigaon	
4	ASM SS04	220/132/33 KV Amingaon (New) S/S	Available	Kamrup Rural	JV of Techno Electric & Engineering Company Ltd., Kolkata & Seiyuan, China
		132/33 kV Guwahati M.C. (New) S/S	Available	Kamrup Metro	
		132/33 kV Paltanbazar (new) S/S	Available	Kamrup Metro	
		Extn of 132 kV Kamakhya S/s	Available	Kamrup Metro	
5	ASM DMS01	33/11kV Silapathar-II (New)s/s	Available	Dhemaji	M/s Necon Power & Infra Ltd , Jorhat
		33/11kV Mailo(New)s/s	Available	Karbi Anglong	
		33/11kV LGM hospital(new) s/s	Available	Sonitpur	
		33/11kV Hathimurah-2 (New)s/s	Available	Nagoan	
		33/11kV Parowa existing SS	Available	Sonitpur	
		33/11kV Dolabari Existing s/s	Available	Sonitpur	
		Samaguri Existing 132/33kv S/s	Available	Nagoan	
		Existing Shankardeonagar 220/132/33 SS	Available	Nagaon	
		33/11kV Silapathar s/s	Available	Dhemaji	
		33 kV DMS lines - 119 km			
6	ASM DMS02	33/11kV Romai (New)s/s	Available	Tinsukia	M/s Sterling & Wilson Pvt. Ltd., Kolkata
		33/11kV Bogibil (New)s/s	Available	Tinsukia	
		33/11kV Dibrugarh (New)s/s	Available	Dinrugarh	
		Dibrugarh Existing 132/33kv S/s	Available	Dibrugarh	
		Chapakhowa Existing 33/11kV S/s	Available	Tinsukia	

		Barapathar Existing 33/11kV S/s	Available	Golaghat	
		Sarupathar Existing 33/11kV S/s	Available	Golaghta	
		Sariajhan Existing 33/11kV S/s	Available	Golaghta	
		Teok Existing 33/11kV S/s	Available	Jorhat	
		Kakojaan Existing 33/11kV S/s	Available	Jorhat	
		Zangi Existing 33/11kV S/s	Available	Jorhat	
		Pragati Existing 33/11kV S/s	Available	Jorhat	
		33 kV DMS lines - 146 km			
7	ASM DMS0 3	33/11kV Harsingha (New)s/s	Available	Harisinga , Dist. : Udalguri	M/s Sterling & Wilson Pvt. Ltd., Kolkata
		33/11kV Sesa (New)s/s	Available	Kamrup Rural	
		33/11kV Ramdiya (New)s/s	Available	Kamrup Rural	
		33/11kV Domdoma-Hazo (New)s/s	Available	Kamrup Rural	
		33/11kV Chabipool -(New) s/s	Available		
		Paneri Existing 33/11kV S/s	Available	Paneri, Dist. : Udalguri	
		Kalaigaon Existing 33/11kV S/s	Available	Kalaigaon , Dist. : Udalguri	
		Khairabari Existing 33/11kV S/s	Available	Khoirabari, Dist. : Udalguri	
		Tangla Existing 33/11kV S/s	Available	Tangla, Dist. : Udalguri	
		33/11kV Mukalmuwa existing s/s	Available		
		Existing 33/11kV Paltan bazaar S/s	Available		
		Existing 33/11kV Judges field S/s	Available		
		Existing 33/11kV Jail(Fancy bazaar) S/s	Available	Kamrup Metro	
		Existing 33/11kV Ullubari S/s	Available	Kamrup Metro	
		33 kV DMS lines - 134 km			
8	ASM DMS0 4	33/11kV GS Road -(New) GIS s/s	Available	Kamrup Metro	M/s Necon Power & Infra Ltd , Jorhat
		33/11kV GMC-2 -(New) GIS s/s	Available	--do--	
		33/11kV Tarun Nagar -(New) GIS s/s	Available	--do--	
		33/11kV Arya College (New) GIS s/s	Available	--do--	
		Bay addition at Existing GMC S/s	Available	--do--	
		Bay addition at Existing Ullubari S/s	Available	--do--	
		33 kV DMS lines - 80 km		--do--	
9	ASM TR01	Transformer Package (ASM-TF-01) i) 2x160MVA, 220/132KV 3-Ph Auto T/F at Amingaon (New) GIS (ii) 2x160MVA, 220/132KV 3-Ph Auto T/F at Samaguri S/S (Aug) (iii) 2x100MVA, 220/132KV 3-Ph Auto T/F at Behiating (New) S/S (iv) 2x50MVA, 132/33KV 3-Ph Power T/F at Dhaligaon S/S (Aug) (v) 2x50MVA, 132/33KV 3-Ph Power T/F at GMC S/S (New GIS) (vi) 2x50MVA, 132/33KV 3-Ph Power T/F at Paltanbazar S/S (New GIS) (vii) 2x50MVA, 132/33KV 3-Ph Power T/F at Tezpur S/S (New)			M/s Transformers & Rectifiers Ltd.,

