Eastern Regional Power Committee Kolkata-33

Salient Decisions taken in 100th OCC meeting held on 22.08.14

- 1. OCC advised all the SLDC representatives from states to attend the PCC meetings for detailed deliberation of tripping incidences.
- 2. OCC took serious note on non-compliance by Powergrid and advised Powergrid to check the healthiness of the SPS on immediate basis and submit a report before 28th TCC meeting. Powergrid agreed.
- 3. The house was informed that one additional training programme on Pollution Mapping is scheduled to be held on 27th & 28th August, 2014 at ERPC, Kolkata. OCC advised WBSEDCL, JSEB, OPTCL, BSEB & SIKKIM to arrange sending their concerned representatives to attend the training programme with all the completed grid map under respective control area.
- 4. Constituents were also requested to arrange positioning of dummy insulators on identified locations on grid map at the earliest so that pollution mapping of Eastern region could be started at site on and from September,2014. OCC also advised all the constituents to give the details of their consignee address so that the test kits for pollution mapping can be dispatched. Constituents agreed.

Minutes of 100th OCC Meeting held on 22nd Aug, 2014 at ERPC, Kolkata

List of participants is at **Annexure-A**.

Member Secretary (I/C), ERPC welcomed all the participants to the 100th OCC of ERPC. He informed that recently it is observed that SLDC representatives of state utilities, even being member of PCC, are not participating in the Protection Co-ordination Committee meetings for fruitful and meaningful analysis/deliberation of grid disturbances. He requested all the SLDC representatives from states to attend the PCC meetings for detailed deliberation of tripping incidences. Thereafter, he took up the agenda points in seriatim.

Item no. A.1: Confirmation of minutes of 99th OCC meeting of ERPC held on 18.07.2014

The minutes were uploaded in ERPC website and circulated vide letter dated 28.07.14 to all the constituents. No comments were received till date.

Members may confirm the minutes.

Deliberation in the meeting

ERLDC requested for amendment in Item no. B.29

In the minutes the last Para of the Item no. B.29 was recorded as "OCC advised constituents to get the information of URS power from ERLDC website and accordingly they can send their requisition to the generators."

It was amended to:

"OCC advised constituents to send the requisition to ERLDC after duly endorsed/concurred from NTPC."

Members confirmed the minutes of 99th OCC meeting with this amendment.

PART B

Item no. B.1: Power System related issues pertaining to the States in Eastern Region

CEA vide letter dated 3rd June, 2014 requested to submit major issues related to generation, transmission, distribution, system operation, protection, etc. pertaining to each State of the region. The information should be furnished state wise and should include issues on which

- States require assistance of the Central Government
- Action/ attention is required from the State Government

The relevant information is to be submitted on regular basis as and when issues generate.

Members may note and comply.

Deliberation in the meeting

Members noted.

Item no. B.2: Drawal of power from 400/ 132KV Lakhisarai(PG) by temporary LILO of existing 132 kV Lakhisarai-Jamui S/C

In 98th OCC, BSPTCL informed the status as follows:

1. Lakhisarai (PG) – Lakhisarai(BSPTCL) 132 kV D/c line – As per LOA, it will be completed by Aug, 2014.

2. Lakhisarai (PG) – Jamui (BSPTCL) 132 kV D/c line – will be completed by Feb, 2015.

BSPTCL vide letter dated 2nd July, 2014 informed that, presently work has been slow down due to monsoon and may not able to complete within target date. Hence, BSPTCL has planned to make LILO of 132 kV Lakhisarai-Jamui S/C at Lakhisarai(PG). As for as metering, protection and communication the following arrangement has been proposed:

Transmission line	Metering	Protection	Communication
132 kV Lakhisarai (PG) –	At Lakhisarai (PG)	At Lakhisarai (PG)	Will be provided through
Lakhisarai(BSPTCL)	end	end and at Lakhisarai (BSPTCL) end	dedicated mobile of GSS no. +91 77638-18060
132 kV Lakhisarai (PG) – Jamui(BSPTCL)	At Lakhisarai (PG) end	At Lakhisarai (PG) end and at Jamui (BSPTCL) end	Will be provided through dedicated mobile of GSS no. +91 77638-18053

Thereafter, ERLDC vide letter dated 4th July, 2014 requested Powergrid to examine the above configuration and asked for confirmation on adequacy of protection, metering and communication arrangements.

In 99th OCC, OCC requested Powergrid to do the needful for drawl of power from Lakhisarai (PG) through the temporary LILO of 132 kV Lakhisarai-Jamui S/C line at Lakhisarai (PG).

Powergrid informed that they will provide metering facility and protection settings. However, BSPTCL has to install PLCC system for communication as the PLCC system is not in the scope of Powergrid.

OCC advised BSPTCL to arrange for PLCC system for availing power as desired.

Powergrid/BSPTCL may update.

Deliberation in the meeting

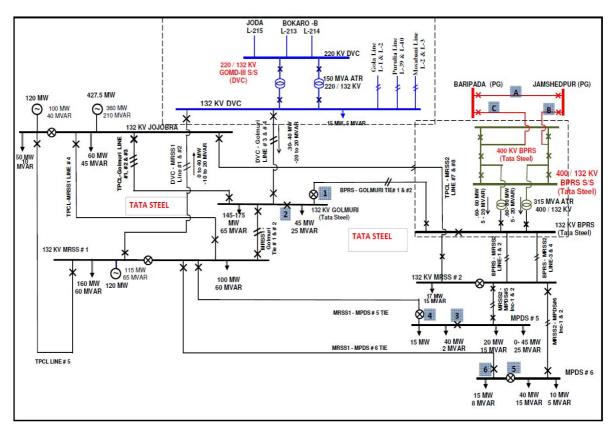
BSPTCL representative informed that procurement of PLCC system is in progress. Till commissioning of PLCC system, the GPRS communication will be used for data and voice communication.

OCC agreed.

Powergrid informed that Jamui bay is not yet ready and it will be available by 10th September, 2014.

Powergrid asked for protection system details at BSPTCL end. In reply BSPTCL representative informed that CE (Transmission), BSPTCL is looking after this project and he may be contacted for further details.

OCC advised BSPTCL to share the protection details of BSPTCL end with Powergrid for proper protection settings & co-ordination.



Item no. B.3: Momentary paralleling of 220/132 kV DVC system with 400kV Powergrid system at TATA steel (TISCO) interface---ERLDC

TATA STEEL Jamshedpur Steel Plant is connected to the DVC Grid through 220/132kV DVC Substation and to the ISTS system through 400/132kV BPRS (Tata Steel) Substation. Further, TATA STEEL distributes power to various load points through its 132kV power distribution network. Details of the interfaces with DVC and ISTS systems as well as the 132kV interconnected network within TATA STEEL plant considered within the purview of this study have been mentioned below:

- Interface with DVC System: 2x150MVA, 220/132kV ATR at Jamshepur (DVC) Substation
- Interface with ISTS System (POWERGRID): 2x315MVA, 400/132kV ATR at BPRS (TATA STEEL) Substation. This substation is fed through LILO of one circuit of 400kV Baripada – Jamshedpur D/c line.
- Interconnected 132kV Power Distribution Buses within the plant: BPRS Bus, MRSS#2 Bus, MPDS#5 Bus, MPDS#6 Bus, Golmuri Bus, MRSS#1 Bus, Jojobera (Generation) Bus

Further, 4x120MW + 1x67.5MW Units are installed at with 132 kV Jojobera (CPP of Tata steel)

At present Tata steel draws power from both, DVC and TISCO (BRPS) in radial mode without any connectivity between these two islands at 132 kV level. Only in event of loss of connectivity at 400 kV TISCO (BPRS) substation, Tata steel normally extend power from DVC side to supply critical and emergency load which is earlier being served through TISCO BPRS. However once the supply of at TISCO (BPRS) revives, Tata steel disconnects the supply from DVC side and then connect it to TISCO (BPRS) substation. This disconnection from DVC side before synchronization with TISCO(BPRS) side leads to second interruption of power supply in TISCO area to avoid this Tata steel wants to connect TISCO(BPRS) supply first prior to disconnecting it from DVC side which leads to momentary paralleling of 220/132 kV DVC system with 400kV Powergrid system at TATA steel (TISCO) interface.

To analyses the effect Tata steel had carried out a study along with POWERGRID (CC) which suggested that momentarily paralleling may be carried out however for this the voltage difference before paralleling this system should be minimum. ERLDC has also analyzed the same.

DVC may deliberate.

Deliberation in the meeting

As TATA steel is the direct consumer of DVC, DVC raised strong reservation on placing the agenda item by ERLDC in ERPC forum.

Hence, Member Secretary did not permit any deliberation on the issue and OCC advised ERPC Secretariat to communicate the issue to DVC for their consideration.

Item no. B.4: Submission of DPR for R&U of protection and control system for funding from PSDF

In 99th OCC, The house was informed that PSDF appraisal committee meeting will be held shortly and so OCC advised all the constituents to send their DPRs in new formats available at ERPC website (http://www.erpc.gov.in) to NLDC at the earliest

WBSETCL informed that, they have already sent the DPR to NLDC. OCC requested to give a copy to ERPC Secretariat for record. WBSETCL agreed.

OPTCL, DVC, JSEB and BSPTCL agreed to submit the DPR by 25th July, 2014.

OCC also advised NTPC to send the proposal of bus splitting of 400 kV Khahalgaon S/s to appraisal committee as per the ERPC decision. NTPC agreed.

Till date, ERPC Secretariat has received the DPR from WBSETCL, OPTCL and DVC.

Members may update the status.

Deliberation in the meeting

BSPTCL informed that the DPR was submitted to their financial wing for approval.

For Kahalgaon Bus splitting NTPC informed that they had submitted to their higher authority for approval.

ERPC Secretariat informed that JSEB has submitted the DPR for only one 220 kV S/s (Ramchandrapur S/s). On URTDSM scheme Powergrid was again requested to place the details to appropriate authority in proper formats for PSDF funding. Powergrid agreed.

Constituents not yet submitted were again requested to submit the DPR as early as possible.

Constituents agreed.

Item no. B.5: Preparedness of the Power Sector for the Monsoon season

A meeting was taken by Secretary, Ministry of Power on 6th May, 2014 wherein measures in general to mitigate the shortages due to poor monsoon were chalked out. Accordingly, an urgent meeting was convened on 13th June, 2014 at ERPC conference room to assess the situation in Eastern Region. Minutes of the meeting are circulated in the meeting.

