

North Eastern Regional Power Committee

Agenda For

133rd OCC Sub-Committee Meeting

Time of meeting : 10:00 Hrs.

Date of meeting : 8th June, 2017 (Thursday)

Venue : "Hotel Nandan", Guwahati.

A. CONFIRMATION OF MINUTES

CONFIRMATION OF MINUTES OF 132nd MEETING OF OPERATION SUB-COMMITTEE OF NERPC.

The minutes of 132nd meeting of Operation Sub-committee held on 12th May, 2017 at Guwahati were circulated vide letter No. NERPC/SE (O)/OCC/2016/4556-4591 dated 20th May, 2017.

MeECL vide mail dated. 21.05.17 has sought modification on the minutes of Agenda Item B.1.(2) :

Recorded:

Name of the Element	Name of Utility	Status
63MVAR Reactor at Byrnihat	MePTCL	EE, MePTCL informed that budgetary offer is yet to be received. Once received DPR would be prepared in one week and sent to NLDC/NPC. SE(C&O) mentioned that the rates can be taken from POWERGRID and DPR should be sent immediately. MePTCL agreed.

To be Recorded:

Name of the Element	Name of Utility	Status
63MVAR Reactor at Byrnihat to be replaced with 80MVAR Reactor	MePTCL	EE, MePTCL informed that budgetary offer is yet to be received. Once received DPR would be prepared in one week and sent to NLDC/NPC. SE(C&O) mentioned that the rates can be taken from POWERGRID and DPR should be sent immediately. MePTCL agreed.

The Sub-committee may confirm the minutes of 131st OCCM of NERPC with above modifications as no other 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 132nd OCC:

State	Protection System	ADMS	CAPACITOR INSTALLATION
Arunachal Pradesh	Approved by A.P. Government	DPR already submitted to CEA & NLDC	Study is in progress and the same will be submitted to NERPC for approval
Nagaland	LOAs already completed and works is likely to be completed by 30.09.2017.	DPR already submitted to CEA & NLDC	DPR already submitted to CEA & NLDC
Mizoram	By June'17 all LOAs would be issued.	DPR already submitted to CEA & NLDC	DPR already submitted to CEA & NLDC
Manipur	By June'17 all LOAs would be issued.	DPR already submitted to CEA & NLDC	DPR preparation stage
Tripura	By June'17 all LOAs would be issued.	DPR will be submitted by July'17 to CEA & NLDC	-
Assam	By June'17 all LOAs would be issued.	DPR will be submitted soon to CEA & NLDC	-
Meghalaya	MePTCL – All LOAs will be completed by June, 2017. MePGCI – by June, 2017 all LOAs	DPR preparation stage.	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 132 nd OCC	Latest status
63MVAR Reactor at Byrnihat to replaced with 80MVAR Reactor	MePTCL	EE, MePTCL informed that budgetary offer is yet to be received. Once received DPR would be prepared in one week and sent to NLDC/NPC. SE(C&O) mentioned that the rates can be taken from POWERGRID and DPR should be sent immediately. MePTCL agreed.	
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 30.06.17	
2x12.5 Mvar Bus Reactor at Samaguri	AEGCL	Replacement of bushing required, alternate location for shifting to be informed by AEGCL/SLDC	
220 kV, 1x31.5 Mvar Bus Reactor at Mokokchung (PG).	NERTS	December'17	
400 kV, 2x63 MVAR Bus Reactor at Biswanath Chariali	NERTS	-	

Utilities may please intimate the latest status.

3. Furnishing of various data for reliable grid operation:

Data regarding	Utilities non-submission/compliance	
	As of 132 nd OCC	As of 133 rd OCC
UFR Operation Report	Tripura - upto Feb'17 Manipur - upto Mar'17	
Reporting of Commissioned Elements for Tarang App	All SLDCs except Manipur	
DAS output for FRC calculation	***	

