



भारत सरकार Government of India

विद्युत मंत्रालय Ministry of Power

उत्तर पूर्वी क्षेत्रीय विद्युत समिति

North Eastern Regional Power Committee

मेघालया स्टेट हाउसिंग फिनांस को-आपरेटिव सोसायटी लि. बिल्डिंग

Meghalaya State Housing Finance Co-Operative Society Ltd. Building

नांग्रिम हिल्स, शिल्लोंग - ७९३००३

Nongrim Hills, Shillong – 793003.



ISO 9001:2008

Ph. No: 0364 - 2520050

Fax No: 0364 - 2520030

Website: www.nerpc.nic.in

No. NERPC/SE (O)/OCC/2014/1731-1765

Dated: August 22, 2014

To,

1. Managing Director, AEGCL, Bijuli Bhawan, Guwahati – 781 001
2. Managing Director, APDCL, Bijuli Bhawan, Guwahati – 781 001
3. Managing Director, APGCL, Bijuli Bhawan, Guwahati – 781 001
4. Director (Generation), Me. PGCL, Lumjingshai, Short Round Road, Shillong – 793 001
5. Director (Distribution), Me. ECL, Lumjingshai, Short Round Road, Shillong – 793 001
6. Director(Transmission), Me. PTCL, Lumjingshai, Short Round Road, Shillong – 793 001
7. Managing Director, MSPDCL, Electricity Complex, Keishampat, Imphal – 795 001
8. Managing Director, MSPCL, Electricity Complex, Keishampat, Imphal – 795 001
9. CGM, (LDC), SLDC Complex, AEGCL, Kahilipara, Guwahati-781 019
10. Chief Engineer (WE Zone),Department of Power ,Govt. of Arunachal Pradesh, Itanagar- 791111
11. Chief Engineer (EE Zone),Department of Power, Govt. of Arunachal Pradesh, Itanagar- 791111
12. Chief Engineer (TP&MZ),Department of Power, Govt. of Arunachal Pradesh, Itanagar- 791111
13. Engineer-in-Chief (P&E), Department of Power, Govt. of Mizoram, Aizawl – 796 001
14. Chief Engineer (P), Department of Power, Govt. of Nagaland, Kohima – 797 001
15. General Manager, TSECL, Agartala – 799 001
16. Regional ED (East –II), NTPC, 3rd Floor, OLIC Bldg., Pl No- N.17/2, Nayapalli, Bhubaneswar-12
17. ED, NERTS, PGCIL, Dongtiah-Lower Nongrah, Lapalang, Shillong -793 006
18. ED (O&M), NEEPCO Ltd., Brookland Compound, Lower New Colony, Shillong-793003
19. ED (Commercial), NEEPCO Ltd., Brookland Compound, Lower New Colony, Shillong-793003
20. ED (O&M), NHPC, NHPC Office Complex, Sector-33, Faridabad,Haryana-121003
21. GM (Plant), OTPC, Badarghat Complex, Agartala, Tripura - 799014
22. GM, NERLDC, Dongtiah, Lower Nongrah, Lapalang, Shillong -793 006
23. Member Secretary, ERPC, 14 Golf Club Road, Tollygunge, Kolkata-700033
24. Chief Engineer, GM Division, Central Electricity Authority, New Delhi – 110066

Sub: Minutes of the 100th OCC Meeting - Reg.

Sir,

The Minutes of the 100th OCC Meeting of NERPC held on 13.08.2014 at "Hotel Grand Starline", Guwahati is enclosed for favour of kind information and necessary action please.

Any comments or observations may kindly be communicated at the earliest.

With warm regards,

Encl: As above

भवदीय / Yours faithfully,

बी. लिंगखोइ

बि. लिंगखोइ / B. Lyngkhoi

निदेशक / Director/ SE

Copy to:

1. CGM, AEGCL, Bijuli Bhavan, Guwahati - 781001
2. CGM, APGCL, Bijuli Bhavan, Guwahati - 781001
3. CGM, DISCOM, Bijuli Bhavan, Guwahati - 781001
4. Head of SLDC, Me.ECL, Lumjingshai, Short Round Road, Umjarain, Shillong – 793 022
5. Head of SLDC, Department of Power, Govt. of Arunachal Pradesh, Itanagar- 791 111
6. Head of SLDC, Department of Power, Dimapur, Nagaland
7. Head of SLDC, Electricity Department, Govt. of Manipur, Keishampat, Imphal – 795 001
8. Head of SLDC, Department of Power, Govt. of Mizoram, Aizawl – 796 001
9. Head of SLDC, TSECL, Agartala – 799 001
10. Chief Engineer(Elect), Loktak HEP, Vidyut Vihar, Kom Keirap, Manipur- 795124
11. DGM (C&M), OTPC, 6th Floor, A-Wing, IFCI Tower -61, Nehru Place, New Delhi – 110019.

वी. लिंगरखेडु

निदेशक / Director/ SE

**MINUTES OF THE 100th OPERATION COORDINATION
SUB-COMMITTEE MEETING OF NERPC**

Date : 13/08/2014 (Wednesday)
Time : 10:00 hrs
Venue : "Hotel Grand Starline", Guwahati.

The List of Participants in the 100th OCC Meeting is attached at **Annexure - I**

Shri B. Lyngkholi, SE (Operation), NERPC welcomed all the participants to the 100th OCC and then introduced Shri M. K. Bordoloi and Shri N. Perme who have recently taken over as new CGM (LDC), AEGCL and EE (SLDC), Ar. Pradesh and stated that the forum will benefit from their long experienced & associated in the power sector. He informed the house about the plan shutdown of Pallatana Unit #1 and requested all the constituents to co-operate and adhere to the instruction of NERLDC during real time operation for safety of the grid. He also requested all the participants of the constituents to actively participate in the meeting so that fruitful decisions could be taken. Thereafter, the agenda items for discussion were taken up.

A. CONFIRMATION OF MINUTES

CONFIRMATION OF MINUTES OF 99th MEETING OF OPERATION SUB-COMMITTEE OF NERPC.

The minutes of 99th meeting of Operation Sub-committee held on 16th July, 2014 at Cherrapunjee were circulated vide letter No. NERPC/SE (O)/OCC/2014/924-58 dated 24th July, 2014.

OTPC vide mail dated 01.08.2014 has communicated their observation in respect of 99th OCC minutes of the meeting as below:

On Page 16, under sub-heading **Shutdown of Palatana Unit#1**, it is once again referred that "***GM (P), OTPC assured the house with the information that Unit-II of the station is capable of generating power and could start generation immediately in case of outage of Unit-1***".

OTPC communicated vide letter no. OTPC/UDP/Palatana/14-15/223 dated 27.06.14 addressed to the Director / SE (O), NERPC, vide letter no. OTPC/UDP/Palatana /14-15/285 dated 21.07.14 addressed to the Director / SE (O), NERPC and vide letter no. OTPC/UDP/Palatana /14-15/309 dated 25.07.14 addressed to the Member-Secretary (I/C), NERPC that Pallatana Unit #2 was not synchronized in combined cycle mode as test synchronization for both steam and gas turbines are separated. Further, it was stated that Unit #2 is not ready to run at higher loads because of non completion of various sub-systems required for higher load operation and OTPC is in constant touch with BHEL for completion of the job. Hence, question of running unit #2 as recorded in the minutes is to be corrected.

NERLDC also vide mail dated 04.08.2014 has communicated their observation in respect of 99th OCC minutes of the meeting as below:

NERLDC informed that Updated version of Operating Procedure, SLD & Power Maps of NER States and NER has already uploaded in NERLDC website & e-mailed to power utilities of NER for comment and suggestion. Power utilities of NER are requested to submit comment and suggestion for this document latest by 28th July, 2014; otherwise, it will be treated as final.

Members stated that the format uploaded by NERLDC is pdf format which is not editable. They requested NERLDC to upload in editable format for highlighting the comments/ suggestions.

The Sub-committee confirmed the minutes of 99th OCCM of NERPC as no other comments/observations were received from the constituents.