The latest status on the issue was circulated in the meeting.

Members may update.

Deliberation in the meeting

Members updated the latest status enclosed at Annexure-B.5.

Item no. B.6: Scheduling issues of ER constituents

In line with the decision of 99th OCC, a special meeting for resolving issues related to Scheduling was convened on 7th August, 2014. In the meeting the following decisions were taken:

- Declaration of Technical Minimum of thermal stations: The technical minimum of the generators will be declared by the generators based on the design specifications of manufacturers. NTPC was requested to provide the documents regarding technical minimum as given by manufacturers.
- II) Consent of recipient beneficiary: DVC will collect the consent from MP/Haryana and submit to ERLDC for scheduling of power from Mejia. The power will be scheduled from 4th time block starting from the time of submission of the consent.
- III) Consent of recipient beneficiary for backward revision of schedule: In case of LTOA/MTOA from DVC to WBSEDCL, both agreed for revision of schedule from the time block it was submitted for backward revision. ERLDC agreed to revise the schedule on instant basis but informed that it will be reflected/ uploaded in website after few time blocks.

Members may note.

Deliberation in the meeting

NTPC circulated the documents related to technical minimum of their generators to the constituents.

ERLDC requested GRIDCO to send their requisition through SLDC, Bhubaneswar instead of through Power Purchase Department of Odisha, to avoid possible confusion

GRIDCO agreed.

Item no. B.7: Implementation of Automatic Demand Management Scheme (ADMS) in compliance of CERC order dated 25/04/2014 on sue-motu petition no. SM/005/2014- WBSETCL

ADMS was discussed in 94th OCC meeting held on 21.02.2014 wherein constituents were advised to communicate their views to CERC.

The commission in its order dated 25.04.14, directed the Officers-in-Charge of the respondents State Transmission Utilities/State Load Despatch Centres to show cause, latest by 15.5.2014, as to why action under Section 142 of the Electricity Act, 2003 should not be taken against them for non-compliance with our directions and the provisions of the Act and the Grid Code with regard to implementation of the Automatic Load Management Scheme.

OCC may deliberate in detail regarding guidelines towards implementation of ADMS in the state system.

Members may deliberate.

Deliberation in the meeting

Constituents felt that the ADMS shall be implemented by the DISCOM's and they are not aware that how this scheme will be implemented.

DVC informed that they have developed an algorithm for implementing ADMS scheme in their SCADA system and it will be possible to implement under new up gradation schemes.

OCC requested DVC to share the details with house so that the same can be shared with other DISCOMs for their understandings.

DVC agreed.

Item no. B.8: Extension of Talcher-Kolar pole trip signal to JITPL for generation reduction -ERLDC

i. On synchronization of SR and NEW grid in a special meeting in ERPC it was decided that, Sterlite, GMR and JITPL would share 600 MW generation relief through SPS in case of single/both pole tripping of HVDC Talcher-Kolar. In subsequent SPS meeting held on 08.05.14 then it was agreed that, the 600MW generation relief would be shared as given below when JITPL come into bar:

Sterlite- 350 MW, GMR- 150 MW and JITPL- 100 MW.

It was also decided that Powergrid will extend the digital signal to JITPL switchyard for implementation of the scheme.

In 98th OCC, it was informed that the JITPL unit was declared COD w.e.f. 06.06.2014.

Powergrid informed that at present there is no direct connectivity to JITPL for extending the signal. The connectivity will be established via Talcher-Angul-JITPL. It was informed that, they are already in process to establish the connectivity and extend the trip signal to JITPL and the work will be completed by June, 2014.

In 99th OCC, Powergrid informed that they do not have any information about the extension of the trip signal to JITPL and requested for written communication.

OCC informed that it was decided in SPS meeting held on 08.05.14 and advised Powergrid to extend the trip signal immediately.

Powergrid agreed.

Powergrid may update.

Deliberation in the meeting

Powergrid informed that the signal will be extended from Angul to JITPL by September, 2014.

OCC took serious note on non-compliance of OCC decision and advised Powergrid to extend the trip signal by Sept, 2014 positively.

ii. In 99th OCC, ERLDC informed that both GMR and SSL failed to provide any generation relief during last Talcher-Kolar pole trip on 14.07.2014. GMR vide letter informed that they have not received the trip signal from Talcher end.

Secretariat vide letter dated 13.08.2014 requested Powergrid to check the healthiness of the particular SPS and place a report in this regard.

Powergrid may update.

Deliberation in the meeting

It was communicated vide letters that GMR and Sterlite did not receive the trip signals from Talcher and Jharsuguda respectively.

OCC took serious note on non-compliance by Powergrid as it is in concern with grid security. OCC advised Powergrid to check the healthiness of the SPS on immediate basis and submit a report before 28th TCC meeting.

Powergrid agreed.

OCC referred the issue to TCC for further guidance.

Item no. B.9: New Islanding Schemes in Eastern Region

B.9.1. FSTPS Islanding Scheme, NTPC

98th OCC recommended following:

- 1) Procurement of new PLCC panels for Lalmatia, Dumka and Farakka S/s
- 2) Procurement of two sets of 300 AH battery banks along with battery charger for Dumka and Lalmatia S/s as decided in 94th OCC.

In 99th OCC, Powergrid informed that the new estimate for procurement of above items is in approval stage by its appropriate authority but indicated that the amount would be around Rs. 53,41,889/- .It was informed that the final approved estimate will be submitted to JSEB by July, 2014.

Powergrid/ JSEB may update the status.

Deliberation in the meeting

Powergrid informed that the estimate of Rs. 53,10,526/- has already been sent to JSEB and requested JSEB to release the amount as early as possible.

JSEB informed PGCIL to send the details to GM, Dumka for payment of the project estimate/cost incurred for PLCC checking as it comes under jurisdiction of Dumka.

B.9.2. Chandrapura TPS Islanding Scheme, DVC

27th TCC/ERPC advised DVC to implement the scheme by 30th October, 2014 and reiterated that no further extension will be given.

DVC may update the status.

Deliberation in the meeting

DVC informed that tender evolution was completed and order is to be placed.

B.9.3. BkTPS Islanding Scheme, WBPDCL

In 27th TCC/ERPC, WBPDCL informed that LOA has been placed on 14th May, 2014 and the work will be completed by December, 2014 (+/- 2 months).

In 99th OCC, WBPDCL informed that it will be completed in schedule.

WBPDCL may update the status.

Deliberation in the meeting

WBPDCL informed that it will be completed in schedule.

B.9.4. Tata Power Islanding Scheme, Haldia

In 27th TCC/ERPC meeting, WBSETCL informed the scheme will be implemented by July, 2014. In 99th OCC, WBSETCL informed that order has been placed and the scheme will be implemented by November, 2014.

WBSETCL may update the status.

Deliberation in the meeting

WBSETCL informed that drawing has been finalized and the scheme will be completed in by November, 2014.

Item no. B.10: Concerned members may update the latest status.

B.10.1. Status of construction of 400 kV Sterlite-Jharsuguda D/C sections

Sterlite may update.

Deliberation in the meeting

Sterlite informed that the work order will be placed by next week and the construction may take 15 months from the date of award.

MS I/C informed that Sterlite has not submitted any status after the 27th TCC meeting and advised Sterlite to place the status of the construction of said line on monthly basis.

OCC referred the issue to TCC for further guidance.

B.10.2. Status of 400kV GMR- Angul D/C line.

GMR may update.

Deliberation in the meeting

GMR informed that stringing of 15 towers spans is pending and the line will be commissioned by end of October, 2014.

OCC referred the issue to TCC for further guidance.

B.10.3. Status of construction of Chuzachen bay at Rangpo S/s.

Chuzachen may update.

Deliberation in the meeting

Chuzachen informed that the construction of these bays was undertaken by Govt. of Sikkim. Sikkim representative informed that the issue is under consideration of Sikkim Government.

B.10.4. Status of 400kV Maithon-Gaya and Koderma-Gaya D/C lines.

In 99th OCC, Powergrid informed that the work was delayed due to rain & other unavoidable problems and so the line is expected to be delayed commissioned by August, 2014.

Powergrid may update the latest status.

Deliberation in the meeting

Powergrid informed that the lines are expected to commissioned by September, 2014.

B.10.5. Replacing/repairing of defective PLCC equipment at SgTPP end of 400 kV SgTPP-Farakka line

In 99th OCC, Powergrid informed that PLCC equipment has been replaced and it will be commissioned by 31st July, 2014.

Powergrid and WBPDCL may update the status.

Deliberation in the meeting

Powergrid informed that the PLCC system will be commissioned by 25th August, 2014.

B.10.6. Status of 80MVAR Line reactor of 400kV Meramundali-Angul at Meramundali

In 99th OCC, Powergrid informed that the reactor is ready and could not be charged due to defective Siprotec relay which belongs to OPTCL. OPTCL informed that this Siprotec relay is very old and there is no inventory for these type of relays as these were used in very few places.

OCC advised Powergrid to explore the possibilities for replacement of this relay on exchange basis & can be exchanged when OPCTL make it available. PGCIL & OPTCL agreed.

Subsequently, Powergrid informed that Siprotec 7SA522 and Easun Reyolle THR 3EP1 relays are available with them but they could not replace it, as the dimensions of these relays are different from defective relay. The replacement is feasible only if cut-out is widened.

Powergrid requested OPTCL to arrange the above requirement for replacement of the relay.

OPTCL and Powergrid may update.

Deliberation in the meeting

Powergrid informed that reply is waiting from OPTCL.

OCC advised OPTCL to do the needful at the earliest at their end for solving the problem.

B.10.7. 220 kV inter-connecting lines of OPTCL with 400/220 kV Bolangir (PG) S/s

400/220 kV, 2X 315 MVA S/S at Bolangir has been established by Powergrid as part of ISTS system & the following 220 kV interconnecting lines was envisaged to be established by OPTCL:

- (i) LILO of OPTCL's Burla-Bolangir line at Bolangir (PG).
- (ii) Bolangir(PG) –Bolangir (OPTCL) S/C line.
- (iii) Bolangir(PG) Kesinga S/C line.

In 99th OCC OPTCL informed the status as follows:

- (i) LILO of OPTCL's Burla-Bolangir line at Bolangir(PG) —Work is in progress and it would be completed by Nov, 2014
- (ii) Bolangir(PG) Kesinga S/C line Tender opened and completion schedule is Dec, 2015.

OPTCL may update the status.

Deliberation in the meeting

OPTCL informed that work is in progress as per the schedule.