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Questionnaire of Working Group on Hydro(FOLD)	P&ED, Mizoram & DoP Nagaland. All generating utilities black start/mock start for hydro in last five years.##	
Report on VDI/FDI	All SLDCs except Assam, Meghalaya.	
DG healthiness report	NEEPCO, NERTS, NTPC, OTPC, Ar. Pradesh, AEGCL, MSPCL, MePTCL, Mizoram, Nagaland, TSECL.	
Auxiliary Supply details	NERTS, NTPC, OTPC, Ar. Pradesh, AEGCL, MSPCL, Mizoram, Nagaland, TSECL.	
Technical & Commercial data for PoC (Q3 2017-18)	-	

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
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 MAY, 2017

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

NER PERFORMANCE DURING MAY, 2017

States	Energy Met (MU)		w.r.t. Apr,17 % inc (+) /dec (-)	Energy Reqr. (MU)		w.r.t. Apr,17 % inc (+) /dec (-)	% inc (+) /dec (-) of energy reqr vs met. In Apr,17
	May-17	Apr-17		May-17	Apr-17		
Ar. Pradesh	61.01	58.636	4.05	62.19	59.486	4.55	-1.90
Assam	723.12	619.101	16.80	765.00	659.554	15.99	-5.47
Manipur	72.13	67.792	6.40	73.29	69.185	5.93	-1.58
Meghalaya	136.77	120.821	13.20	136.77	120.821	13.20	0.00
Mizoram	42.30	41.775	1.26	43.16	42.510	1.53	-1.99
Nagaland	63.70	53.431	19.22	64.75	54.334	19.17	-1.62
Tripura	120.73	96.587	25.00	124.52	101.994	22.09	-3.04
Region	1219.76	1058.143	15.27	1269.69	1107.884	14.60	-3.93

States	Demand Met (MW)		w.r.t. Apr,17 % inc (+) /dec (-)	Demand in (MW)		w.r.t. Apr,17 % inc (+) /dec (-)	% inc (+) /dec (-) of Demand vs met. In Apr,17
	May-17	Apr-17		May-17	Apr-17		
Ar. Pradesh	145	129	12.40	145	133	9.02	0.00
Assam	1580	1399	12.94	1649	1414	16.62	-4.18
Manipur	161	154	4.55	163	155	5.16	-1.23
Meghalaya	304	292	4.11	304	293	3.75	0.00
Mizoram	85	85	0.00	86	86	0.00	-1.16
Nagaland	131	120	9.17	132	121	9.09	-0.76
Tripura	276	252	9.52	280	252	11.11	-1.43
Region	2391	2209	8.24	2472	2258	9.48	-3.28

REGIONAL GENERATION & INTER-REGIONAL EXCHANGE IN MU

AVERAGE FREQUENCY (Hz)

Month---->	May-17	Apr-17
Total Generation in NER (Gross)	1111.858	1048.652
Total Central Sector Generation (Gross)	873.920	754.168
Total State Sector Generation (Gross)	295.716	294.484
Inter-Regional Energy Exchange		
(a) NER-ER	42.45	124.49
(b) ER-NER	242.07	120.44
(c)NER-NR	102.02	114.88
(d)NR-NER	92.30	195.72
© Net Import	189.90	76.79

Month---->	May-17	Apr-17
	% of Time	% of Time
Below 49.9 Hz	5.05	9.02
Between 49.9 to 50.05 Hz	72.20	74.20
Above 50.05 Hz	22.75	16.78
Average	49.99	49.99
Maximum	50.27	50.26
Minimum	49.85	49.66

C. OLD ITEMS

4. Status of Generating Units, Transmission Lines in NER:

During 133rd OCC meeting, the status as informed by different beneficiaries is as follows:

