



भारत सरकार Government of India

विद्युत मंत्रालय Ministry of Power

उत्तर पूर्वी क्षेत्रीय विद्युत समिति

**North Eastern Regional Power Committee**

एन ई आर पी सी कॉम्प्लेक्स, डोंग पारमाओ, लापालाङ, शिल्लोंग-७९३००६, मेघालय  
NERPC Complex, Dong Parmaw, Lapalang, Shillong - 793006, Meghalaya



**ISO 9001:2008**

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No. NERPC/SE (O)/OCC/2014/**2954-89**

Dated: November 19, 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. Group General Manager, NTPC, Bongaigoan Thermal Power Project, P.O. Salakati, Kokrajhar- 783369
17. ED, NERTS, PGCIL, Dongtieh-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, Dongtieh, 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 103<sup>rd</sup> OCC Meeting - Reg.**

**Sir,**

The Minutes of the 103<sup>rd</sup> OCC Meeting of NERPC held on 13.11.2014 at "Hotel Nandan", 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. Addl. GM (EED), NTPC Ltd., Bongaigoan Thermal Power Project, P.O. Salakati, Kokrajhar- 783369
12. DGM (C&M), OTPC, 6th Floor, A-Wing, IFCI Tower -61, Nehru Place, New Delhi – 110019.

वी. लिंगरखेडु  
निदेशक / Director/ SE

North Eastern Regional Power Committee

**MINUTES OF THE 103<sup>rd</sup> OPERATION COORDINATION**

**SUB-COMMITTEE MEETING OF NERPC**

**Date** : 13/11/2014 (Thursday)  
**Time** : 10:00 hrs  
**Venue** : "Hotel Nandan", Guwahati.

The List of Participants in the 103<sup>rd</sup> OCC Meeting is attached at **Annexure - I**

Shri B. Lyngkhoi, Director/SE(O), NERPC welcomed all the participants to the 103<sup>rd</sup> OCC meeting. He highlighted about the decisions taken during the 27<sup>th</sup> PCC meeting held on 12.11.2014 and also the finalization of DPR for funding from PSDF. He stated that Assam has already completed the DPR, Meghalaya & Nagaland will be completed soon. Ar. Pradesh has furnished the DPR during the meeting but was advised to complete the DPR as per latest format given by CEA and stated that they will submit soon. Shri Lyngkhoi also informed that His Excellency President of India will visit Itanagar on 21.11.2014 and hence relevant shutdown affecting power supply to Ar. Pradesh should be kept in mind while approving the shutdown. He also mentioned that festival seasons is approaching and requested all the constituents to keep the transmission lines, distribution lines etc., in healthy condition to avoid unnecessary public agitation. He also expressed concerned about the Declaration Capacity of Loktak HEP since water is less comparing to last year and hence requested the forum to look into the matter for judiciously utilized of energy till the next monsoon. He informed the forum that POWERGRID has prepared the reply against the Petition No. MP/113/2014 scheduled to be held on 27.11.2014 at CERC, New Delhi and requested all the constituents to go through the reply and give some comments/suggestions so that NERPC can compile the reply on behalf of NER constituents and at the same time urged the constituents of NER to attend the above hearing. Further, he informed that as intimated by CEA, the National Power Committee (NPC) meeting is scheduled to be held on last week of November, 2014 and requested the constituents to send the agenda at the earliest. He also informed the house that NERPC has shifted to their own Office Complex at Lapalang, Shillong and on behalf of NERPC he thanked all the constituents for their support in various ways to make this happened.

Lastly, he mentioned that due to request from the constituents stating that many of the protection agenda items could not be discussed thoroughly on the same day of OCC meeting and hence requested NERPC to host the OCC & PCC separately, but the participants in PCC meeting is not at all satisfactorily for last few months. He requested the house to give the suggestion if the OCC & PCC should be clubbed together for fruitful outcome.

**Deliberation of the Committee**

The Sub-committee suggested that whenever numbers of agenda items/analysis etc., of PCC are to be discussed, the PCC meeting can be conducted separately otherwise, the PCC can be combined together with OCC meeting for fruitful outcome of meeting.

***The Sub-committee noted as above.***

Thereafter, the agenda items were taken up for discussion.

**A. CONFIRMATION OF MINUTES**

**CONFIRMATION OF MINUTES OF 102<sup>nd</sup> MEETING OF OPERATION SUB-COMMITTEE OF NERPC.**

The minutes of 102<sup>nd</sup> meeting of Operation Sub-committee held on 16th October, 2014 at Guwahati were circulated vide letter No. NERPC/SE (O)/OCC/2014/1982-2017 dated 24th October, 2014.

No observations or comments were received from the constituents. The Subcommittee may discuss & confirm minutes of 102<sup>nd</sup> OCCM of NERPC.

***The Sub-committee confirmed the minute of 102<sup>nd</sup> OCCM of NERPC.***

**ITEMS FOR DISCUSSION**

**B.1. OPERATIONAL PERFORMANCE AND GRID DISCIPLINE DURING OCTOBER, 2014**

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

**NER PERFORMANCE DURING OCTOBER, 2014**

States	Energy Met (MU)		% inc(+)/dec(-)	Energy Reqr. (MU)		% inc(+)/dec(-)
	Oct-14	Sep-14		Oct-14	Sep-14	
Ar. Pradesh	53.37	<b>53.95</b>	-1.1	70.0	<b>70.00</b>	0.0
Assam	727.01	<b>688.04</b>	5.7	790.0	<b>825.00</b>	-4.2
Manipur	65.47	<b>59.79</b>	9.5	66.0	<b>65.00</b>	1.5
Meghalaya	128.03	<b>131.21</b>	-2.4	170.0	<b>145.00</b>	17.2
Mizoram	37.57	<b>34.46</b>	9.0	43.0	<b>36.00</b>	19.4
Nagaland	59.69	<b>54.64</b>	9.2	65.0	<b>60.00</b>	8.3
Tripura	96.08	<b>92.98</b>	3.3	120.0	<b>120.00</b>	0.0
Region	<b>1167.21</b>	<b>1115.06</b>	4.7	<b>1324.00</b>	<b>1321.00</b>	0.2