ITEMS FOR DISCUSSION

B.1. OPERATIONAL PERFORMANCE AND GRID DISCIPLINE DURING JULY, 2014

As per the data made available by NERLDC, the grid performance parameters for July, 2014 are given below:

NER PERFORMANCE DURING JULY, 2014

States	Energy Met (MU)		% inc(+)/dec(-)	Energy Reqr. (MU)		% inc(+)/dec(-)
	July-14	Jun-14		July-14	Jun-14	
Ar. Pradesh	50.54	47.01	7.5	52.23	49.38	5.8
Assam	756.43	684.38	10.5	820.21	742.77	10.4
Manipur	49.42	45.53	8.6	51.77	48.22	7.4
Meghalaya	131.41	126.19	4.1	154.74	155.41	-0.4
Mizoram	35.85	35.23	1.8	37.59	37.17	1.1
Nagaland	49.71	45.58	9.1	51.72	47.79	8.2
Tripura	93.31	91.19	2.3	100.68	97.46	3.3
Region	1166.6	1075.1	8.5	1268.9	1178.2	7.7

States	Demand Met (MW)		% inc(+)/dec(-)	Demand in (MW)		% inc(+)/dec(-)
	July-14	Jun-14		July-14	Jun-14	
Ar. Pradesh	116	110	5.5	118	111	6.0
Assam	1187	1215	-2.3	1329	1343	-1.0
Manipur	125	117	6.8	131	118	10.9
Meghalaya	297	289	2.7	299	294	1.7
Mizoram	82	74	11.4	83	75	10.4
Nagaland	117	111	5.4	120	115	3.6
Tripura	238	230	3.5	239	235	1.6
Region	1996	1998	-0.1	2263	2252	0.5

REGIONAL GENERATION & INTER-REGIONAL EXCHANGE IN MU

Month---->	July-14	Jun-14
Total Generation in NER (Gross)	1139.61	920.033
Total Central Sector Generation (Gross)	795.39	576.11
Total State Sector Generation (Gross)	344.22	343.923
Inter-Regional Energy Exchange		
(a) NER-ER	18.85	20.748
(b) ER-NER	81.81	219.5
© Net Import	62.96	198.752

AVERAGE FREQUENCY (Hz)

Month---->	July-14	Jun-14
	% of Time	% of Time
Below 49.7 Hz	35.15	37.28
Between 49.7 to 50.2 Hz	49.99	45.31
Above 50.2 Hz	14.86	17.41
Average	49.93	49.93
Maximum	50.36	50.67
Minimum	49.41	49.32

From the above table, it is seen that energy requirement & requirement met (MU) of the region increased considerably, whereas peak met (MW) decreases slightly from the previous month.

The Summary of Messages issued by NERLDC for the constituents of NER for the Month of July, 2014 is given as below:

Constituents	Deviation Violation Message			Zero crossing Violation Message		
	Alert	Emergency	Total	Alert	Emergency	Total
AP	2	63	65	2	31	33
Assam	2	34	36	3	19	22
Manipur	0	25	25	0	3	3
Meghalaya	1	47	48	2	5	7
Mizoram	1	45	46	1	4	5
Nagaland	3	48	51	0	12	12
Tripura	1	73	74	0	17	17
AGBPP	0	0	0	0	0	0
AGTPP	0	0	0	0	0	0
RHEP	0	0	0	0	0	0
KOPILI	0	0	0	0	0	0
KHANDONG	0	0	0	0	0	0
KOPILI -II	0	0	0	0	0	0
DHEP	0	0	0	0	0	0
LOKTAK	0	2	2	0	0	0
PALATANA	0	3	3	0	0	0

The Sub-committee requested to avoid the deviation and try to maintain within the permissible limit for the safety of the grid.

FOLLOW UP ACTION

C.1 Synchronization of Pallatana Module -II

The CoD of Unit # 1 of OTPC was declared on 04.01.2014 and 3rd Gas Booster Compressor (GBC) is still in BHEL's factory at Hyderabad. The status is being monitored in subsequent OCC meetings and despite several requests from OTPC, ONGC cannot enhance the amount of supply of gas till date. While monitoring the status of transmission lines associated with evacuation of Pallatana Unit # 1 generation, representative from NETC informed that loop in of one circuit of 400 kV

D/C Silchar – Bongaigoan at Byrnihat S/S has been completed, but the line cannot be charged further since bay for loop out of this circuit is yet to be completed by Meghalaya. Further, NETC informed the members that 400 kV Silchar – Azara – II will be completed by June, 2014 and as intimated by Assam that 400kV sub-station is also ready for charging and once this line is completed, Azara-Byrnihat-I will be back charged through loop out circuit of Azara towards Byrnihat. NETC also mentioned that the balance section of Azara-Bongaigoan can be commissioned after 3 (three) months of getting the forest clearance for two locations in Aie valley and in Goalpara Division respectively.

Deliberation of the Committee

SE (O) informed that during the Regional Planning of Power in NER under the Hon'ble Member, NEC, the issue was requested by NERPC to supply adequate gas to Pallatana of OTPC & Monarchak of NEEPCO for the benefit of the region and accordingly, Adviser (Power), NEC has written to CMD, ONGC requesting them to supply adequate immediately so that plants can generate to the full capacity.

DGM, OTPC informed that the matter has also been followed up by them and ONGC has assured that adequate gas supply will be made available by end of September, 2014.

The Sub-committee also reviewed the status of commissioning of second unit of OTPC at Pallatana, following Transmission lines of POWERGRID and substation at Azara of Assam. The status as informed by OTPC, Assam and POWERGRID is as follows:

SN	Items	Present status
1	Trial operation and CoD of Unit -II of OTPC at Palatana	Trial run is expected in October, 2014 and CoD is expected in Oct-Nov, 2014
2	400KV D/C Silchar - Melriat line	March, 2015
3	400KV D/C Silchar - Imphal line	November, 2014
4	220KV D/C Mariani (New) – Mokokchung	September, 2014

5	400KV D/C Byrnihat-Bongaigaon line	Byrnihat – Azara section charged on 28.07.2014. Azara–Bongaigaon section is expected by December, 2014
6	400kV Balipara – Bongaigaon D/C line # 3 & 4 with FSC	August, 2014 subject to availability of forest clearance for 5.2 kms of the line. [FSC commissioned on 11.01.2014]
7	400/220 kV sub-station at Azara of Assam	Completed

The Sub-committee requested OTPC to furnish the details for trial run of Unit #2 in advance to NERLDC. OTPC agreed.

The Sub-committee also discussed in detailed about the mechanism of power evacuation at Azara since loop out bay at Byrnihat is not ready. The forum suggested that Assam has to look for implementation of Reverse Power Relay, before drawing power (loading) the sub-station. Assam agreed.

The Sub-committee noted as above.

C.2 SPS scheme for Pallatana

The following four (4) System Protection Scheme (SPS) associated with generating Unit#1 (363.3MW) of OTPC at Palatana has been planned for NER:

Case 1: Tripping of generating unit of OTPC at Palatana

Case 2: Tripping of 400 kV D/C Palatana- Silchar line (with generation from OTPC's plant at Palatana)

Case 3: Tripping of 400 kV Silchar-Byrnihat line (with generation from OTPC's plant at Palatana)

Case 4: Tripping of 400 KV Silchar – Byrnihat line (without generation from OTPC's plant at Palatana)

During 95th OCC meeting, the Sub-committee had reviewed the status of implementation of the scheme and the status was as follows:

Case I & Case IV: Has already been implemented

Case 2-3: GM, OTPC stated that implementation of SPS -2 & 3 mentioned above was discussed in detail and the scheme was finalized in the meeting held with BHEL at Palatana on 17.01.2014. Subsequently some modification has been carried out by BHEL and same will be circulated to all. The commercial offer for implementation of scheme is expected in 10days time and the scheme is will be implemented very soon after completion of procurement process.