SN	Items	Status as given in 133 rd OCC Meeting	Status as given in 132 nd OCC Meeting
a. New Projects			
1	Trial operation and CoD of Unit -II of Bongaigaon TPS of NTPC		Exact COD of Unit-II to be informed in next OCC meeting.
2	400/220kV, 2x315 MVA ICT of NTPC at Bongaigaon		ICT-1 - Manufacturing stage
3	Kameng HEP of NEEPCO two units (2 x 150 MW) Next two units (2x150 MW)		Delay in dam construction. First unit by early 2018.
4	Pare HEP of NEEPCO (2 x 55 MW)		Delay in dam construction. First unit by early 2018.
5	400 kV D/C Silchar - Melriat line of PGCIL		June, 2017.
6	220kV Rangia - Salakati of AEGCL		December 2017 (30 km line idle charge from Salakati end)
7	132kV Monarchak – Surjamaninagar D/C of TSECL		September, 2017
8	132kV Pasighat – Aalong of Ar. Pradesh		Charging for testing purpose may be taken up with C.E., DoP Ar. Pradesh.
9	132kV Surjamaninagar Bay at OTPC		S.E.(C&O),NERPC work to be completed by OTPC. Clarification sought from CEA.
10	400kV D/C Balipara – Kameng of Ar. Pradesh		July 2017.
11	RHEP 80 MVAR Bus Reactor		T.S. completed except for GIS bay.
12	SLDCs (Ar. Pradesh, Manipur, Mizoram, Nagaland)		Manipur – Completed ToC remaining, Mizoram- Completed, Nagaland-Building ready and handed over, AP-SAT going on.

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13	400/220 kV 315 MVA ICT-II at Bongaigaon		Manufacturing stage
14	220/132 kV, 2x160 MVA ICTs at Balipara		ICT -I - June'17 ICT-II By 31 st August 2017(LOA date).
15	220/132 kV, 1x160 MVA ICT with GIS Bay at Kopili		By 31 st August 2017(LOA date).
16	400/132 kV, 1x315 MVA ICT-III at Silchar		December, 2017(LOA date).
17	Replacement of 2x315 MVA ICTs with 2x500 MVA ICTs at Misa (PG)		December, 2017(LOA date).
18	400 kV Silchar - Misa D/C		M/s Sterlite Grid 4 Limited
19	1x125 MVAR Bus Reactor at 400 kV at Balipara		December, 2017(LOA date).
20	1x125 MVAR Bus Reactor at 400 kV Bongaigoan		December, 2017(LOA date).
21	Bays at Hailakandi & 132V Silchar-Hailakandi		June, 2017.
22	Tuirial HEP of NEEPCO		Unit #I - Oct'2017 Unit #II - Dec'2017
23	New Umtru HEP of MePGCL (2x20MW)		Unit #I- synchronized on 24.04.17. CoD by last week of May'17 U#II - July'17
b. Elements under breakdown/ upgradation			
24	Up-gradation of 132 kV Lumshnong-Panchgram line	DPR submitted for board approval.	DPR submitted for board approval.
25	Switchable line Reactors at 400kV Balipara & Bongaigoan	Bongaigaon-Sept'17	Bongaigaon-May'17
26	PLCC Panels at Loktak end of Loktak - Ningthoukhong 132 kV feeder and Loktak - Rengpang 132 kV feeder	May'2018	May'2018

27	LILO of 132kV Ranganadi – Nirjuli at Pare of NEEPCO by PGCIL	Work given to KEC. Completion by May'2018	Work given to KEC. Completion by May'2018
28	LILO of 132kV Ranganadi – Itanagar (Chimpu) at Pare of Ar. Pradesh	Bay 1 at RHEP for Pare: July'17 Bay 2 at RHEP for Itanagar: Mar'18	Bay 1 at RHEP for Pare: May'17 Bay 2 at RHEP for Itanagar: Mar'18

Concerned constituents may kindly intimate the status.

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	-	-	-	-

Hydro planning

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 June, 2017 - July, 2017 at Annexure- D.2., which is available in the website of NERPC.

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

NETC and POWERGRID have submitted the outage data for the month of February, 2017 & March 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 01.06.17**. All SLDCs are requested to assess the Total Transfer Capability (TTC), Transmission Reliability Margin (TRM) and Available Transfer Capability (ATC) for the month of June'17 using these cases, and submit the study cases and results to NERLDC by **12.06.17**.

