



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
नाग्रिम हिल्स, शिल्लोंग - ७९३००३
Nongrim Hills, Shillong – 793003.



ISO 9001:2008

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No. NERPC/SE (O)/OCC/2013/ 5259-88

Dated: September 18, 2013

To,

1. Managing Director, AEGCL, Bijuli Bhawan, Guwahati – 781 001
2. Director (Distribution), Me. ECL, Lumjingshai, Short Round Road, Shillong – 793 001
3. Director(Transmission), Me.PTCL, Lumjingshai, Short Round Road, Shillong – 793 001
4. CGM, (LDC), SLDC Complex, AEGCL, Kahelipara, Guwahati-781 019
5. Chief Engineer (WE Zone), Department of Power, Govt. of Arunachal Pradesh, Itanagar- 791 111
6. Chief Engineer (EE Zone), Department of Power, Govt. of Arunachal Pradesh, Itanagar- 791 111
7. Chief Engineer (TP&MZ), Department of Power, Govt. of Arunachal Pradesh, Itanagar- 791 111
8. Engineer-in-Chief (P&E), Department of Power, Govt. of Mizoram, Aizawl – 796 001
9. Chief Engineer (P), Electricity Department, Govt. of Manipur, Keishampat, Imphal – 795 001
10. Chief Engineer (P), Department of Power, Govt. of Nagaland, Kohima – 797 001
11. General Manager, TSECL, Agartala – 799 001
12. ED (O&M), NERTS, PGCIL, Dongtieh-Lower Nongrah, Lapalang, Shillong -793 006
13. ED (O&M), NEEPCO Ltd., Brookland Compound, Lower New Colony, Shillong-793003
14. ED (Commercial), NEEPCO Ltd., Brookland Compound, Lower New Colony, Shillong-793003
15. ED (O&M), NHPC, NHPC Office Complex, Sector-33, Faridabad, Haryana-121003
16. GM (Plant), OTPC, Badarghat Complex, Agartala, Tripura - 799014
17. GM, NERLDC, Dongtieh, Lower Nongrah, Lapalang, Shillong -793 006
18. Member Secretary, ERPC, 14 Golf Club Road, Tollygunge, Kolkata-700033
19. Chief Engineer, GM Division, Central Electricity Authority, New Delhi – 110066

Sub: Minutes of the 89th OCC Meeting held on 13th September, 2013 at Shillong.

The Minutes of the 89th OCC Meeting of NERPC held on 13.09.2013 at “Shillong Club”, Shillong is enclosed for favour of kind information and necessary action please.

The minutes is also available on the website of NERPC www.nerpc.nic.in

Encl: As above

भवदीय / Yours faithfully,

बि. लिंगखोइ / B. Lyngkhoi

अधीक्षण अभियंता / **Superintending Engineer**

प्रचालन / **Operation**

Copy to:

1. Chief Engineer, AEGCL, Bijuli Bhavan, Guwahati - 781001
2. Chief Engineer, APGCL, Bijuli Bhavan, Guwahati - 781001
3. Chief Engineer, DISCOM, Bijuli Bhavan, Guwahati - 781001
4. Head of SLDC, Me.ECL, Lumjingshai, Short Round Road, Shillong – 793 001
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.

MINUTES OF THE 89th
OPERATION COORDINATION SUB-COMMITTEE MEETING
OF NERPC

Date : 13/09/2013 (Friday)

Time : 10:00 hrs

Venue : "Shillong Club", Shillong.

The List of Participants in the 89th OCC Meeting is attached at **Annexure - I**

The meeting was started with welcome address by Shri S.K. Ray Mohapatra, MS I/C, NERPC. He welcomed Shri H.C. Phukan, CGM (LDC), AEGCL; Shri Mukul Banerjee, GM (Plant), OTPC; Shri A. Patir, GM, NERTS and Shri T.S Singh, GM, NERLDC and stated that the forum will be benefited in resolving many important issues by the presence of senior officers of constituents. He highlighted the forum about the important decisions of the recently concluded 14th TCC meeting which was held on 4th September, 2013 at Agartala. Since NERPC meeting could not be held due to unavoidable circumstances, the minutes of 14th TCC has been circulated to all the NERPC members as directed by Chairman, NERPC & Hon'ble Power Minister, Govt. of Tripura for approval. Some of the important decisions taken during the 14th TCC meeting are the setting up of SLDCs in four (4) states [Ar. Pradesh, Manipur, Mizoram and Nagaland] and upgradation/expansion of SCADA/EMS in other three (3) states; establishment of OPGW based communication link, construction of 400 kV P.K. Bari – Surjamaninagar line as regional project. Further, he informed that IIT Guwahati has been requested to assist the study group members of NERPC in various system studies associated with NE network and state network. He also briefed about the recent orders issued by CERC including the permission by CERC for injection of infirm power to the grid from the generating station of OTPC at Palatana, funding from NLCPR (Central) for taking up renovation and rectification work in substations / generating stations and the power scenario in the region and stated that demand for power of NE states is in rising trend, particularly of Assam. Less rain fall is going to be the matter of concern for the days to come. He requested all the constituents to actively participate in the discussion for fruitful outcome of the meeting.

Thereafter, Member Secretary I/C requested Shri B. Lyngkhoi, SE(O), NERPC to take up the agenda items for discussion.

A. CONFIRMATION OF MINUTES

CONFIRMATION OF MINUTES OF 88th MEETING OF OPERATION SUB-COMMITTEE OF NERPC.

S.E (O) informed that the minutes of 88th meeting of Operation Co-ordination Sub-committee held on 7th August, 2013 at Guwahati were circulated vide letter No. NERPC/SE (O)/OCC/2013/4696-4725 dated 16th August, 2013.

He informed that NERLDC vide letter No. NERLDC/GM/1278 dated 23.08.2013 wanted Item No. C.17 to be modified as below:

Item No: C.17- Minutes recorded: "DGM, POWERGRID informed that the all the Energy Meters, which are in service, are less than 5 years old. He requested NERLDC to list out the meters which are likely to complete 5 years of service so that necessary action can be taken up by POWERGRID accordingly.

Minutes to be recorded as: "NERLDC does not maintain database on procurement, installation dates of SEMs. Hence, testing schedule of SEMs is to be drawn by CTU based on its record/database of procurement, installation"

GM, POWERGRID informed that only few meters are more than 5 (five) years old and stated that these meters will be tested, calibrated and replaced soon.

The Sub-committee confirmed the minutes of 88th OCCM of NERPC as no other observations or comments were received from the constituents.

SE (O), NERPC then requested NERLDC to give the presentation on the grid performance of NER during the month of August, 2013.

The presentation as given by NERLDC is given as below:

ITEMS FOR DISCUSSION

B.1. OPERATIONAL PERFORMANCE AND GRID DISCIPLINE DURING AUG' 13

- i) **Average frequency** during August, 2013 was 50.11 Hz as compared to 50.07 Hz in July, 2013
- ii) **Minimum frequency** in August, 2013 was 49.37 Hz as compared to 49.02 Hz recorded in the previous month.
- iii) **Maximum frequency** was 50.64 Hz (11.08.13 at 06:09 hrs) as compared to 50.63 Hz recorded in July, 2013.
- iv) **System frequency** remained within permissible range of 49.7 Hz to 50.2 Hz for 75.46 % of the time, below 49.7 Hz for 1.08 % and above 50.2 Hz for 23.46 % of the time as compared to 85.35 %, 0.15 % and 14.5 % respectively in the previous month.
- v) **Regional peak** demand in August, 2013 was 2158 MW as compared to 1984 MW in July, 2013, an increase of 8.77 % over the previous month.
- vi) **Regional peak availability** was 1920 MW as compared to 1973 MW in previous month, a decrease of 3 % over the previous month.
- vii) **Energy requirement** was 1156.76 MUs in August, 2013 compared to 1139.97 MUs in July, 2013, an increase of 1.47 % over the previous month.
- viii) **Regional energy availability** was 1091.19 MUs compared to 1126.12 MUs in the previous month, a decrease of 3% over the previous month.
- ix) **Rise in demand met** was recorded in Manipur (1%), Assam (2%), Ar. Pradesh (7%), Meghalaya (1%), Mizoram (5%) & Nagaland (2%) over the previous month.
- x) **Drop in demand met** was recorded in Tripura (5%) over the previous month viz. July, 2013.
- xi) **No Over Voltage** at 400 kV Sub-Station was observed
- xii) **No over Voltages** were observed at 220kV & 132 kV S/S.
- xiii) **No under Voltages** were observed at 400 kV S/S & 220 kV S/S.
- xiv) **No Under voltage** at 132kV S/S was observed.
- xv) **Regional Generation & Inter-regional Exchanges** during the month of August, 2013 compared to July, 2013 are given below:

SN	Parameter	August, 2013	July, 2013
REGIONAL GENERATION & INTER - REGIONAL EXCHANGES (in MU)			
1	Total Generation in NER (Gross)	936.2	1024.25
2	Total Central Sector Generation (Gross)	575.12	650.62
	Total State Sector Generation (Gross)	361.08	373.63
3	Inter-Regional Energy Exchanges		
	(a) NER – ER	13.41	30.56
	(b) ER – NER	187.8	146.56
	(c) Net Import	174.39	116.0

The Summary of Category A, B, C Messages issued by NERLDC for the constituents of NER for the Month of August, 2013 is given as below:

State	A (<49.8 Hz)		B (<49.7 Hz)		C (<49.7 Hz) Persistent Overdrawal		Total	
	Jul'13	Aug'13	Jul'13	Aug'13	Jul'13	Aug'13	Jul'13	Aug'13
Ar. Pradesh	01	04	00	01	00	00	01	05
Assam	01	05	00	01	00	00	01	06
Manipur	01	04	00	00	00	00	01	04
Meghalaya	01	04	00	00	00	00	01	04
Mizoram	01	00	00	00	00	00	01	00
Nagaland	01	06	00	00	00	00	01	06
Tripura	00	05	00	01	00	00	00	06

The Sub-committee noted as above.

