

North Eastern Regional Power Committee

Agenda For

134th OCC Sub-Committee Meeting

Time of meeting : 10:00 Hrs.

Date of meeting : 28th July, 2017 (Friday)

Venue : "Hotel Nandan", Guwahati.

A. CONFIRMATION OF MINUTES

CONFIRMATION OF MINUTES OF 133rd MEETING OF OPERATION SUB-COMMITTEE OF NERPC.

The minutes of 133rd meeting of Operation Sub-committee held on 8th June, 2017 at Guwahati were circulated vide letter No. NERPC/SE (O)/OCC/2016/4556-4591 dated 16th June, 2017.

The Sub-committee may confirm the minutes of 133rd OCCM of NERPC as no comments/observations were received from the constituents.

ITEMS FOR DISCUSSION

B.1. ACTION TAKEN:

1. IMPLEMENTATION OF PROJECTS FUNDED FROM PSDF:

The status as informed in 133rd OCC:

State	Protection System	ADMS	CAPACITOR INSTALLATION
Arunachal Pradesh	-	-	-
Nagaland	-	Under process of approval.	Under process of approval. To submit undertaking and other required documents.
Mizoram	By June'17 all LOAs would be issued.	Under process of approval.	Under process of approval. To submit clarification.
Manipur	By June'17 all LOAs would be issued.	Under process of approval. To submit clarification.	To submit pilot scheme DPR
Tripura	All LOAs issued. Target for work completion March'2018.	DPR will be submitted by July'17 to CEA & NLDC	Under Study stage**

Agenda for 134th OCC Meeting to be held on 28th July, 2017

Assam	By June'17 all LOAs would be issued.	DPR submitted. Under process of approval.	-
Meghalaya	MePTCL – All LOAs will be completed by June, 2017. MePGCI – by June, 2017 all LOAs	DPR will be submitted by July'17 to CEA & NLDC	DPR to be prepared.

The status of implementation of the above schemes (physical as well as financial progress) may please be reviewed and the entities are requested to expedite implementation of the schemes. The entities may also be advised to furnish status as per format by first week of every month on regular basis to Member Convener, PSDF Project Monitoring Group (AGM, NLDC, POSOCO) with a copy to NPC & NERPC.

States may please intimate the latest status.

2. Long Outage of Important Grid Elements:

Name of the Element	Name of Utility	Status as informed in 133rd OCC	Latest status
63MVAR Reactor at Byrnihat to replaced with 80MVAR Reactor	MePTCL	EE, MePTCL informed that budgetary offer has been received and is under evaluation.	
400KV 80MVAR Bus Reactor at Palatana	OTPC	04 Nos bushing to be replaced. Work would be completed by OTPC itself. Tentative completion 31.10.2017.	
63 Mvar Line Reactor of 400 kV Balipara - Bongaigaon III line at Bongaigaon	NERTS	Within 15.06.17.	
220 kV, 1x31.5 Mvar Bus Reactor at Mokokchung (PG).	NERTS	December'17	
132 KV Durllavcherra-Dharmanagar	AEGCL	-	
132 kV Jiribam - Rengpang S/C	MSPCL	-	
132 kV Mariani (AEGCL) - Mokokchung	DoP Nagaland & AEGCL	-	

Agenda for 134th OCC Meeting to be held on 28th July, 2017

(DoP, Nagaland) S/C			
132 kV P K Bari - Silchar II	TSECL	-	
132 kV Dimapur - Dimapur I	DoP Nagaland	-	
132 kV Hailakandi - Dullavcherra	AEGCL &TSECL	-	

Utilities may please intimate the latest status.

3. Furnishing of various data for reliable grid operation:

Data regarding	Utilities non-submission/compliance	
	As of 133 rd OCC	As of 134 th OCC
UFR Operation Report	All SLDCs except Meghalaya & Nagaland upto May'17	
Reporting of Commissioned Elements for Tarang App	All SLDCs except Manipur & Nagaland	
DAS output for FRC calculation	OTPC, NTPC, NEEPCO, NHPC	
Questionnaire of Working Group on Hydro(FOLD)	P&ED Mizoram	
Report on VDI/FDI	All SLDCs except Assam, Meghalaya.	
DG healthiness report	NERTS, NTPC, OTPC, Ar. Pradesh, AEGCL, MSPCL, MePTCL, Mizoram, Nagaland, TSECL. Revised format to be circulated by NERLDC.	
Auxiliary Supply details	NERTS, NTPC, OTPC, Ar. Pradesh, AEGCL, MSPCL, Mizoram, Nagaland, TSECL. Revised format to be circulated by NERLDC.	
Technical & Commercial data for PoC (Q3 2017-18)	Due date for submission of Q3 data is 21.06.2017.	
Daily Operational Data	-	

Date & Time of event	Brief description	Name of ISGS	Whether data submitted
On 21.02.17 at 15:59Hrs	900 MW generation loss due to tripping of Klaisindh units-1,2	Palatana,BgTPP, AGTCCPP Extn,Ranganadi	NO

Agenda for 134th OCC Meeting to be held on 28th July, 2017

On 05.02.17 at 12:24Hrs	765kV Mainpuri-Bara tripped alongwith both running units of Bara TPS. Generation loss=1100MW	Palatana,BgTPP, AGTCCPP Extn,Ranganadi	NO
On 28.04.17 at 19:10 Hrs	GD-IV load loss = 689MW generation loss= 845MW	Palatana,BgTPP, AGTCCPP Extn,Ranganadi	NO
<i>AGTCCPP, AGBPP, Khandong, Kopili, Doyang and Loktak may please intimate their DAS implementation schedule.</i>			

NERLDC has informed that P&ED Mizoram are yet to submit the questionnaire. NERLDC has also requested that Water level, inflow details, discharge quantity & Number of Gate opening (in case of spillage) of Hydro Plants be recorded on a 12 hour basis (2 entries in a day) and to be submitted to NERPC & NERLDC on a monthly basis for proper operational planning.