OTPC had requested POWERGRID to look into following issues:

- (a) SPS at OTPC end should not be modified with commissioning of 2nd Circuit of Silchar _ Bongaigaon 400kV line.
- (b) Trip command from two different sources should be available to desynchronize the machine to avoid unwarranted tripping of generating Unit when the generation is more than 200MW. During 93rd OCC meeting, subcommittee had suggested OTPC for getting input from Circuit breakers at both ends of the line (Silchar & Byrnihat) through communication link and to discuss the matter with POWERGRID.
- (c) Two out of three logics [i.e. inputs from circuit breaker (s), master trip relay (s) etc.] shall be utilized for desynchronisation of Gas Turbines. During 93rd OCC meeting, subcommittee had suggested OTPC to discuss the matter with POWERGRID.

Deliberation of the Committee

Enhancement of quantum of load relief during SPS operation: The matter was deliberated in last OCC meeting and it was decided to convene meeting of identified committee for the review of SPS schemes to ensure higher load relief as well as changes to be incorporated in the schemes in view of changes in network topology. ***Further OTPC may informed the house the status of SPS-3[NERLDC is of the opinion that the elaborate scheme furnished by M/s BHEL may not be necessary and tripping of the identified CB will be serve the purpose.]*** In addition the SPS-3 requires to be upgraded to incorporate addition of Silchar-Azara 400 kV line.

The Sub-committee requested to have a sub-group committee meeting on 22.08.2014 at NERLDC, Shillong to discuss for early implementation of the SPS Case II & III as well as other issues of Islanding Scheme etc.

C.3 Details of Installations and self-certification (by STUs and CTUs) in respect of operationalisation of Under Frequency Relays (UFRs) in NER systems and additional requirement of UFR and df/dt relays:

The OCC regularly review the status of UFR based load shedding in the region. The following details are confirmed in earlier OCC meetings.

Assam: UFRs based load shedding for 220MW have been implemented.

Nagaland: UFRs based load shedding for 20MW have been implemented.

It was also informed in earlier OCC meeting that UFR operation report in prescribed format on monthly basis is received from Mizoram regularly but other beneficiaries have not sent any information. It was requested that all constituent states of the region to complete the installation of UFRs required for all four stages by July, 2014 end and start furnishing of UFR operation reports to NERPC & NERLDC on monthly basis before OCC meetings.

Implementation of UFR load shedding based on average load as per CERC order in Petition No. 263/MP/2012 on 19.12.13: As per para no 13 of CERC order in Petition No. 263/MP/2012 on 19.12.13:

Quote

We have heard the parties and perused the pleadings. We are in agreement with the petitioner that there is a need to review and estimate the actual load on the feeders and the constituents should consider average load in the feeders for computation of target relief on identified feeders. As sufficient load relief has not been achieved, the respondents are directed to identify more feeders for installation of UFR and df/dt relays and submit the details to SRPC.

Unquote

At present, UFR load shedding based on maximum load is implemented in NER. When UFR based load shedding are required, load of identified feeders are not generally at peak load. As such sufficient load relief will not be achieved for system requirement. NER beneficiaries are accordingly requested to compute average load of identified feeders where UFRs are installed and to identify additional feeders for installation of UFRs to fulfil the target based upon average load.

The sub-committee expressed concern that inspite of completion of installation of Stages I & II, no data have been received during the major grid disturbance occurred on 25.07.2014. The sub-committee requested all the constituents to furnish the data at the earliest so that the issue can be discussed on 22.08.2014 as above. The sub-committee also requested Ar. Pradesh, Manipur, Meghalaya, Mizoram & Tripura to complete the remaining installation of Stage III & IV at the earliest.

C.4 Lines under long outages

During the 100th OCC meeting, the issue for restoration of these lines was reviewed by the committee and the status was as follows:

- a) 220kV BTPS – Agia line (one ckt) – [Since Nov'97]: The representative of Assam informed that the work has been **completed on 25.07.2014**.

The sub-committee noted the same and appreciated AEGCL for the same. With the commissioning of this line ATC/TTC has been enhanced accordingly.

- b) 132kV Mariani – Mokokchung line - [Since Apr'02]

Since no representative from Manipur was present the status could not be updated.

- c) 39km of 132kV Rengpang – Jiribam line – [Since Oct'02]

Manipur representatives informed that the status could not be ascertained as the concerned officials looking after transmission were not available. The members requested Manipur representative to inform the status of the line at the earliest.

- d) 132 kV Dimapur (Nagaland) – Kohima (Nagaland) line at 220/132 kV Dimapur (PGCIL) Substation- [Since Aug'11]:

The sub-committee noted as above.

C.7 Furnishing Geographic Co-ordinates of Nodes of NER Grid:

Power Maps of NER states are being developed by CBIP. To represent nodes of NER Grid in power maps, Co-ordinates of **existing Nodes, Nodes under construction & identified future Nodes** (66 kV & above) of NER Grid are required. Power Utilities of NER are requested to furnish latitude & longitudes of Nodes of NER Grid.

All the constituents have agreed to furnish the above data to NERLDC at the earliest. However, no data from any power utility have been received till date except Meghalaya and Tripura. Assam representative stated in the 99th OCC meeting that they have outsourced the work and the same would be furnished in the next OCC meeting.

Deliberation of the Committee

Meghalaya and Tripura had already submitted the data to NERLDC. Assam representative stated that they have outsourced the work and the same would be furnished in the next OCC meeting.

The subcommittee requested concerned utilities to furnish the data at the earliest & the utilities agreed.

C.8 Monthly MU requirement & availability of each state of NER as per format:

The following figures of state wise MU requirement and availability were taken from LGBR 2014-15 of NERPC. State wise MU requirement and availability for these months are to be checked. Constituents may kindly verify if the above data are correct.

Requirement:

Name of State	Aug14	Sep14	Oct14	Nov14	Dec14
Ar. Pradesh	70	70	70	65	65
Assam	830	825	790	660	680
Manipur	65	65	65	65	65
Meghalaya	150	145	170	175	175
Mizoram	39	36	43	43	40
Nagaland	55	60	65	55	55
Tripura	120	120	120	110	120
NER	1328	1321	1323	1173	1201

Availability:

Name of State	Aug14	Sep14	Oct14	Nov14	Dec14
Ar. Pradesh	78	69	58	47	43
Assam	630	583	534	461	454
Manipur	85	78	72	64	59
Meghalaya	287	268	231	158	148
Mizoram	56	50	46	39	36
Nagaland	60	56	52	38	34
Tripura	159	148	147	134	138
NER	1353	1252	1130	941	914

- These data required for preparation of various reports.

Constituents may kindly note.

C.9 Monthly MW requirement & availability of each state of NER:

The following figures which were taken from minutes of 98th OCCM have been reviewed in the 99th OCCM as given below:

A. Peak Demand in MW

Name of State	Aug14	Sep14	Oct14	Nov14	Dec14
Ar. Pradesh	90	139	136	125	125
Assam	1400	1350	1380	1435	1450
Manipur	110	135	140	135	135
Meghalaya	260	310	335	350	345
Mizoram	85	86	87	90	80
Nagaland	110	100	140	120	125
Tripura	250	260	310	270	250
NER	2345	2380	2528	2525	2460

B. Peak Availability in MW

Name of State	Aug14	Sep14	Oct14	Nov14	Dec14
Ar. Pradesh	100	101	130	120	118
Assam	1050	1045	993	874	867
Manipur	90	122	134	115	118
Meghalaya	350	401	415	290	276
Mizoram	95	91	91	80	79
Nagaland	100	95	86	75	75
Tripura	260	300	295	285	281
NER	2045	2155	2145	1839	1814

As decided in 96th OCCM, SLDCs are requested to provide the following data:-

A. Off Peak Demand in MW (0800 Hr)

Name of State	Aug14	Sep14	Oct14	Nov14	Dec14
Ar. Pradesh	74	77	75	69	69
Assam	918	868	856	890	899
Manipur	81	81	84	81	81
Meghalaya	202	202	201	210	207
Mizoram	54	57	57	59	52
Nagaland	72	72	84	72	75
Tripura	182	175	202	176	163
NER	1500	1460	1485	1555	1470

B. Off Peak Availability in MW (0800 Hr)

Name of State	Aug14	Sep14	Oct14	Nov14	Dec14
Ar. Pradesh	129	121	121	115	114
Assam	955	903	914	831	835
Manipur	123	114	114	104	105
Meghalaya	460	437	390	276	264
Mizoram	94	89	84	76	76
Nagaland	88	83	78	70	71
Tripura	291	284	284	279	274
NER	2068	1955	1910	1751	1740

Constituents may kindly note.