States	Demand Met (MW)		% inc(+)/dec(-)	Demand in (MW)		% inc(+)/dec(-)
	Oct-14	Sep-14		Oct-14	Sep-14	
Ar. Pradesh	126	<b>115</b>	9.6	136	<b>139</b>	-2.2
Assam	1257	<b>1207</b>	4.1	1380	<b>1350</b>	2.2
Manipur	134	<b>126</b>	6.3	140	<b>135</b>	3.7
Meghalaya	273	<b>280</b>	-2.5	335	<b>310</b>	8.1
Mizoram	80	<b>78</b>	2.6	87	<b>86</b>	1.2
Nagaland	118	<b>116</b>	1.8	140	<b>117</b>	19.7
Tripura	266	<b>256</b>	3.9	310	<b>260</b>	19.2
Region	<b>2141</b>	<b>2112</b>	1.4	<b>2528</b>	<b>2380</b>	6.2

**REGIONAL GENERATION & INTER-REGIONAL EXCHANGE IN MU**

Month---->	Oct-14	Sep-14
Total Generation in NER (Gross)	1083.71	1214.34
Total Central Sector Generation (Gross)	703.04	807.99
Total State Sector Generation (Gross)	380.67	406.35
<b>Inter-Regional Energy Exchange</b>		
(a) NER-ER	18.19	117.37
(b) ER-NER	128.19	49.29
© Net Import	110.00	-68.08

**AVERAGE FREQUENCY (Hz)**

Month---->	Oct-14	Sep-14
	% of Time	% of Time
Below 49.9 Hz	25.06	28.68
Between 49.9 to 50.05 Hz	52.9	55.3
Above 50.05 Hz	22.04	16.02
Average	49.97	49.95
Maximum	50.49	50.37
Minimum	49.53	49.34

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

**FOLLOW UP ACTION**

**C.1 Synchronization of Palatana Module -II**

During 102nd OCC meeting, representative from OTPC informed that CoD of Unit-II is expected to be completed by October / November 2014.

The Sub-committee also reviewed the status of commissioning of second unit of OTPC at Palatana, 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	Status as given in 102 <sup>nd</sup> OCC Meeting	Status as on 103 <sup>rd</sup> OCC
1	Trial operation and CoD of Unit -II of Palatana	Trial run is expected by end of Oct 2014 and CoD is expected in 3 <sup>rd</sup> Week of Nov, 2014	OTPC Unit-II- All testing for trial run shall be completed by 30 <sup>th</sup> Nov 2014. Expected COD by December end
2	400KV D/C Silchar - Melriat line	June, 2015	June, 2015
3	400KV D/C Silchar - Imphal line	December, 2014	December, 2014
4	220KV D/C Mariani (New) – Mokokchung	December, 2014	December, 2014
5	400KV D/C Byrnihat-Bongaigaon line	December, 2014	December, 2014
6	400kV Balipara – Bongaigaon D/C line 3 & 4 with FSC	November, 2014	Commissioned on 5/11/2014.
7	400/220 kV sub-station at Azara of Assam	Completed	Completed

During 102<sup>nd</sup> OCC meeting, the Sub-committee requested OTPC to furnish the details for trial run of Unit #2 in advance to NERLDC. OTPC agreed.

The Sub-committee requested Assam to implement the Reverse Power Relay as decided in the system study committee meeting at the earliest which is given below:

**1) If the flow is above 45-50 MW, relay at Azara should operate accordingly with 5 minutes time delay.**

**2) If the flow is above, 50 MW, the reverse power relay at Azara should operate instantaneously.**

### **Deliberation of the Committee**

It was deliberated that during testing of Block-II, the generation of Block-I may have to be reduced to accommodate infirm generation from Block-II, which will affect the scheduled availability of constituents. Forum requested the constituents to bear with this for greater interest of commissioning of the Block-II of OTPC and subsequent COD, which will enhance the generation availability of the region benefitting the constituents. Constituents agreed to the same but requested OTPC to intimate the testing programme of Block-II & availability from Block-I well in advance so that they can plan their drawal schedule from various sources vis-à-vis requirement.

AEGCL representative informed the members that the Reverse Power Relay settings at Azara are already implemented.

NTPC representative informed the members regarding Bongaigoan TPS Unit - I (IC = 250 MW) that boiler light up is expected by November 2014 and CoD is expected by March 2015.

***The Sub-committee noted as above.***

### **C.2 SPS scheme for Palatana**

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)

The OCC Sub-committee continuously review the status of implementation of the scheme and the status as intimated in the 99th OCC Meeting is given below:

**Case I:** Already implemented.

**Case II & III:** 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 offer of BHEL is intimated by OTPC but the required schematic diagram as agreed in the 97th OCC meeting is unavailable.

**Case III & IV (POWERGRID Part):** The SPS – 3 & SPS – 4 will have to be made operational in case of tripping / outage of both 400kV Silchar – Byrnihat and 400kV Schar – Azara Line for which POWERGRID has to carry out the modification of existing scheme.