NERPC/NERLDC may please inform the status.

B.2. OPERATIONAL PERFORMANCE AND GRID DISCIPLINE DURING JUNE, 2017

As per the data made available by NERLDC, the grid performance parameters for June, 2017 are given below:

NER PERFORMANCE DURING JUNE, 2017

States	Energy Met (MU)		w.r.t. May,17 % inc (+) /dec (-)	Energy Reqr. (MU)		w.r.t. May,17 % inc (+) /dec (-)	% inc (+) /dec (-) of energy reqr vs met. In June,17
	June-17	May-17		June-17	May-17		
Ar. Pradesh	56.26	61.01	-7.79	57.36	62.19	-7.77	-1.92
Assam	789.75	723.12	9.21	823.36	765.00	7.63	-4.08
Manipur	59.67	72.13	-17.27	60.95	73.29	-16.84	-2.10
Meghalaya	154.15	136.77	12.71	154.15	136.77	12.71	0.00
Mizoram	37.09	42.30	-12.32	38.13	43.16	-11.65	-2.73
Nagaland	58.30	63.70	-8.48	59.39	64.75	-8.28	-1.84
Tripura	111.51	120.73	-7.64	114.51	124.52	-8.04	-2.62
Region	1266.74	1219.76	3.85	1307.85	1269.69	3.01	-3.14

States	Demand Met (MW)		w.r.t. May,17 % inc (+) /dec (-)	Demand in (MW)		w.r.t. May,17 % inc (+) /dec (-)	% inc (+) /dec (-) of Demand vs met. In June,17
	June-17	May-17		June-17	May-17		

Agenda for 134th OCC Meeting to be held on 28th July, 2017

Ar. Pradesh	123	145	-15.17	124	145	-14.48	-0.81
Assam	1623	1580	2.72	1744	1649	5.76	-6.94
Manipur	155	161	-3.73	156	163	-4.29	-0.64
Meghalaya	272	304	-10.53	272	304	-10.53	0.00
Mizoram	77	85	-9.41	82	86	-4.65	-6.10
Nagaland	146	131	11.45	147	132	11.36	-0.68
Tripura	268	276	-2.90	268	280	-4.29	0.00
Region	2387	2391	-0.17	2499	2472	1.09	-4.48

REGIONAL GENERATION & INTER-REGIONAL EXCHANGE IN MU

AVERAGE FREQUENCY (Hz)

Month---->	June-17	May-17
Total Generation in NER (Gross)	1453.218	1111.858
Total Central Sector Generation (Gross)	1032.192	873.920
Total State Sector Generation (Gross)	421.026	295.716
Inter-Regional Energy Exchange		
(a) NER-ER	6.362	42.45
(b) ER-NER	352.192	242.07
(c)NER-NR	375.306	102.02
(d)NR-NER	14.197	92.30
© Net Import	-15.279	189.90

Month---->	May-17	May-17
	% of Time	% of Time
Below 49.9 Hz	5.94	5.05
Between 49.9 to 50.05 Hz	73.13	72.20
Above 50.05 Hz	17.59	22.75
Average	48.33	49.99
Maximum	50.24	50.27
Minimum	49.72	49.85

D. NEW ITEMS

D.1 Generation Planning (ongoing and planned outages)

NEEPCO & NHPC may kindly intimate the availability for hydro stations:

Generating Station	Units running	MW	MU	Reservoir
Khandong				
Kopili				
Kopili-II				
Ranganadi				Subject to inflow
Doyang				
Loktak				
AGBPP	-	-	-	-
AGTPP	-	-	-	-

The outage of other generating stations may be approved considering the present water levels in reservoirs.

The Committee may discuss and approve the proposed shutdown by Generating Stations as given in Annexure – D.2 below.

D.2 Outage Planning Transmission elements

It was agreed in the 99th OCC meeting that shutdown will be availed only after approval is given by the OCC forum. It was also agreed that deferment/revision of outages elements other than already approved in OCC will be henceforth put/displayed in the website of NERPC (**under Operational Activities/OCC Approved shutdown**) as per CERC regulations/ CEA guidelines etc for ensuring smooth & secure grid operation.

Furnishing request of shut down of the element, which was approved by NERPC, by Indenting Agency (ISTS licensees/STUs/Generating Companies) to NERLDC: Planned shutdown approved by NERPC shall be considered for implementation by NERLDC on D-3 basis. If an outage is to be availed on say 10th of the month, the shutdown availing agency would reconfirm to NERLDC on 7th of the month by 10:00 Hr. This practice is necessary to ensure optimal capacity utilization and the time required for associated system study/coordination by/amongst RLDC/NLDC.