D. NEW ITEMS

D.1 Generation Planning (ongoing and planned outages)

The availability of hydro stations of NEEPCO/NHPC are as follows:

Generating Station	Units running	MW	MU	Reservoir
Khandong	1	25	2.235	Spilling
Kopili	3	150	13.95	Spilling
Kopili-II	1	25	2.235	
Ranganadi	3	300	Subject to inflow	
Doyang	3	70	2.51	FRL
Loktak	3	105	2.765	
AGBPP	9	200	-	-
AGTPP	4	75	-	-

Notes: - 1) Unit-II of Khandong expected to be synchronized by September 2014.

2) There will be shortfall of around 400 MW in peak hours during shutdown of Palatana for combustion inspection

OTPC informed that Block-I of Pallatana has to undergo Combustion Inspection (CI) after completion of 8000 Fixed Firing Hours as per stipulation of GE (USA). Hence, they propose to undertake CI from 20.08.2014 to 04.09.2014.

The sub-committee enquired from OTPC whether the shutdown requested by them for 15 days can be completed as per request. If not, OTPC can intimate the forum so that they can decide before giving the shutdown.

OTPC representative informed that as per statement given by GE the work will be completed within 15 days. It was assured that maximum efforts will be monitored by them so that the work can be completed in time.

The sub-committee advised OTPC to intimate to NERPC/NERLDC by 26.08.2014 after thorough check up of the machine in case the work cannot be completed within the specified period of 15 days. OTPC agreed.

The sub-committee decided that no transmission lines which affect the ATC/TTC should be approved for shutdown during the above period i.e. 20.08.2014 to 04.09.2014. At the same time maximum generation should be made available from the generating stations in the region to meet the shortage of power due to Pallatana shutdown. All the constituents should strictly adhere to the instruction of NERLDC during real time operation for the safety of the grid.

After detail discussion the sub-committee approved the shutdown as proposed by OTPC/NEEPCO for August 2014 and September 2014 as given below:

S.N	Unit No:	From	To	No. of days	Reason
1.	Pallatana U #1	20.08.2014 (00:00 hrs)	04.09.2014 (24:00 hrs)	15 days	Combustion Inspection (CI)
1.	AGTPP U #5	06.09.2014	15.09.2014	10 days	CI & BI (Subject to Availability of Pallatana Unit#1)

Committee noted as above.

D.2 Water level and spillage data of hydro stations

Historical data of reservoir level and spillage data of Hydro stations are not available with NERLDC. This information is sometimes asked by various authorities to facilitate in making database for the same. All concerned are requested to furnish the available information to NERLDC as early as possible.

Deliberation in the meeting

It was learnt that NERLDC has furnish the format to all the constituents for necessary submission of data. Hence constituents may kindly furnish the data to NERLDC at the earliest.

Committee noted as above.

D.3 Outage Planning Transmission elements

SE (O), NERPC stated that as agreed in the 99th OCC meeting, 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.

Further, he stated that for all inter-regional outage proposals and all outages requiring curtailment/rescheduling of generation/load the rescheduled outage plan if any, must be sent to NERPC Secretariat and only on receiving approval/consent from NERPC secretariat, NERLDC shall process the rescheduled proposal as per the procedure approved by OCC forum. 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 reconfirmed to NERLDC on 7th of the month by 1000 Hr. This practice is necessary to ensure optimal capacity utilization and the time required for associated system study/coordination by/amongst RLDC/NLDC.

After detail discussion the sub-committee approved the shutdown as proposed by constituent members for August, 2014 to September 2014 as given in Annexure - D.3 which is already uploaded in the website.

D.4 TTC of NER-ER Corridor under N-1 Criteria & enhancement of TRM of NER-ER Corridor:

Subsequent to the commissioning of Azara S/s and associated transmission lines etc, it has been observed from system study that sensitivity towards BTPS has increased and accordingly the credible contingency for calculation of TTC of NER-ER Corridor under present condition is taken as collapse of tower of 220kV BTPS Salakati line [i.e. N-1-1 Criteria] and the TTC is 780/600 MW during Off-peak/Peak considering N-1 of Misa ICT also. Further as per detailed procedure for relieving congestion in real time operation of CERC, size of largest generating unit in the control area/ group of control area/Region will be import transmission reliability margin (TRM) of the corridor. Import TRM of NER-ER corridor is presently taken as 50 MW. However now 363 MW of Palatana is largest size of machine in NER Grid and being located in southern part of the region the TRM is directly related to the outage of this unit. Accordingly import TRM of NER-ER corridor needs to be revised; around 300 MW considering SPS based load relief is considered.

Deliberation in the meeting

The forum did not agree to import TRM of NER-ER corridor and revision of 300 MW load relief SPS. The forum requested NERPC Secretariat to take up the matter with NLDC on the matter.

Committee noted as above.

D.5 Review of Generation Run-back frequency setting of Pallatana machines:

It has been observed that Pallatana generation starts decreasing when system frequency is more than 50.60 Hz (Generation run back continues till frequency reaches 50.3 Hz). It is requested to review the settings to avoid sharp decrease of generation in case of system isolation resulting collapse of the system.

Deliberation in the meeting

OTPC representative informed that the matter will be taken up by them with the manufacturer and the status would be intimated in the next OCC meeting.

Committee noted as above.

D.6 Status/Load ability of 132 kV Lumshnong – Panchgram Line:

Meghalaya informed that since the line is old, loading of above line needs to be fixed at a safe thermal limit. Hence both Assam & Meghalaya may look into the matter for strengthening of the system.

During 98th OCC meeting, Assam informed the members that healthiness of the line has been checked by AEGCL till Panchgram and it was found that the line is very old and cannot be loaded up to 50 MW. Healthiness of the line from Lumshnong end may be confirmed from Me. PTCL.

During 99th OCC meeting, Member Secretary (I/C) informed that the 132kV Lumshnong – Panchgram line is an interstate line benefiting the NER region. Strengthening of this line is essential to increase the loadability of the line beyond 50MW and this will require huge expenditure. He further stated that possibility of funding from PSDF may be explored as per PSDF guidelines.

He advised Me.ECL to apply for funding from PSDF by filling in prescribed formats as provided by CEA/NLDC.

Deliberation in the meeting

SE, Me. ECL informed that the DPR for the same is almost ready and the same will be sent to NERPC Secretariat for further action in this regard.

Committee noted as above.

D.7 Status of Construction of:

1. 220/132/33 kV sub-station at Sonapur
2. LILO of 132 kV Kahilipara – Umtru Line at Byrnihat.

During 99th OCC meeting, members requested Assam and Meghalaya to resolve the matter bilaterally and inform the members in the next OCCM.

Deliberation in the meeting

SE, Me. ECL informed that meeting between Assam & Meghalaya was held on 01.08.2014 and they have decided to resolve bilaterally.

Committee noted as above.

D.8 Frequent disruption of power supply to Kameng HEP:

It was informed in 99th OCC meeting that, the Department of Power, Govt. of Arunachal Pradesh was allowed to draw power from a Tee-connection at Tipi (near Bhalukpong) from the 132 kV Balipara - Khuppi Transmission Line. The Tee-connection was energized on 31-05-11 and drawal of power was temporarily allowed for two months only within which time the LILO System was supposed to be commissioned. It may be noted that the drawal of power in the 132 kV Balipara - Khuppi Line is monitored from Balipara end and therefore the drawal of power in the said Tee-connection is being accounted.