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 01.06.17**. SLDCs are requested to check the TTC of their control areas as computed by NERLDC and **give comments, if any, by 12.06.17**. The TTC figures for June'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	206	185	215	188
Assam	1585	1467	1505	1462
Manipur	282	261	296	260
Meghalaya	276	256	325	245
Mizoram	126	116	126	119
Nagaland	179	70	201	64
Tripura	225	140	276	187

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. Installation of 80MVAR, 1x400KV GIS Bus Reactor/ Bay Addition at RHEP

As discussed in several OCC meetings there is requirement of bus reactor to be installed at RHEP switchyard to control over voltage in the NER system. Against agenda no. C.10. of 109th OCC meeting after detail deliberations, Member Secretary suggested NEEPCO to work out the tentative estimate for above cost and intimate in next PCC meeting so that the matter can be taken up for funding from PSDF since the matter is for the benefit of the region.

Accordingly, vide letter no. NO: NEEPCO/ED(O&M)/RHEP-09/2015-16/2646 dtd. 13/01/2016 NERPC was intimated a cost estimate of Rs. 3698.965 Lakh for procurement & installation of Bus Reactor at 400KV Ranganadi Switchyard.

In the MOM of 17th TCC meeting held on 04/10/2016 circulated on 26/10/2016 through e-mail it was observed that under item no. B.12 the proposal for installation 80MVAR Bus Reactor at RHEP SY has been approved in the 6th SCM and recommended in the TCC and RPC forum.

For open tendering process for procurement and installation of the Bus Reactor, the modalities of funding from PSDF as intimated in the 109th OCC meeting may please be discussed.

In 131st OCCM, Director, NPC informed that reactor installation for improvement of voltage profile of the grid may be funded from PSDF. However in this case approval has been obtained differently. DGM (AM), NERTS opined that since SCM approval has been accorded, no separate CERC approval is required and NEEPCO may directly file tariff petition. The forum requested NERPC to clarify from CEA/NLDC about funding from PSDF or execution by CTU.

NERPC may please intimate the status.

D.6 Pending issues with NTPC regarding vacation of land etc and failure of NTPC to honour the commitment:

NTPC has not yet vacated the 32M extended portion (32 x 248) of the plot of land which has prevented AEGCL from constructing the 132kv APM (Jogighopa) Bay. This vacation was agreed upon by NTPC — but has not materialized till date.

Boundary wall for AEGCL was supposed to be constructed by NTPC which has not yet been constructed by them even after more than three years of their commitment.

AEGCL has not been allowed to operate the entrance gate (constructed by AEGCL) as the CISF personnel of NTPC continue to .keep the lock and key of the same thereby causing acute difficulties for entry and exit of AEGCL personnel — so much so that AEGCL personnel are sometimes even prevented from entering the switch yard for attending to emergency operational problem in switch yard/control room. Separate entry gate for AEGCL should immediately be allowed to be operated.

Even after their commitment, the Guest House for AEGCL as agreed upon has not yet been constructed by NTPC.

In all these issues the NTPC authorities have been unexpectedly insensitive and no cooperative.

In 132nd OCC, S.E.(C&O),NERPC informed that the matter should be resolved bilaterally. He however, mentioned that the issue will be raised to the competent authority of NTPC & Assam so that the matter can be resolved amicably.

NERPC may please inform the status.

D.7 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 may please intimate the status.

D.8 Over drawal by constituents

It has been observed that despite repeated requests for maintaining drawal within schedules, especially when BgTPP & Palatana generations are not available, some of

the constituents namely Tripura persistently overdraws from the grid resulting in violation of inter-regional ATC on many occasions. Constituents, especially Tripura, are requested to please adhere to the real time advice of NERLDC for maintaining grid security & reliability. In this regard constituents are also requested to please make advance planning for meeting their demands considering contingency situations of generations outages.

In 132nd OCC Sr. Engineer, NERLDC while presenting the Grid Performance in April'2017 reported the repeated non-compliance of TSECL to deviation limit violation message/zero crossing messages. Sr. Manager, NEEPCO informed that overdrawal by Tripura has resulted in loss of generation from AGTCCPP. DGM(MO),NERLDC suggested that a detailed report highlighting the following be presented by NERLDC in the next meeting:

- 15 min graph of Schedule vs. Actual w.r.t. Tripura for specific days with high O/D.
- Actions which had to be taken by TSECL (eg. load curtailment etc.) but not done as well as the message given by RLDC on that particular occasion.