In 124th OCCM, SE(C&O) strongly opined that constituents should inform to NERPC/NERLDC in case shutdown is not avail as approved in the OCC meeting and should mention clearly the reason for not availing the shutdown. The full list of shutdown would be placed in the next OCC by NERLDC so that proper record can be made in future for generating units as well as transmission lines. All constituents endorsed the view of SE(C&O).

In 130th OCCM, Member Secretary opined strongly about non commitments of earlier decision by the constituents and stated that all proposed plan shutdowns and agenda for the next OCC meeting should be sent to NERPC Secretariat latest by 5th day of next month. He directed SE(C&O) that the decision should be strictly adhere to and no shutdowns or agenda will be entertained after that stipulated date.

The sub-Committee may kindly discuss and approve the transmission line outages proposed by Constituents for July, 2017 - August, 2017 at Annexure-D.2., which is available in the website of NERPC.

D.3 Estimated Transmission Availability Certificate (TAC) for the month of March, 2017& April, 2017:

NETC and POWERGRID have submitted the outage data for the month of March 2017 & April 2017. So the attributability of outage of the said elements may please be finalized.

Members may please discuss.

D.4 Assessment of Total Transfer Capability (TTC), Transmission Reliability Margin (TRM) and Available Transfer Capability (ATC) by SLDC on respective Inter-State Transmission Corridor

Updated PSS/E Base Cases have been **mailed to all the SLDCs on 02.07.17**. All SLDCs are requested to assess the Total Transfer Capability (TTC), Transmission Reliability Margin (TRM) and Available Transfer Capability (ATC) for the month of Aug'17 using these cases, and submit the study cases and results to NERLDC by **25.07.17**.

NERLDC has assessed the state control area wise, state subsystem wise and group of control-area wise TTCs for NER Grid, on behalf of SLDCs of NER. The study results conducted by NERLDC **mailed to all SLDCs on 14.07.17**. SLDCs are requested to check the TTC of their control areas as computed by NERLDC and **give comments, if any, by 25.07.17**. The TTC figures for Aug'17 are as follows:

Name of States	Off Peak TTC in MW		Peak TTC in MW	
	N-0	N-1	N-0	N-1
Arunachal Pradesh	192	187	188	186
Assam	1567	1462	1514	1420
Manipur	324	260	322	250
Meghalaya	277	227	296	246
Mizoram	126	116	126	119
Nagaland	168	68	161	67
Tripura	294	170	296	196

If no comments received from any SLDCs of NER, TTC, ATC & TRM figures of State control area and group of control areas as assessed by NERLDC will be considered as final and may be uploaded on website.

As per discussions in 122nd OCC meeting of NERPC, all SLDCs of NER may host the assessed TTC / ATC / TRM figures on their website for information dissemination.

Members may discuss.

D.5 Transformer Tap optimization

System study was conducted by NERLDC considering load, generation and network pattern of May, 2017 during Peak & Off Peak periods. Suggested taps position of important transformers in NER for maintaining bus voltages within permissible limit as well as to minimize system losses are attached at Annexure D.21.

In 132nd OCC, NERLDC informed that system study was conducted based on May, 2017 Off Peak & Peak Base Cases and suggested Tap position were given in the report. NERLDC requested all the utilities to go through the report and take necessary actions.

DGM(AM),NERTS informed that changing tap positions in peak and off-peak period is a tedious job and should be avoided as far as possible.

NERLDC informed that system study conducted based on May, 2017 Off Peak & Peak Base Cases indicated high voltage (431 kV) at Byrnihat with present tap setting (D-9). After detailed deliberation it was decided to change the tap position to D-4 for 400/220kV 2x315MVA ICT at Byrnihat as a one-time measure.

MeECL may please intimate the status.

D.6. Status of Implementation of SAMAST:

DGM(MO), NERLDC made a presentation on SAMAST which means SCHEDULING (S), ACCOUNTING(A), METERING(M), AND (A), SETTLEMENT OF (S) TRANSACTIONS (T) IN ELECTRICITY.

He intimated that Forum of Regulators Technical Committee is regularly following-up the status of implementation of SAMAST in all States across the Country. The implementation would include Metering at intra-State level, AMR scheme to fetch data to SLDC, intra-State scheduling, Open Access web portal, Accounting, Settlement system etc. This would pave way for intra-State ABT implementation. He advised the States to proceed with the activities as listed in SAMAST report (highlighted in ppt) and apply for PSDF funding.

Assam, Tripura and Meghalaya expressed interest in the project. It was clarified that NERPC and NERLDC would provide support to the States on this.

AEGCL, TSECL, MeECL may please intimate the status.

AGENDA ITEM FROM NETC:

D.7. DIVERSION OF 400 KV D/C SILCHAR-BYRNIHAT-AZARA TRANSMISSION LINE BETWEEN LOCATION NO. 573 TO 580 (2.33 KM) TO FACILITATE CONSTRUCTION OF TETELIA - BYRNIHAT RAILWAY LINE OF NORTHEAST FRONTIER RAILWAY (NFR):

The 400 kV D/C Silchar – Byrnihat-Azara line is the part of 400 kV Palatana Transmission System owned by NETC presently being maintained by PGCIL. Silchar – Byrnihat Ckt & Silchar – Azara Ckt of the said line were commissioned on 01.03.2013 and on 27.07.2014 respectively.