B.10.8. Power Evacuation from 400/ 220KV Daltonganj and Chaibasa Substations

In 96th OCC, Powergrid informed the status as follows:

1. 400/220 kV Daltanganj which will be connected to existing Daltanganj and Garwa S/s – ready by June, 15.

2. 400/220 kV Chaibasa which will be connected to Chaibasa S/s- ready by Sep, 2014.

In 99th OCC, Powergrid informed that 400/220kV Chaibasa S/s will be ready by September, 2014. However, the downstream system 220/132kV is to be made ready by JSEB as per the above schedule.

For 400/220 kV Daltanganj S/s, Powergrid informed that it is facing problem in land acquisition and the matter is continuously being taken up with State Govt.

Powergrid and JSEB may update the status.

Deliberation in the meeting

Powergrid informed that work is in progress as per the schedule.

JSEB updated the status on downstream system as follows,

- 220/132 kV Daltanganj: Land acquisition is in progress. 220/132 kV GSS at Daltonganj of JUSNL will be connected to existing 132/33 kV GSS at Daltonganj by 132 kV D/C transmission line and also the power will be extended up to Garhwa GSS for evacuation. JUSNL is taking keen interest to resolve the power crisis in this region and after land acquisition, tender for construction of 220/132 kV GSS will be published and it will take minimum 18 months for construction of such grids from the date of award.
- 220/132/33 kV Chaibasa: Construction of 220/132/33 kV GSS at Chaibasa is already in process and the scheme is under consultancy projects awarded to M/s PGCIL. The work is almost in completion stage and likely to be completed by the end of December' 2014. After completion of both GSS i.e. 400/220 kV Chaibasa (PGCIL) and 220/132/33 kV GSS at Chaibasa (JUSNL), above said grids will be connected by 220 kV D/C transmission line for which administrative approval has already been obtained.

For power evacuation at 132 kV level, JUSNL have planned to construct following 132 kV D/C, transmission line from 220/132/33 kV GSS at Chaibasa:

- a) 132 kV D/C Chaibasa Gua transmission line and then 132 kV D/C, 3 phase Gua Kiriburu transmission line (SAIL DEPOSIT WORK). Estimate has already framed by field officials and a meeting is scheduled to be held on 27.08.2014 with SAIL officials for decision.
- b) 132 kV D/C, Chaibasa Chakradharpur transmission line

- c) 132 kV D/C, Chaibasa Noamundi transmission line
- d) 132 kV D/C Chaibasa -Rajkharsawan line with construction of 132 kV bay at 132/33 kV Rajkharsawan grid.
- e) LILO of one Ckt of 132 KV D/C Noamundi- Chaibasa Transmission Line at 132/33 kV GS/S Kendposi including with 2 nos. of 132 kV bay.
- f) LILO of one Ckt of 132 KV D/C Chaibasa-Manoharpur Transmission Line at 132/33 kV GS/S at Goelkera including with 2 nos. of 132 kV bay.

Scheme from SI. No. (b) to (f) could not be taken in financial year 2014-15 due to nonavailability of fund from State Govt./ other sources. After availability of fund these scheme will be taken in financial year 2015-16.

B.10.9. Status of works related to Implementation of SPS for 500MW round the clock power through HVDC Bheramara

In 99th OCC, Powergrid informed the status as follows:

- Line reactor of Behrampur-Jeerat will be converted into switchable bus reactor: tendering completed and expected by March, 2015.
- 400 kV Sagardighi-Behrampur D/C (HTLS twin): Work has been awarded and will be commissioned by Dec, 2014.

Powergrid may update the status.

Deliberation in the meeting

Powergrid informed that there work is in progress as per the schedule.

B.10.10. Automatic Meter Reading (AMR)

In 99th OCC, Powergrid informed that 77 out of 97 AMRs have been installed and the rest will be installed by September, 2014.

ERLDC informed that 51 AMRs have been reporting to ERLDC and data has been verified.

Powergrid and NTPC may update.

Deliberation in the meeting

Powergrid informed that 87 out of 97 AMRs have been installed and the rest will be installed by September, 2014. They informed that TCS personnel will give training on downloading the meter data using DCDs.

ERLDC informed that 41 AMRs are reporting correctly, 22 AMRs are intermittent and rest AMRs are not reporting.

NTPC asked for three DCDs for Khahalgaon, Farakka and Talcher stations. Powergrid agreed.

B.10.11. Modification of 132kV Bus arrangement at 220/132kV Purnea Sub-station of POWERGRID

In 99th OCC, Powergrid informed that work will be awarded by August, 2014.

Powergrid may update the latest status.

Deliberation in the meeting

Powergrid informed that work was awarded and post award discussions were going on.

Item no. B.11: High voltage problem at 400kV Jeypore OPTCL Substation—OPTCL

In 99th OCC, Powergrid reported that ICT tap position at 400kV Jeypore S/s has been changed from 16 to 14 as per the decision of OCC. ERLDC informed that voltage profile has improved (around 3-4 kV in 220 kV side) after changing the ICT tap position. It was also informed that voltage profile will further improve after the installation of 125 MVAR bus reactor at Jaypore (PG).

Subsequently, OPTCL vide dated 4th August, 2014 informed that the high voltage problem is still persisting at Jeypore (PG) and requested for further lowering the tap position to resolve the issue.

Powergrid may update.

Deliberation in the meeting

ERLDC informed that they are doing study for further lowering the ICT Tap Position.

On enquiry, Powergrid informed that there was some space issues for installation of 125 MVAR reactor at Jeypore S/s, but the same was resolved and it will be installed as soon as it reaches the site.

Item no. B.12: Tripping of 132 kV Patratu (JSEB)- Patratu (DVC) line - DVC

It was informed that whenever the said line was loaded beyond 40 MW it is getting tripped from Patratu (JSEB) end on overload.

In 99th OCC, DVC informed that their engineer had visited the Patratu (JSEB) S/s and found that the relay setting was for lower loading. OCC felt that the line loading was restricted because ICTs may be getting overloaded and advised JSEB to provide the details of overloading of lines/ICTs within a week. JSEB agreed.

DVC and JSEB may update.

Deliberation in the meeting

JSEB informed that the over-current settings of 132 kV Patratu (JSEB)- Patratu (DVC) line at the JSEB end is 372 A (which corresponds to 70-75 MW).

DVC informed that the line is under charged condition and it will be monitored.

Item no. B.13: Status of "Third Party Protection Audit"

List of the observations along with updated compliances received from the constituents made available in reports of ERPC website (**www.erpc.gov.in**).

Members may update.

Deliberation in the meeting

Members noted.

Item no. B.14: Preparation of crisis management plan for Cyber Security in Power Sector in line with CERT-IN.

The activity of the preparation of Crisis Management Plan for countering the cyber attacks and its implementation including the Mock Drills, audits etc. is being monitored by CEA regularly in line with crisis management plant of Ministry of Power. Power Utilities (including generation,

transmission & distribution utilities) of eastern region are to furnish regularly the updated status to on the same to Chief Engineer, Distribution Planning & Development Division, CEA.

NTPC communicated their activity of the preparation of Crisis Management Plan for countering the cyber attacks vide letter dated 2nd August, 2013. In 88th OCC, constituents requested for another workshop on this issue. OCC agreed and requested NTPC and CESC to share their scheme in the workshop.

Members may note and comply.

Deliberation in the meeting

Members noted.

Item no. B.15: Energy Generation data management from Renewable Energy Sources

As per Electricity Act, 2003, CEA has been entrusted with the task of collecting electricity generation data. CEA is monitoring all the existing generating stations with capacity more than 25 MW (Conventional sources only). In recent years there has been appreciable growth in generation from Renewable Energy Sources (RES).

In view of above it was decided to monitor all the generating stations under RES connected to the grid and also to bring out month wise, state wise and sector wise report on RES generation in MU including peak generation from RES.

CEA already requested to nominate Nodal officers at the level of SLDC for the above purpose. However, only few states have responded.

Those SLDCs who have not yet nominated the nodal officers for Energy Generation Data management from RES are requested to furnish the details at following email/Fax:

Email: ceaopmwind@gmail.com with a copy to rishika.engineer@gmail.com and s.sewak@cea.nic.in

Nodal officers from CEA: Mrs. Rishika Sharan, Director, CEA, 011-26732663 and 26102263(Fax), Mobile: 9868021299 Mrs. Sarita Sewak, Dy. Director, 011-26732656

SLDCs may note and nominate their Nodal officers as advised.

Deliberation in the meeting

Members noted.

Item no. B.16: Restricted Governor Mode of Operation

The latest status of units of ER under RGMO is circulated in the meeting.

Members may update.

Deliberation in the meeting

Members noted.

Item no. B.17: Pollution mapping for Eastern Region -- Powergrid

On the issue OCC advised to convene a special meeting tentatively on 8th August, 2014 at ERPC, Kolkata to assess status of completion of base works needed to start of actual Pollution Mapping work on-site.

Accordingly, a special meeting was held on 8th August, 2014 at ERPC, Kolkata wherein Powergrid updated the latest status as follows:

	_	Dummy Insulators	Balance grids (pending	
Utility	Scope	Installed	Location)	Remarks
BSPTCL	59	44	21	Since 38 grids only effective
JUSNL	67	23	52	Since 15 grids only effective
WBSECTL	74	52	33	Since 41 grids only effective
OPTCL	164	69	116	Since 48 grids only effective
Sikkim	6	0	6	No insulators installed
POWERGRID ER 1	96	96	0	Installation completed
POWERGRID ER 2	43	43	0	Installation completed
POWERGRID Odhisa	43	43	0	Installation completed

In the meeting, all constituents were advised to install the dummy insulators and send the requisite information as early as possible. Constituent's wise list of pending locations is available at ERPC website (http://www.erpc.gov.in/).

Powergrid may update the status.

Deliberation in the meeting

It was informed that one additional training programme on Pollution Mapping is scheduled to be held on 27th & 28th August, 2014 at ERPC, Kolkata.

OCC advised WBSEDCL, JSEB, OPTCL, BSEB & SIKKIM to arrange sending their concerned representatives to attend the training programme with all the completed grid map under respective control area. Constituents were also requested to arrange positioning of dummy insulators on identified locations on grid map at the earliest so that pollution mapping of Eastern region could be started at site on and from September,2014.

OCC also advised all the constituents to give the details of their consignee address so that the test kits for pollution mapping can be dispatched.

Constituents agreed.