		(viii) 1x50MVA, 132/33KV 3-Ph Power T/F at Samaguri S/S (Aug) (ix) 2x31.5MVA, 132/33KV 3-Ph Power T/F at Hazo S/S (New) (x) 2x31.5MVA, 132/33KV 3-Ph Power T/F at Tangla S/S (New) (xi) 2x31.5MVA, 132/33KV 3-Ph Power T/F at Silapathar S/S (New) (xii) 2x31.5MVA, 132/33KV 3-Ph Power T/F at Teok S/S (New) (xiii) 2x31.5 MVA, 132/33KV 3-Ph Power T/F at Sarupathar S/S (New) (xiv) 4x8.33MVA, 132/33KV 1-Ph Power T/F at Chapakhowa S/S (New)			
10	ASM TW01	220 kV D/C Rangia-Amingaon			Yet to be awarded
11	ASM TW02	220 kV D/C Tinsukia-Behiating			Yet to be awarded
12	ASM TW03	132 kV D/C Kahilipara-Guwahati Medical College TL			Yet to be awarded
		132 kV D/C Amingaon-Hazo TL			
		LILO of 132 kV S/C Rangia-Rowta TL			
		LILO of 132 kV S/C Kamalpur-Sishugram at Amingaon			
		LILO of 132 kV S/C Kamalpur-Khamakhya at Amingaon			
		OPGW Live Line Stringing for 1. 132kV S/C Rangia-Rowta TL 2. 132kV S/C Rangia-Shishugram TL 3. 132kV Shishugram-Kahilipara TL			
13	ASM TW04	132 kV S/C (ON D/C TOWER) Dhemaji-Silapathar TL			Yet to be awarded
		OPGW Live Line stringing for 1.132kV S/C Dhemaji- N.Lakhimpur TL 2. 132kV S/C N.Lahimpur –Gohpur TL			
14	ASM TW05	132 kV S/C (ON D/C TOWER) Rupai-Chapakhowa TL			Yet to be awarded
15	ASM TW06	LILO of 132 kV S/C GOLAGHAT-BOKAJAN at Sarupathar			Yet to be awarded
		132 kV D/C Sonabil-Tezpur TL			
		LILO of 132 kV S/C JORHAT-NAZIRA AT TEOK			
16	ASM P01	Pile Foundation Package (PI01) of RC locations of TW01 & TW02			Yet to be awarded

Boundary Wall construction at New Shillong DMS



Control Room 132kv Tangla SS



Boundary Wall 132kV Tangla SS



Control Room RCC Footing 132kv Tezpur SS



132kV Teok S/S



Upgradation of 220/132kV Mawangap SS

Augmentation of 220/132 kV Samağuri SS



33/11 kV Hathimurah-II SS

220/132/33 kv Amingaon SS



33/11 kv Mynkre SS