However, now to facilitate construction of Tetelia – Byrnihat Railway line of NFR, a section of the line to the tune of 2.33km involving 6 (six) tower locations is to be diverted through a new alignment. During construction of the line in the year 2012, NFR had claimed that both the line and Railway corridor in this section are overlapping each other and hence the line is to be shifted prior to the construction of the Railway line. The permission for possession of land was granted to NFR as per notification u/s 4 (1) in July 2010 by Addl. Dy. Commissioner, Kamrup (Metro), Guwahati.

NETC in the capacity of transmission systems developer finalized the route alignment during 2005-06 after obtaining necessary approvals such as section 68 & section 164 under Electricity Act 2003. Though it was not mandatory, NETC obtained approval from Revenue Authorities of Sonapur during December 2010 much before taking up the construction activity in the Tetelia-Byrnihat section by NFR and completed the work by April 2012.

Agenda for 134th OCC Meeting to be held on 28th July, 2017

Since then, series of meetings were held between NETC & NFR in presence of representative of Govt. of Assam. But till August'2016, no conclusion could be arrived with regard to which party (NETC/NFR) would bear the expenses of the said diversion. Finally, in the meeting convened by Special Secretary (Power) GoI on 26.09.2016, NETC had issued the letter of acceptance for diversion of the line as per their directive. Accordingly, NETC has placed the LOA for diversion of the line with a target to complete by December 2017. On behalf of NETC, PGCIL is executing the job under Project Management Consultancy (PMC). The total cost of this diversion work will be around Rs. 14.0 Cr.

NETC propose for booking of this expenditure under PoC Mechanism as the line has to be diverted in the interest of the Nation, in general and for the State of Meghalaya in particular.

NETC may please deliberate.

AGENDA ITEM FROM NERPC:

D.8. Low gas pressure in Stage-2 of 400/220kV Byrnihat S/Sn:

In Special Meeting held on 23.06.17 DGM(AM), NERTS informed that upon visit by NERTS officials to 400/220kV Byrnihat S/Sn it has been found that Stage 2 gas pressure is low and susceptible to direct trip without sounding alarm. The forum requested MeECL to investigate and revert back at the earliest.

MeECL may please intimate the status.

D.9. Connectivity to Namsai Node:

The 6th NETeST Forum opined that there is requirement of one ISTS transmission line 132kV Tinsukia to Namsai(PG) keeping in view optical grid connectivity and back up connectivity of power requirement of Arunachal Pradesh. Forum opined the technical study may be done by NERLDC and same may be put up as an agenda in OCC forum.

Members may please discuss.

AGENDA ITEM FROM NERTS:

D.10. Commercial operation of 132kV Passighat – Roing – Tezu

Subsequent to 24 Hours successful trial operation, following elements are put in service for commercial operation:

1. 132kV Passighat – Roing Line w.e.f. 12.06.2017
2. 132kV Roing – Tezu Line w.e.f. 12.06.2017
3. 15MVA, 132/33kV ICT – 1 at Roing w.e.f. 12.06.2017
4. 15MVA, 132/33kV ICT – 2 at Roing w.e.f. 12.06.2017
5. 20MVAR, 145kV Bus Reactor at Roing w.e.f. 12.06.2017
6. 20MVAR, 145kV Bus Reactor at Tezu w.e.f. 14.06.2017

Further, successful test charging and trial operation of following elements also carried out but load flow could not be done due to non-readiness of 33kV downstream by DoP, AP

7. 15MVA, 132/33kV ICT – 1 at Tezu on 11.06.2017
8. 15MVA, 132/33kV ICT – 2 at Tezu on 11.06.2017

This is for information and record.

D.11. Construction of dedicated 33KV line along with bay at 220KV Mariani (AEGCL) Substation for providing auxiliary power supply to POWERGRID, Mariani (New) Substation:

220KV Mariani(New) Substation owned by POWERGRID was commissioned in March'2013 & is a critical substation for evacuation of Kathalguri generation as well as feeding power to Nagaland. Further, the substation is shall be upgraded to 400KV voltage level under NERSS Project shortly. Availability of reliable auxiliary power supply for the station is of utmost importance not only for catering to requirement of the substation (including switchyard & colony) but also for maintaining a healthy protection system.

Accordingly, for facilitating provision of reliable auxiliary power, the work for construction of a 33KV dedicated feeder from Mariani(AEGCL) Substation to POWERGRID Mariani(New) Substation including one 33 KV Bay at Mariani (AEGCL) end was entrusted to AEGCL on deposit work basis. The requisite amount of Rs. 1 Crore for the said work too was deposited to AEGCL in January'2014.

As on date, construction of the 33KV feeder has been completed by AEGCL. However, the 33KV Bay at Mariani (AEGCL) end is yet to be completed despite passage of more than 3 years from the date of deposition of fund, owing to which it has not been possible to draw auxiliary power through the dedicated feeder till date. As a result of this inordinate delay in completion of works related to the dedicated 33KV feeder, POWERGRID Mariani Substation is facing serious crisis on account of unavailability of reliable auxiliary power in the station. The existing 11KV feeder connected to the station (non-dedicated) too is unreliable since frequent interruption (15 to 20 times a day) is experienced. The matter has been taken up with AEGCL through various correspondences (copies enclosed).