FOLLOW UP ACTION

C.1 Synchronization of Pallatana Module -I

The Status of transmission system associated with evacuation of power from generating stations of OTPC at Palatana and of NTPC at Bongaigaon as informed by POWERGRID during 14th TCC meeting is given below:

Byrnihat – Bongaigaon 400kV line – **January, 2014**

Balipara – Bongaigaon 400 KV D/C line -**December, 2013**

Silchar- Imphal 400kV D/c line and substation at Imphal- **works in progress**

Silchar- Melriat 400kV D/c line and substation at Malriat - **works in progress**

Mariani – Mokokchung 220kV D/c line - **works in progress**

During the 14th TCC meeting, representative of OTPC informed that the Unit tripped after re-synchronization due to rotor earth fault. However, the machine will be resynchronized to the grid during middle of September, 2013. Regarding Unit#2, he informed preliminary tests are in progress and the machine will be synchronized by November 2013 for trial run. The declaration of CoD is expected by December 2013.

Deliberation of the Committee

OTPC representative informed that ONGC has carried out the cleaning of gas pipe line and filters are to be changed, which will be completed by 15.09.2013. He stated that after completion of work, OTPC will go for trial run again followed by integrated DLN tuning and PPA test.

The committee enquired about the faulty gas compressor and the safety of the plant to run with only single gas compressor.

GM, OTPC stated that the faulty gas compressor has already reached Hyderabad and the status is not known how long it will take to rectify the compressor. He requested all the constituents to help them in backing down their generation, if required, during the trial run of the plant.

NEEPCO and NHPC stated that their reservoirs are full and sometimes spilling of water is also taking place and hence backing down of their generations at this stage is very difficult. NPHC further stated that backing down has been imposed on them during the last one month and enquired, if revision of DC is possible.

DGM, NERLDC stated that revision of DC is not allowed by CERC for reservoir based projects, but revision of DC is allowed only for run of the river (RoR) stations only. Hence generators can approach CERC in this regard.

The Committee decided that since lean hydro season is approaching, OTPC can avail the opportunity to complete trial run & PPA tests for declaration of CoD. However, based on real time operation NERLDC will look into the matter to accommodate the trial run operation of OTPC. NERLDC requested Generators & Constituents to co-operate for backing down of their generation, if required, for accommodating Palatana generation for testing purposes and declaration of CoD.

The Committee also enquired about the low voltage of problem in the generating station of NHPC at Loktak, which was raised during the 14th TCC meeting.

NHPC representative presented the voltage profile at the Loktak generating station of NHPC, which was found to be within IEGC range. Further, he informed that voltage profile has improved.

The Committee requested NHPC to send the relevant data to NERLDC viz. MVAR generation, MW generation, position of GT tap and corresponding voltage profile [particularly when voltage is less than 120kV] etc., so that NERLDC can study the matter. NHPC agreed to submit the same.

The Sub-committee noted as above.

C.2 Independent third party audit of protection system:

The protection audit of the substations / generating stations in NER was completed in February, 2013 and subsequently Detailed Project Report (DPR) was submitted to CEA in June, 2013. The estimated cost projected in the DPR for rectification / renovations of substations / generating stations of seven states of the region is about Rs. 816 crores. He also highlighted about the discussion in 2nd NPC meeting held at Delhi on July 16, 2013 regarding funding from PSDF for renovation & up-gradation of substations and generating station in NER. During the meeting CEA had informed that Min. of Power has been requested for considering 20% funding from PSDF. It was also made clear that the funding for entire amount, projected in the DPR will not be available and states should take up renovation & up-gradation of protection systems without waiting for funds from the center. The fund accumulated in PSDF from NER is only about Rs. 110 crores. The rectification / renovations work proposed in DPR cannot be taken up with this nominal fund.

During the 14th TCC meeting, the issue had been discussed in detailed. The committee decided that the states should plan to take up renovation & up-gradation of protection systems at the earliest without waiting for funding from PSDF. Since constituents are not in a position to finalize the funding pattern, the committee requested NERPC, on behalf of the region, to take up the matter with Ministry of Power and DoNER for funding from Non-Lapsable Central Pool Resources (NLCPR) – Central.

Deliberation of the Committee

SE (O) stated that consolidated project proposal for funding through NLCPR (Central) are to be prepared for taking up renovation/rectification works. The proposal is to be submitted on behalf of the region to MoP with copy to DoNER. The upgradation/ renovations of substations / generating stations are essential for safety, security and reliable operation of the system. Initiative should be taken for taking up rectification work at the earliest without waiting for funding.

The Sub-committee noted as above.

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:

During 14th TCC meeting, the quantum of UFR based load shedding has been approved by the Committee as decided in the 88th & 13th PCC meeting as given below:

SN	Stages	Frequency (in Hz)	State-wise Load Shedding	Total Load shedding (in MW)
1	Stage-I	49.2	Arunachal = 5 MW Assam = 55 MW Manipur = 5 MW Meghalaya = 15 MW Mizoram = 5 MW Nagaland = 5 MW Tripura = 10 MW	100
2	Stage-II	49.0	Arunachal = 5 MW Assam = 55 MW Manipur = 5 MW Meghalaya = 15 MW Mizoram = 5 MW Nagaland = 5 MW Tripura = 10 MW	100

3	Stage-III	48.8	Arunachal = 5 MW Assam = 55 MW Manipur = 5 MW Meghalaya = 15 MW Mizoram = 5 MW Nagaland = 5 MW Tripura = 10 MW	100
4	Stage-IV	48.6	Arunachal = 5 MW Assam = 55 MW Manipur = 5 MW Meghalaya = 15 MW Mizoram = 5 MW Nagaland = 5 MW Tripura = 10 MW	100
			Total load shedding	400

Deliberation of the Committee

The Sub-committee requested all constituents to identify and furnish the list of feeders for above quantum of UFR based load shedding in their respective States (Ar. Pradesh, Manipur, Mizoram & Nagaland – 4 x 5 = 20 MW, Assam – 4 x 55 = 220 MW, Meghalaya – 4 x 15 = 60 MW and Tripura – 4 x 10 = 40 MW) for all the four (4) stages so that the same can be finalized in the next OCC/PCC meetings.

All constituents agreed to submit the list of feeders at the earliest.

The Sub-committee noted as above.

C.4 Lines under long outages

The status for restoration of these lines as informed in the 14th TCC meeting is as follows:

- a) 220kV BTPS – Agia line (one ckt) – [Since Nov'97]: Material has already been procured and the target for completion of work is January, 2014.
- b) 132kV Mariani – Mokokchung line – [Since Apr'08]: Since no representative from Nagaland was present, the status could not be updated.
- c) 39km of 132kV Rengpang – Jiribam line – [Since Oct'02]: CE, Manipur informed that line is complete and test charge has already been carried out. The line will be put back into service by September, 2013.

- d) LILO of 132 kV Dimapur (Nagaland) – Kohima (Nagaland) Line at 220/132 kV Dimapur (PGCIL) Substation- [Since Aug'11]: Since no representative from Nagaland was present, the status could not be updated.

Deliberation of the Committee

The status for restoration of following lines as reviewed in the 89th OCC meeting is given below:

- a) 132kV Mariani – Mokokchung line –Representative from DoP, Nagaland informed that the work of changing the insulators is in progress and the status / progress will be intimated in the next OCC/PCC meetings.
- b) 132 kV Dimapur - Dimapur - II line – Representative from DoP, Nagaland informed that formal communication has been made to POWERGRID to assist in establishment of alternative arrangement for evacuation of power. GM, POWERGRID stated that they have not received any communication from Nagaland in this regard. DoP, Nagaland handed over the letter to POWERGRID during the meeting. GM, NERTS stated that they will look into the matter and the status will be intimated in the next OCC/PCC meetings.

The Sub-committee noted as above.

C.5 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 and are under implementation.

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 scheme for all the four cases will be as follows:

Case 1: When Palatana unit trips:

- i. When generator at Palatana trips a signal will be generated from trip relay of the unit.
- ii. This signal should trip the CB of 132 kV Silchar – Srikona D/C & 132 kV Silchar – Panchgram lines at Silchar.
- iii. Subsequent to tripping of 132 kV Silchar – Panchgram line, the CB at Badarpur of 132 kV Badarpur – Panchgram line should be tripped.
- iv. After these trippings an instant load of 80 MW will be relieved during off-peak hours & 130 MW will be relieved during peak hours which will prevent the system from cascade tripping
- v. Then manual demand disconnection/management should be imposed.

Case 2: When 400 kV Palatana-Silcher (D/C) lines trip

- i. When both the ckts of 400 kV Palatana – Silchar lines trips, a signal will be generated from trip relays at Silchar
- ii. This signal should trip the CBs at Silchar end of 132 kV Silchar – Srikona D/C & 132 kV Silchar – Panchgram lines.
- iii. Subsequent to tripping of 132 kV Silchar – Panchgram line, the CB at Badarpur end of 132 kV Badarpur – Panchgram line should be tripped.
- iv. After these trippings an instant load of 80 MW will be relieved during off-peak hours & 130 MW will be relieved during peak hours which will prevent the system from cascade tripping
- v. Then manual demand disconnection/management should be imposed.