The forum after detailed deliberation requested TSECL to strictly adhere to schedule irrespective of grid frequency.

NERLDC may please present a report.

D.9 Deviation Charges Outstanding of APDCL – Curtailment of Open Access

Outstanding deviation charges of APDCL is Rs. 50.84 Cr and deviation interest payable is Rs. 0.13 Cr as on 05.05.2017 (Till week -3 of FY 2017-18) out of which Rs. 26.30 Cr is outstanding for a period of more than last 13 weeks.

In 132nd OCCM, DGM(MO),NERLDC requested Assam to liquidate Outstanding dues at the earliest to avoid OA curtailment. He also informed that at the moment APDCL has to pay more than Rs. 55 Crores. AGM, APDCL responded that the matter is being taken up with their finance counterpart and hoped that dues would be liquidated very soon. DGM (MO), NERLDC requested APDCL to submit a time bound action plan to clear outstanding dues and pay current bills and it would enable non-imposition of any regulation on APDCL. APDCL representative agreed to submit an action plan after internal approval.

AEGCL may please intimate the latest status.

D.10 Tripping of OTPC Both Block Due to Grid Black Out

OTPC Both Block Tripped on 25/04/2017 at 13:05 hrs, Startup delayed on 26/04/2017 due to grid disturbance OTPC Both Block Tripped on 28/04/2017 at 19:10 hrs

In 132nd OCCM, DGM(O&M),OTPC stated that 400kV Palatana-Silchar D/C is lifeline for Palatana GBPP and its non-availability seriously affects evacuation of power from Palatana with subsequent unit tripping on over-frequency. He requested the forum to ensure the availability of 400 kV Palatana-Silchar D/C, 400kV Silchar -Byrnihat and

400kV Silchar -Azara at all times for reliable supply of power to NER beneficiaries and reduced damage to plant machineries. Members unanimously accepted the gravity of the situation and requested NERPC to convene a special meeting to discuss maintenance of aforesaid lines, SPS concerning evacuation etc. at the earliest.

NERPC may please intimate status.

D.11. Providing of Bank Protection of Dikrong River at Ranga De Reserve Village, Bihpuria Circle, Dist: Lakhimpur, Assam due to erosion of land on account of discharge of Ranganadi HEP:

The Ranga De Reserve Village is situated under Bihpuria Circle of Lakhimpur District in Assam at the left bank of Dikrong River where continuous erosion river bank is going on due discharge of Ranganadi Hydro Generation. At present, the fate of the villagers is in uncertainty. Earlier NEEPCO had provided river bank protection of Dikrong River from Bihari Basti to a part of Ranga De Reserve Village leaving around 2 KM bank unprotected which is suffering erosion endangering the life and property of the villagers.

In fact due to indiscriminate erosion of Dikrong River Bank, POWERGRID is shifting all the Towers of 400kV D/C Balipara-Ranganadi Line to pile foundation as per the approval of NERPC. Presently, the construction of those Pile foundations is in progress.

Now, the villagers of Ranga De Reserve Village are not allowing POWERGRID to carry out pile foundation in Location No. 48 & 49 which falls in said stretch of 2KM unprotected bank and pressing hard for providing River Bank Protection.

NEEPCO may extend the Bank Protection in unprotected 2 KM stretch in line with earlier execution of River Bank Protection as the river bank erosion is mainly on account of downstream discharge of Ranganadi HEP.

In 129th OCC DGM (AM), NERTS informed that matter was referred to GM, Pare HEP of NEEPCO but, GM, Pare stated that the matter does not come under the purview of Pare HEP. Subsequently, matter was referred to GM, Ranganadi HEP and Circle Officer of Bihpuria Circle of Lakhimpur District in Assam. S.E. (C&O), NERPC stated that NEEPCO should involve into the matter to resolve ROW in co-ordination with POWERGRID and Local administration so that POWERGRID can complete the pile foundation. Accordingly, the forum advised NEEPCO and NERTS to jointly conduct the site survey and revert back to the forum.