AEGCL is therefore requested to expedite completion of the balance works related to the aforesaid 33KV dedicated feeder on priority so that reliable auxiliary power is made available to the Mariani (new) substation without any further delay.

AEGCL may kindly provide the completion schedule for the above 33KV dedicated feeder.

NERTS may please deliberate.

D.12. Diversion of 132KV Nirjuli-Ranganadi (Nirjuli-Lekhi section) as per requirement of NF Railways.

Diversion of the 132KV Nirjuli-Ranganadi (Nirjuli-Lekhi section comprising of the section from tower loc.134 to loc.23) has been taken up by POWERGRID as per requirement of NF Railways. On completion of the instant re-alignment work, the existing towers in the old route including tower No. 11, from which LILO section connecting 132KV Lekhi Substation of DoP, AP emanates, shall have to be abandoned & dismantled.

Since, with completion of the diversion work, the existing LILO line connecting 132KV Lekhi Substation (DoP, AP) shall get affected, therefore the matter was discussed on earlier occasions in OCC Forum wherein it was deliberated that DoP, AP too shall complete re-alignment/ modification of their LILO line so as to maintain connectivity with Nirjuli & Ranganadi.

The work of diversion of 132KV Nirjuli-Ranganadi line (by POWERGRID) is presently in advanced stage of completion & is expected to be completed by September-2017. DoP, AP is requested to intimate the present status of work pertaining to shifting of the LILO portion for maintaining the connectivity.

NERTS may please deliberate.

D.13. Requirement of Protection Wall at POWERGRID Ziro Substation on account of Severe Landslide & resultant damage on 10.07.2017:

Severe landslide has taken place within the periphery of 132KV Ziro substation on 10.07.2017 in the aftermath of torrential rain in recent times. As a result, part of the boundary wall (27 m approx.) & 2 No. 33 KV Bays have been substantially damaged. Temporary protection for averting further sliding is meanwhile being provided.



Therefore, as a long term protection measure against landslide, POWERGRID shall provide suitable protection wall at identified stretches of the station. The agenda is placed for information of the forum.

NERTS may please deliberate.

D.14. Restoration of 400KV D/C Silchar-PK Bari TL (charged at 132KV) subsequent to collapse of towers:

The 400KV D/C Silchar-PK Bari TL (charged at 132KV) underwent breakdown on 02.04.2017 on account of collapse of tower at loc. 124,125, 126, 137, 138 & 139 in Karimganj District, Assam in the aftermath of severe cyclone.

Subsequently, one of the circuits (Ckt#1) of the line was temporarily restored through ERS on 07.05.2017.

Meanwhile, permanent restoration of the line too has commenced on war footing. However, the work has been hampered due to continuous rain & resultant flood at entire work site in recent times.

It may also be mentioned that presently the entire work site/adjoining area is in completely inundated condition, posing threat to stability of the temporarily erected

Agenda for 134th OCC Meeting to be held on 28th July, 2017

ERS towers. In the event of failure of ERS tower during such flooded condition, extensive damage to life & property in the entire area due to electrocution is apprehended. Hence, considering such safety hazard, the line (temporarily charged through ERS) has been disconnected on 10.07.2017. The line shall once again be put in service on recession in water level in the adjoining area.



Further, the job of permanent restoration of the line section, which too has been badly affected due to on-going flood, shall be commenced & completed within an estimated timeframe of two months after recession in flood at work site.

This is for information please.

AGENDA ITEM FROM NEEPCO:

D.15. Replacement of battery bank at AGBPP:

Existing 48V DC battery bank for PLCC at AGBPP are installed and maintained by PGCIL which are in service more than twenty years, hence needs immediate replacement by POWERGRID.

NEEPCO may please deliberate.

AGENDA ITEM FROM NERLDC:

D.16. Updated Operating Procedures of NER July 2017 (Draft):

Operating Procedures of NER July 2017 has been updated and e-mailed to regional entities of NER and also available in NERLDC website.

Power utilities of NER are requested to send comment and suggestion for this document by 30th June'17. This document will be finalized by 20th July'17.

The document is password protected. Password may be collected from SOII department of NERLDC.

No comment has been received by NERLDC from Power Utilities of NER till date.

This is for information & necessary action please.

D.17. Updated Power Map of NER July 2017 (Draft):

Power Map of NER July 2017 has been updated and e-mailed to regional entities of NER and available in NERLDC website. It will cover all the elements under operation, execution & planning stage.

Power utilities of NER are requested to submit comment and suggestion and check the line length, capacity etc. for this document by 30th June'17.

Views/comments were received from some power utilities of NER.

The final version of compiled document on Power Map of NER July 2017, is made available in pdf format in NERLDC website (www.nerldc.org) with password protection. Password may be obtained from SO-II Department, NERLDC.

This is for information & necessary action please.

D.18. Web portal on Weather Information for Power Sector:

MoU was signed between POSOCO & IMD on 18.05.15 to have an effective weather information interface exclusively for Power System Operation. In pursuance to this MoU, dedicated web portals for all the 5 regions have been developed jointly by IMD & POSOCO. These web portals contain lot of information related to weather forecast, real time & past data related to various locations in all the regions.