However, due frequent over-drawal by Department of Power, Govt. of Arunachal Pradesh from the said Tee-connection, 132kV Balipara-Khuppi line is frequently opened from Balipara substation which hampers the construction work of Kameng HEP of NEEPCO.

It was agreed in the 99th OCC meeting that NEEPCO will remove the Tee-Connection in consultation with Ar. Pradesh.

Deliberation in the meeting

The Sub Committee also expressed serious concern about the Tee-Connection made at Bhalukpong from Balipara-Khuppi Tr line which is not permissible as per IE rules. The OCC forum has advised NEEPCO to open the T-connection with immediate effect.

The Committee noted as above.

D.9 Commissioning of 315 MVA ICT at NTPC Bongaigaon & also 220 kV BTPS(Assam):

NTPC D/C line for off loading 220kV Salakati-BTPS D/C line – It has been observed that the 220 kV Salakati – BTPS D/C line is getting overloaded during peak hours posing threat to system security. For off-loading the link it is requested to NTPC for taking actions for early commissioning of 315 MVA ICT at NTPC Bongaigaon & also 220 kV BTPS(Assam) – NTPC D/C line for off loading 220kV Salakati-BTPS D/C line. As no representatives from NTPC were present in the 99th

OCC meeting, the subcommittee advised NERLDC/NERPC to take up the matter with NTPC for early commissioning of 315 MVA ICT at NTPC Bongaigoan.

NERPC vide letter dated 30.07.2014 has written to NTPC in this regard, but no reply was received from them.

Deliberation in the meeting

AGM, NTPC stated that test charging of Bongaigoan ICT is done. 2 bays will be test charged from Balipara end in the 2nd week of September 2014.

The Committee noted as above.

D.10 Partial Requisition Based Scheduling in NER:

Tripura informed that Partial Requisition based schedule has been implemented in the region except for Hydel Generation. But hydel generation frequently changes their schedule which is effected the DSM & penalty imposed for that.

During 98th OCC meeting, members noted the difficulties in scheduling Run-of-river project as it is a must run station in case of spillage. The same is also applicable for other Hydro stations in case of spillage. It was agreed that the issue will be deliberated in next OCCM to arrive at better practice of scheduling.

Deliberation of the Committee

AS, NERPC informed that the issue was also discussed in the 21st CCM as below where representative of NERLDC referred Clauses 6.5.12 and 6.5.13 of IEGC which are quoted below:

Clause 6.5.12 of IEGC : Run-of-river power station with pondage and storage type power stations are designed to operate during peak hours to meet system peak demand. Maximum capacity of the station declared for the day shall be equal to the installed capacity including overload capability, if any, minus auxiliary consumption, corrected for the reservoir level. The Regional Load Despatch Centers shall ensure that generation schedules of such type of stations are prepared and the stations despatched for optimum utilization of available hydro energy except in the event of specific system requirements/constraints.

Clause 6.5.13 of IEGC : The schedule finalized by the concerned load dispatch centre for hydro generating station, shall normally be such that the scheduled energy for a day equals the total energy (ex-bus) expected to be available on that day, as declared by the generating station, based on foreseen/planned water availability/release. It is also expected that the total net energy actually supplied by the generating station on that day would equal the declared total energy, in order that the water release requirement is met."

It was clarified by NERLDC that in case of hydro, water available in the reservoir would have to be optimally utilized and reduced requisition resulting in sub-optimal utilization would not be possible as it would violate IEGC provisions. In case of ROR and spilling reservoir based hydro, water would have to be fully used and scheduling would have to be done accordingly. But in case of no spilling, there can be appropriate water management/planning in OCC as per requirement of beneficiaries which would effectively result in requisition based scheduling. Commercial Committee advised that in such cases when there is no spilling, OCC may plan MU/day for each reservoir hydro for a period till next OCC. This would help beneficiaries to decide their action plan. Based on the broad planning in OCC, RLDC would prepare entitlement/schedule in MW in day ahead basis taking into account demand profile of States/Region.

Regarding sudden change in ROR schedule, it was felt that such variation would have to be absorbed by beneficiaries by regulating own generation and reducing requisition from gas thermal up to technical minimum. It was also felt that continuous trading in PX once implemented would come to the rescue of beneficiaries.

The Committee noted as above.

D.11 Evacuation of power from Margherita Power Plant.

APGCL is developing a 660 MW supercritical power plant in Margherita based on Assam coal, with a provision of future expansion with an identical unit. The project is proposed to be executed in joint venture with NEEPCO. Being a plant of large capacity in comparison with Assam grid, we are faced with issues of evacuation of power and stability of Assam grid in case of sudden outage of the plant.

Deliberation of the Committee

Representative from APGCL informed the following points:-

- 1) Govt. of Assam has allotted land measuring 2000 Bighas covered at village Saliki NC, Margherita Sub-division, District: Tinsukia in favour of APGCL.
- 2) Water drawal permission obtained from Department of Water Resources, Govt. of Assam from river Buridehing at rate of 2500 cum/hr.
- 3) Coal linkage of 1.7 Million Tonnes per annum applied to Ministry of Coal, fee of Rs. 5.00 Lakhs deposited and application in duly filled CEA format furnished to CEA. Correspondences are going on from Govt. of Assam and APGCL for early coal linkages to the project.
- 4) Preparation of EIA study report for the proposed project as per ToR, MOE&F is going on.
- 5) Consultant M/s DCPL, Kolkata engaged for preparation of Pre Feasibility Report and DPR. Final PFR submitted in the month of December, 2012. Draft DPR has also been submitted and is under review.
- 6) As per Board's resolution No 10 dated 25-04-14, the project is to be implemented through Joint Venture Model with NEEPCO.
- 7) MoU has already been signed on 14.07.14 with NEEPCO for implementation of the project on JV mode.
- 8) Change of configuration from 2x250 MW to 1x660 MW has been decided.

The Committee noted as above and requested NERPC to take up the matter in appropriate forum.

D.12 Estimated Transmission Availability Certificate (TAC) for the month of July, 2014.

The Estimated Transmission System Availability for the month of July, 2014, furnished by PGCIL, is **99.9820%**. The detail outage data for calculation of Transmission System Availability furnished by PGCIL, is at **Annexure D.12**. NER constituents are requested to kindly communicate their views and observations, if any, by 28th August, 2014 so that Final TAC for the month of July, 2014 may be finalized by NERPC Secretariat.

SE (O) informed that as per Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014-19, the Transmission System Availability factor for a calendar month (TAFM) w.e.f. 1st April, 2014 shall be calculated by the

respective transmission licensee, got it verified by the concerned RLDC and certified by the Member Secretary, Regional Power Committee of the region concerned, separately for each AC and HVDC transmission system. He highlighted some of the important points on the regulation regarding transmission availability calculations as follows:

- For Ac system, two trippings per year shall be allowed
- After two trippings in a year, additional 12 hours outage shall be considered in addition to the actual outage
- In case of outage of a transmission element affecting evacuation of power from the generating station, outage hour shall be multiplied by a factor of 2.
- The weightage factor for each category of transmission elements shall be calculated as per regulation.

The sub-committee requested the forum to find out the mechanism regarding transmission elements affecting the generating stations so that unnecessary burden will be imposed on any agency. They felt that further deliberation is required so that constituents can understand better.

SE (O) stated that no further deliberation is required, but requested all the constituents to go through the CERC Regulations above and take the matter with CERC for their difficulties. He also mentioned that NERPC Secretariat will certify the TAC as per CERC regulations from 1st April, 2014. Being the first certificate to be issued for the control period 2014-19 the same may be thoroughly deliberated by the constituents vis a vis the new tariff regulation so that any inadvertent mistake can be detected & corrected before issuance of certificate by NERPC.

The Committee noted as above.

Date & Venue of next OCC meeting

It is proposed to hold the 101st OCC meeting of NERPC in second week of September, 2014. However, the exact date and venue will be intimated in due course.

The meeting ended with thanks to the Chair.