Item no. B.18: Certification through BIS as per IS 18001:2007 to all generating/ transmission units. (Item No. B9 of 84th OCC meeting)

In 84th OCC meeting all constituents were requested to interact with BIS with intimation to ERPC and get certified as per CEA direction.

In 85th OCC NTPC informed that, NTPC-Farakka has been certified with IS 18001. Other constituents including OHPC requested to interact with BIS with intimation to ERPC and get certified as per CEA direction. The matter is getting reviewed by highest authorities with top priority.

In 88th OCC NTPC informed that, all NTPC stations in Eastern Region are certified with IS 18001. NHPC informed that, Teesta is also certified with IS 18001.

After that, OHPC and CESC informed that their stations are certified with IS18001.

Members may note and update the status.

Deliberation in the meeting

Members noted.

Item no. B.19: Procurement of Emergency Restoration System (ERS Towers) for Eastern Region constituents- Powergrid

Powergrid may update the latest status.

Deliberation in the meeting

Powergrid informed that there is no progress in procurement.

Item no. B.20: Status of available Emergency Restoration System (ERS Towers) in Eastern Region

The present status of ERS towers as available in ER is as given below:

SI. No.	Name of S/S	No. of ERS towers available	ERS towers in use
1	Durgapur, ER-II	1 Set (8 towers)	Two numbers of tower erected in 400 kV Maithon- Mejia D/C line near
2	Rourkela, ER-II	1 Set (8 towers)	Maithon and one no. tower having 170 ft has been erected in 220 kV Faraka-Lalmatia line near Farakka.
3	ER-I (located at Jamshedpur)	15 towers (10 nos Tension tower and 5 nos suspension tower)	

Members may note.

Deliberation in the meeting

Powergrid informed that 400 kV Maithon- Mejia D/C line has been restored and ERS towers were dismantled and stationed. Members noted.

Item no. B.21: Mock Black start exercises in Eastern Region - ERLDC

i) The status of black start exercises

In 97th OCC, tentative schedule of Black Start for 2014-15 exercise was confirmed by the constituents.

In 99th OCC, the following generators are scheduled for black start:

- i. Chujachen HEP : In month of Jan, 15
- ii. Rengali HEP :- August, 14
- iii. U. Indravati HEP :- August, 14

OPTCL may update.

Deliberation in the meeting

OHPC informed that reservoirs of both Rengali HEP and U.Indravati HEP are under spilling condition and they rescheduled the Black start exercise as follows:

i. Rengali HEP :- Last week of September, 14 iii. U. Indravati HEP :- Last week of September, 14

ii) Testing of DG sets meant for Black start

Report regarding test run of DG sets for the month of Aug, 2014 has not been received from any of the constituents. All test reports may be forwarded to <u>erldc.cal@gmail.com</u> & <u>psdas_psd@yahoo.com</u>.

Constituents may kindly ensure compliance.

Deliberation in the meeting

Members noted.

Item no. B.22: Restoration of SCADA data

Updated latest status is circulated in the meeting. During deliberations in 99th OCC it was pointed out by most of the constituents that SCADA problem in many locations are due to behind the schedule progress of work on the part of CTU/PGCIL. OCC advised Powergrid/CTU to expedite and restore at least the priority RTUs by 31st July, 2014.

CTU may update.

Deliberation in the meeting

Updated status is enclosed at Annexure-B.22.

Replacement of RTUs at Kahalgaon, NTPC

NTPC in 98th OCC informed that on account of the fire incidence in RTU & SIC panels of the ULDC system at NTPC-Kahalgaon Switchyard control room, the real time data transmission to ERLDC for generation & power flow of various lines have stopped since 18th June, 2014. These RTU & SIC panels are the assets of PGCIL and needs to be made available by PGCIL at the earliest.

ERLDC also informed that data of those RTUs are very important and stressed for early restoration.

OCC advised Powergrid to replace the RTUs on priority basis latest by 15th July, 2014.

In 99th OCC, Powergrid informed that RTU is not available, they are going for tender and it will take 2 months. OCC advised Powergrid to divert some other RTUs and complete the work by 31st July, 2014.

Concerned Member may update.

Deliberation in the meeting

Powergrid informed that order has been finalized, the generator and bus voltage data will be made available to ERLDC by 15th September, 2014. The rest of the data will be restored in another four (4) months.

Item no. B.23: Black start and Restoration procedure of Eastern region- ERLDC

Back start and restoration procedure of Eastern Region was updated by ERLDC on 30.11.13. Prior to updation a draft copy of same was circulated to all the constituents of eastern regional via email dated 15th November 2013 seeking comments as well as updates on following issues:

a) Details of 220kV and above substation(s) not having synchronizing facility for

synchronization of islands and time schedule for providing the same.

b) Details of Minimum auxiliary power requirement and survival power requirement by unit/plant wherever left blank in the document

SI No.	Constituent	Data received (Yes/No)
1	BSPHCL	Yes
2	DVC	Yes
3	JVSNL	No
4	OHPC/OPGC	Yes
5	West Bengal	Yes
6	CESC	Yes
7	NHPC	Yes
8	NTPC	Yes
9	CHEP	Yes
10	APNRL	Yes
11	MPL	Yes
12	GMR	Yes
13	JITPL	Yes

Status of data received regarding synchronization facility and auxiliary and survival power

Data has been received from all constituents except JUSNL. In the last OCC meeting JUSNL had agreed to furnish the data. However, the same has not yet been received by ERLDC.

ERLDC may update the status.

Deliberation in the meeting

JUSNL has submitted the relevant data.

Item no. B.24: Reactive Power performance of Generators and GT tap position optimization

a) Review of reactive power generation/drawal of generators vis-à-vis 400kV station bus voltage of units

Maximum and minimum voltage was observed (data taken from SCADA) Generating stations have been monitored for sample dates in the month of July, 14:

Power Plant	Max and Min Voltage observed for July 14 (KV)	Date for monitoring (July 2014)
Farakka STPS	422, 410	3,14,18
Khalgaon STPS	420,400	7, 12, 13
Talcher STPS	410, 398	12,21,26
Teesta	414,403	28,29
Bakreshwar TPS	410, 386	1,14,15
Kolaghat TPS	421, 395	1, 16, 18
Sagardighi TPS	423, 407	12,22
MPL	422, 414	3, 6, 8
Mejia-B	427, 414	15, 21, 29
DSTPS	432, 420	15, 21, 27
Adhunik TPS	422, 412	29, 30
Sterlite	433, 407	05,08,24

ERLDC may update.

Deliberation in the meeting

ERLDC has presented the performance of the generators.

b) Optimization of GT tap position at Adhunik, Mejia-B and DSTPS

In 97th OCC, members requested ERPC Secretariat to convene a special meeting for detail deliberation on tap changing proposal before next OCC.

Accordingly, a special meeting was convened on 27th June, 2014. During the meeting following tap position was agreed:

SI. No.	Utility	Present GT tap position	Agreed tap position in the meeting
1	APNRL: GT-1	8	9
	APNRL: GT-2	3	4
2	Mejia-B, DVC	4	5
3	DSTPS, DVC	5	6

MPL was requested to submit MW, MVAr, voltage data of both HV and LV side of GT/Generator terminal for the past months and GT tap details for analysis, so that decision on the required tap position could be decided in next OCC. MPL agreed to provide the required data to ERLDC.

Subsequently, DVC vide mail dated 3rd July, 2014 informed that GT tap position of MTPS units U#7&8 has been changed from Tap no. 4 to Tap no. 5.

In 99th OCC, DVC informed that DSTPS tap will be changed after ensuring the improvement of voltage profile is sufficient for synchronization of units, which will be checked by opening 400 kV DSTPS-Jamshedpur line during shutdown of both the units.

MPL informed that the required data had been submitted to ERLDC. The status of Adhunik units could not be updated as they were not available in the meeting.

Thereafter, ERLDC informed that data from MPL has been received and the same is being studied for requirement of change of GT tap position.

ERLDC and Adhunik may update the status.

Deliberation in the meeting

Adhunik informed that their unit #2 was under long shutdown due to stator earth fault. They will change their tap before synchronization of unit #2.

Item no. B.25: Operating procedure of ER

As per IEGC clause 5.1 (f) a set of detailed operating procedures for each regional grid shall be developed and maintained by the respective RLDC in consultation with the regional entities for guidance of the staff of RLDC. In line with this a draft operating procedure of Eastern Region for 2014 was emailed to all concerned on 18th July 2014. Based on the comment received it was finalized on 31st July 2014. The latest version of operating procedure is available at ERLDC website and same can be downloaded from the link *http://erldc.org/OP.pdf*

Members may note.

Deliberation in the meeting

Members noted.

100th OCC Minutes

PART C:: OPERATIONAL PLANNING

Item no. C.1: Shutdown proposal of transmission lines and generating units for the month of Sep' 14

Members may also finalize the Shutdown proposals of the generating stations and transmission lines for the month of Sep' 14 is circulated in the meeting.

Members may confirm.

Deliberation in the meeting

Approved maintenance programme of generating stations and transmission elements for the month of September, 2014 is at **Annexure-C.1**.

Shut down of PGCIL 400KV Ckt-1 of Raigarh – Sundargarh transmission line for LILO connectivity

The LILO connection of 400 kV Raigarh-Jharsuguda-I at Ind Barath Energy (Utkal) Ltd. (IBEUL) was discussed in the special meeting held on 11.08.2014 wherein Ind Barath was advised to submit the detail progress of the ATS from Ind Barath to Jharsuguda for considering the LILO connection.

Deliberation in the meeting

IBEUL placed the detail progress of their ATS, Ind Barath-Jharsuguda line before the house and requested to allow the LILO connection to IBEUL for drawing construction power.

OCC advised to place status of progress to CEA and NLDC along with the proposal for review of LILO of 400 kV Raigarh-Jharsuguda-I at Ind Barath.

Item no. C.2: Anticipated power supply position during Sep'14

The abstract of peak demand (MW) vis-à-vis availability and energy requirement vis-à-vis availability (MU) for the month of Sep'14 were prepared by ERPC Secretariat on the basis of Provisional LGBR for 2014-15, keeping in view that the units are available for generation and expected load growth etc. and circulated in the meeting.

Members may confirm.

Deliberation in the meeting

Modified anticipated power supply position for the month of Sep, 2014 after incorporating constituents' observations is given at **Annexure-C.2**.