Weather Website of North Eastern Region has been made operational from 29th April 2017. The link of the website is <http://amssdelhi.gov.in/NERLDC/MAIN.html>. The same is also available in WEATHER tab in NERLDC website.

The Website covers weather related information of all the Seven States of North Eastern Region. Summarized contents of the Website are follows:

1. Regional Summary: Regional Forecast, Weather Bulletin, Daily and Weekly Weather.
2. Now-cast for Guwahati, Dibrugarh, Jorhat, Dhubri, Silchar & North Lakhimpur
3. Warning: District Level, State Level & Cyclone
4. Mateogram @ 3 hourly, 10 days forecast for 33 locations in the Region: Assam-19, Arunachal Pradesh -4, Meghalaya-3, Nagaland-3, Tripura-2, Manipur and Mizoram 1 each.
5. Radar Products for two Locations updated @10 Minutes: Agartala & Mohanbari
6. Satellite Image updated @ 30 minutes from INSAT 3 D.

With better understanding of this data, various utilities in the concerned region can equip themselves with better preparedness and improved operational planning, thereby enhancing the reliability of power system operation. For interpretation of weather data available on the web portal to derive the information and knowledge for decision making in the day to day operation of Power system, series of interactive sections with IMD would be required.

As OCC meetings are held on monthly basis and representatives from all SLDCs, constituents and utilities attend the same, these interactive sections with IMD representative in conjunction with OCC meeting would be highly beneficial.

Members may please discuss.

D.19. Post-Monsoon & Pre-Monsoon Disaster Management Plans of power utilities:

Crisis in power sector is an event of acute danger which can cause sudden disruption of power supply. Objectives of the Disaster Management Plan is to improve the preparedness to meet any contingency, reduce the response time in organizing the assistance, identify major resources: man power, materials & equipment needed to make the plan operational and optimize the use of the combined resources. The Disaster Management Act enacted in Dec05 has assigned the role/responsibilities to various Ministries/Departments for co-ordinated approach with other organizations.

CEA vide letter no. CEA/PLG/PSLF/15/Crisis/356-367 dated 12.06.2017 requested POSOCO to submit pre-post monsoon disaster management plans of PSUs, status of mock drill & flushing out of reservoir and details of review of Disaster Management Plan on an urgent basis as this is a parliamentary matter. CEA letter is attached as Annexure I. NERLDC vide email circulated the formats for furnishing these details to all PSUs. Format for furnishing data is attached as Annexure II. Information from NHPC & State Power Utilities are not received till date.

It is requested to NHPC and State Utilities to furnish the pre-post monsoon disaster management plans, status of mock drill & flushing out of reservoir and details of review of Disaster Management Plan at the earliest to NLDC/NERLDC.

NERLDC may please deliberate.

D.20. Load Forecasting Methodology

It has been observed that the deviation is high for day-ahead load forecast done by state power utilities from actual demand met. This error is reflected in the deviation of drawl of state utilise from the regional grid. To find out the reason for this gap, it is necessary to know the approach/process behind the load forecast.

SLDCs may please inform the methodology adopted by them for their load forecast.

D.21. False DC by AGBPP:

It is seen repeatedly that whenever RRAS up regulation is implemented for AGBPP, they starts reducing their DC thereby creating problem implementing RRAS.(Ref 1. NERLDC msg 30th June @ 1637hr 2. NERLDC msg 6th July'17 @ 1406hr. and so on)and it is regularly happening. As per IEGC regulation 6.4, mis-declaration of plant DC is wrong practise and can be penalised.

Forum may discuss the issue and give direction to AGBPP to avoid such mis-declaration of DC.

(IEGC CI 6.4.18: It shall be incumbent upon the ISGS to declare the plant capabilities faithfully, i.e. according to *their best assessment*. In case, it is suspected that they have *deliberately over/under declared the plant capability contemplating to deviate from the schedules given on the basis of their capability declarations (and thus make money either as undue capacity charge or as the charge for deviations from schedule), the RLDC may ask the ISGS to explain the situation with necessary backup data.*)

Members may please discuss.

D.22. Charging of new elements without proper communication and telemetry by Nagaland:

132 kV Doyang-Wokha line LIL Oed at Sanis sub-station (date unknown). On 07.07.17 Nagaland requested to charge 132 KV Doyang-Wokha line and accordingly permission given to charge the line from Doyang. After charging the line there was frequent oscillation and jerk in Doyang machine and the machine was about to trip. (Attached Mail from Doyang dated 07.07.2017). Also there was no telemetry in Sanis and Wokha S/S. No voice communication is also not available with Sanis and wokha.

(IEGC 4.6.2: Data and Communication Facilities: Reliable and efficient speech and data communication systems shall be provided to facilitate necessary communication and data exchange, and supervision/control of the grid by the RLDC, under normal and abnormal conditions. All Users, STUs and CTU shall provide Systems to telemeter power system parameter such as flow, voltage and status of switches/ transformer taps etc. in line with interface requirements and other guideline made available by RLDC.)

So forum may discuss and issue suitable guidelines to Nagaland and others also to follow the same.