List of Participants in the 100th OCC Meeting held on 13/08/2014

SN	Name & Designation	Organization	Contact No.
1.	Sh. Nangkong Perme, EE (E)	Ar. Pradesh	9436288643
2.	Sh. M.K. Bordoloi, CGM, SLDC	AEGCL	9435203996
3.	Sh. B.C. Buddu, GM	APGCL	9435045675
4.	Sh. J.K. Baishya, AGM, LDC	AEGCL	9435041494
5.	Sh. K.Sarma, AGM	AEGCL	9435013532
6.	Sh. J.P. Choudhury, AGM	APDCL	9954055295
7.	Sh. K. Goswami, DGM	APDCL	9864020019
8.	Sh. S.K.Banya, DGM	APDCL	9435081870
9.	Sh. A.K. Saikia, DGM,LDC	AEGCL	9864116176
10.	Mrs. M.Ravi, Manager, LDC	APGCL	-
	Not represented	Manipur	
11.	Sh. F.Kharshing, SE, SLDC	Me.ECL	9863066960
12.	Sh. R.Syiem, SE (T&T)	Me. PTCL	9863065709
13.	Sh. R.Majaw, SE(EM)	Me.ECL	9436110871
14.	Sh. T.Gidon, EE, SLDC	Me.ECL	9774479956
15.	Sh. David Ramnunsanga, Sr. EE	Mizoram	9436155836
16.	Sh. A.Jakhalu, EE(Transmission)	Nagaland	9436002696
17.	Sh. Uddhayan Debbarma, DGM	TSECL	9436462842
18.	Sh. Debabrata Pal, Sr. Mgr	TSECL	9436500244
	Not represented	NERLDC	
19.	Sh. C.P.Saikia, Sr. Mgr (E/M)	NEEPCO	9435577598
20.	Sh. D.Goswami, Sr. Mgr (E/M)	NEEPCO	9435577655
21.	Sh. Arup Bhattacharya, AGM (EED)	NTPC	9435701599
22.	Sh. Deepak Chetia, AM (O&M)	NTPC	9435325996
23.	Sh. Niraj Kr. Choudhary, Dy. Mgr (E)	NHPC	9436894890
24.	Sh. Pranav Kumar, Engineer (E)	NHPC	9436894887
25.	Sh. P.Kanungo, DGM (OS)	NERTS	9436302823
26.	Sh. Arup Ch. Sarmah, DGM (Comml)	OTPC	9871839502
27.	Sh. N. K. Gupta, Manager (O)	OTPC	9774233426
28.	Sh. B. Lyngkholi, S.E (O)	NERPC	9436163419
29.	Sh. Lalrinsanga, A.S	NERPC	9436161886
30.	Sh. S. M. Jha, E.E (O)	NERPC	8731845175

POWER GRID CORPORATION OF INDIA LIMITED
OPERATION SERVICE DEPARTMENT, NERTS, SHILLONG
Exception Report of Bus Reactors

MONTH : JULY-14

Sl. No.	Name of the Element		Ckt No		Duration of Outage and Attributable To						Category	Reason of Outage		
	Outage		Restoration		POWERGRID		Other Constituents		Sys.Const/Natural calamities/ Militant activities				Outage under categories of Deemed Available	
	Date	Time	Date	Time	Hrs.	Mns.	Hrs.	Mns.	Hrs.	Mns.			Hrs.	Mns.
BR_SILCHAR(63MVAR)			#2											
1	04/07/2014	18:54	05/07/2014	00:26	00	00	00	00	00	00	05	32	SVRD	h/T for vol. regu. On RLDC instruction vide code 1035
Sub-Total					00	00	00	00	00	00	05	32		
BR_BONGAIGAON(80MVAR)			#4											
2	01/07/2014	00:00	01/08/2014	00:00	00	00	00	00	00	00	744	00	SVRD	h/T for vol. regu. On RLDC instruction vide code 902
Sub-Total					00	00	00	00	00	00	744	00		
BR_BONGAIGAON(80MVAR)			#3											
3	01/07/2014	00:00	06/07/2014	04:45	00	00	00	00	00	00	124	45	SVRD	h/T for vol. regu. On RLDC instruction vide code 941
4	07/07/2014	18:27	01/08/2014	00:00	00	00	00	00	00	00	581	33	SVRD	h/T for vol. regu. On RLDC instruction vide code 1087
Sub-Total					00	00	00	00	00	00	706	18		
Grand Total					00	00	00	00	00	00	1455	50		

POWER GRID CORPORATION OF INDIA LIMITED
OPERATION SERVICE DEPARTMENT, NERTS, SHILLONG
Exception Report

MONTH: JULY-14

Sl. No.	Name of the Element		Ckt No		Duration of Outage and Attributable To								Category	Reason of Outage
	Outage		Restoration		POWERGRID		Other Constituents		Sys.Const/Natural calamities/ Miltant activities		Outage under categories of Deemed Available			
	Date	Time	Date	Time	Hrs.	Mns.	Hrs.	Mns.	Hrs.	Mns.	Hrs.	Mns.		
RCN_AGARTALA					# 1									
1	20/07/2014	20:55	20/07/2014	21:25	00	00	00	30	00	00	00	00	OMSU	Fault in Tripura state system
2	23/07/2014	09:20	23/07/2014	11:55	02	35	00	00	00	00	00	00	OMST	SD vtaken for rectification of Rph CT iunner at 79rilla end
3	23/07/2014	11:55	23/07/2014	12:44	00	00	00	49	00	00	00	00	OMSU	Line could not be charged after SD due to nroblem at NEEPCO end
Sub-Total					02	35	01	19	00	00	00	00		
RCN_AGARTALA					# 2									
4	20/07/2014	20:55	20/07/2014	21:35	00	00	00	40	00	00	00	00	OMSU	Fault in Tripura state system
5	27/07/2014	01:17	27/07/2014	01:50	00	00	00	33	00	00	00	00	OMSU	Fault in downstream Tripura system
Sub-Total					00	00	01	13	00	00	00	00		
AIZWAL_KUMARGHAT														
6	01/07/2014	09:25	01/07/2014	11:14	01	49	00	00	00	00	00	00	OMST	ESD taken for checking of PSL pertaining to autoreclosure feature at Aizawl end
7	12/07/2014	16:19	12/07/2014	16:44	00	00	00	25	00	00	00	00	OMSU	Tripped due to downstream fault in Mizoram svstem
8	22/07/2014	10:30	22/07/2014	12:37	00	00	00	00	02	07	00	00	LMAC	SD taken for clearing of bamboos leaning towards condr from outside line corridor in
9	26/07/2014	08:25	26/07/2014	11:53	00	00	00	00	03	28	00	00	LNCC	Offlin etest shows no abnormality. Lightning suspected
Sub-Total					01	49	00	25	05	35	00	00		
BADARPUR_KHLIERIAT														
10	20/07/2014	13:08	20/07/2014	13:20	00	00	00	00	00	12	00	00	LNCC	Tripped due to lightning(LA countr incr at KHL T in RYB nh)
Sub-Total					00	00	00	00	00	12	00	00		
DIMAPUR_IMPHAL														
11	01/07/2014	08:11	01/07/2014	17:15	00	00	00	00	09	04	00	00	LNCC	SD taken for shifting of endangered loc.139
12	02/07/2014	08:00	04/07/2014	20:00	00	00	00	00	60	00	00	00	LNCC	do
13	05/07/2014	10:27	05/07/2014	15:24	00	00	00	00	04	57	00	00	LNCC	SD taken for dismantling old tower in connection with shifting of endangered
14	27/07/2014	18:45	27/07/2014	19:08	00	23	00	00	00	00	00	00	OMST	ESD taken for attending hotspot in Rph CT terminal