Case 3: 400 kV Silchar – Byrnihat line (with generation at Pallatana)

When 400 kV Byrnihat – Silchar lines trip, signal will be generated from trip relays at Silchar

- i. This signal should trip CB of GTG/STG of Generating Unit at Palatana. But unit may run in Full Speed No Load (FSNL) condition.
- ii. An instant relief of load of 230/130 MW will prevent the system from cascade tripping.

- iii. Then manual demand disconnection/management should be imposed.

Case 4: When 400 kV Silchar – Byrnihat line trip(without generation at Pallatana)

- i. When 400 KV Byrnihat – Silchar line trips, a signal will be generated from trip relays at Silchar.
- ii. This signal should trip the CB of 132 kV Silchar – Srikona D/C & 132 kV Silchar – Panchgram lines at Silchar.
- iii. Subsequent to tripping of 132 kV Silchar – Panchgram line, a signal will be generated from trip relay of 132 KV Silchar – Panchgram line. This signal should trip the CB at Badarpur of 132 kV Badarpur – Panchgram line.
- iv. After these trippings an **instant load relief** of around **95 MW in Peak Hours** which will prevent the system from cascade tripping.
- v. Then manual demand disconnection/management may be imposed, if necessary. Load reduction in 132 kV pocket is required for SPS under Case-I and the scheme has already been implemented by NERTS in line with discussion in OCC forum.

For Case-II, generation reduction at Palatana as well as load reduction in 132 kV pocket are required. Load reduction part has already been implemented by NERTS in line with discussion in OCC forum. Regarding generation reduction, it has been seen from the study that injection of power at Palatana should be reduced to around 20 MW excluding own auxiliary consumption.

For Case-III, generation reduction to the tune of 200 MW is required in case Unit # 1 is running under full load i.e the generation should be brought down to around 150 MW. The scheme will be kept in 'OFF' mode/ineffective mode in case generation is around 150 MW. OTPC, BHEL will plan how the required generation reduction will be effected for implementation of the schemes under Case-II & III.

Regarding SPS under Case-IV, it has been decided that the scheme will be implemented as early as possible considering the adverse impact of tripping of the line on the NER grid. The scheme is similar to Case-I and hence implementation should not take much time. NERTS was requested to take necessary action for implementation at the earliest.

SPS will be reviewed from time to time after implementation for further improvement based on the system requirement. The SPS will be reviewed again when the second Unit at Palatana is connected to the NER grid.

During 14th TCC meeting, the committee requested OTPC to highlight action plan for reducing the generation for implementation of proposed SPS. OTPC requested NERLDC for providing certain information as desired by BHEL. Committee advised OTPC to communicate NERLDC accordingly for getting the required information. OTPC was requested for taking early action for implementation of SPS for safety & security of the NER grid.

Deliberation of the Committee

GM, NERTS informed that for SPS corresponding to Case I & IV will be made operational from 14.09.2013.

GM, NERLDC stated that the main concern is for SPS corresponding to Case – II & III above and requested OTPC to look into the matter for implementation at the earliest.

GM (Plant), OTPC stated that such reduction of load at very short duration would be difficult. However, he stated that no proposal has been received from BHEL. However, BHEL's representative will be requested to visit the site again and discuss with NERLDC along with OTPC so that matter can be resolved at the earliest. Subcommittee requested OTPC to resolve the issue at the earliest in consultation with NERLDC & BHEL.

The Sub-committee noted as above.

C.6 Implementation of islanding scheme in NER

During the 87th OCC meeting, the committee had decided the following islanding scheme and associated frequencies levels for creation of islands in NER:

SN	Islanding Scheme	Lines required to be opened	UFR Location	Implementing Agency
1	ISLAND AT 48.80 Hz: Island comprising of generating units of AGBPP (Gas), NTPS (Gas) & LTPS (Gas) and loads of Upper Assam system & Deomali area (Ar. Pradesh) [Total Generation: 380-400MW and load: 200MW (off peak)-300MW (peak)]	(a) 220 kV New Mariani (PG) – AGBPP	UFR-1 [At New Mariani (PG)]	POWERGRID
		(b) 220 kV New Mariani (PG) – Misa		
		(c) 220 kV Mariani – Misa	UFR-2 [At Mariani, Samaguri of AEGCL]	AEGCL
		(d) 220 kV Mariani – Samaguri		
		(e) 132 kV Mokokchung – Mariani		
		(f) 132 kV Dimapur (PG) – Bokajan	UFR-3 [At Dimapur (PG)]	POWERGRID
2	ISLAND AT 48.20 Hz: Island comprising of generating units of AGTPP (Gas), generating units at Baramura (Gas), Rokhia (Gas) & Gumati (Hydro) and loads of Tripura system & Dullavcherra area (Assam) [Total Generation: 150-160MW and load: 110MW (off-peak)-150MW (peak)]	132 kV Palatana – Udaipur	UFR-1 [At Palatana]	OTPC
		132 kV Palatana – Surjamani Nagar		
		132 kV Silchar – Dullavcherra	UFR-2 [At Silchar]	POWERGRID
		132 kV AGTPP – Kumarghat	UFR-3 [At Kumarghat]	POWERGRID
		132 kV P K Bari – Kumarghat		
3	ISLAND AT 47.90 Hz: Isolation of NER from NEW grid at ER-NER boundary with rest of the generation and load of NER	To be decided after system study		

The islanding schemes 1 & 2 elaborated above have been agreed by TCC members as decided in the 12th PCC meeting. GM (OS), POWERGRID suggested that while finalizing the islanding scheme -1 (proposed at 48.8 Hz), 100MW of UFR based load shedding proposed at 48.8Hz (as decided by NPC) should be taken into account and adequate time delay should be provided for operation of UFR or df/dt relay. Regarding the Case – III mentioned above i.e. isolation of NER from ER at ER-NER boundary, the relevant study required is being carried out in association with WRPC. Further, the committee requested Prof. P. Tripathi from IIT, Guwahati to assist the study group of NERPC in carrying out various system studies required for islanding scheme and other studies as and when required. He agreed for providing

assistance. Necessary data will be furnished to Prof. Tripathy by NERLDC for further action.

Deliberation of the Committee

The Sub-committee decided to form a sub-group to look into the matter and discuss in detail for implementation of the islanding scheme 1 &2.

The sub-group would comprise of representatives from Assam, Tripura, NEEPCO, POWERGRID, NERPC, NERLDC & IIT, Guwahati. The nomination from various organizations should reach NERPC before next OCC/PCC meeting so that further action plan can be discussed in next OCC/PCC meeting.

The Sub-committee noted as above.

C.7 Grid Security Expert System (GSES):

SE (O), NERPC informed that during the 14th TCC meeting, the committee decided to review again about the implementation of GSES after setting of SLDCs in all states and establishment reliable communication link.

The issue is kept in abeyance for the time being.

The Sub-committee noted as above.

C.8 Release of day ahead drawal schedule based on actual requisition by Constituents instead of open and full capacity requisition:

In the 14th TCC meeting, GM, NERDC informed that requisition based scheduling has been implemented on 27.08.2013 on 15 minutes time block (96 blocks in a day) and so far no difficulties have been encountered.

The committee appreciated the efforts taken by NERPC/NERLDC in successful implementation of the requisition based scheduling. Further, the committee requested to follow up and monitor the technical & commercial issues in the sub-committee of NERPC.

Deliberation of the Committee

DGM, TSECL stated that requisition based scheduling has been implemented from 27th August, 2013; but sometimes as per their requisition the schedule was not implemented.

DGM, NERLDC stated that during 88th OCC meeting all constituents had agreed for full support and co-operation during the initial stage of implementation of requisition based scheduling and the sub-committee had requested the constituent states to bear with the problems likely to be encountered during initial phases and co-operate with NERLDC for successful implementation. NERLDC also informed that the technical minimum quantum declared by the generators will be followed by them for scheduling purposes as it is difficult to cross check the figures furnished by generators along with DC.

NERLDC requested Tripura to furnish the details of the communications sent to NERLDC for revision of schedule so that the reason for not entertaining such revision can be ascertained.

Sr. Manager, NEEPCO stated that MoP/CEA have set the annual generation target and they have to achieve the target strictly and at the same time, if most of the constituents are in under drawal mode, it will be very difficult not only to meet the target but also will lead to financial loss to them.

DGM, TSECL again stated that revision of scheduling is not intimated by NERLDC and requested NERLDC to intimate them whenever revision takes place. NERLDC informed that all the revisions are posted in their web site as soon as it is done.

The Sub-committee enquired from other constituents if they have faced any difficulty so far. All other constituents informed that no difficulty has been encountered so far and agreed for providing all support to NERLDC. The Sub-committee requested Tripura to co-ordinate with NERLDC and any difficulty faced by the constituent states during the process of implementation can be discussed further in next OCC meeting.

The Sub-committee noted as above and requested all constituents to co-operate with NERLDC for successful implementation. The status will be reviewed again in the next OCC meeting.

C.9 Maintenance of Isolators at 79 Tilla S/S:

Tripura informed that maintenance work of 6 nos of isolators at 79 Tilla Grid s/s which are connected with 132 KV R C Nagar L-I & L – II have been pending since a very long time. Power Grid had done only partial maintenance work on 3 (three) isolators out 6 (six). The remaining work of isolators along with Earth switches is very urgent from operational point of view.