In 132nd OCCM, Sr. Manager, NEEPCO informed that the matter was consulted with ED (O&M), NEEPCO who opined that it does not concern NEEPCO and NERTS/POWERGRID should take necessary action. DGM (AM), NERTS informed that condition at site is grave and POWERGRID officials are being restricted to work, he requested NERPC to intervene. S.E(C&O), NERPC concluded that NERPC would write to concerned heads of NEEPCO and NERTS to resolve the matter.

NERPC may please intimate status.

D.12. SPS for transfer of 160 MW to Bangladesh through Tripura-Bangladesh link:

POWERGRID vide. C/CTU-PIg/NE/02/Bangladesh dated. 07.02.2017 has informed that in the 12th India-Bangladesh JWG &JSC meeting decision was taken to enhance power transfer through 400kV S.M. Nagar-South Comilla link (charged at 132 kV). In this regard a SPS needs to be in place to increase reliability in power supply. Following SPS action has been suggested by POWERGRID:

Sl. No.	Contingency	SPS Action
1	Outage of one ICT out of 400/132kV 2x125MVA ICTs at Palatana	Limit transfer to 100MW on Cross-Border link, followed by shifting of 60MW load from Indian grid to Bangladesh grid.
2	Outage of 132 kV Palatana- S.M. Nagar line	Tripping of Cross border link followed by shifting of entire 160MW load from India to Bangladesh grid.
3	Outage of one circuit of SM. Nagar-South Comilla line	Limit transfer to 130MW on Cross-Border link, followed by shifting of 30MW load from Indian grid to Bangladesh grid.

In 129th OCCM, AGM (SO-I), NERLDC informed that as per the suggested scheme of SPS, it's implementation involves load reduction in Bangladesh system. In order for effective resolution, he suggested that a meeting be convened with Bangladesh Power Department officials, NERPC, NERLDC, CTU and TSECL. The forum requested NERPC to write to CTU for taking up the matter with MoP.

In 130th OCCM, S.E.(C&O),NERPC informed that the matter is being followed up with CTU/MoP and latest status would be informed in next OCCM.

In 132nd OCCM, NERLDC informed the forum that during three major disturbances in NER on 25.04.17, 26.04.17 & 28.04.17, Bangladesh load was also affected. NERLDC again requested the forum to organize the meeting as soon as possible since CTU is asking about the implementation of Bangladesh SPS. S.E.(C&O),NERPC informed that the meeting would be convened within next week.

NERPC may please intimate status.

AGENDA ITEM FROM OTPC:

D.13. Regarding OTPC Stability issue At Tech Minimum as per IEGC 4th Amendment:

CERC has given effect the Indian Electricity Grid Code, (Fourth Amendment) Regulations, 2016 which was notified on 06.4.2016 on Regulation 1(2), sub-Regulation 6.3B of the this Regulations about 6.3B – Technical Minimum Schedule for operation of Central Generating Stations and Inter-State Generating Stations. "The technical minimum for operation in respect of a unit or units of a Central Generating

Station of inter-State Generating Station shall be 55% of MCR loading or installed capacity of the unit of at generating station". Which is came into force from 00:00 hrs of 15/05/2017.

Please find the events of Technical minimum of following date...

- On 16/05/2017, NERLDC given us SG 388 MW (Copy Attached) Ex Bus from block 25 to 32 as per IECG 4th Amendment, and during load reduction GT-1 & GT-2 Mode Change over happens at 07:22 Hrs at GT-1 and 07:20 Hrs at GT-2 @ \approx 113 MW on GT-1 and 114 MW at GT-2, and Total EX bus 388 MW Total Load Plant 407 MW.
- On 30/05/2017, NERLDC Given us SG 385.65 MW Ex Bus from block 74 to 78 as per IECG 4th Amendment, but we are force to generate \approx 10MW 15 MW Greater Then Given SG (Tech Min) for the plant stability, Please note that on 16/05/2017 the SG was 388 MW and our GTs mode changeover happens.

OTPC response on draft notification of IECG 4th Amendment submitted to CERC on 15/09/2015, we pray the Hon'ble Commission to allow a block-wise Technical Minimum Schedule of 65 % of Installed Capacity for OTPC Palatana Project on ground of following Point.