OTPC had requested POWERGRID to look into following issues:

- (a) SPS at OTPC end should not be modified with commissioning of 2nd Circuit of 400kV Silchar - Bongaigaon line. It is agreed in earlier OCC meetings that the SPS associated with Palatana need to be reviewed including enhancement of load shedding and NERLDC was requested accordingly to review the SPS on 99th OCC meeting.
- (b) Trip command from two different sources should be available to desynchronize the machine to avoid unwanted 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 de-synchronization of Gas Turbines. During 93<sup>rd</sup> OCC meeting, subcommittee had suggested OTPC to discuss the matter with POWERGRID.

During 102<sup>nd</sup> OCC meeting, OTPC representative informed that the ramp down rate of GTG = 18 MW / min and the ramp down rate of STG is very low. Reduction from full load to 200 MW therefore takes time.

After deliberation, OTPC was requested to implement at the earliest the required technical modifications for SPS Case - III through BHEL or any other firm. OTPC was requested to intimate the action plans within a week.

### **Deliberation of the Committee**

OTPC representative informed the members that BHEL has already implemented the scheme for reduction of generation of Palatana to 200 MW immediately on operation of SPS – 3.

DGM, NERTS informed that the necessary modification of SPS – 3 & SPS – 4 will be done by November 2014.

OTPC was requested to submit the detail scheme of SPS – II & III to NERLDC. OTPC agreed and informed that they have completed SPS at their end and will inform through letter. Logic will be sent to NERLDC by OTPC.

### **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 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 serve the purpose. In addition the SPS-3 requires to be upgraded to incorporate addition of Silchar - Azara 400 kV line.

The matter was studied and deliberated by the system study group of NERPC on 14.10.2014 at NERLDC, Shillong. The minutes are reproduced below: -

1. Lumshnong – Khliehriat will be disconnected and Lumshnong will be fed from Panchgram.

Once SPS-1 or SPS – 2 or SPS -4 operates, then Lumshnong S/s will be tripped and a load relief of 15 MW may be expected.

2. Dharmanagar - P.K. Bari will remain disconnected from P.K. Bari and Dharmanagar & Dullavcherra will be fed from Silchar S/S radially.

Once SPS-1 or SPS – 2 or SPS -4 operates, then 132kV Schar - Dullavcherra feeder will be tripped at Silchar End through SPS and relief of 14 MW load can be achieved.

POWERGRID, NERTS will have to incorporate the tripping of 132kV Schar - Dullavcherra feeder in SPS-1 & SPS-2.

The above suggestions may be reviewed by system study committee as and when required.

#### **Deliberation of the Committee**

DGM, NERTS informed the members that the incorporation of tripping of 132kV Schar - Dullavcherra feeder in SPS-1 & SPS-2 will be completed by November 2014.

***The Sub-committee requested POWERGRID to complete the wiring for all the cases above in co-ordination with OTPC and also requested OTPC to extend all help to POWERGRID if necessary.***

#### **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 latest status intimated during the meeting is given below: -

Assam & Nagaland: UFRs based load shedding for 220MW & 20MW have been implemented by both the States. However, UFR operation and amount of load relief reports are to be sent to NERLDC regularly. Assam & Nagaland agreed to do the needful.

Manipur: Informed that UFRs based load shedding for all the four stages have been implemented, however, the exact amount of load relief would be furnished soon. Relays have been tested and reports are sent to NERLDC. UFR operation and amount of load relief reports will be sent to NERLDC regularly.

Tripura: UFRs based load shedding for Stages I & II have been implemented. Tendering is done for Stages II & IV and M/s Alstom is awarded for implementation. It is expected to implement Stages II & IV within 2 months.

Meghalaya: UFRs based load shedding for Stages I, II & III completed. 4th stage implementation process is held up due to law and order problem in Garo Hills. Reports of UFR operations are sent regularly to NERLDC.

Arunachal Pradesh: EE, SLDC informed that Stage - I is completed. Stage - II is under consideration and may be expected by December 2014. Stage - III and Stage - IV may be expected to be completed by March 2015. It was informed that Ar. Pradesh had furnished the feeder's name of Stage II, III & IV.

Mizoram: EE, SLDC, Mizoram informed that UFR based load shedding for Stages I has been completed. Stage - II is under consideration which may be expected to be implemented by December 2014. Status of Stage - III & IV will be intimated in next OCC meeting. Mizoram is sending the UFR reports regularly for the implemented stages.

***The sub-committee noted as above.***

#### **C.4 Lines under long outages**

During the 101<sup>st</sup> OCC meeting, the issue for restoration of these lines was reviewed by the committee and the status was as follows:

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

Manipur representative informed that towers are faulty in locations 90 and 91 due to constructions of railway line and road by Ministry of Railway and BRTF. Compensation for the same is awaited from the 2 parties and repairing work may be completed after 2 months after receipt of the compensations. The line is expected to be restored by October 2014.

**Deliberation of the Committee**

***The status could not be updated as Manipur was not represented.***

**C.5 CT Ratio of Transmission Lines in NER:**

During 102nd OCC meeting, CT ratios of transmission lines of NER are to be enhanced for enhancement of transfer capability & reliable grid operation. List of these transmission lines are available in minutes of 102nd OCCM of NERPC. NEEPCO has submitted CT configuration details; it is requested to furnish the adopted CT ratio details.

**Deliberation of the Committee**

OTPC and NEEPCO informed that the works pertaining to them have been completed and the same has been sent to NERLDC.

***Members agreed to submit the required information to NERLDC.***

**C.6 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.

During 101st OCC meeting, NERLDC informed that all the beneficiary states except Manipur have submitted the required information. Now NERLDC informed that NEEPCO (Khupi S/S), POWERGRID (Mariani, Mokokchung, Melriat, Namsai, Tezu & Roing), NHPC (Loktak HEP & Lower Subhansiri HEP), OTPC (Palatana GBPP) and NTPC (Bongaigaon TPP) have not furnished these data till date.