132 KV Kohima-Karong-Imphal line: Presently 132 kV Kohima-Karong line is service and Karong –Imphal is also healthy. So 132 kV Kohima-Karong-Implal complete line may be kept in service to make alternate parallel corridor for 132 kV for 132 kV Dimapur-Implal. This arrangement will give stability in the Manipur /Nagaland system. With implementation of SLDC and new SCADA/EMS system in Manipur and Nagaland we hope reliable telemetry and voice communication will be available from Kohima, Karong and Imphal.

Members may discuss and decide.

It is observed that 132 kV Daporizo-Along-Pasighat-Tezu-Namsai line is tripping everyday (Tripped on 06.07.17 @ 1033 hrs, on 07.07.17 @ 0915 hrs, on 09.07.17 @ 1555 hrs, on 11.07.17 @ 1250 hrs, on 13.07.17 @ 0516 hrs). It is creating problem in Ranganadi/Ziro. Also as per CERC guide lines all these events are GD-1 category (Full S/S outage). So Arunachal is need to check the line thoroughly before requesting for permission for charging.

Also telemetry/voice communication is not available from these stations. As per IEGC it is very important to have telemetry and voice communication.

Forum may discuss and issue guidelines to AP/POWERGRID.

Members may please discuss.

D.23. Online submission of daily data:

NERLDC has developed as in house web based reporting software. Formats for filling the online data have been sent to Assam, Meghalaya & Tripura, all ISGS generators and CPCC NERTS.

Assam, Meghalaya and Tripura started giving some data but all Inter-state link wise we need data (only MWH on daily basis) which we are not getting. So all are requested to give these data online to NERLDC everyday.

Members may please co-operate for successful testing and implementation.

D.24. Dedicated voice communication:

Dedicated voice communication and availability is one of the key requirements for efficient grid management. But it is observed that whenever we try to talk to SLDCs always it shows busy. We have intimated POWERGRID to resolve this problem but still it is not solved but still it is pending.

Most of the PG stations are connected through only one dedicated voice communication. Minimum two no of dedicated link needs to be done at the earliest.

Forum may discuss and time bound target may be fixed to fulfil the above requirement. Also 400 KV stations, HVDC station, SLDCs need 4 no of dedicated voice communication.

Following S/S either does not have link or links are not working.

1. PALATANA (Biggest Gen in NER)-No dedicated voice link.
2. 400 kV SILCHAR PG Station.-No dedicated voice link.
3. SM Nagar (International link)-No dedicated voice communication with RLDC.
4. MONARCHAK Gen: No dedicated voice link with RLDC.
5. SALAKATI (Inter Regional PG station)No dedicated voice link.
6. 400 kV BYRNIHAT: No dedicated voice link with RLDC/SLDC.
7. 400 kV Azara: No dedicated voice link with RLDC.

Following S/S links are not working.

1. Itanagar-23640151
2. Jiribam-23640130
3. Kathalguri-23640154
4. Ranganadi-23640119
5. Kolasib-23640111

Members may please discuss.

D.25. Important RTUs are not working:

1. 400 kV BALIPARA out since 26.06.17: Central NER Grid visibility lost.
2. 132 kV ITANAGAR: Effect: Realtime drawal of AP is not coming. Visibility of AP grid lost. Communication link problem.
3. 132 kV HAFLONG.
4. KHANDONG
5. KOPILI
6. RANGANADI: Completely un-stable. Communication problem. Team needs to be formed involving PG and RHEP and solve the problem within fixed time.

7. KOLASIB
8. ROING: Newly installed but not coming.
9. TEZU: Newly installed but not coming.

Forum may discuss and timeframe may be fixed to restore these RTUs.

Members may please discuss.

AGENDA ITEM FROM DoP Ar. Pradesh:

D.26. Simplification of Operational Matters pertaining to 132kV Pasighat - Roing:

The recently commissioned 132 Kv line from Pasighat to Roing at present serves no purpose to any other constituents. At the both ends at Pasighat and Roing the beneficiaries are only Arunachal Pradesh. It injects its own power at Pasighat and draws at Roing. Any kind of activities in operational matters pertaining to this segments benefits or affect the state of Arunachal Pradesh only. Therefore the Grid Control activities pertaining to that element may be simplified so that during the emergency nature of Shutdown and Withdrawal becomes easier and response to such situation can be attended in a faster and efficient manner. In the present scenario for every operational purpose, Pasighat-Roing Transmission System being a part of NERTS reports to NERLDC and in return NERLDC seek consents from the SLDC Arunachal Pradesh and again SLDC Arunachal Pradesh Seek further consent from transmission utilities (DoP) in a very long and tortuous manner which so much of inconveniences.

Therefore it is suggested that a simplified mechanism is adopted to meet the ends in a faster and convenient way. Such a mechanism could be that for all approved / emergency shutdowns and normalization of NERTS, for that portion of the systems, reports to SLDC Arunachal Pradesh directly instead of reporting to NERLDC. All such actions, on the part of SLDC Arunachal Pradesh, shall inform NERLDC of every action taken for records.

DoP Ar. Pradesh may please deliberate.