During the 87th OCC meeting, POWERGRID informed that purchase order of materials for the above work has been placed and work is expected to be completed by September, 2013.

Deliberation of the Committee

GM, POWERGRID informed that materials have already been received by them and the work will be completed in September, 2013.

The Sub-committee noted as above.

C.10 Installation of Harmonic Filters:

In the 14th TCC meeting, CE, Ar. Pradesh informed that power supply to the Satyam Steel Plant at Banderdewa has been disconnected and only after completion of installation of harmonic filters, the supply to the plant will be resumed. He also informed that the work is likely to be completed by December 2013.

Deliberation of the Committee

Since no representative from DoP, Ar. Pradesh was present, the status could not be updated.

The Sub-committee noted as above.

C.11 Parallel Operation of 3x20 MVA Transformers with 160 MVA Auto-transformer at Kopili:

The committee has discussed about the importance of bringing the 3x20MVA transformer back into service. Sr. Mgr. (E/M), NEEPCO informed that the matter has been taken up with POWERGRID. It has been observed that the 3x20MVA,

transformer can only operate at Principal tap and there is no back up O/C+E/F protection on 220kV side of transformer. However, all efforts are to be taken to complete the work by July, 2013. The sub-committee had suggested that all required protection should be in place before operation of the transformer.

During 88th OCC meeting and 12th PCC meeting, Sr. Manager, NEEPCO informed that Kopili HEP is facing serious problem due to acidic nature of water and most of the engineers are busy with restoration of the plant. However, all efforts will be put by NEEPCO to complete all required tests at the earliest before bringing the transformers into operation and parallel operation of above transformer is likely to be completed by August, 2013. The relay co-ordination will be done in consultation with PGCIL.

Deliberation of the Committee

Sr. Manager, NEEPCO informed that the transformer was in charged condition since 08.09.2012 and while attempt was made to load the transformer on 13.08.2013, the transformer got tripped. On inspection, it was found that the tap changer vent of phase-B Transformer has exploded. Once the repair work is over, further action will be initiated and status will be intimated to the forum in next OCC meeting.

The Sub-committee noted as above.

C.12 Poor Availability of Auxiliary Supply at various Sub-stations of POWERGRID in NER:

In line with the MOM of 87th OCC Meeting the issue has been taken up with concerned utilities to look into the matter and improve the availability & reliability of existing source from which auxiliary power supply is provided to following Sub Stations of POWERGRID, NER:

SN	Station	Present Availability	Communication Made	Status / Action Plan
1	Bongaigaon SS	60%	The CGM (D), LAR	
2	Salakati SS	60%	The CGM (D), LAR	

3	Kumarghat SS	80%	AGM (CS & O), TSECL	
4	Misa SS	20%	The CGM (D), CAR	
5	Balipara SS	75%	The CGM (D), CAR	
6	Badarpur SS	60%	The CGM (D), LAR	

CGM, LDC, AEGCL enquired from POWERGRID about the percentage mentioned above, whether it is only the availability or the reliability also. Further, he requested POWERGRID to intimate the quantum of auxiliary load requirement at each substation mentioned above.

DGM, POWERGRID informed that both availability & reliability is necessary for smooth operation of the grid. Regarding the quantum of load, he stated that there is no change in requirement of auxiliary load in the above stations, however, the same will be submitted to AEGCL.

CGM, LDC requested POWERGRID to keep in touch with the concerned person of above substation and inform them about the non-availability of power supply as and when it occurs and AEGCL will also pursue the matter for improvement in availability of reliable auxiliary supply, which is required for the benefit of the grid.

Deliberation of the Committee

GM, NERTS informed that the status is still the same, no further improvement till date.

The Sub-committee requested POWERGRID to pursue with concerned constituents so that the work could be completed at the earliest for the benefit of the grid.

The Sub-committee noted as above.

C.13 Provision of 2nd Source for Auxiliary Supply at various Sub-stations of POWERGRID in NER:

In line with the MOM of 87th OCC Meeting the issue has been taken up with concerned utilities to look into the matter and identify the second independent source through which redundant auxiliary power supply can be provided to the sub stations of POWERGRID, NER. Further, our representative has also discussed with the in-charge of local stations and the status is as below:

SN	Station	Communication Made	Status / Action Plan
1	Bongaigaon	CGM (D), LAR	Applied for a second source to DGM, APDCL, Kokrajhar. Response is being awaited till now.
2	Salakati	CGM (D), LAR	<i>APDCL may please expedite</i>
3	Kumarghat	AGM (CS & O), TSECL	Already has a 33 kV Connection apart from the existing 11 kV connection in use. The 33/0.4 kV Transformer is to be commissioned. <i>No issue</i>
4	Misa	CGM (D), CAR	Applied to SDO, Kathiatoli, for a second source. APDCL is to give estimate. <i>APDCL may please expedite</i>

SN	Station	Communication Made	Status / Action Plan
5	Balipara	CGM (D), CAR	Applied to SDO, Balipara for a second source. DGM PDCL, Tezpur confirmed that a 33 kV Line can be extended from Ghoramari S/S. Survey is to be conducted and estimate to be prepared. <i>APDCL may please expedite</i>
6	Badarpur	CGM (D), LAR	Applied to DGM, APDCL, Panchgram for a second 33 kV connection, who has confirmed it's feasibility but yet to submit cost estimate to POWERGRID. <i>APDCL may please expedite</i>
7	Dimapur	The Addl. Chief Engineer, DoP, NL	Applied to Ex. Engr, Dimapur who has confirmed verbally that there is no provision for a second source. <i>Issue may be discussed</i>
8	Haflong	CGM (D), LAR	Applied to AGM, APDCL, Haflong who has confirmed that there is no provision for a new 33 kV connection. However he has confirmed that a 33 kV connection is possible from the 132/33 kV Haflong Grid Substation and requested to take up the matter with AGM, AEGCL, Silchar. <i>AEGCL may please comment</i>
9	Aizawl	Chief Engineer (Distribution) P & E Deptt.	Taken up with P&E Deptt. and it is confirmed that a second 11 kV connection is possible from Luangmual S/S. POWERGRID to request P&E Deptt. for an estimate for the new connection. <i>P&E, Mizoram may please expedite</i>
10	Nirjuli	Chief Engr(P) WEZ, DOP, AP	POWERGRID, Nirjuli will approach DoP, AP shortly. <i>DoP, AP may please expedite</i>

CGM, LDC requested POWERGRID to keep in touch with the concerned person of above substation and inform them about the non-availability of power supply as and when it occurs and AEGCL will also pursue the matter for improvement in availability of reliable auxiliary supply, which is required for the benefit of the grid.

DGM, TSECL informed that their proposal has already been communicated and requested POWERGRID to take up the matter with concerned authority so that the work can be completed at the earliest. EE, SLDC, Ar. Pradesh also agreed with the proposal of Tripura. He also requested POWERGRID to take up the matter with concerned authority of DoP, Ar. Pradesh for early necessary action.

Since no representatives from Mizoram & Nagaland were present in the meeting, the Sub-committee requested POWERGRID to take up the issue directly with them.

Deliberation of the Committee

Same status as item C.12 above.

The Sub-committee noted as above.

C.14 Long outage of Transformers at BTPS:

During the 86th OCC meeting, Assam had informed that one transformer (160 MVA, 220/132 KV) & one 80 MVA, 220/132 KV transformer at BTPS was under shutdown

Deliberation of the Committee

CGM, LDC, AEGCL informed that outage of the transformer was so long because the (1x160MVA, 220/132kV) transformer failed during the warranty period and it was dispatched to the factory of M/s EMCO. He informed that repaired transformers is likely to reach the site very soon and commissioning of the transformers (1x160 MVA, 220/132kV + 1x80 MVA, 220/132kV) will be completed by September, 2013.

The Sub-committee noted as above.

C.15 Monthly MU requirement & availability of each state of NER as per format:

Requirement

Name of State	Jun13	Jul13	Aug13	Sep13	Oct13
Arunachal Pradesh					
Assam					
Manipur					
Meghalaya					
Mizoram					
Nagaland					
Tripura					

Availability

Name of State	Jun13	Jul13	Aug13	Sep13	Oct13
Arunachal Pradesh					
Assam					
Manipur					
Meghalaya					
Mizoram					
Nagaland					
Tripura					

These data required for system study, daily report, computation of TTC-ATC etc.

During the 87th OCC meeting all constituents have agreed to furnish the data as per format above, but till date no constituents have submitted the data.

Deliberation of the Committee

DGM, NERLDC informed that the above data have not been received by them, he once again requested all the constituents to submit the same at the earliest.

The Sub-committee noted as above.

D. NEW ITEMS

D.1 Proforma for Operational Statistics

The operational Statistics as given below was not furnished in the meeting.

- (i) – Schedule Vs Actual Generation.
- (ii) – Peak Demand: Schedule Vs Actual.
- (iii) – Integrated Operation of the system.
- (iv) – Details of DC, schedules and injections from Central sector stations, drawal schedules and entitlements of constituents.
- (v) – Details of major reservoirs in NER.

The operational statics were shown in the presentation by NERLDC.

The Sub-committee noted as above.

D.2 State-wise anticipated peak demand/requirement, shortage for September-December, 2013 & January, 2014.