Sl. No.	Name of the Element		Ckt No		Duration of Outage and Attributable To								Category	Reason of Outage
	Outage		Restoration		POWERGRID		Other Constituents		Sys.Const/Natural calamities/ Miltant activities		Outage under categories of Deemed Available			
	Date	Time	Date	Time	Hrs.	Mns.	Hrs.	Mns.	Hrs.	Mns.	Hrs.	Mns.		
Sub-Total					00 : 23		00 : 00		74 : 01		00 : 00			
GOHPUR_NIRJULI														
15	05/07/2014	15:37	05/07/2014	19:07	03 : 30		00 : 00		00 : 00		00 : 00		SEFT	Yph LA failed at nirjuli end
Sub-Total					03 : 30		00 : 00		00 : 00		00 : 00			
IMPHAL_IMPHAL			#1											
16	05/07/2014	08:25	05/07/2014	08:14	00 : 00		-24 : 11		00 : 00		00 : 00		OMSU	Downstream fault(condr snapping) in 33KV Manipur svstem
17	18/07/2014	12:32	18/07/2014	12:36	00 : 00		00 : 04		00 : 00		00 : 00		OMSU	due to downstream fault in Manipur system
18	22/07/2014	04:45	22/07/2014	05:36	00 : 00		00 : 51		00 : 00		00 : 00		OMSU	Tripped due to fault in Manipur state system
19	22/07/2014	06:09	22/07/2014	06:19	00 : 00		00 : 10		00 : 00		00 : 00		OMSU	Tripped due to fault in Manipur state system
20	22/07/2014	14:13	22/07/2014	14:24	00 : 00		00 : 11		00 : 00		00 : 00		OMSU	Tripped due to fault in Manipur state system
Sub-Total					00 : 00		-23 : 27		00 : 00		00 : 00			
JIRIBAM_AIZWAL														
21	02/07/2014	15:25	02/07/2014	15:32	00 : 00		00 : 00		00 : 07		00 : 00		LNCC	Tripped due to lightning
22	03/07/2014	11:46	03/07/2014	14:34	00 : 00		00 : 00		02 : 48		00 : 00		LNCC	ESD taken for replacement of insulator in Bnh at loc 414 damaged by lightning
23	12/07/2014	16:19	12/07/2014	16:38	00 : 00		00 : 19		00 : 00		00 : 00		OMSU	Tripped due to downstream fault in Mizoram svstem
24	13/07/2014	09:25	13/07/2014	12:18	00 : 00		00 : 00		00 : 00		02 : 53		SCSD	SD taken for retrofitting of MICOM relay at Aizawl
25	22/07/2014	12:24	22/07/2014	12:32	00 : 00		00 : 00		00 : 08		00 : 00		LNCC	Tripped due to lightning
Sub-Total					00 : 00		00 : 19		03 : 03		02 : 53			
JIRIBAM_HAFLONG														
26	01/07/2014	13:05	01/07/2014	16:45	00 : 00		03 : 40		00 : 00		00 : 00		OMSU	Trip due to arcing during stringing of HT line by State utility near line
Sub-Total					00 : 00		03 : 40		00 : 00		00 : 00			
JIRIBAM_LOKTAK			# 2											
27	20/07/2014	08:15	20/07/2014	14:29	00 : 00		00 : 00		06 : 14		00 : 00		LNCC	Tripped due to landslide causing a tree to come within vicinity of Bnh condn at loc 61-
Sub-Total					00 : 00		00 : 00		06 : 14		00 : 00			
KHANDONG-HAFLONG														
28	24/07/2014	20:35	24/07/2014	21:04	00 : 00		00 : 00		00 : 29		00 : 00		LNCC	Heavy lightning. Insulator flashover at loc 80-81
Sub-Total					00 : 00		00 : 00		00 : 29		00 : 00			
KHANDONG_KHLIERIAT			I											

Sl. No.	Name of the Element		Ckt No		Duration of Outage and Attributable To								Category	Reason of Outage
	Outage		Restoration		POWERGRID		Other Constituents		Sys.Const/Natural calamities/ Miltant activities		Outage under categories of Deemed Available			
	Date	Time	Date	Time	Hrs.	Mns.	Hrs.	Mns.	Hrs.	Mns.	Hrs.	Mns.		
29	23/07/2014	11:49	23/07/2014	14:05	00	00	00	00	02	16	00	00	LNCC	SD taken for replacement of Yph Insulator string shattered due to lightning impact
30	27/07/2014	12:55	27/07/2014	13:07	00	00	00	00	00	12	00	00	LNCC	(Tripped due to lightning with LA counter incr. at KHLT
31	29/07/2014	03:59	29/07/2014	04:23	00	00	00	24	00	00	00	00	OMSU	fault in Meghalaya downstream system
Sub-Total					00	00	00	24	02	28	00	00		
KHANDONG_KHLIERIAT			# 2											
32	24/07/2014	19:05	24/07/2014	19:26	00	00	00	00	00	21	00	00	LNCC	R & Bph Insulator at loc.51 damaged due to Heavy lightning with LA counter incr. at fault in Meghalaya downstream system
33	29/07/2014	03:59	29/07/2014	04:32	00	00	00	33	00	00	00	00	OMSU	
34	30/07/2014	11:26	30/07/2014	17:00	00	00	00	00	05	34	00	00	LNCC	ESD taken for replacement of Insulator string at loc.51(R&B) damaged by lightning
Sub-Total					00	00	00	33	05	55	00	00		
KHLIERIAT_KHLIERIAT														
35	29/07/2014	03:59	29/07/2014	04:10	00	00	00	11	00	00	00	00	OMSU	fault in Meghalaya downstream system
Sub-Total					00	00	00	11	00	00	00	00		
KUMARGHAT_R C NAGAR														
36	27/07/2014	16:25	27/07/2014	16:36	00	00	00	00	00	11	00	00	LNCC	Heavy lightning near loc.106
37	28/07/2014	01:51	28/07/2014	02:04	00	13	00	00	00	00	00	00	LPPT	Transient ph-ph fault
38	28/07/2014	08:37	28/07/2014	08:52	00	00	00	15	00	00	00	00	SRMU	Relay mal-operation at RC Nagar end
39	30/07/2014	11:29	30/07/2014	11:39	00	10	00	00	00	00	00	00	LEFT	tripped during heavy lightning
40	31/07/2014	07:20	31/07/2014	16:15	08	55	00	00	00	00	00	00	OSPT	Planned maintenance work in the line
Sub-Total					09	18	00	15	00	11	00	00		
LOKTAK_IMPHAL			# 2											
41	22/07/2014	04:45	22/07/2014	05:20	00	00	00	35	00	00	00	00	OMSU	Tripped due to fault in Manipur state system
Sub-Total					00	00	00	35	00	00	00	00		
KOLASIB-AIZAWL														
42	05/07/2014	13:03	05/07/2014	14:10	00	00	00	00	01	07	00	00	LNCC	ESD taken for clearing of bamboo leaning towards condr near loc 78 due to cyclonic
43	08/07/2014	11:02	08/07/2014	17:08	00	00	00	00	06	06	00	00	LNCC	ESD taken for replacement of Yph condn in bet 192-93 damaged under the impact of
44	12/07/2014	16:19	12/07/2014	16:53	00	00	00	34	00	00	00	00	OMSU	Tripped due to downstream fault in Mizoram svstem
45	24/07/2014	18:01	24/07/2014	18:12	00	00	00	11	00	00	00	00	OMSU	Fault beyond line length