ADDITIONAL AGENDA ITEMS FROM NERLDC:

D.27. Opening of 132 kV Palatana-Udaipur- unilaterally by Tripura :

Frequently it is observed that Tripura keeps open the 132kV Palatana-Udaipur line without any information to NERLDC and Palatana. The line is connected to biggest gas based NER generator of Palatana and opening of this line unilaterally creating threat to the system security of NER Grid. Even we understand that it is important grid element and any S/D or opening requires permission from NERLDC.

Forum may discussed and issue suitable guidelines.

NERLDC may please deliberate.

D.27. Frequent disturbance in Tripura system due to reduced grid security:

Number of disturbance in Tripura system increased due to following reason.

1. 132 kV Silchar-PK Bari both the lines out since long.(Line-1 out from 10th July'17,Line-2 from 02nd April'17)
2. Links are being kept open by Tripura without intimation.(On 19.07.17, 132 kV SM Nagar-Agartala I & II,132 kV Agartala- Bodhjungnagar,132 KV Agartala-RCN-II lines were open and 132 kV Ambassa-Gamaitilla line was S/D and no information to NERLDC. At 1331 hrs 132 kV RCN-Kumarghat and RCN-Agartala-II tripped and Tripura grid collapsed, RCN(ISGS), Monarchak, Rokhia tripped.)
3. 132 kV Kamalpur-Ambassa line always remains open at Ambassa.

It is gathered that Palatana generation will be out from 19th August for 20 days and during that time if all these loops remains open stability of Tripura system will come down drastically.

NERLDC may please deliberate.

ADDITIONAL AGENDA ITEMS FROM ENICL/STERLITE:

D.28. Update on NERSS-II(B) & V awarded under TBCB:

The following transmission system associated with North Eastern Region Strengthening Scheme were discussed in 4th, 5th and 6th SCMPSP of NER and was agreed to be implemented through TBCB route in 35rd Empowered Committee held on 14th September 2015,

A. NERSS II Part B

- i. Biswanath Chariyali (POWERGRID) – Itanagar 132kV D/c line
- ii. 2 nos. 132kV line bays at Itanagar for termination of Biswanath Chariyali (POWERGRID) – Itanagar 132kV D/c line.
- iii. LILO of one circuit of Biswanath Chariyali (POWERGRID) – Itanagar 132kV D/c line at Gohpur (AEGCL)
- iv. Silchar (POWERGRID) – Misa (POWERGRID) 400kV D/c Line

B. NERSS -V

- i. Establishment of 400/132kV, 2 X 315MVA S/s at Surajmaninagar
- ii. Establishment of 400/132kV, 2 X 315MVA S/s at P.K. Bari
- iii. Surajmaninagar – P.K. Bari 400kV D/C line
- iv. 2 no. 400kV line bays at Palatana GBPP switchyard for termination of Palatana-Surajmaninagar 400kV D/c line
- v. AGTPP (NEEPCO) – P.K.Bari (TSECL) 132kV D/c line with high capacity HTLS conductor
- vi. 2 no. 132 kV line bays at P.K.Bari (TSECL) S/s for termination of AGTPP (NEEPCO) – P.K.Bari (TSECL) 132kV D/c line.

ENICL/STERLITE may please update the status.

D.29. Use of Multi-circuit towers and Monopoles:

1. **Use of Multi Circuit Towers** – There are two lines one is 400kV D/C Surajmaninagar - P.K. Bari Transmission line which is 92 kms and other is 132kV D/C AGTPP (NEEPCO) – P.K. Bari (TSECL) Transmission line which is 82 kms. These two lines are parallel to each other in forest, so we want to implement Multi

Agenda for 134th OCC Meeting to be held on 28th July, 2017

circuit Towers in forest area by merging these two lines for approx. 60 kms (M/C Start point to M/C End Point). (Pictorial Representation is attached in Annexure). The 132kV D/C will be kept in lower side and 400kV D/C in the upper side of the tower. The usage of multi circuit towers will reduce the Forest area and there would be a substantial reduction in the number of trees to be felled in Forest Portion. The details are as:-

Description	SMN-Pkbari 400kV	NEEPCO-PKBar 132	Total Forest Area details while Laying Single Lines	NEEPCO-SMN-Pkbari 400kV/132kV Multi Circuit Line	Saving in Forest area / Tree Cutting while using Multi Circuit Transmission Line in Forest Portion.
	Line Length:	Line Length:	Line Length:	Line Length:	Line Length:
	Tripura	Tripura	Tripura	Tripura	Tripura
Length of Transmission Line in K.M	92	82	174	115	59
Forest Length in K.M	32.5	41	73.5	34.5	39.0
Line Corridor in Meter	46	27		46	
Forest Area (In hac)	150	111	261	159	102
Total Trees Enumerated on Sample Basis @ 600 Tree/Hectare	89,700	66,420	1,56,120	95,220	60,900
No. of Forest Proposals Submissions	1	1	2	2	

We may save felling of 60,900 trees and there would be a reduction in Forest area required for diversion by 102 Ha.

2. Use of Monopoles - 132kV D/C Biswanath Chariyalli (PowerGrid) - Itanagar Transmission line is of 69kms, out of which we proposed to install Monopoles in the forest Area of Arunachal Pradesh for approximately 14 kms.

ENICL/STERLITE may please deliberate.

Any other item:

Date and Venue of next OCC

It is proposed to hold the 135th OCC meeting of NERPC on second week of August, 2017. The date & exact venue will be intimated in due course.