The sub-Committee reviewed & finalized the anticipated peak demand/energy requirement/Availability (without Pallatana generation) for the months of September to December, 2013 & January, 2014.

A. Peak Demand

SN.	State	Peak Demand (MW) Sep' 13	Peak Demand (MW) Oct' 13	Peak Demand (MW) Nov' 13	Peak Demand (MW) Dec' 13	Peak Demand (MW) Jan' 14
1	Ar. Pradesh	130	130	130	130	120
2	Assam	1300	1350	1350	1350	1300
3	Manipur	130	130	130	130	120
4	Meghalaya	280	280	280	300	280
5	Mizoram	90	85	85	85	75
6	Nagaland	120	120	120	120	100
7	Tripura	250	250	260	260	230
	Region	2300	2345	2355	2355	2245

B. Peak Availability

SN.	State	Peak Availability (MW) Aug' 13	Peak Availability (MW) Sep' 13	Peak Availability (MW) Oct' 13	Peak Availability (MW) Nov' 13	Peak Availability (MW) Dec' 13
1	Ar. Pradesh	120	120	120	100	100
2	Assam	1050	1050	1050	850	830
3	Manipur	110	110	115	110	110
4	Meghalaya	250	250	250	240	240
5	Mizoram	75	75	75	65	60
6	Nagaland	90	110	115	95	85
7	Tripura	155	170	150	180	160
	Region	1850	1885	1875	1600	1585

The Committee noted as above.

D.3 Generation Planning (ongoing and planned outages)

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

Khandong – 1.584 MU
 Kopilli – 2.376 MU
 Ranganadi - Subject to inflow
 Doyang – 1.589 MU
 Loktak – 2.520 MU

The Committee suggested that the current DC given by generating stations shall be maintained till the next OCC meeting since reservoirs are in good condition and in case of urgency NERPC & NERLDC will review the same.

Extension of shutdown of GTG # 1- Refer to letter no. NEEPCO/AGBPP/DGM (E)/2012- 2013/T- 8/614 Dated: 19/08/2013. Due to non- issue of VISA by the Indian Embassy at Tokyo to the expert of Mitsubishi Corporation (MC) to be deputed as Inspection Technical Advisor (TA), the scheduled program of Inspection is delayed. Consequently, the complete program of overhauling is delayed since the repairing activities can be carried out only after the inspection and decision by the Inspection TA. In view of the above the work program is to be rescheduled and planned to complete the overhauling works by 14th Sept 2013.

Deliberation of the Committee

Sr. Manager, NEEPCO informed that the expert of Mitsubishi Corporation (MC) Inspection Technical Advisor (TA) could not reach site due to VISA problem and the scheduled program of Inspection got delayed. The unit is expected to be ready by September 2013.

The Committee noted as above.

Shutdown of Complete Plant for 7(seven) days: For Revamp, Renovation & Modernization works of Gas Booster Station of AGBPP following works in the common area are to be attended:

A. Final gas line piping connection works (to be carried out by CEIPL):

- (a) Installation of Station inlet scrubber,
- (b) Installation of common engine fuel filter system
- (c) Installation of all gas flow meters.

B. Works to be carried out by Dresser Rand

- (a) Common discharge header modification,
- (b) Installation of 4nos of isolation valves in each individual unit with spectacle blind and spool piece.
- (c) Radiography/ hydro test, painting etc. for modified lines.

As such, shutdown of the complete Power Plant is required for seven days w.e.f. 23rd Oct to 30th 2013. At present, contribution to the Grid from the Plant is 180 MW depending on the ambient temperature. The actual date of shutdown may vary by a day or two depending on the arrival of man and materials at Site.

The Committee discussed and agreed the proposed complete shutdown of AGBPP plant of NEEPCO from 23.10.13 to 30.10.2013. However, during the above period, generation from other plants have to be maximized to meet the shortfall and NERLDC has to plan accordingly.

D.4 Puja load in Tripura

Tripura have to receive about 150 MW power during Durga Puja w.e.f 10.10.13 to 19.10.13 from the Grid. That time own generation from Tripura may be 100MW. Demand has gradually increased since last April 2013. Necessary action for arranging additional power is being taken up. Open access for bi-lateral transaction may be 30 MW power from Me.ECL, 60MW from NVVN and 25 MW power from Mizoram. NERLDC may ensure necessary arrangement to meet 270 MW power during Puja by Tripura especially during 16.00 hrs to 24:00 hrs.

Deliberation of the Committee

DGM, NERLDC stated that purchase of power from Me.ECL may not be helpful to Tripura due to transmission constraints in 132 kV pocket. As per the study carried out by NERLDC, Tripura can draw only 100 MW during peak hours of PUJA days. He stated that the quantum of power purchased by Tripura from Mizoram will be added up to their drawal quantum and so they should pursue with Mizoram to get maximum power from them. He also requested Tripura to adhere to their drawal quantum by avoiding over drawal for the safety and security of the grid.

The Sub-committee requested Tripura to pursue with Mizoram and the status will be reviewed again in the next OCC meeting before the Puja festival.

The Committee noted as above.

D.5 Outage Planning Transmission elements

After detail discussion the sub-committee approved the shutdown as proposed by POWERGRID, ENCIL and AEGCL September/October, 2013 is given in **Annexure – D.5 (i, ii & iii) respectively.**

The Sub-committee also requested that as decided earlier, all planned shutdown of transmission elements and generating unit should be submitted for coming 2 (two) months in advance so that NERPC/NERLDC can plan and also intimate to other region for smooth co-ordination of shutdown i.e. all constituents of the region should submit the planned shutdown programme of the generating units /

transmission elements for the month of October & November 2013 for discussion in 90th OCC meeting to be held in 1st week of October, 2013. The Sub-committee has also requested to all the agencies that shutdown period and timing granted in the OCC meeting should be strictly adhered to avoid difficulties in the operation of grid. Further, the Sub-committee have decided that in case of daytime shutdown, the transmission elements should be brought back into service as per approved shut down programme and the line should be charged by 16:00 Hrs sharp. **No planned shutdown, other than those approved in OCC meeting, of transmission elements and generating unit will be entertained anymore unless it is of emergency nature. In this regard, NERPC has already communicated number of times. The subcommittee has decided to follow the planned shutdown programme as approved in OCC forum strictly and requested all constituents of the region to co-operate.**

The Sub-committee noted as above.

D.6 Estimated Transmission Availability Certificate (TAC) for the month of July, 2013.

The Estimated Transmission System Availability for the month of July, 2013, furnished by PGCIL, is **99.9604%**. The detail outage data for calculation of Transmission System Availability furnished by PGCIL, is at **Annexure D.17**. NER constituents are requested to kindly communicate their views and observations, if any, by 27th September, 2013 so that Final TAC for the month of August, 2013 may be finalized by NERPC Secretariat.

The Sub-committee noted as above.

D.7 Major grid disturbances in the previous month (August, 2013)

There was no major grid disturbance during the month of August, 2013 pertaining to NER grid.

The Sub-committee noted as above.

D.8 Any other item:

D.9 Date & Venue of next OCC meeting

It is proposed to hold the 90th OCC meeting of NERPC on first week of October, 2013. As per roaster, Mizoram will be the host for 90th OCC meeting. The exact venue will be intimated in due course.

The meeting ended with thanks to the Chair.

List of Participants in the 89th OCC meeting held on 13/09/2013

SN	Name & Designation	Organization	Contact No.
1.	No Representatives	Ar. Pradesh	
2.	Sh. H.C. Phukan, CGM, SLDC	Assam	09435559447
3.	Sh. P. K. Sarma, GM, Com-T	Assam	09435344083
4.	Sh. B. C. Bordoloi, DGM, SLDC	Assam	09435045675
5.	Sh. J. K. Baishya, AGM, SLDC	Assam	09435041494
6.	Sh. A. K. Saikia, AGM, SLDC	Assam	09864116176
7.	Sh. K. Goswami, AGM, Com-T	Assam	09864020019
8.	Sh. G.K. Bhuyan, AGM, (Protection)	Assam	09954055295
9.	Sh. Budha Chandra Sharma, EE	Manipur	09436020911
10.	Sh. A. Kharpan, SE, Me. PTCL	Meghalaya	09436117802
11.	Sh. R. Syiem, SE, Me. PTCL	Meghalaya	09863065704
12.	Sh. M. Marbaniang, SE, (T&T)	Meghalaya	09436110759
13.	Sh. F.E. Kharshiing, SE, SLDC	Meghalaya	09863063375
14.	No Representatives	Mizoram	
15.	Sh. Nitovi Wotsa, EE (E)	Nagaland	09436004928
16.	Sh. A. Jakhalu, EE (Trans)	Nagaland	09436002696
17.	Sh. A. Gan. Chaudhuri, DGM (C&T)	Tripura	09436139311
18.	Sh. B. Debbarma, DGM (SO)	Tripura	09436450501
19.	Sh. T. S. Singh, GM	NERLDC	09436302717
20.	Sh. N. R. Paul, DGM	NERLDC	09436302723
21.	Sh. A. Mallick, CM (SO-II)	NERLDC	09436302720
22.	Sh. B.R Medhi, Dy. Manager	NERLDC	09436335379
23.	Sh. Rahul Chakrabarti, Engineer	NERLDC	09402507543
24.	Sh. A. Patir, GM	NERTS	09436302529
25.	Sh. Madhavan, Manager	NERTS	09436335250
26.	Sh. P.C. Barman, DGM	NEEPCO	09435144141
27.	Sh. D. Choudhury, Sr. Mgr	NEEPCO	09435339747
28.	Sh. Bhaskar Goswami, Sr. Mgr.	NEEPCO	09436163983
29.	Sh. C.L. Khayuingam, Asst. Mgr (E)	NHPC	09402880207
30.	Sh. Pranav Kumar, Engineer (E)	NHPC	09436894887
31.	Sh. M. Banerjee, GM (Plant)	OTPC	08413990716
32.	Sh. Atanu Nath, Associate Mgr.	ENICL	09457808241
33.	Sh. S.K. Ray Mohapatra, MS I/C	NERPC	09818527857
34.	Sh.B. Lyngkhai, SE (O)	NERPC	09436163419
35.	Sh. S. M. Jha, EE (O)	NERPC	09831078162