1. Plant Stability (Combustion Mode Changeover)
2. Reduced NOx emissions
3. Take or Pay Mechanism as per GSPA

Please Note that and As we mentioned in our submission to Hon'ble Commission that, For stable operation of station it is always desirable to run the gas turbines in PM mode and mode changeover from PM to PPM mode must be avoided as long as possible, it hampers machine stability and the turbine can trip during mode changeover.

Please be informed that current Technical Limit (55%) is on transient zone of mode changeover, and it is causing the instability of our Gas Turbine operation. It is request you to Please give us the SG 15 to 20 MW Grater then the Tech Min Load (or Freeze Tech Min for OTPC @ 60%) for plant Stability and system stability.

OTPC may please deliberate.

AGENDA ITEM FROM NERLDC:

D.14. Request for maintaining Shutdown co-ordination and taking code:

Maintaining proper co-ordination in respect of availing of shutdown is very essential from grid as well as human security point of view. This is for all the elements covered by "List of important Grid element". Moreover obtaining opening as well as closing codes from LDCs is very important in this regard to avoid any untoward incidence. 132 KV RC Nagar-Agartala-1 line S/D was approved for 30.05.2017 by NERPC provided real time grid condition is OK. But Tripura (TSECL) without consulting and without taking code from NERLDC, opened the line from Agartala end on 30.05.2017. It is to be noted here that NER grid was in alert state due to severe cyclonic storm MORA on that day. Caution messages were also sent from NERLDC to all constituents specially Tripura, Assam, Mizoram and Meghalaya. Despite of this situation opening of the line without proper co-ordination is very unfortunate. All constituents are requested to please adhere to the safety requirements in future.

NERLDC may please deliberate.

D.15. Dedicated Voice Communication:

In most of the stations of ISGS only one IP phone is installed which is creating problem in Grid Management. So minimum two nos of VOIP phones are required in all the stations of ISGS , 400 KV sub-stations, , S.M.NAGAR (International connectivity), Monarchak and SLDCs. Suitable measure may please be taken for installation of 2 nos of IP phones in all the stations. It may please be noted that in previous PUNWARE ULDC dedicated system in all the stations 2 nos of connections were provided and 4 nos in SLDCs

Moreover, IP phones are not installed in 1) SILCHAR, 2) PALATANA, 3) SLDC Manipur, 4) SLDC Mizoram, 5) SLDC AP, 6) SLDC Nagaland, 7) Mokokchung, 8) AZARA, 9) SM Nagar , 10) BYRNIHAT 11) SALAKATI 220 KV 12) NTPC, BgTPP, and 13) Ziro.

In addition to above, IP phones are not working in 1) Mariani(PG), 2) Jiribam, 3) Kolasib, 4) Haflong ,5) Kohima and 6) Kathalguri .

Ensuring availability of proper voice communication system is an integral part of smooth grid operation which may please be deliberated and necessary action may please be taken by concerned authorities.

Members may please discuss.

D.16. Non-reporting of RTUs :

Itanagar(PG), Ziro(PG), Kolasib(PG), Ranganadi, Doyang, Kopili , khandong, KOPEX are not reporting since long, So it is very important to restore the RTUs at the earliest as visualization of NER Grid has come down drastically and probability of disturbance of Grid is very high in absence of proper visibility. Correct assessment of grid condition during contingencies is seriously affected due to poor visibility and restoration processes also are delayed. It is understood that NEEPCO has taken reinstallation activities of RTUs for their power stations; latest position in this regard may be provided by NEEPCO.

All concerned are requested to please restore the RTUs at the earliest.

Members may please discuss.

D.17. Non availability of state data at RLDC from SLDCs:

Even after the integration of SLDCs of Manipur, Mizoram the data of Manipur & Mizoram RTUs through respective SLDCs are not reporting at NERLDC.

NERTS, Manipur and Mizoram are requested to please ensure the same.