During 102nd OCC meeting, Manipur representative stated that they had already sent to GM, NERLDC. Tripura representative submitted to NERLDC during the

meeting. NERTS agreed to submit soon. NEEPCO will check and submit. OTPC agreed to submit soon. POWERGRID (Biswanath Chariali, Mariani, Mokokchung, Melriat, Namsai, Tezu & Roing), NHPC (Lower Subhansiri HEP), OTPC (Palatana GBPP) and NTPC (Bongaigaon TPP) have not furnished these data till date.

**Deliberation of the Committee**

OTPC, NEEPCO, AEGCL submitted the required information. NHPC submitted the information for Loktak HEP and agreed to submit detail of Subhansiri HEP within a week. NERTS and NTPC also agreed to submit the required information within a week.

***The sub-committee noted as above.***

**C.7 Single Line Diagram of Sub-stations, Switching Stations & Power Stations of NER:**

P&E Mizoram, Me. PTCL, TSECL and POWERGRID (except Mariani) have furnished Single Line Diagram of their Sub/Switching Stations.

All other constituents of NER are requested to furnish Single Line Diagram of Sub-Stations, Switching Stations & Power Stations owned by them at the earliest as these diagrams are required for proper visualization.

**Deliberation of the Committee**

Nagaland submitted the required information. AEGCL and NERTS (for Mariani) agreed to submit within a week. Ar. Pradesh agreed to submit within this month.

***The sub-committee noted as above.***

**C.8 Status of implementation of re-setting of Run Back frequency of Palatana Unit:**

This issue was also deliberated in 102<sup>nd</sup> OCC meeting. It was decided that the setting of re-setting frequency is to be set at 50.5 Hz.

**Deliberation of the Committee**

OTPC representative informed the members that as advised by BHEL, the difference between run-back frequency and re-setting frequency should be at least

0.2 Hz for safety of relay and efficient machine operation (i.e. 50.7Hz for run-back and 50.5 Hz for re-setting).

*The sub-committee noted as above.*

**C.9 Finalization of Annual Load Generation Balanced Report (LGBR) for peak as well as off-peak scenarios and the Annual outage plan for 2015-2016 by 31.12.2014 as per IEGC:**

As per IEGC, each SLDC shall submit LGBR for its control area, for peak as well as off-peak scenario, by 31st October for the next financial year, to respective RPC Secretariat. The annual plans for managing deficits/surpluses in respective control areas shall clearly be indicated in the LGBR submitted by SLDCs.

As per IEGC, all SEBs/STUs, Transmission Licensees, CTU, ISGS, IPPs, MPPs and other generating stations shall provide to the respective RPC Secretariat their proposed outage plan in writing for the next financial year by 31st October of each year. These shall contain identification of each generating unit/transmission line/ICT etc., the preferred date for each outage and its duration and where there is flexibility, the earliest start date and latest finishing date.

**Deliberation of the Committee**

Me. PDCL, APDCL and NEEPCO have submitted the required information.

NHPC, OTPC and Nagaland agreed to submit the required information within a week. Ar. Pradesh and TSECL agreed to submit the required information this month. NTPC was also requested to submit the generation target and annual maintenance programme in respect of Bongaigaon TPS for the year 2015 – 2016.

*The sub-committee noted as above.*

**C.10 Latest status of FGMO/RGMO implementation in different generating stations:**

To update the available record of FGMO/RGMO implementation in NER it is requested that the latest unit-wise status of implementation of FGMO/RGMO in different Central & State sector generating stations may please be furnished to NERLDC at the earliest.

**Deliberation of the Committee**

NERLDC highlighted the present status available with them, members agreed to send the updated status to NERLDC at the earliest.

*The sub-committee noted as above.*

**C.11 Submission of list of feeders connected to essential load:**

As per clause no 5.8.c of IEGC, essential loads are to be restored on priority during restoration process. Constituents of NER are requested to furnish list of feeders connected to essential load at the earliest to incorporate in next version of Black start & Restoration Procedures of NER.

**Deliberation of the Committee**

All SLDCs were requested to prepare restoration procedure in respect of concerned states and intimate essential loads to be restored on priority to NERLDC at the earliest.

*The sub-committee noted as above.*

**C.12 Gas Grid for Gas Based Power Stations & Mining Load Network:**

Gas Grids for Gas Based Power Stations representing location of gas production, gas network & location of gas based power station are required for creation of data bank. AEGCL/TSECL/NEEPCO/OTPC are requested to send these to NERLDC as early as possible. Mining Load & its connectivity with grid sub-station is required for system operation and identification essential load. AEGCL/Me. PTCL are requested to send this information to NERLDC.

**Deliberation of the Committee**

Assam submitted the above information and other constituents agreed to look into the matter and send the required information if available.

*The sub-committee noted as above.*

**C.13 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. Constituents may kindly verify if the above data are correct for March, 2014 only.

**Requirement:**

Name of State	Nov14	Dec14	Jan15	Feb15	Mar15
Ar. Pradesh	65	65	65	55	48
Assam	660	680	690	615	570
Manipur	65	65	70	55	51
Meghalaya	175	175	195	175	175
Mizoram	43	40	41	35	40
Nagaland	55	55	60	55	50
Tripura	110	120	125	120	120
<b>NER</b>	<b>1173</b>	<b>1201</b>	<b>1246</b>	<b>1090</b>	<b>1054</b>

**Availability:**

Name of State	Nov14	Dec14	Jan15	Feb15	Mar15
Ar. Pradesh	47	43	40	31	40
Assam	461	454	439	385	413
Manipur	64	59	56	47	47
Meghalaya	158	148	133	111	110
Mizoram	39	36	36	31	32
Nagaland	38	34	32	27	31
Tripura	134	138	137	112	150
<b>NER</b>	<b>941</b>	<b>914</b>	<b>873</b>	<b>744</b>	<b>823</b>

- These data required for preparation of various reports.