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

MONTH : AUGUST-13

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	01/08/2013	18:37	02/08/2013	00:48	00	00	00	00	00	00	06	11	SVRD	h/T for vol. regu. On RLDC instruction vide code 4276
2	02/08/2013	18:18	03/08/2013	00:31	00	00	00	00	00	00	06	13	SVRD	h/T for vol. regu. On RLDC instruction vide code 4284
3	05/08/2013	18:17	05/08/2013	20:37	00	00	00	00	00	00	02	20	SVRD	h/T for vol. regu. On RLDC instruction vide code 4297
4	06/08/2013	18:30	06/08/2013	20:45	00	00	00	00	00	00	02	15	SVRD	h/T for vol. regu. On RLDC instruction vide code 4308
5	07/08/2013	17:56	09/08/2013	07:41	00	00	00	00	00	00	37	45	SVRD	h/T for vol. regu. On RLDC instruction vide code 4315
6	10/08/2013	18:15	10/08/2013	21:57	00	00	00	00	00	00	03	42	SVRD	h/T for vol. regu. On RLDC instruction vide code 4342
7	11/08/2013	18:25	11/08/2013	23:34	00	00	00	00	00	00	05	09	SVRD	H/T for vol. regu. On RLDC instruction vide code 4351
8	12/08/2013	18:18	12/08/2013	22:39	00	00	00	00	00	00	04	21	SVRD	h/T for vol. regu. On RLDC instruction vide code 4364
9	15/08/2013	18:43	15/08/2013	21:48	00	00	00	00	00	00	03	05	LVRD	h/T for vol. regu. On RLDC instruction vide code 4377
Sub-Total					00 : 00		00 : 00		00 : 00		71 : 01			
BR_SILCHAR(63MVAR)			#1											
10	04/08/2013	18:28	04/08/2013	22:03	00	00	00	00	00	00	03	35	SVRD	h/T for vol. regu. On RLDC instruction vide code 4290
11	09/08/2013	18:16	09/08/2013	22:21	00	00	00	00	00	00	04	05	SVRD	H/T for vol. regu. On RLDC instruction vide code 4329
12	17/08/2013	18:08	17/08/2013	22:58	00	00	00	00	00	00	04	50	SVRD	h/T for vol. regu. On RLDC instruction vide code 4398
13	21/08/2013	18:25	21/08/2013	20:09	00	00	00	00	00	00	01	44	SVRD	h/T for vol. regu. On RLDC instruction vide code 4441
14	22/08/2013	18:13	22/08/2013	22:26	00	00	00	00	00	00	04	13	SVRD	H/T for vol. regu. On RLDC instruction vide code 4457
15	23/08/2013	09:09	23/08/2013	14:26	00	00	00	00	00	00	05	17	SVRD	H/T for vol. regu. On RLDC instruction vide code 4463
16	25/08/2013	18:35	25/08/2013	22:41	00	00	00	00	00	00	04	06	SVRD	h/T for vol. regu. On RLDC instruction vide code 4490
17	26/08/2013	18:08	26/08/2013	23:56	00	00	00	00	00	00	05	48	SVRD	h/T for vol. regu. On RLDC instruction vide code 4502
18	27/08/2013	18:18	27/08/2013	21:33	00	00	00	00	00	00	03	15	SVRD	H/T for vol. regu. On RLDC instruction vide code 4511
19	30/08/2013	18:18	30/08/2013	21:46	00	00	00	00	00	00	03	28	SVRD	h/T for vol. regu. On RLDC instruction vide code 4525

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	: 00	00	: 00	00	: 00	40	: 21		
Grand Total					00	: 00	00	: 00	00	: 00	111	: 22		

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

MONTH: AUGUST-13

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.		
BADARPUR_KOLASIB														
1	03/08/2013	21:10	03/08/2013	21:28	00	00	00	00	00	18	00	00	LNCC	tripped during heavy lightning
Sub-Total					00	00	00	00	00	18	00	00		
AIZWAL_KUMARGHAT														
2	17/08/2013	10:15	17/08/2013	11:47	01	32	00	00	00	00	00	00	OMST	SD of main bus at Aizawl for Isolator rectification works
3	17/08/2013	16:29	17/08/2013	16:36	00	00	00	00	00	07	00	00	LNCC	A bamboo bush fell upon line due to landslide(loc 85-86)
4	25/08/2013	21:55	25/08/2013	22:00	00	05	00	00	00	00	00	00	LEFT	Transient E/F
Sub-Total					01	37	00	00	00	07	00	00		
AIZWAL_ZEMEBAK # 2														
5	07/08/2013	15:40	07/08/2013	17:08	00	00	00	00	00	00	01	28	OSFD	ESD taken by Zemabawk, Mizoram
6	17/08/2013	10:18	17/08/2013	11:47	01	29	00	00	00	00	00	00	OMST	SD of main bus at Aizawl for Isolator rectification works
Sub-Total					01	29	00	00	00	00	01	28		
BADARPUR-BADARPUR														
7	05/08/2013	18:43	05/08/2013	20:43	00	00	00	00	00	00	02	00	OSFD	ESD of Main Bus taken by AEGCL
Sub-Total					00	00	00	00	00	00	02	00		
BADARPUR_JIRIBAM														
8	27/08/2013	19:00	27/08/2013	19:29	00	00	00	29	00	00	00	00	OMSU	SD of Main Bus taken for attending damaged dropper connectio ICT(state
Sub-Total					00	00	00	29	00	00	00	00		
BADARPUR_KHLIERIAT														
9	03/08/2013	17:32	03/08/2013	17:34	00	00	00	00	00	02	00	00	LNCC	Tripped during heavy lightning
Sub-Total					00	00	00	00	00	02	00	00		
BADARPUR_KUMARGHAT														
10	24/08/2013	00:52	24/08/2013	00:59	00	00	00	00	00	07	00	00	LNCC	Line section patrolled, no abnormality found lightning related tripping
Sub-Total					00	00	00	00	00	07	00	00		
DIMAPUR_IMPHAL														

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.		
11	08/08/2013	08:15	08/08/2013	17:09	00	00	00	00	00	00	08	54	SCSD	SD taken for upgradation of existing CTs with CTs of higher ratio(600/1)
12	15/08/2013	13:14	15/08/2013	13:24	00	00	00	10	00	00	00	00	OMSU	disturbance in Manipur state system
13	22/08/2013	14:01	22/08/2013	14:10	00	09	00	00	00	00	00	00	LEFT	Transient E/F
14	26/08/2013	03:37	26/08/2013	04:06	00	29	00	00	00	00	00	00	OMST	LBB operation in 132KV side
15	31/08/2013	05:12	31/08/2013	08:30	00	00	00	00	00	00	03	18	SCSD	Main Bus SD at Imphal for facilitating bay extn work
Sub-Total					00	38	00	10	00	00	12	12		
DOYANG_DIMAPUR			# 1											
16	11/08/2013	15:21	11/08/2013	15:37	00	00	00	00	00	16	00	00	LNCC	Tripped on direct lightning stroke
17	26/08/2013	03:14	26/08/2013	12:10	00	00	00	00	08	56	00	00	LNCC	Rph Insulator decapped at loc. 188 dur to lightning
18	29/08/2013	12:41	29/08/2013	15:19	02	38	00	00	00	00	00	00	OMST	SD taken for checking/testing of DPR & other schemes
Sub-Total					02	38	00	00	09	12	00	00		
DOYANG_DIMAPUR			# 2											
19	11/08/2013	15:21	11/08/2013	15:41	00	00	00	00	00	20	00	00	LNCC	Tripped on direct lightning stroke
20	19/08/2013	07:33	19/08/2013	12:19	00	00	00	00	04	46	00	00	LMAC	A tree from uphill side felled by villagers in the span 227-28
21	19/08/2013	12:40	19/08/2013	12:58	00	00	00	00	00	18	00	00	LMAC	tree from uphill sidse felled by villagers
22	26/08/2013	03:37	26/08/2013	04:16	00	39	00	00	00	00	00	00	OMST	LBB operation in 132KV side
Sub-Total					00	39	00	00	05	24	00	00		
IMPHAL_IMPHAL														
23	13/08/2013	16:02	13/08/2013	16:22	00	00	00	00	00	20	00	00	GGDC	Tripped on protn against fault in downstream Manipur system
24	15/08/2013	11:02	15/08/2013	11:15	00	00	00	13	00	00	00	00	OMSU	Tripped on fault in state downstream line
25	22/08/2013	17:34	22/08/2013	17:59	00	00	00	25	00	00	00	00	OMSU	Fault in state downstream fault
26	22/08/2013	20:03	22/08/2013	20:15	00	00	00	12	00	00	00	00	OMSU	Dfault in state downstream system
27	23/08/2013	14:30	23/08/2013	14:55	00	00	00	25	00	00	00	00	OMSU	Downstream fault in state system
28	23/08/2013	16:40	23/08/2013	16:48	00	00	00	08	00	00	00	00	OMSU	do
29	23/08/2013	19:40	23/08/2013	19:54	00	00	00	14	00	00	00	00	OMSU	do
30	26/08/2013	12:18	26/08/2013	12:32	00	00	00	14	00	00	00	00	OMSU	Fault in downstream state line