Item no. C.3: Prolonged outage of power system elements in Eastern Region

Generating Station	UNIT NO	CAP(MW)	DATE	REASONS FOR OUTAGE	Date of restoration
MEJIA	3	210	15.06.14	HYDROGEN LEAKAGE	
MEJIA	4	210	21.06.14	LOW DEMAND	
MEJIA B	8	500	03.08.14	COAL SHORTAGE	
BOKARO-B	3	210	11.08.14	COAL SHORTAGE	
KODERMA	1	500	20.07.14	LOW VACCUUM	
DSTPS	2	500	20.07.14	TUBE LEAKAGE	
KODERMA	2	500	04.08.14	PA FAN PROBLEM	
MEJIA	5	250	31.07.14	ESP PROBLEM	
GMR	1	350	23.07.14	PA DUCT LEAKAGE	
GMR	3	350	07.08.14	ASH HANDLING PROBLEM	
TENUGHAT	1	210	12.07.14	EXCITATION PROBLEM	
KOLAGHAT	1	210	20.07.13	OVERHAULING	
BANDEL	5	210	16.11.13	MAINTENANCE	
SAGARDIGHI	1	300	05.08.14	MAINTENANCE	
STERLITE	2	600	08.06.14	TURBINE VIBRATION	
STERLITE	4	600	17.07.14	LOW DEMAND	
KHSTPP	7	500	19.07.14	MAINTENANCE	
TSTPP	2	500	04.08.14	AMP	
DPL	7	300	02.08.14	TUBE LEAKAGE	
WARIA	4	210	12.08.14	COAL SHORTAGE	

(i) Generating units:

(ii) Transmission elements

Name of the Line/Element	Outage Date	Reason	Date of restoration
220 KV JEERAT - SATGACHIA D/C	15.06.10	DUE TO LAND SLIDE OF GANGES RIVER BANK	
220 KV MENDHASAL - NARENDRAPUR - II	12.10.13	TOWER COLLAPSE	
315 MVA ICT - I AT BIDHANNAGAR	18.01.14	FAILURE OF R PH. BUSHING, HV SIDE.	
400 KV STERLITE - RAIGARH - I	08.06.14	400 KVROURKELLA-RAIGARH CKT AVAILABLE BY PASSING LILLO AT STERLITE	

Members may update.

Deliberation in the meeting

Members updated the latest status.

Item no. C.4: Information regarding commissioning of new transmission element

- 1. 315 MVA 400/220/33 kV ICT-I at Rangpo was charged for the first time on no load at 17:36hrs of 01.07.14.
- 2. 765/400 KV, 3X500 MVA ICT-II at Jhasuguda was charged for the first time at 19:10 HRS on 03.07.14.
- 3. 765KV Bus-II at Jharsuguda was charged for the first time at 20:05 Hrs of 03.07.14.
- 4. 3x80 MVAR B/R-II at Jharsuguda was charged for the first time at 20:43 Hrs of 03.07.14.
- 5. 50 MVAR B/R-I at RaghunathpurTPS was charged for the first time at 18:05 Hrs of 09.07.14.

- 6. 765 KV Jharsuguda-Dharamjaygarh-I was charged for the first time at 00:00Hrs of 29/07/14.
- 7. 765 KV Jharsuguda-Dharamjaygarh-II was charged for the first time at 16:00 Hrs of 29/07/14.

All constituents are requested to intimate details of commissioning of new elements/generating units (if any) positively by the first working day of the current month for the previous month.

All members are also requested to verify above and also intimate regarding details of any other new elements commissioned but not included in the above list.

Members may note/update.

Deliberation in the meeting

Members noted.

Status of commissioning of generating station and transmission elements are as follows:

New generating units:

S.No.	Power Plant	Plant Size	Expected date
1	Koderma Unit#2	2x500MW	
2	Corporate Power Unit#1	2x270MW	
3	Teesta-III Unit#1	1x200MW	
4	Raghunathpur Unit#1	2x600MW	
5	TLDP-IV	1x40MW	

New transmission elements:

SI No.	Name of Element	Expected date
1	400 kV Maithon-Gaya D/C	
2	400 kV Gaya-Koderma D/C	
3	400kV Sasaram-Daltonganj D/C & Daltonganj S/Stn	
4	400 kV Ranchi-Raghunathpur D/C	
5	400 kV Meramandali-Dubri D/C	
6	400 kV Corporate- Ranchi D/C	
7	400 kV IB-Meramandali D/C	
8	220 kV TLDP-IV – NJP ckt-2	2014
9	220 kV Jeerat-Rishra D/C	
10	220 kV Latehar-Daltonganj D/C	
11	220 kV Lohardaga-Lathehar D/C	
12	220 kV Bidhansai-Cuttack D/C	
13	220 kV Girdih-Koderma D/C	Sep, 2014

Members may update.

Deliberation in the meeting

Members updated the latest status.

PART D:: OTHER ISSUES

Item no. D.1: UFR operation during the month of July'14

System frequency touched a minimum of 49.41 Hz in July'14. Accordingly, no report of operation of UFR has been received from any of the constituents.

Members may note.

Deliberation in the meeting

Members noted.

Item no. D.2: Grid incidences during the month of July, 2014.

SI no	Disturbance Place	Date & Time	Generation loss (MW)	Load loss (MW)	Remark	Category
1	132kV Purnea (BSPHCL)	03/07/14 at 21:35hrs	0	165	Total power failure occurred at 132/33kV Purnea (BSPHCL) s/s due to fault in 132kV Purnea (BSPHCL)-Forbisgunj line	-
2	220kV Purnea PG (Old)	07/07/14 at 15:19hrs	0	150	Total power failure occurred at 220kV Purnea PG (Old) s/s due to insulator decapping at loc 41 in 220kV Purnea (Old)-Dalkhola-II.	GD-1
3	132kV Purnea (BSPHCL)	07/07/14 at 19:55hrs	0	120	Total power failure occurred at 132/33kV Purnea (BSPHCL) s/s due to fault in 132kV Purnea (BSPHCL)-Forbisgunj line	-
4	JSEB(Chandil)	08/07/14 at 13:53hrs	0	111	Total power interrupted at 220kV Chandil Sub- Station due to busting of 33kV side Y-phase LA of 132/33kV transformer-IV at 132kV Adityapur substation	GD-1
5	OPTCL (Budhipadar, IB valley)	08/07/14 at 17:21hrs	780	450	Total power failure occurred at 220kV Budhipadar S/s due to snapping of bottom most conductor (between gantry & dead end tower) of 220 kV Budhipadar-Basundhara ckt-II	GD-1
6	OPTCL (TTPS, Joda) & DVC (BTPS & adjacent 132kV S/s)	12/07/14 at 16:50hrs	560	170	Various 220kV lines, ATRs and all the running units of TTPS tripped due to inclement weather condition. DVC system also got affected due to loss of supply from Joda S/s.	GD-1
7	132kV Purnea (BSPHCL)	19/07/14 at 20:31hrs	0	120	At 20:31hrs, total power failure occurred at 132/33kV Purnea (BSPHCL) s/s due to fault in 132kV Purnea (BSPHCL)-Saharsha line	-
8	JSEB (Patratu, Hatia, Tenughat)	21/07/14 at 13:09hrs	30	220	Total power failure occurred at Patratu & Hatia (I) & (II) due to bursting of R-Ø LA of 150MVA Auto transformer-1 in switchyard of Patratu S/s.	GD-1
9	GMR	23/07/14 at 10:03 & 10:41hrs	480	0	Total power failure occurred at GMR S/s due to tripping of all outgoing lines from GMR on E/F.	GD-1
10	BSHPCL (Biharsariff (BSEB), Fatuha)	26/07/14 at 23:31hrs	0	465	Due the fault in 220kV Biharshariff-Bodhgaya- D/C which was under shutdown for reconductoring work and kept idle charged from Biharshariff end,all the three 315 MVA, 400/220kV ICTs at Biharshariff(PG) tripped	GD-1
11	OPTCL (Budhipadar, IB valley)	29/07/14 at 20:10hrs	815	430	Total power failure occurred at Budhipadar S/s due to B-Ph breaker limb of 220 kV Budhipadar-Tarkera-II burst at Budhipadar.	GD-1

Members may note.

Deliberation in the meeting

Members noted.

Item no. D.3: Any other items

Meeting ended with vote of thanks to the chair.

Annexuse-A

Venue: ERPC Conference Room

Time: 11:00 hrs

Date: 22.08.14 (Friday)

SI	Name	Designation	Organization	Contact	Email	Signature
No				Number		
1	A. R. Bandyspelle	Mszle	ERPC	9433068533	msespe-poceer Enie in	Handgopr.
2	U.K. Verma	GM	ERLDC	089-2496220	injught unge very	llemani
3	D.K. Shorivastare	Acm	ERUDE	9433041502	aleshrivestern 55 @ yehn.c., i	AZ Daimo
4	S. Baneryfee	CM	ERLDC	9 43 304123		kyn
5	PSDad	СН	- do	9473041837	psolas_psol@ Jahor con	U ,
6	G. Charrabonlj	DGM	- dv -	9433041815	C. gontom 62 0 gmail. com	with
7	s.P. part	ehm	Routenbrin Udinh	1 14315756		for
8	B. Pour	CE(SLDe)	DVC	9903247102	- bpan. drc @ gmail. Cim	Brm
9	J C Patri	Alim (NTRC)	MTPC	9437043673	jepateentre le	gami,
10	RAKESH KUMAR	AGm (os)	NTPC. PATNA	9431011344.	12@ntpc. co.m	Patertixa
11	Hiscay Dorjee. Bhutia.	E.E. (scar)	E 94P Sildem	9647879822	hiscordnjes44 @gmail. Con,	ling:
	D. Chetroledmey	CM	NHIC	9910121161	denhpe@yaho	· Achel
13	S. P. Reth	DY.MJE(D)	NHPC	8170005662	Sartildte	213
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20	Sawar Ko Sahay	St Enginees	ERLDC	9432013173	Salay. sausorv @gunail. Com	Jahay

"Coming together is a beginning, staying together is progress, and working together is success." –Henry Ford

[Page 1]

Venue: ERPC Conference Room

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Time: 11:00 hrs

Date: 22.08.14 (Friday)