**Constituents may kindly note.**

**C.14 Monthly MW requirement & availability of each state of NER:**

**A. Peak Demand in MW**

Name of State	Nov14	Dec14	Jan15	Feb15	Mar15
Ar. Pradesh	125	125	130	130	120
Assam	1435	1450	1380	1235	1320
Manipur	135	135	150	135	140
Meghalaya	350	345	390	385	360
Mizoram	90	80	79	78	84
Nagaland	120	125	130	120	119
Tripura	270	250	245	235	260
<b>NER</b>	<b>2525</b>	<b>2460</b>	<b>2455</b>	<b>2318</b>	<b>2403</b>

**B. Peak Availability in MW**

Name of State	Nov14	Dec14	Jan15	Feb15	Mar15
Ar. Pradesh	120	118	110	101	100
Assam	874	867	835	816	826
Manipur	115	118	109	105	106
Meghalaya	290	276	246	192	200
Mizoram	80	79	75	71	70
Nagaland	75	75	70	66	64
Tripura	285	281	275	272	270
<b>NER</b>	<b>1839</b>	<b>1814</b>	<b>1719</b>	<b>1623</b>	<b>1636</b>

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

**A. Off Peak Demand in MW (0800 Hr)**

Name of State	Nov14	Dec14	Jan15	Feb15	Mar15
Ar. Pradesh	69	69	72	72	70
Assam	890	899	856	766	800
Manipur	81	81	90	81	80
Meghalaya	210	207	234	231	232
Mizoram	59	52	51	51	50
Nagaland	72	75	78	72	74
Tripura	176	163	159	153	155
<b>NER</b>	<b>1555</b>	<b>1470</b>	<b>1465</b>	<b>1426</b>	

**B. Off Peak Availability in MW (0800 Hr)**

Name of State	Nov14	Dec14	Jan15	Feb15	Mar15
Ar. Pradesh	115	114	107	100	101
Assam	831	835	817	796	799
Manipur	104	105	102	98	97
Meghalaya	276	264	240	216	220
Mizoram	76	76	73	69	70
Nagaland	70	71	68	64	65
Tripura	279	274	271	268	270
<b>NER</b>	<b>1751</b>	<b>1740</b>	<b>1465</b>	<b>1611</b>	<b>1622</b>

*The Sub-committee noted as above.*

**D. NEW ITEMS**

**D.1 Generation Planning (ongoing and planned outages)**

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

Generating Station	Reservoir level as on 15/10/14	MU Content	Present DC MU	No. of days as per current generation
Khandong & Kopili-II	718.00	21.9	0.835	26
Kopili	609.59	185.8	2.304	81
Doyang	321.60	27.2	0.542	50
Loktak	767.69	75.0	1.365	55

**Hydro generation planning for lean hydro period** - Proper planning is required to utilize the available water for entire lean hydro period, say up to May, 2015.

It was agreed that DC of Loktak, Khandong & Kopili – II, will be reduced for better utilization during lean hydro period.

*The sub-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.

During 101<sup>st</sup> OCC meeting, DGM, NERLDC informed that the format was sent to all the constituents for necessary submission of data. However, till date no constituents have submitted the data to NERLDC.

**Deliberation in the meeting**

***The Sub-committee once again requested all the constituents to furnish the data as per format given below to NERLDC at the earliest.***

**Water level format:**

Year		FRL		MDDL	
Station	Month	Date	Water level	Generation in MU	Water utilized in cumecs

**Water spillage format:**

Year	Station					
Date	Inflow in cumecs	Status of spillage (Spilling/ Not spilling)	Duration		Total	Month
			From (Hrs.)	To (Hrs.)	Hrs.	

**D.3 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 10<sup>th</sup> of the month, the shutdown availing agency would reconfirm to NERLDC on 7<sup>th</sup> 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.

During 102nd OCC continuous shutdown of 132 kV Ranganadi – Lekhi line was allowed from 18.10.2014 to 22.10.2014 for shifting of LOC 52. But the S/D could not be returned upto 25.10.2014 (11:39 Hrs) which resulted in huge power shortfall in almost entire Central Assam, particularly in the North Bank Region.

Situation further aggravated due to celebration of Diwali festival on 23.10.2014 as public showed widespread agitation in many areas. It should be noted that during 102<sup>nd</sup> OCC, Assam insisted to defer the above shutdown after Diwali festival so that any power shortage during Diwali could be avoided, but it was only after POWERGRID assured that the shutdown would return within a stipulated time, Assam concurred the above shutdown.

Assam would like to stress upon the matter as it has created widespread resentment among public to which Assam was not answerable. So, in future continuous shutdown of such nature should not be taken before any important event, and even if taken, agency should be sure enough to bring back the element within the stipulated time frame granted by OCC forum.

POWERGRID may like to deliberate.

#### **Deliberation in the meeting**

***The sub-Committee approved the transmission line outages proposed by Constituents for November - December, 2014 as enclosed at Annexure- D.3***

Further, members felt that such deferment from approved shutdown mentioned above should be avoided in future especially during festivals. Any transmission licensee proposing for shutdown should take into consideration any contingencies that may arise especially when 2 or more parties are concerned. Any further extension of shutdown required should be intimated to NERLDC/ NERPC officially at the earliest so that necessary steps may be taken by concerned utilities to serve esteemed customers/ consumers efficiently.