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.		
31	31/08/2013	05:08	31/08/2013	08:42	00	00	00	00	00	00	03	34	SCSD	Main Bus SD at Imphal for facilitating bay extn work
Sub-Total					00	00	01	51	00	20	03	34		
JIRIBAM_AIZWAL														
32	19/08/2013	23:17	19/08/2013	23:24	00	07	00	00	00	00	00	00	LEFT	Transient E/F
33	23/08/2013	12:47	23/08/2013	12:55	00	00	00	00	00	08	00	00	LNCC	Tripped due to falling of bamboo from unhill side
34	23/08/2013	20:23	23/08/2013	20:31	00	00	00	00	00	08	00	00	LNCC	tripped during lightning with LA counter incr. at AZI. end
35	23/08/2013	20:34	23/08/2013	20:51	00	00	00	00	00	17	00	00	LNCC	lightning, LA counter incr at AZL end
36	23/08/2013	20:57	23/08/2013	21:16	00	00	00	00	00	19	00	00	LNCC	do
37	27/08/2013	12:46	27/08/2013	12:54	00	08	00	00	00	00	00	00	LPPT	Phase to Phase fault
38	27/08/2013	18:58	27/08/2013	19:36	00	00	00	38	00	00	00	00	OMSU	SD of Main Bus taken for attending damaged dropper connecting ICT(state
Sub-Total					00	15	00	38	00	52	00	00		
JIRIBAM_HAFLONG														
39	17/08/2013	20:34	17/08/2013	20:45	00	11	00	00	00	00	00	00	LEFT	Transient E/F
40	26/08/2013	01:22	26/08/2013	01:43	00	00	00	00	00	21	00	00	LNCC	Insulator flashover at loc.254,255 & 257 due to lightning (LA counter incr. at IRM end)
41	27/08/2013	18:57	27/08/2013	19:34	00	00	00	37	00	00	00	00	OMSU	SD of Main Bus taken for attending damaged dropper connecting ICT(state
42	29/08/2013	10:29	29/08/2013	11:47	00	00	00	00	01	18	00	00	LNCC	SD taken for replacement of Insulator strings at loc.257. damaged due to lightning
Sub-Total					00	11	00	37	01	39	00	00		
JIRIBAM_LOKTAK # 2														
43	04/08/2013	00:55	04/08/2013	01:01	00	00	00	00	00	06	00	00	LNCC	tripped during heavy lightning
44	09/08/2013	08:17	09/08/2013	08:22	00	00	00	00	00	05	00	00	GGDC	Tripped on overcurrent protn
45	13/08/2013	16:02	13/08/2013	16:12	00	00	00	00	00	10	00	00	GGDC	Tripped due to problem in Manipur grid
46	15/08/2013	14:36	15/08/2013	14:50	00	00	00	00	00	14	00	00	GGDC	Due to overloading subsequent to disturbance in Manipur system
47	17/08/2013	09:38	17/08/2013	09:48	00	10	00	00	00	00	00	00	LPPT	Phase to Phase fault
48	17/08/2013	11:11	17/08/2013	11:15	00	00	00	00	00	04	00	00	GGDC	Tripped due to overloading
49	27/08/2013	13:39	27/08/2013	13:47	00	00	00	08	00	00	00	00	OMSU	Tripped due to fault in Jiribam-Poilapool line
50	27/08/2013	18:55	27/08/2013	19:37	00	00	00	42	00	00	00	00	OMSU	SD of Main Bus taken for attending damaged dropper connecting ICT(state

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.		
51	30/08/2013	13:01	30/08/2013	13:06	00	00	00	05	00	00	00	00	OMSU	Tripped on protn against fault in Jiribam-Jiribam(state) line
52	31/08/2013	13:04	31/08/2013	13:13	00	09	00	00	00	00	00	00	LEFT	Transient E/F
Sub-Total					00	19	00	55	00	39	00	00		
KHANDONG_HAFLONG														
53	01/08/2013	09:37	01/08/2013	16:28	00	00	00	00	06	51	00	00	LNCC	SD for clearing vegetation leaning from uphill side in the span 150-160
54	09/08/2013	10:09	11/08/2013	18:28	00	00	00	00	00	00	56	19	OSFD	SD taken by NEEPCO for relay retrofitting work.
55	12/08/2013	00:59	12/08/2013	01:13	00	00	00	14	00	00	00	00	OMSU	Tripped on protection against fault in Haflong-Haflong(state) line
56	16/08/2013	09:30	16/08/2013	22:30	00	00	13	00	00	00	00	00	OMSU	SD taken by NEEPCO for retrofitting works
57	16/08/2013	23:52	17/08/2013	09:44	00	00	09	52	00	00	00	00	OMSU	ESD taken by Khandong(NEEPCO)
58	17/08/2013	12:01	17/08/2013	19:20	00	00	07	19	00	00	00	00	OMSU	ESD taken by NEEPCO end
59	17/08/2013	20:34	17/08/2013	20:45	00	00	00	11	00	00	00	00	OMSU	tripped at KHD end only on downstream fault in Haflong-Haflong(state) line
60	23/08/2013	11:01	23/08/2013	11:16	00	00	00	15	00	00	00	00	OMSU	Problem at Khandong end
61	28/08/2013	13:06	28/08/2013	13:18	00	12	00	00	00	00	00	00	LEFT	Transient E/F
Sub-Total					00	12	30	51	06	51	56	19		
KHANDONG_KHLIERIAT # 1														
62	02/08/2013	13:15	02/08/2013	13:30	00	00	00	00	00	15	00	00	LNCC	Tripped due to lightning
Sub-Total					00	00	00	00	00	15	00	00		
KHANDONG_KHLIERIAT # 2														
63	03/08/2013	16:56	03/08/2013	17:10	00	00	00	00	00	14	00	00	LNCC	Tripped due to heavy lightning
64	21/08/2013	14:50	21/08/2013	15:00	00	10	00	00	00	00	00	00	LEFT	Transient E/F
Sub-Total					00	10	00	00	00	14	00	00		
KHANDONG_KOPILI # 1														
65	01/08/2013	00:00	05/08/2013	21:49	00	00	00	00	117	49	00	00	LNCC	Tower at loc.17 & 18 damaged due to falling of tree from uphill side during storm
Sub-Total					00	00	00	00	117	49	00	00		
KHLIERIAT_KHLIERIAT														
66	20/08/2013	08:31	20/08/2013	19:25	00	00	00	00	00	00	10	54	SCSD	SD taken for upgradation of existing CTs at KHLI.T(State) end with higher ratio CTs
67	21/08/2013	09:01	21/08/2013	17:07	00	00	00	00	00	00	08	06	SCSD	do

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.		
68	22/08/2013	08:04	22/08/2013	16:50	00	00	00	00	00	00	08	46	SCSD	do
69	22/08/2013	16:50	23/08/2013	14:55	00	00	00	00	00	00	22	05	GOMD	kept open as per instruction of NERLDC
Sub-Total					00	00	00	00	00	00	49	51		
KUMARGHAT_R C NAGAR														
70	07/08/2013	15:40	07/08/2013	15:46	00	06	00	00	00	00	00	00	LEFT	Transient E/F
71	25/08/2013	08:01	25/08/2013	18:27	00	00	00	00	00	00	10	26	LCSD	SD taken for facilitating stringing of Silchar-Pkbari line
Sub-Total					00	06	00	00	00	00	10	26		
LOKTAK_IMPHAL # 2														
72	09/08/2013	08:17	09/08/2013	16:23	00	00	00	00	00	00	08	06	LCSD	SD taken for replacement/tightening of existing jumpers in the line
73	10/08/2013	08:25	10/08/2013	16:33	00	00	00	00	00	00	08	08	LCSD	do
74	13/08/2013	16:02	13/08/2013	16:07	00	00	00	00	00	05	00	00	GGDC	Tripped due to problem in Manipur grid
75	15/08/2013	13:14	15/08/2013	13:28	00	00	00	14	00	00	00	00	OMSU	Disturbance in Manipur state downstream svstem
76	15/08/2013	14:36	15/08/2013	14:50	00	00	00	14	00	00	00	00	OMSU	Due to disturbance in state downstream fault
77	17/08/2013	11:11	17/08/2013	11:17	00	00	00	00	00	06	00	00	LNCC	Rph Insulator at loc.12 damaged due to liehtning
78	19/08/2013	12:00	19/08/2013	15:52	00	00	00	00	00	52	00	00	LNCC	Rph Insulator string at loc.12 damaged due to liehtning
79	31/08/2013	05:14	31/08/2013	08:32	00	00	00	00	00	00	03	18	SCSD	Main Bus SD at Imphal for facilitating bay extn work
Sub-Total					00	00	00	28	04	03	19	32		
NIRJULI-RANGANADI														
80	05/08/2013	06:11	05/08/2013	06:35	00	00	00	24	00	00	00	00	OMSU	Tripped on fault beond line jurisdiction
Sub-Total					00	00	00	24	00	00	00	00		
KOLASIB-AIZAWL														
81	12/08/2013	21:41	12/08/2013	21:49	00	08	00	00	00	00	00	00	LEFT	Transient E/F
82	17/08/2013	10:18	17/08/2013	11:52	01	34	00	00	00	00	00	00	OMST	SD of main bus at Aizawl for Isolator rectification works
83	25/08/2013	11:50	25/08/2013	22:26	10	36	00	00	00	00	00	00	OSPT	SD taken for bay maintenance work at Kolasih end
84	28/08/2013	18:46	28/08/2013	18:53	00	07	00	00	00	00	00	00	LEFT	Transient E/F
Sub-Total					12	25	00	00	00	00	00	00		
RANGANADI-ZIRO														