SI No	Name	Designation	Organization	Contact Number	Email	Signature
21	N. Mandal	AGM(E)	Gak'	801608229	niladri. mandal gatünfra.com	- Hu
22	P.K.Senalah	AGM(E)	GMR	9777580352	prasant sendar	
23	b.D.BARIN	AM		9585040628	bidya param	mil.com ovir
24	Gardons Carpo proting	Sm (opm)	DPPS/DPL Dugupor	9434712932	end-1714 K yak	P P3278
25	R Chikreint	DGM LYG		983105461	5	Rado
26	PRASHAN'T KU. DAS	DAM (Every)	SUDCOPTCL	9438907408	prashoolk. das Ogahou concer	Ro
27	P.K. Mishra	G.M (210)	SLDL, Odishi	943890 7402	ele.pkmishrel sklearissa.orsin	ha
28	A. Binros	c.E.,SLDe	WBSETCL	9734910030	amitain. bina 22@ grail. com	1 1/ 1
2.9	Snipit North	CE(CPD)	LSBSETCL	343491007G 3434310019	Sujit nation to be bedded	
30	Durga Sachan Nag	Dan (0)	WAPS, WAPDOCL	833 C 903888	ding e why ic	R. S. in an
31	A.K. Seigh	ESE	JUSNL	997385020 8	@gmail. Cen	an
32	P. Kumar	Ē8 <u>F</u>	BSPTCL	90267	Squard. Con	BOK_
33	G. Leve	ARE	REPL	9547891353	and long	Anada
34	D. K. Bauri	EE	ERPC	3883617236	ecop.expcggov.in	
35	B. SARKHEL	SE(PS)	ERPL	9433065724		Soul
36	T.R.Mohapatra	Dy-Mar	FRLOC	9433041873		Turkin
37	P. Bamorger	DE	MBSEDEL	9432407		h
38	S. Chattoforthy	Manaye	Pawayrd) Kaleati	943474800		32
39	Pohit laumor	Sr. Engr	POWERGRAD DR-5	9431815714	Cr-osi@ Yahoo.com	(B)
40	R. P. Singh.	DGm (os)	NTPC ER: 146, Patros	7431011366		2 military

[&]quot;Coming together is a beginning, staying together is progress, and working together is success." -Henry Ford

Venue: ERPC Conference Room

Time: 11:00 hrs

Date: 22.08.14 (Friday)

Sl No	Name	Designation	Organization	Contact Number	Email	Signature
41	RK-MANDAL	DGM(EEMG)	Kanalgaon	9431600132	nptc.co.in	oht.
42	Yeshi Dema	AE(E)		1 97577685383	geshidemet 7@ gmail-iom	fulli
43	Pema Choden	50(M)	CHTP, DGPC	1915177159759	Chodensz Ogni gmail.com	fing:-
44	Veren Tsheng	$A \cdot C(E)$	THP, ALPC	+ 57517881946	alexor 31 D gmail.com	Alph
45	Jampes Thardney	JE (E)	THE DAPC	0057517630436		Anga-
46	A Musher	LEMO LADIS	mpl	G V34001689	Obstagener	palle
47	Aboke R Bhunia	AGMlos)	NTPC/Kol	9433027333	aloke bhunia @ rediffmail.com	(18mg)
48	Vijay Kumar.g	Sr. Engineer	JITPL	9583040	C grown, Gm	wigg
49	Mardhusnden Sah	a AGM (elect	GRIDUO	9692427876	mide esce gm	il M.S.Soh
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51	N. Khen	L.0	37	9433035435	Klannun 1 440 parail - co-	Nath
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54	P. K. Kendr.	SE(E)	SLDC, WISEte	993308692	4 phundre 1961 (a) yahoo.co.in	127.
55	V. Kalyaran	EC	ERAC	24232015		(Q)
56	P.K.DE	6 E	ERPC	9433125844		the second
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59	T.K.Dc.	A.C.F	WASLOC	94338707 4 8		Juse
60	JOYDEB BANDYOPH	HAAY SE	ERPC			12

"Coming together is a beginning, staying together is progress, and working together is success." -Henry Ford

Venue: ERPC Conference Room

Time: 11:00 hrs

Date: 22.08.14 (Friday)

Sl No	Name	Designation	Organization	Contact Number	Email	Signature
61	Chardoska AC Mallice	nar	ERNC	9733041800	Sanjeev Chandrikar @ gmail.com	Gs.2.
62	AC Mallice	Adr. (P)	in Barathe Energy Uffeel	9437012385	alerch wallies	2
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"Coming together is a beginning, staying together is progress, and working together is success." -Henry Ford

Annexure-B.5

1. Rescheduling of planned maintenance shutdown of Central Sector (CS) Thermal/Gas units

Region				Central Sector units rescheduled for maintenance during post monsoon		
	Number	MW	Number	MW		
ER	15	4740	6	1880		

For details refer Annexure-I

2. Status of hydro reservoirs

Region	Total number of Reservoirs	Number of Reservoirs whose level is higher than last year	Number of Reservoirs whose level is less than last year	Remarks
ER	6	6	0	

For details refer Annexure-II

3. Coal stock position at coal based thermal power stations of NTPC & DVC

Region	Total number of CS coal based stations	Number of stations where coal available for 15 days or more	Number of stations where coal stock critical (leass than 7 days)	Number of stations where coal stock super critical (leass than 4 days)	Remarks
ER	9				Critical/Super Critical

Possibilities of transferring coal from stations of NTPC of ER to other NTPC stations of other regions were at this moment found not feasible.

4. Progress of construction of transmission lines critical for greater inter-regional exchanges

ĺ	-		No. (Of critical transmission li	ines	
		No. Of identified critical		Likely to be		
		transmission lines under	Subsequently	commissioned in the	Awaiting for various	
	Region	construction as on 1.5.14	commissioned	current month	clearances	Remarks
	ER	2				

For details refer Annexure-III

Annexure-I

SYSTEM	POWER STATION	Unit NO.	Effective Capacity (MW)	Scheduled Maintenance Programme	Revised Maintenance Programme	Remarks
	CTPS	Unit No. 3	130	11.07.2014 to 26.07.2014	Already completed	
	BTPS (B)	Unit No 1	210	16.08.2014 to 05.09.2014	16.08.2014 to 05.09.2014	Two units operation will be continued
DVC	Mejia TPS	Unit No 4	210	25.08.2014 to14.09.2014	25.08.2014 to14.09.2014	Numbers of units will be there for maintaing generation.
	megia 115	Unit No 6	250	21.09.2014 to 06.10.2014	Deferred	
		Unit No 7	500	15.07.2014 to 09.08.2014	Already completed	
		Unit No 2	60	20.08.2014 to 03.09.2014	Will be reviewed in OCC	
	TTPS	Unit No 3	60	06.09.2014 to 20.09.2014		
		Unit No 5			25.06.2014 to 16.07.2014	
		Unit No 6	110	20.07.2014 to 18.08.2014	10.07.2014 to 08.08.2014	
	FSTPS	Unit No 5	500	31.07.2014 to 04.09.2014	22.08.2014 to 24.09.2014	Allowed to attend unaviodable Turbine vibration
	KhSTPP Stg-I	Unit No 2	210	15.06.2014 to 14.07.2014	20.06.2014 to 10.07.2014	Other units should be in operation
NTPC		Unit No 5*	500	Deferred to Oct/Nov, 2014	25.08.2014 to 18.09.2014	AH (Allowed because of coal shortage)
	KhSTPP Stg-II	Unit No 7	500	15.07.2014 to 08.08.2014	19.07.2014 to 12.08.2014	There is coal shortage. As Unit is running with vaccum problem, S/D was allowed.
	TSTPP Stg-I	Unit No 2	500	01.08.2014 to 14.09.2014		Allowed for PCB clearance for boiler licence & because of foreign expert tied up
	TSTPP Stg-II	Unit No 5	500	19.07.2014 to 17.08.2014	ER proposed for deferrement	SR Cleared.
	15111 Stg-II	Unit No 6	500	15.06.2014 to 14.07.2014	Already cleared & under Shutdown.	

*- NTPC will try to bring the unit at the earliest & NTPC will maintain the same DC as before the outage of unit #5 on account of Annual Overhaul and will generate accordingly.

Annexure-II

	Rese	rvoir Lev	el							
SI. No.	Name of Station	FRL	MDDL	07-06-2013	07-06-2014	06-06-2013	06-06-2014	31-05-2013	31-05-2014	12-06-2014
1	Burla	630 ft	590 ft	595.89	604.73	596.62	605.10	598.33	606.71	603.08
2	Balimela	1516 ft	1440 ft	N.A.	1487.40	N.A.	1487.60	1482.20	1487.90	1486.40
3	Rengali	123 mt	109 mt	109.91	114.24	110.01	114.45	111.70	115.41	113.24
4	U.Kolab	858 mt	844 mt	849.16	849.25	849.26	849.38	849.88	849.79	848.63
5	U.Indravati	641 mt	625 mt	628.00	629.44	628.10	629.63	628.70	630.52	628.60
6	Machkund	2750 ft	2685 ft	2709.00	-	2709.20	2725.60	2711.20	2727.00	

Detail Plan of Odisha for contingency is given at Annexure B.1a

Annexure-III

SI. No.	Name of the line	COD		
1	220 kV Balimela-Upper Sileru line	Already in charged condition		
2	765 kV Dharamjaygarh-Jharsuguda D/C line	July, 2014		
3	765 kV Angul-Jharsuguda D/C line	December, 2014		

Shutdown of all major Transmission lines of CTU will be cleared in monthly OCC meetings depending upon the status of Monsoon.

220 kV Balimela- U. Sileru ideally charged from U.Sileru end wef 12.06.14.

Operational and Commercial modalities between Odisha and Andhra Pradesh are in the process of finalization.

SI. No.	Name of the line	COD
1	220 kV Balimela-Upper Sileru line	Already in charged condition
2	765 kV Dharamjaygarh-Jharsuguda D/C line	July, 2014
3	765 kV Angul-Jharsuguda D/C line	September, 2014

Shutdown of all major Transmission lines of CTU will be cleared in monthly OCC meetings depending upon the status of Monsoon. 220 kV Balimela- U. Sileru ideally charged from U.Sileru end wef 12.06.14.

Operational and Commercial modalities between Odisha and Andhra Pradesh are in the process of finalization.