#### **D.4 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 99<sup>th</sup> OCC meeting, the subcommittee advised NERLDC/NERPC to take up the matter with NTPC for early commissioning of 315 MVA ICT at NTPC Bongaigaon.

During 100th OCC 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.

**Deliberation in the meeting**

Representative from NTPC informed the members that tie transformers I & II have been charged but not the ICT. ICT is expected to be charged within 3 months.

Further, 4 bays have been commissioned viz.

- 1) 400 kV BTPS – Bongaigaon – I
- 2) 400 kV BTPS – Bongaigaon – II
- 3) 400/33 kV Tie I
- 4) 400/33 kV Tie II

Start-up power is drawn from Tie transformer – I only and the project is expected to be commissioned by March 2015.

***Committee noted as above.***

**D.5 Requisition based scheduling:**

In the 102nd OCC meeting, representative from APDCL informed that the real time scheduling of power is revised absurdly high due to sudden inflow in RHEP. This sudden revision of schedule is sometimes more than 20% of the earlier schedule, causing inconvenience in demand management besides commercial loss through DSM. He requested the forum to devise some scheduling mechanism by reducing schedules from storage based hydro station while preventing commercial loss of beneficiaries.

Members agreed to the proposal of APDCL. After deliberation, it was decided that NERLDC may come out with a proposal for implementing requisition based scheduling for storage based hydro stations also. However, the following points should be noted: -

- 1) All scheduling will be done as per IEGC.
- 2) There should not be any spillage of water as stipulated in IEGC.
- 3) Technical minimum criteria may be different from thermal stations.
- 4) Such reduction in requisition may be done only when there are sudden changes of schedule due to inflow of RoR stations.

During 102<sup>nd</sup> OCC meeting, the Sub-committee requested NERLDC to highlight the proposal in next OCC meeting for deliberation.

**Deliberation in the meeting**

Forum deliberated that during sudden inflow in RHEP, constituents will first under requisition from Gas based station after that possibility shall be explored for reduction of generation in Storage bases Hydro station.

It was opined that since RHEP is NEEPCO Station, so due to sudden inflow in RHEP only NEEPCO hydro station generation will be reduced.

After deliberation, it was agreed that in case of revision of schedule more than 20 % from RHEP, generation from other stations of NEEPCO may be reduced proportionately to safeguard the violations of IEGC by beneficiaries due to such revisions in schedules.

However, since minimum generation from each unit of NEEPCO generating stations are different and details are not yet provided by NEEPCO. In order to absorb the revised schedule of RHEP, many units of NEEPCO plants may need to be reduced or even some units may be required to be stopped. Therefore, it was agreed that for proper planning purposes NEEPCO may come with a proposal in next OCC for efficient scheduling from their units in case of revision from RHEP.

***Committee noted as above.***

**D.6 Furnishing Energy Charge Rate (ECR) of NER, ISGS:**

For providing information to MOP, CEA etc Energy Charge Rates (ECR) of Palatana, AGBPP, AGTPP, Ranganadi, Kopili, Khandong, Kopili St II, Doyang and Loktak are required. NEEPCO, NHPC & OTPC are requested to please furnish Energy Charge Rates (ECR) of previous month in ₹/kWh by 15<sup>th</sup> of next month.

Concerned constituents are requested to furnish the above data.

**Deliberation in the meeting**

Members agreed to provide the Energy Charge Rates (ECR) of the above stations in every OCC. Any changes due to revision of MAT, fuel landing cost, etc may be updated before submitting to OCC meeting. The ECRs will then be sent to higher

authorities as and when required and the same will also be uploaded to NERPC / NERLDC website for ready reference.

***Sub-committee noted as above.***

#### **D.7 Progress Report of Ongoing Projects:**

Progress reports of ongoing generation and transmission projects of NER need to be communicated to NERLDC by all constituents on monthly basis as per format. The progress of different elements are necessary for incorporation in Operational Feedback and other reports as also for preparation of Base Case for system study in NER. Accordingly, constituents are requested to furnish the progress report of their elements by 10<sup>th</sup> of every month for the previous month.

Currently, only NTPC, NEEPCO and Me. PGCL are furnishing monthly progress report of elements on regular basis.

#### **Deliberation in the meeting**

Members agreed to send the required information as per format attached at ***Annexure - D.7***

***Sub-committee noted as above.***

#### **D.8 Evacuation Plan of Lower Kopili HEP (110 MW):**

Under the evacuation plan of Lower Kopili Hydroelectric Project (110 MW), one new 220kV sub-station is proposed at Lanka (Sankardeb Nagar) with connectivity through one 220kV double circuit line from LKHEP. To bring the proposed 220kV sub-station with 220kV network, one circuit LILO of Kopili – Misa 220kV D/C line at Lanka is proposed. As the said Kopili – Misa D/C is an interstate line, approval for proposed LILO line is placed at the disposal of NERPC forum. The length of the LILO line is about 5 KM.

#### **Deliberation in the meeting**

After deliberation, it was agreed to refer the proposed evacuation plan to system strengthening committee of CEA for necessary approval.

***Sub-committee noted as above.***

**D.9 Commercial operation of newly constructed ASEB 33kV line:**

- a) PGCIL installed SEM bearing SI. No. NP-8387-A, model ER300P on 13.09.13. The meter required configure for remote data collection from control room computer like other installed meters for calculation of station output & \*.dat file.
- b) Required modification of SEMDBASE software where the meter will be added with Khandong PS Ex-bus calculation. The line CT is 200/1A and PT is 33KV/110V.