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.		
85	04/08/2013	12:56	04/08/2013	13:20	00	00	00	24	00	00	00	00	OMSU	Tripped due to downstream fault in state line(Ziro-Daporizo)
Sub-Total					00	00	00	24	00	00	00	00		
KHANDONG_KOPILI			# 2											
86	02/08/2013	13:17	02/08/2013	13:20	00	00	00	00	00	03	00	00	GGDC	tripped on overloading
87	03/08/2013	16:56	03/08/2013	17:08	00	00	00	00	00	12	00	00	GGDC	tripped on overcurrent protn
88	03/08/2013	17:32	03/08/2013	17:37	00	00	00	00	00	05	00	00	GGDC	do
Sub-Total					00	00	00	00	00	20	00	00		
SILCHAR-SRIKONA-I			#1											
89	09/08/2013	08:54	09/08/2013	16:45	07	51	00	00	00	00	00	00	OSPT	AMP S/D
Sub-Total					07	51	00	00	00	00	00	00		
SILCHAR-SRIKONA-II			#2											
90	10/08/2013	08:49	10/08/2013	17:02	08	13	00	00	00	00	00	00	OSPT	AMP S/D
Sub-Total					08	13	00	00	00	00	00	00		
BALIPARA_TEZPUR														
91	01/08/2013	13:02	01/08/2013	18:20	00	00	00	00	00	00	05	18	OSFD	Bus-SD availed by AEGCL
92	02/08/2013	06:34	02/08/2013	07:43	00	00	01	09	00	00	00	00	OMSU	fault beyond POWERGRID line jurisdiction
93	10/08/2013	10:41	10/08/2013	11:50	00	00	01	09	00	00	00	00	OMSU	Fault beyond POWERGRID jurisdiction
Sub-Total					00	00	02	18	00	00	05	18		
KATHALGURI_MARIANI														
94	06/08/2013	10:40	06/08/2013	15:14	00	00	00	00	00	00	04	34	OSFD	ESD taken by AEGCL for Isolator rectification works
95	10/08/2013	12:01	10/08/2013	13:37	00	00	01	36	00	00	00	00	OMSU	SD taken by Kathalguri(NEEPCO)
Sub-Total					00	00	01	36	00	00	04	34		
MISA_DIMAPUR			# 1											
96	24/08/2013	08:52	24/08/2013	16:40	07	48	00	00	00	00	00	00	OSPT	SD taken for tightening of jumpers along the line
Sub-Total					07	48	00	00	00	00	00	00		
MISA_DIMAPUR			# 2											
97	25/08/2013	08:29	25/08/2013	16:49	08	20	00	00	00	00	00	00	OSPT	SD taken for tightening of jumpers along the line
Sub-Total					08	20	00	00	00	00	00	00		
MISA_KATHALGURI														

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.		
98	12/08/2013	11:09	12/08/2013	15:14	00	00	04	05	00	00	00	00	OMSU	SD by NEEPCO
Sub-Total					00	00	04	05	00	00	00	00		
MISA_MARIANI														
99	06/08/2013	10:29	06/08/2013	16:30	00	00	00	00	00	00	06	01	OSFD	SD taken by AEGCL for rectification of Isolator
100	26/08/2013	03:54	26/08/2013	04:55	00	00	00	00	01	01	00	00	LNCC	Tripped due to lightning, delay in charging from Mariani end
Sub-Total					00	00	00	00	01	01	06	01		
MISA_SAMAGURI # 1														
101	01/08/2013	13:02	01/08/2013	17:49	00	00	00	00	00	00	04	47	OSFD	Bus SD availed by AEGCL
102	02/08/2013	01:27	02/08/2013	01:46	00	00	00	00	00	19	00	00	LNCC	No abnormality found during patrolling, lightning suspected
Sub-Total					00	00	00	00	00	19	04	47		
MISA_SAMAGURI # 2														
103	01/08/2013	13:02	01/08/2013	17:51	00	00	00	00	00	00	04	49	OSFD	Bus-SD availed by AEGCL
Sub-Total					00	00	00	00	00	00	04	49		
BALIPARA_BONGAIGAON # 1														
104	29/08/2013	08:05	29/08/2013	17:51	00	00	00	00	09	46	00	00	LNCC	SD taken in connection with shifting of loc 288 affected by erosion on Pole Fdn do
105	30/08/2013	08:26	30/08/2013	16:30	00	00	00	00	08	04	00	00	LNCC	
Sub-Total					00	00	00	00	17	50	00	00		
BALIPARA_BONGAIGAON # 2														
106	13/08/2013	20:25	13/08/2013	23:29	03	04	00	00	00	00	00	00	SRMT	Relay maloperation at Balipara end
107	25/08/2013	19:57	25/08/2013	20:14	00	00	00	00	00	17	00	00	LNCC	Bph Insulator at loc.767 damaged due to severe lightning stroke
108	27/08/2013	09:08	27/08/2013	09:32	00	00	00	00	00	24	00	00	LNCC	transient tripping on account of lightning.
Sub-Total					03	04	00	00	00	41	00	00		
MISA_BALIPARA # 1														
109	22/08/2013	08:38	22/08/2013	16:32	00	00	00	00	00	00	07	54	SCSD	Installtion of REL670 DPR at Balipara S/s
Sub-Total					00	00	00	00	00	00	07	54		
MISA-BALIPARA #2														
110	22/08/2013	09:09	22/08/2013	09:18	00	09	00	00	00	00	00	00	OMST	line tripped during testing of Misa-Balipara-1 at Misa end
111	23/08/2013	08:32	23/08/2013	16:20	00	00	00	00	00	00	07	48	SCSD	SD taken for installation of REL670 DPR at Balinara end

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 : 09		00 : 00		00: 00		07 : 48			
BALIPARA-RANGANADI			# 1											
112	01/08/2013	00:00	01/08/2013	19:02	00 : 00		00 : 00		00 : 00		19 : 02	LVRD	H/T for vol. regu. On RLDC instruction vide code 4260	
113	02/08/2013	00:50	02/08/2013	08:20	00 : 00		00 : 00		00 : 00		07 : 30	LVRD	h/T for vol. regu. On RLDC instruction vide code 4277	
114	02/08/2013	08:20	14/08/2013	19:55	00 : 00		00 : 00		299 : 35		00 : 00	LNCC	SD for shifting of condr from ERS to new tower on Pile Fdn	
115	15/08/2013	23:49	16/08/2013	08:35	00 : 00		00 : 00		00 : 00		08 : 46	LVRD	h/T for vol. regu. On RLDC instruction vide code 4379	
116	16/08/2013	08:35	16/08/2013	19:27	00 : 00		00 : 00		10 : 52		00 : 00	LNCC	SD taken for shifting of condr from ERS to new tower on Pile fdn	
117	16/08/2013	23:36	17/08/2013	06:44	00 : 00		00 : 00		00 : 00		07 : 08	LVRD	h/T for vol. regu. On RLDC instruction vide code 4379	
118	17/08/2013	06:44	17/08/2013	13:02	00 : 00		00 : 00		06 : 18		00 : 00	LNCC	SD taken for shifting of condr from ERS to new tower on Pile fdn	
119	21/08/2013	00:32	21/08/2013	19:18	00 : 00		00 : 00		00 : 00		18 : 46	LVRD	h/T for vol. regu. On RLDC instruction vide code 4431	
120	22/08/2013	00:15	22/08/2013	17:12	00 : 00		00 : 00		00 : 00		16 : 57	LVRD	h/T for vol. regu. On RLDC instruction vide code 4446	
121	25/08/2013	03:07	25/08/2013	16:47	00 : 00		00 : 00		00 : 00		13 : 40	LVRD	h/T for vol. regu. On RLDC instruction vide code 4479	
Sub-Total					00 : 00		00 : 00		316: 45		91 : 49			
BALIPARA-RANGANADI			# 2											
122	02/08/2013	05:52	02/08/2013	06:11	00 : 19		00 : 00		00 : 00		00 : 00	LEFT	Transient E/F	
123	15/08/2013	00:16	15/08/2013	17:25	00 : 00		00 : 00		00 : 00		17 : 09	LVRD	h/T for vol. regu. On RLDC instruction vide code 4375	
124	18/08/2013	08:07	20/08/2013	18:56	00 : 00		00 : 00		58 : 49		00 : 00	LNCC	SD taken fro shifting of condr from ERS to new tower on Pile fdn	
125	24/08/2013	04:19	24/08/2013	18:02	00 : 00		00 : 00		00 : 00		13 : 43	LVRD	h/T for vol. regu. On RLDC instruction vide code 4470	
Sub-Total					00 : 19		00 : 00		58: 49		30 : 52			
Grand Total					56 : 23		44 : 46		543 : 37		319 : 14			