D.18. Furnishing of daily operational line data:

As discussed and requested in previous OCC meetings all concerned utilities need to send their daily system operation data to RLDC in specified format, supplied by NERLDC, on regular basis through mail. But it is observed that utilities are not furnishing these data regularly in specified formats in spite of repeated requests from RLDC. So it is once again requested all to send data regularly to RLDC in new formats only through system operation mail. NERLDC is planning to Host the Reporting Software shortly in their website and the utilities will require to fill the formats online.

NERLDC may please deliberate.

D.19. Delayed operation of SPS-2 on 16th May'17:

400 kV Silchar-Palatana 1 line was under shutdown w.e.f 0807 Hrs on 16.05.17 and at around 08:27 Hrs on 16.05.2017, 400 kV Silchar-Palatana 2 line tripped. **This satisfied conditions for operation of SPS-2** which is designed to reduce Palatana generation to house load immediately.

However, at the time of this event, Palatana generation was not reduced to house load immediately resulted in overloading of 132 kV AGTCCPP - Kumarghat line & 132 kV Agartala - Dhalabil line (low capacity) and subsequently tripped on over current.

Due to tripping of these elements, part of Tripura, Bangladesh (South Comilla), Palatana & AGTCCPP power systems were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch

Members may please discuss.

D.20. Periodic Mock Testing of SPS:

In the PCC Subgroup Meeting of NERPC held on 05th May'17 at Shillong, it was decided to conduct mock testing of SPS periodically for checking healthiness.

In 132nd OCC, The forum stressed the need for periodical testing of SPS so that it operates as per design during emergency condition.

It is proposed to conduct mock testing of SPS-II & SPS-III related to reduction of Palatana Generation on 15.06.17 & 16.06.17 respectively.

Members may discuss and finalize dates for SPS mock test.

D.21. Updated List of Important Grid Elements of NER, May 2017:

As per Clause No 5.2.c of IEGC, List of Important Grid Elements of NER May 2017 (Draft) prepared. Updated List of Important Grid Elements of NER May 2017 (Draft) was e-mailed to regional entities of NER and also available in NERLDC website.

In 132nd OCC, NERLDC informed the forum that Draft List of Important Elements has been uploaded in NERLDC Website under the Tab Download/Imp Elements and requested to give comments, if any, by 25th May'17. The document will be finalized by 31st May'17.

Views/comments were received from some power utilities of NER but the information provided was inadequate to complete the document. The compiled document (Revision-0) on **List of Important Grid Elements of North Eastern Region -May 2017 (R-0)**, is made available in pdf format in NERLDC website (www.nerldc.org) with password protection. Password may be obtained from SO-II Department, NERLDC.

NERLDC may please deliberate.

D.22. Review of UFR based load shedding schemes:

Under Frequency Relay (UFR) based load shedding schemes are meant to provide relief to the power system in case of decline in frequency and arrest further decline. However, in the case of disturbance on 28th April'17, load relief from UFR based load shedding schemes was only reported from Tripura and Mizoram. Manipur and Meghalaya have reported that UFR based load shedding schemes has not operated during disturbance on 28th April'17.

During analysis it has been observed that UFR feeders have not been identified in South Assam Area. Hence, no operation of UFR has been observed in Assam during disturbance of 28th April 2017.

Review of UFR based load shedding schemes and identification of feeders where UFR relay to be installed taking into consideration the changes in the power system in NER Grid, are to be carried out at the earliest.

Members may please discuss.

D.23. Review of Islanding Schemes:

Islanding of AGTCCPP (Island-II) with Tripura power system & Dullavcherra load failed to operate during the disturbances on 25th April'17, 26th April'17 and 28th April'17. Load in the Island-II has increased and load relief from the UFR is not sufficient to balance load generation in this island. Due to this reason, island-II collapsed during disturbances in 25th April'17, 26th April'17 and 28th April'17.

Review of islanding schemes is to be carried out at the earliest, considering the changes in the power system.

Members may please discuss.

D.24. 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 **10th July'17**.

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

This is for information & necessary action please.

D.25. 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 also 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**. This document will be finalized by **10th July'17**.

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

This is for information & necessary action please.

Any other item:

Date and Venue of next OCC

It is proposed to hold the 134th OCC meeting of NERPC on second week of July, 2017. The date & exact venue will be intimated in due course.