Latest status on non-availability of SCADA data

The latest status as updated in the 100th OCC meeting is as given below:

i) List of RTU supplied under ULDC Project but data is faulty/ intermittent:

SL no	Name of Utility	kV	Name of station	Reason reporting	for	not	Latest status
1	DVC	220	CTPS–B (2 x 250 MW)	Except GT flow, no data			DVC/Powergrid informed that RTU will be commissioned by 10 Sept'2014.

ii) List of additional elements/feeders whose data is not available - station under ULDC project:

SL no	Name of Utility	KV	Name of station	Reason for non reporting	Latest status
1	NTPC	400	Farakka: (3x200+2x500MW)	-	NTPC informed that CTU has to do the termination at RTU.
2	OPTCL	220	Vedanta (9x135 MW)	No status points are available.	It will be rectified within a week.

iii) The List of RTU supplied under BSEB, data is faulty/ intermittent:

S/n	Name of RTU locations	Latest status
1	Jakkanpur, Khagaul RTU, Dumraon, Karmnasha, Sitamarhi, , Purnea & Koshi	Now, All RTUs are communicating. Intermittency of GPRS related issue has been taken up with Airtel.
2	Hathidah, Lakhisarai & Darbhanga	Hathidah & Lakhisarai is now reporting. Due to re-conductoring work in Darbhanga-Samastipur T/L, Darbhanga is not reporting temporarily.
3	Samastipur	Now reporting.
4	BTPS	RTU dismantled. Renovation/overhauling work is going on. SAS is expected to be operational by the end of October, 2014.
5	Begusarai, Rajgir and Hajipur 220 kV	Begusarai & Rajgir is reporting
6	Jagdishpur, Sipara, Madhepura	RTU has been supplied by PGCIL under Sub- transmission project of Bihar but commissioning is left out. It was informed that vendor (ABB) has been tied up for the work.
7	Siwan, Valmikinagar, Gopalganj, Darbhanga, Kisanganj and Arrah	RTU along with communication has been included in the scope of work of Powergrid under up gradation/ replacement scheme of ULDC. It was scheduled to be completed by Oct'14.

SI. No.	Name of the RTU location	Latest Status
1	Chandil	Reporting
2	Lalmatia	Reporting
3	Hatia	Reporting
4	Ramchandrapur	Reporting is interrupted because of problem in PLCC link between Candil & Ramchandrapur. CVT brusted at Ramchandrapur bay and requires replacement. Arrangement in being done for its replacement.
5	Jamtara	Jamtara RTU has been shifted in new control room. POWER GRID has been requested to reintegrate the feeders in RTU as integration of additional feeder (new element) in the existing RTU. Work order for re- integration of Jamtara feeders to be placed on POWER GRID is under process of vetting.
6	Deoghar	Both LMU & LMDU rusted at Jamtara. Arrangement inbeing done for its replacement. Deoghar-Jamtara-Maithon link is interrupted also because of snatching of patching cable at Maithon (G) and Maithon (SLDC). This was found during survey of sites with M/s PUNCOM which will be corrected by the agency under AMC. AMC by PUNCOM has been started.
7	Garawah	Garawah RTU will be restored when it will be connected from Ranchi end through Hatia-Loherdaga-Latehar-Daltonganj –Garwah Transmission lie.
8	Sikidri	AMC by PUNCOM has been started. PUNCOM engineers are attending the
9	Patratu	sites for rectification of fault in PLCC causing non reporting of RTUs.
10	Tenughat	
11	Rajkharsawan	Reporting is interrupted because of shifting of Chandil bay at Rajkharsawan.
12	Kendposi	PLCC outdoor equipment has been shifted recently to new location of Chandil bay at RKSN. Some work like termination of co-axial cable will be
13	Goilkera	done soon.
14	Jadugoda	Co-axial cable faulty at Golmuri (Chandil bay)

iv) The updated status of telemetry of JSEB Sub-Stations under ULDC project is as given below:

v) The updated status of telemetry of OPTCL Sub-Stations under ULDC project is project as given below:

S/n	Name of RTU Locations	Latest status
1	Nalco	OPTCL informed that work will be completed by Oct' 14.

vi) RTU telemetry provided but data are intermittent / new element not wired .

I. NHPC Rangit :

No measurands are available for Gangtok 132 KV feeder in Rangit RTU (Feeders not wired with existing RTU. Action : Powergrid .)

Powergrid informed that analog data part is completed and digital data will be restored by 10^{th} September, 2014.

II. Mendhasal: 400 KV Baripda 1 & 2 line flow and Reactors data, Tap position of both 400 ICTs not available since charging of bays.
Feeders not wired with Mendhasal RTU of OPTCL. Action : OPTCL

OPTCL informed that work is completed.

III. JSL (Meramundali -400): Most of the data not available .

OPTCL informed that JSL is reporting to SLDC, Odisha; data will be extended to ERLDC.

 IV. Jhasurguda 400: Data reporting is highly intermittent.
Intermittent PLCC communication link between Jharsuguda – Rourkela. Also GPRS data reporting very poor.

Powergrid informed that they are shifting the communication link to OPGW.

V. DVC :

(Old RTU not working .New RTU not commissioned Action : DVC .)

- Ramgarh : Communication pending.- by Aug'14
- Putki: work in progress
- > Patherdiah: by October, 2014.
- ▶ Kalipahari: by October, 2014.

vii) Sub - Stations (220 & 132 kV) Telemetry not provided :

I. WBSETCL

(RTU not provided for data telemetry, Action : WBSETCL)

- Subhasgram: Data integrated.
- New Bishnupur: Data integrated.
- ➢ New Town: Data integrated.
- > Bantala: RTU reached at site. Commissioning work completed.
- ➤ Krishna Nagar: By 15th September, 2014.
- ► Kalingpong: By 15th September, 2014.
- ▶ Karseong: RTU commissioned. Communication link problem
- ➤ CESC S/s: EM 220 kV- By January, 2015.
- CESC S/s: Kasba-132 kV, EM-132 kV Jadavpur, Chakmir, Majerhat and CESC Belur- By January, 2015.
- II. DVC

(RTU not provided for data telemetry, Action : DVC.)

- Burnpur: Data integrated
- Dhanbad : Data integrated
- > Chandil (Manique): Data integrated
- III. JSEB

(RTU not provided for data telemetry, Action : JSEB.)

Hatia New, Manique (Chandil), Japla

New RTUs to be commissioned.

Annexure-C.1

	1		0		,	
SYSTEM	POWER STATION	Unit NO.	Effective Capacity	Maintenance Programme	Remarks	No.of Days
WBPDCL	BKTPP	Unit No 4	210	06.09.2014 to 10.09.2014	Boiler License	5
APNRL		Unit No.2	270	September, 2014	Annual Overhaul	15
	ECTDC	Unit No 5	500		To attend Turbine	
NTPC	FSTPS			22.08.2014 to 24.09.2014	Vibration	34
	KI CTDD C4- H	Unit No 5*	500		Annual Overhaul allowed	
NTPC	KhSTPP Stg-II			25.08.2014 to 18.09.2014	due to coal shortage	25

Proposed Maintenance Programme of thermal units during September, 2014.

*- NTPC will try to bring the unit at the earliest & NTPC will maintain the same DC as before the outage of unit #5 on account of Annual Overhaul and will generate according

EASTERN REGIONAL LOAD DESPATCH CENTRE KOLKATA

TRANSMISSION ELEMENTS OUTAGE APPROVED IN 100TH OCC MEETING OF ERPC

	S/D APPROVED IN OCC								
Sr. No	NAME OF THE ELEMENTS	DATE	TIME	DATE	TIME	REMARKS	S/D availed BY	Reason	SUBJECT TO CONSEN FROM AGENCY
1	400 KV Bus #2 DURGAPUR	23-08-2014	08:00	25-08-2014	18:00	ODB	ER-II	Civil exccavation work under BUS splitting project	WBSETCL
2	400KV Maithon- Mejia-3	23-08-2014	09:00	23-08-2014	17:30	ODB	ER-II	SF6 Gas Leakage Arresting work. S/D required for crane movement. Line will be charged through TIE bay when crane movement is not required during SF6 leakage arresting work	DVC
3	A/R 132 KV RANGIT - GANGTOK	23-08-2014	09:00	20-09-2014	17:00	ODB	ER-II	OPGW STRINGING WORK	SIKKIM
1	A/R 400 KV BINAGURI - TEESTA	23-08-2014	09:00	20-09-2014	17:00	ODB	ER-II	OPGW STRINGING WORK	TEESTA
5	A/R 400 KV BOLANGIR - ANUGUL	23-08-2014	09:00	20-09-2014	17:00	ODB	ER-II	OPGW STRINGING WORK	
<u> </u>	400 KV MAIN BAY FARAKKA - DURGAPUR - I	23-08-2014		18-09-2014	17:30	OCB	NTPC	REPLACEMENT OF BREAKER	
5 7	400KV Durgapur Bidhannagar Line-I	24-08-2014		24-08-2014	15:00	ODB	ER-II	To attend hot spot at wave trap end	WBSETCL
								Reactor isolator operation checking for NTAMC ; leakage arrest from	
3	400 KV Maithon-Kahalgaon-I with LR	24-08-2014	09:00	24-08-2014	17:30	ODB	ER-II	reactor:SFRA test	NLDC
9	220 KV BTPS - JAMSHEDPUR LINE OF DVC	24-08-2014	08:00	25-08-2014	18:00	ODB	ER-I	FOR STRINGING WORK OF 400KV D/C BOKARO-KODERMA BETWEEN LOC NO 88/0 TO 89/0	DVC
10	220 KV RAMGARH - BTPS LINE OF DVC	24-08-2014	08:00	25-08-2014	18:00	ODB	ER-I	FOR STRINGING WORK OF 400KV D/C BOKARO-KODERMA BETWEEN LOC NO 88/0 TO 89/0	DVC
11	132 KV D/C GOPALGANJ - MASHRAKH LINE OF BSPTCL	24-08-2014	08:00	25-08-2014	18:00	ODB	ER-I	POWER LINE CROSSING WORK OF800 KV HVDC LINE	BIHAR
2	A/R OF 400 SSRM - ALLD LINE	24-08-2014	06:00	10-09-2014	19:00	ODB	ER-I	FOR OPGW INSTALLATION WORK	NLDC
13	400 KV Maithon-Koderma-II LR	25-08-2014	09:00	25-08-2014	17:30	ODB	ER-II	Bushing oil sample collection for DGA as per CTC recommendation.	
14	400Kv Bus-II ar Angul	25-08-2014	08:00	25-08-2014	18:00	ODB	ER-II	Erection of misiing section of BUS-II	
15	KEONJHAR - RENGALI	25-08-2014	09:00	02-09-2014	17:00	ODB	ER-II	OPGW STRINGING WORK	
16	220 KV BUS - I AT RNC	25-08-2014	10:00	25-08-2014	19:00	ODB	ER-I	FOR AMP WORKS	JHARKHAND
17	400 KV BUS - I AT PATNA S/S	25-08-2014	10:00	27-08-2014	17:30	ODB	ER-I	BAY CONSTRUCTION WORK OF 400 KV PATNA - KISHAGANJ LINE	
8	400 KV Maithon RTPS(DVC)	25-08-2014	09:00	25-08-2014	17:30	ODB	ER-II	PIR removal of main Bay CB .S/D required for crane movement. Line will be charged through TIE bay when crane movement is not required during PIR removal work	DVC
9				26-08-2014	18:00	ОСВ	ER-I	Permanent shutdown of the said circuit will be taken, On restoration, Line will be charged as Gaya-Maithon Ckt-2 on its designated DIA	NLDC/DVC
20	400kV Maithon Koderma ckt-2	25-08-2014	08:00	26-08-2014	18:00	ОСВ	ER-I	Permanent shutdown of the said circuit will be taken, On restoration, Line will be charged as Gaya-Koderma Ckt-2 terminated in the DIA of Maithon-1 at GAYA	NLDC/DVC
21	400 kV Kahalgaon - Lakhisarai & Kahalgaon - Biharsariff - II	26-08-2014	06:00	28-08-2014	18:00	ocb	ER-I	LILO of kahalgaon - Biharsariff at Lakhisarai	NLDC
-				03-09-2014	18:00	OCB	ER-I	Permanent shutdown of the said circuit will be taken, On restoration, Line will be charged as Sasaram-Biharsharif Ckt-4	
22	400kV Biharsharif-Gaya	01-09-2014	08:00	11-09-2014	18:00	ОСВ	ER-I	Permanent shutdown of the said circuit will be taken, On restoration, Line will be charged as 765kV Gaya-Ballia. This will involve removal from ERS at GAYA end and interchange of GAYA-BALLIA with Sasaram-Biharsharif D/C	NLDC
				03-09-2014	18:00	ОСВ	ER-I	Permanent shutdown of the said circuit will be taken. On restoration, Line will be charged as Sasaram-Biharsharif Ckt-4	NLDC