**Deliberation in the meeting**

- a) Representative from AEGCL informed the members that necessary configuration is expected to be completed by this month.
- b) May be reviewed in next OCC after getting feedback from field officers.

***Sub-committee noted as above.***

**D.10 Estimated Transmission Availability Certificate (TAC) for the month of October, 2014:**

The Estimated Transmission System Availability for the month of October, 2014, furnished by PGCIL, is **99.9820%**. The detail outage data for calculation of Transmission System Availability furnished by PGCIL is at **Annexure D.10**. NER constituents are requested to kindly communicate their views and observations, if any, by 28th November, 2014 so that Final TAC for the month of October, 2014 may be finalized by NERPC Secretariat.

**Availability certification of ISTS elements** – POWERGRID & NETC submitted outage reports of their lines for certification for the first time for this control period i.e. 2014-19. 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.

***Procedure for calculation of Transmission system availability factor for a month as per CERC Regulation 2014-19.***

The OCC forum have agreed to the important points on the regulation regarding transmission availability calculations as follows:

- o For Ac system, two trippings per year shall be allowed.
- o After two trippings in a year, additional 12 hours outage shall be considered in addition to the actual outage
- o 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.
- o The weightage factor for each category of transmission elements shall be calculated as per regulation.

The procedure for finalizing certification by NERLDC was deliberated in detail and the following points were agreed: -

**Planned Outages:** -

1. In all cases of outages, RLDC will certify the actual outage period. The outage period will be cross-checked with the approved outage period in OCC forum. All planned outages should be availed by the executing agency as approved in the OCC forum.
2. Any deferment from approved outage hours and approved outage days may be intimated by the agency to NERPC with a copy to NERLDC, justifying the reason of deferment. The deferred hours/ days without proper justification will be deducted from the availability period.

**Emergency Outages:** -

1. Outages beyond the control of the agency when neither RPC nor RLDC could be informed earlier and immediate remedial actions are required.
2. Outages planned in OCC forum but are of emergency in nature like tower in danger; CBs need immediate replacement, etc. However, the agency has to intimate RPC with a copy to RLDC.
3. Outages that cannot be delayed till next OCC forum for proper approval.
4. However, the agency has to intimate RLDC with the reason of outage for all the above cases which may be approved in OCC forum.

**Transient Outages:** -

1. Outages that are of transient in nature due to lightning, mal-operation of relays, etc.
2. Transient Earth Fault, Auto-reclosure, phase-to-phase fault, etc.
3. Outages due to infringements.
4. However, the agency has to intimate RLDC with the reason of outage for all the above cases which may be approved in OCC forum.

**Outages due to others:** -

1. Outages due to fault in the downstream protection.
2. Outages as per direction of RLDC for desired system condition.
3. Outages due force majeure/ Acts of God.
4. However, the agency has to intimate RLDC with the reason of outage for all the above cases which may be approved in OCC forum.

**Force Majeure:** -

1. Act of God including lightning, drought, fire and explosion, earthquake, volcanic eruption, landslide, flood, cyclone, typhoon, tornado, geological surprises, or exceptionally adverse weather conditions which are in excess of the statistical measures for the last hundred years; or
2. Any act of war, invasion, armed conflict or act of foreign enemy, blockade, embargo, revolution, riot, insurrection, terrorist or military action; or
3. Industry wide strikes and labour disturbances having a nationwide impact in India;
4. However, the agency has to intimate RLDC with the reason of outage for all the above cases which may be approved in OCC forum.

**Conditions given in SoR:** -

1. Only 2 trippings per annum allowed for each AC system, additional 12 hours may be added for each tripping in case of trippings more than 2 in a year.
2. Further, in case of outage of a transmission element affecting evacuation of power from a generating station, outage hours shall be multiplied by a factor of 2.

In the 102nd OCC meeting, DGM (MO), NERLDC also gave a presentation proposing the procedure for transmission availability certification. Members agreed to the proposal of NERLDC except the following points: -

1. Constituents may be allowed to study the outage data submitted by NERTS on weekly basis after uploading the same in NERTS website. Then more time will be available for comments to be submitted by next OCC.
2. Outage certification of period from April 2014 to June 2014 need to be revised as the same will have effect on number of trippings in a year. Further, constituents are not given the evidence provided by transmission licensees for claiming force majeure due to lightning.

DGM, NERTS also gave a presentation explaining the different waveforms recorded during infringements, lightning, etc.

**Deliberation in the meeting**

It was agreed that NERPC will follow the decisions of PCC, OCC and CC forums and any disputed outages will be brought to PCC/ OCC forums for further deliberations.

***The sub-committee noted as above.***

**Additional Agenda:**

**1. Comprehensive Award Scheme – NERPC agenda:**

SE (O) NERPC informed the members that Comprehensive Award Scheme is to be finalized and eligible parties may send the required data by November 2014.

***The Committee noted as above.***

**2. Agenda for Standing Committee Meeting of CEA:**

NERLDC proposed to have Bus reactor (125 MVAR) at Balipara S/S & Bongaigaon S/S. They also requested RHEP, NEEPCO to put their line reactor of Ranganadi end as bus reactor whenever either of the 400 kV Ranganadi – Balipara D/C line is on open condition. NEEPCO representative did not agree to the proposal citing the operational problem.

It was agreed to compile the proposals associated with NER transmission system and the same may be put up to standing committee meeting of CEA for approval.

***The Committee noted as above.***

**3. Requisition of ERS:**

Assam has intimated that they are planning to procure 8 (eight) numbers of ERS for their transmission networks. The procurement will be funded from PSDF as discussed during the meeting with Member (Power System), CEA on 10.11.2014.

The forum requested all the constituents to furnish to NERPC the requirement at the earliest so that the consolidated requirements of NER can be sent to CEA.