Sl. No.	Name of the Element		Ckt No		Duration of Outage and Attributable To								Category	Reason of Outage
	Outage		Restoration		POWERGRID		Other Constituents		Sys.Const/Natural calamities/ Militant activities		Outage under categories of Deemed Available			
	Date	Time	Date	Time	Hrs.	Mns.	Hrs.	Mns.	Hrs.	Mns.	Hrs.	Mns.		
Sub-Total					00 : 00		00 : 45		07: 13		00 : 00			
RANGANADI-ZIRO														
46	04/07/2014	09:53	04/07/2014	10:03	00 : 00		00 : 10		00 : 00		00 : 00		OMSU	Tripped due to downstream fault in AP svsystem
Sub-Total					00 : 00		00 : 10		00: 00		00 : 00			
SILCHAR-BADARPUR-I			#1											
47	06/07/2014	07:14	06/07/2014	16:38	09 : 24		00 : 00		00 : 00		00 : 00		OSPT	SD taken for mass tightening of jumpers in the line
48	07/07/2014	07:16	07/07/2014	15:42	08 : 26		00 : 00		00 : 00		00 : 00		OSPT	do
Sub-Total					17 : 50		00 : 00		00: 00		00 : 00			
SILCHAR-BADARPUR-II			#2											
49	06/07/2014	07:30	06/07/2014	16:41	09 : 11		00 : 00		00 : 00		00 : 00		OSPT	SD taken for mass tightening of jumpers along the line
50	07/07/2014	07:16	07/07/2014	15:42	08 : 26		00 : 00		00 : 00		00 : 00		OSPT	do
Sub-Total					17 : 37		00 : 00		00: 00		00 : 00			
SILCHAR-HAILAKANDI			#1											
51	04/07/2014	07:50	04/07/2014	15:55	08 : 05		00 : 00		00 : 00		00 : 00		OSPT	SD taken for tightening of jumpers along the line
52	04/07/2014	15:55	04/07/2014	18:07	00 : 00		02 : 12		00 : 00		00 : 00		OMSU	Line could not be charged due to non-receipt of clearance from NFERI DC
53	27/07/2014	09:29	27/07/2014	13:36	00 : 00		04 : 07		00 : 00		00 : 00		OMSU	Jumper failure in AEGCL section of the line near Panchoram
Sub-Total					08 : 05		06 : 19		00: 00		00 : 00			
SILCHAR-HAILAKANDI			#2											
54	04/07/2014	07:18	04/07/2014	15:55	08 : 37		00 : 00		00 : 00		00 : 00		OSPT	SD atken for tightening of jumpers along the line
55	04/07/2014	15:55	04/07/2014	16:48	00 : 00		00 : 53		00 : 00		00 : 00		OMSU	Line could not be charged due to non-receipt of clearance from NFERI DC
56	15/07/2014	13:49	15/07/2014	14:44	00 : 00		00 : 55		00 : 00		00 : 00		OMSU	shutdown by ASEB
Sub-Total					08 : 37		01 : 48		00: 00		00 : 00			
BALIPARA_TEZPUR														
57	07/07/2014	12:34	07/07/2014	20:31	00 : 00		07 : 57		00 : 00		00 : 00		OMSU	fault in ASEB section of the line
Sub-Total					00 : 00		07 : 57		00: 00		00 : 00			
MISA_DIMAPUR			# 1											
58	23/07/2014	07:22	23/07/2014	17:03	00 : 00		00 : 00		09 : 41		00 : 00		LNCC	SD taken for extensive clearing of high rise trees leaning towards condnr from outside
59	27/07/2014	18:10	27/07/2014	18:39	00 : 29		00 : 00		00 : 00		00 : 00		OMST	ESD taken for attending heavy sparking in Isolator

Sl. No.	Name of the Element		Ckt No		Duration of Outage and Attributable To								Category	Reason of Outage
	Outage		Restoration		POWERGRID		Other Constituents		Sys.Const/Natural calamities/ Miltant activities		Outage under categories of Deemed Available			
	Date	Time	Date	Time	Hrs.	Mns.	Hrs.	Mns.	Hrs.	Mns.	Hrs.	Mns.		
Sub-Total					00 : 29		00 : 00		09: 41		00 : 00			
MISA_DIMAPUR # 2														
60	24/07/2014	07:34	24/07/2014	18:32	00 : 00		00 : 00		10 : 58		00 : 00	LNCC	SD taken for extensive clearing of high rise trees leaning towards condr from outside	
Sub-Total					00 : 00		00 : 00		10: 58		00 : 00			
MISA_MARIANI(OLD)														
61	25/07/2014	05:21	25/07/2014	06:37	00 : 00		00 : 00		01 : 16		00 : 00	GGDC	tripped on O/V at Misa during grid disturbance	
Sub-Total					00 : 00		00 : 00		01: 16		00 : 00			
MISA_SAMAGURI # 1														
62	25/07/2014	05:24	25/07/2014	20:32	00 : 00		00 : 00		15 : 08		00 : 00	SNCC	Heavy lightning & switching overvoltage led to LA failure at Samaguri	
63	30/07/2014	03:15	30/07/2014	03:35	00 : 00		00 : 00		00 : 20		00 : 00	LNCC	Heavy lightning acuated tripping	
Sub-Total					00 : 00		00 : 00		15: 28		00 : 00			
MISA_SAMAGURI # 2														
64	30/07/2014	03:15	30/07/2014	03:35	00 : 00		00 : 00		00 : 20		00 : 00	LNCC	Tripped due to lightning	
Sub-Total					00 : 00		00 : 00		00: 20		00 : 00			
SALAKATI_BTPS # 2														
65	24/07/2014	10:03	24/07/2014	13:38	00 : 00		03 : 35		00 : 00		00 : 00	OMSU	SD taken by BTPS for maintenance work at their end	
Sub-Total					00 : 00		03 : 35		00: 00		00 : 00			
SALAKATI-BTPS # 1														
66	04/07/2014	18:59	04/07/2014	19:55	00 : 56		00 : 00		00 : 00		00 : 00	OMST	ESD taken for isolation of faulty Bph CVT	
67	07/07/2014	09:55	07/07/2014	14:20	04 : 25		00 : 00		00 : 00		00 : 00	OMST	ESD SD taken for replacement of Bph CVT	
Sub-Total					05 : 21		00 : 00		00: 00		00 : 00			
MISA-MARIANI(NEW)														
68	25/07/2014	05:21	25/07/2014	08:21	00 : 00		00 : 00		03 : 00		00 : 00	GGDC	tripped tripped on high voltage during grid disturbance	
Sub-Total					00 : 00		00 : 00		03: 00		00 : 00			
MISA_BALIPARA # 1														
69	17/07/2014	09:43	17/07/2014	10:03	00 : 00		00 : 00		00 : 20		00 : 00	LNCC	Line patrolled thoroughly, no abnormality found Lightning suspected	
70	19/07/2014	16:14	19/07/2014	19:58	03 : 44		00 : 00		00 : 00		00 : 00	OMST	ESD taken for checking of Rph CVT at Misa due to abnormal sound	
71	25/07/2014	05:15	25/07/2014	05:58	00 : 00		00 : 00		00 : 43		00 : 00	GGDC	Tripped on O/V at BLP during grid disturbance	
Sub-Total					03 : 44		00 : 00		01: 03		00 : 00			

Sl. No.	Name of the Element		Ckt No		Duration of Outage and Attributable To						Category	Reason of Outage				
	Outage		Restoration		POWERGRID		Other Constituents		Sys.Const/Natural calamities/ Miltant activities				Outage under categories of Deemed Available			
	Date	Time	Date	Time	Hrs.	Mns.	Hrs.	Mns.	Hrs.	Mns.			Hrs.	Mns.		
MISA-BALIPARA			#2													
72	25/07/2014	05:15	25/07/2014	05:59	00	00	00	00	00	44	00	00	GGDC	Tripped on O/V at BLP during grid disturbance		
Sub-Total					00	00	00	00	00	44	00	00				
BALIPARA-RANGANADI			# 1													
73	07/07/2014	11:54	07/07/2014	12:24	00	00	00	00	00	30	00	00	LNCC	Line patrolled thoroughly, no abnormality. Lightning susnected		
74	25/07/2014	05:15	25/07/2014	05:15	00	00	00	00	00	00	00	00	LART	Successful A/R		
Sub-Total					00	00	00	00	00	30	00	00				
BALIPARA-RANGANADI			# 2													
75	18/07/2014	10:05	18/07/2014	13:33	00	00	00	00	00	00	03	28	SCSD	SD taken for testing of SPAR in DPR		
76	25/07/2014	05:15	25/07/2014	12:09	00	00	00	00	06	54	00	00	LNCC	Earthwire in the span 33-34 damaged/snapped due to lightning		
Sub-Total					00	00	00	00	06	54	03	28				
Grand Total					79	18	06	55	155	15	06	21				