*The Committee noted as above.*

**4. SPAR for Loktak HEP - NHPC Agenda:**

NERPC Secretariat will pursue with MSPCL for pre-installation works and readiness for implementation of SPAR in 1) 132 kV Loktak - Imphal - I and 2) 132 kV Loktak - Jiribam - I.

*The Committee noted as above.*

**Date & Venue of next OCC meeting**

It is proposed to hold the 104<sup>th</sup> OCC meeting of NERPC on second week of December, 2014. However, the exact date and venue will be intimated in due course.

The meeting ended with thanks to the Chair.

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List of Participants in the 103<sup>rd</sup> OCC Meetings held on 13/11/2014

SN	Name & Designation	Organization	Contact No.
1.	Sh. N. Perme, EE	Ar. Pradesh	09436288643
2.	Sh. M. K. Bordoloi, CGM,SLDC	Assam	09435203996
3.	Sh. Jayanta Kr.Sarma, CGM, AEGCL	Assam	09435140964
4.	Sh. A.K.Saikia, DGM,LDC, AEGCL	Assam	09401026118
5.	Sh. A.N.Dev Choudhury, AGM (TRC)	Assam	09854120791
6.	Sh. J.P. Choudhury, AGM (Com), APDCL	Assam	09954055295
7.	Sh. J.K. Baishya, AGM, LD-Com, AEGCL	Assam	09435041494
8.	Sh. Karuna Sarma, AGM, AEGCL	Assam	09435013532
9.	Amal Borthakur, AGM, APGCL	Assam	09435332264
	<b>No Representatives</b>	<b>Manipur</b>	
10.	Sh. B. Wankhar, EE (MO), SLDC	Meghalaya	09436105914
11.	Sh.T. Gidon, EE, SLDC	Meghalaya	09774479956
	<b>No Representatives</b>	<b>Mizoram</b>	
12.	Sh. Lengminlal Singson, SDO (trans)	Nagaland	09436831124
13.	Sh.Rokobeito Iralu, SDO (Trans.)	Nagaland	09436832020
14.	Sh. U. Debbarma, DGM	Tripura	09436462842
15.	Sh. D. Pal, Sr. Manager	Tripura	09436500244
16.	Sh. N. R. Paul, DGM (SO-I)	NERLDC	09436302723
17.	Sh. Anupam Kumar, Sr. Engineer	NERLDC	09436335379
18.	Sh. Tanya Taji, Sr. Mgr.	NEEPCO	09436042053
19.	Sh.Jayanta Deb, Manager(E/M)	NEEPCO	09859372294
20.	Sh.J.Bhattacharya, AGM (O&M)	NTPC	09435720036
21.	Sh. Satya Prakash, AM (O&M)	NTPC	09435322461
22.	Sh. Deepak Chetia, AM (O&M)	NTPC	09435325996
23.	Sh. R.C.Singh, Manager (E)	NHPC	09436894889
24.	Sh. P. Kanungo, DGM(OS)	NERTS	09436302823
25.	Sh. N. Gupta, Manager (O)	OTPC	09774233426
26.	Sh. B.Lyngkhoi, Director	NERPC	09436163419
27.	Sh. Lalrinsanga, Assistant Secretary	NERPC	09436161886
28.	Sh. S.M. Jha, Dy. Director	NERPC	08731845175



**Annexure-D.7**

**Progress Report of On-Going Generation Projects**

**As on 31-Oct-14**

Sl No	Name of Project	Unit No	Capacity in MW	Total Capacity (in MW)	Name of State/ Executing Agency	Commisioning Schedule				Remarks
						Original		Actual(A)/ As now Expected		
						Syn. comm	COD	Syn. comm	COD	
1										
2										
3										
4										
5										

Progress Report of On-Going Transmission Lines Projects

As on 31-Oct-14

SI No	Name of the Lines	Name of Executing Agency	ATS/ System Strengthening/ Inter Regional Line	Total length in ckm	Construction Progress Status				Target Date		Remark
					Towers				Schedule	Revised/ Anticipated	
					TL (Nos)	STC (Nos)	TE (Nos)	STG ( in ckm)			
<b>A. 800 kV HVDC</b>											
<b>B. 400 kV D/C</b>											
<b>C. LILO of 400 kV D/C</b>											
<b>D. 400 kV D/C (Charged at 132 kV)</b>											
<b>E. 220 kV D/C</b>											
<b>F. 220 kV S/C</b>											
<b>G. LILO of 220 kV D/C</b>											
<b>H. 220 kV S/C on D/C</b>											
<b>I. 132 kV D/C</b>											
<b>J. 132 kV S/C</b>											
<b>K. LILO of 132 kV D/C</b>											
<b>J. LILO of 132 kV S/C</b>											
<b>L. 132 kV S/C on D/C</b>											

Note: TL: Total Location; STC: Stubs Cast; TE: Towers Erected & STG: Stringing Completed



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

MONTH : OCTOBER-14

Sl. No.	Name of the Element		Ckt No		Duration of Outage and Attributable To								Category	Reason of Outage
					POWERGRID		Other Constituents		Sys.Const/Natural calamities/ Militant activities		Outage under categories of Deemed Available			
					Hrs.	Mns.	Hrs.	Mns.	Hrs.	Mns.	Hrs.	Mns.		
ICT_MISA			#1											
1	28/10/2014	23:46	29/10/2014	01:02	01	16	00	00	00	00	00	00	SICT	ICT tripped on Buchholz relay opt B-ph.
<b>Sub-Total</b>					01	16	00	00	00	00	00	00		
<b>Grand Total</b>					01	16	00	00	00	00	00	00		