1		Î	1		1		1	Permanent shutdown of the said circuit will be taken. On restoration, Line will be	
23	400kV Sasaram-Ballia	01-09-2014	08:00						
				11-09-2014	18:00	OCB	ER-I	charged as 765kV Gaya-Ballia. This will involve removal from ERS at GAYA end	NLDC
								and interchange of GAYA-BALLIA with Sasaram-Biharsharif D/C	
24	400kV Biharsharif-Sasaram ckt-3	01 00 2014	08:00	04.00.0014	18:00	ODB	ER-I	Shutdown of the said circuit is required for charging of Biharsharif-Sasaram Ckt-4	NLDC
24	400KV Binarsharit-Sasaram ckt-3	01-09-2014	08:00	04-09-2014	18:00	ODB	ER-I	and 765kV Gava-Ballia Line	NLDC
25	400kV Biharsharif-Sasaram Ckt-4	04-09-2014	08:00	04-09-2014	18:00	ODB	ER-I	Shutdown of the said circuit is required for charging of 765kV Gaya-Ballia Line	NLDC
					10.00	0.00	50 J	Permanent shutdown of the said circuit will be taken, On restoration, Line will be	51/0
26	400kV Maithon-Koderma Ckt-1	02-09-2014	08:00	04-09-2014	18:00	OCB	ER-I	charged as Gaya-Maithon Ckt-1 on its own DIA	DVC
20		02-09-2014	06.00	03-09-2014	18:00	OCB	ER-I	Permanent shutdown of the said circuit will be taken, On restoration, Line will be	NLDC/DVC
				03-07-2014	10.00	000		charged as Gaya-Koderma Ckt-1 on its own DIA	NEDC/ DVC
27		02-09-2014	08:00	02-09-2014	18:00	OCB	ER-I	Shutdown of the line is required for charging with original bay of Koderma-2 at	DVC
	400kV Koderma-Gaya Ckt-2							GAYA Sub-station	
28	220 KV BUS - II AT NPRN	26-08-2014	09:00	26-08-2014	19:00	ODB	ER-I	FOR AMP WORKS	BIHAR
	220 KV D/C ARA - KHAGAUL - I & II							FOR OPGW DIAMOND CROSSING WORK BETWEEN LOC 97 & 98 OF 220 KV ARA -	
29	400 KV D/C PATNA - BALIA - I & II	26-08-2014	06:00	27-08-2014	19:00	ODB	ER-I	KHAGAUL TL AND	BIHAR
								BETWEEN LOC 78 & 79 OF 400 KV PATNA - BALIA TL	
30	220 KV D/C ARA - KHAGAUL - I & II	26-08-2014	06:00	05-09-2014	19:00	ODB	ER-I	FOR OPGW INSTALLATION WORK	BIHAR
31	220 KV ICT#2 Main Bay DURGAPUR	26-08-2014	09:30	26-08-2014	17:30	ODB	ER-II	Local remote switch implementation under NTAMC and AMP	
32	315 MVA ICT-III. at Malda	27-08-2014	08:00	27-08-2014	17:00	ODB	ER-II	Bushing oil sample collection for DGA as per CTC recommendation.	WBSETCL
33	132 KV KONAR - HAZARIBAGH ROAD D/C	27-08-2014	08:00	28-08-2014	18:00	ODB	ER-I	FOR STRINGING WORK OF 400KV D/C BOKARO-KODERMA BETWEEN LOC NO	DVC
						-		44/0 TO 44A/0	
34	125 MVAR B/R - II AT PATNA	27-08-2014	10:00	28-08-2014	17:30	ODB	ER-I	ERECTION OF FIRE FIGHTING SYSTEM	
	220 KV DVC#1 at Durgapur	27-08-2014	09:00	27-08-2014	17:00	ODB	ER-II	Local remote switch implementation under NTAMC and AMP	DVC
	400 KV MALDA-PURNEA-I.	28-08-2014	08:00	28-08-2014	17:00	ODB	ER-II	CT change under ADDCAP.	NLDC
37	220 KV ICT#1 Main Bay DURGAPUR	28-08-2014	09:00	28-08-2014	18:00	ODB	ER-II	Local remote switch implementation under NTAMC and AMP	
38	132 KV KONAR - HAZARIBAGH ROAD D/C	29-08-2014	08:00	30-08-2014	18:00	ODB	ER-I	FOR STRINGING WORK OF 400KV D/C BOKARO-KODERMA BETWEEN LOC NO 51/0 TO 52/0	DVC
39	400 KV BARH - PATNA - III & IV	29-08-2014	08:00	30-08-2014	18:00	ODB	ER-I	POWER LINE CROSSING WORK OF 400 KV BARH - GORAKHPUR LINE	NLDC
40	132 KV KONAR - HAZARIBAGH ROAD D/C	01-09-2014	08:00	02-09-2014	18:00	ODB	ER-I	FOR STRINGING WORK OF 400KV D/C BOKARO-KODERMA BETWEEN LOC NO 62/0 TO 63/0	DVC
41	400 KV KAHALGAON BANKA - II	01-09-2014	06:00	30-09-2014	19:00	ODB	ER-I	FOR OPGW INSTALLATION WORK	NLDC
42	765 KV GAYA - FATEHPUR S/C	01-09-2014	06:00	30-09-2014	19:00	ODB	ER-I	FOR OPGW INSTALLATION WORK	NLDC
43	400 KV Maithon -Durgapur	01-09-2014	09:00	01-09-2014	17:30	ODB	ER-II	Line and Bay AMP	
44	132kV Siliguri-Melli line	01-09-2014	11:00	01-09-2014	15:00	ODB	ER-II	Replacement of Insulator String	SIKKIM
45	220 KV BUS -I at Rourkela	01-09-2014	10:00	01-09-2014	17:00	ODB	ER-II	AMP & CRM of Isolators	OPTCL
46	400KV Durgapur Bidhannagar Line-I	01-09-2014	09:30	01-09-2014	10:00	ODB	ER-II	To isolate Line reactor	WBSETCL
47	50MVAR Line Reactor at durgapur	01-09-2014	09:30	06-09-2014	17:00	ODB	ER-II	Offline Dry out of Line Reactor, Replacement of MOG, Oil leakage arresting work	
48	160 MVA ICT #1 at Baripada	01-09-2014	09:00	01-09-2014	17:00	ODB	ER-II	Installation & commissioning of Remote OTI under NTAMC project	OPTCL
49	A/R KEONJHAR - RENGALI	01-09-2014	09:00	30-09-2014	17:00	ODB	ER-II	OPGW STRINGING WORK	
50	400KV ARMBG-PPSP#1	01-09-2014	10:00	01-09-2014	16:00		WBSETCL	Mnt. Work(O.D.B.)	
51	KHARAGPUR: 80MVAR BUS REACTOR	01-09-2014	07:00	01-09-2014	16:00		WBSETCL	Mnt. Work(O.D.B.)	
52	400 KV Maithon-MPL-II	01-09-2014	09:00	01-09-2014	17:30	ODB	ER-II	Strung bus repair, Y-Ph line CT replacement	MPL
53	220 KV BSF - TENUGHAT S/C	01-09-2014	08:00	02-09-2014	18:00	ODB	ER-I	FOR STRINGING WORK OF 400KV D/C BOKARO-KODERMA BETWEEN LOC NO 58/0 TO 59/0	JHARKHAND/BIHAR
54	400 KV Maithon-Koderma-I LR	02-09-2014	09:00	02-09-2014	17:30	ODB	ER-II	Bushing oil sample collection for DGA as per CTC recommendation.	
	765 KV 3*80 MVAR B/R - I AT NRNC S/S	02-09-2014	08:00	02-09-2014	18:00	ODB	ER-I	FOR TESTING & COMMISSIONING WORK OF AUXILLIARY BUS AND SWITCHING	NLDC
55						11.11.116			INTER 1

56 4	400 KV JSR - ADHUNIK - II	02-09-2014	08:00	02-09-2014	18:00	ODB	ER-I	FOR AMP WORKS	ADHUNIK
	315 MVA ICT#1 at Baripada			02-09-2014	17:00		ER-II	Installation & commissioning of Remote OTI under NTAMC project	OPTCL
	400KV KTPP-KHARAGPUR#1			02-09-2014	15:00			Mnt. Work(O.D.B.)	OTTOL
	400 KV Sundergarh - Raigarh # 1	03-09-2014		03-09-2014	17:00			Insulator replacement at Location No 757	NLDC
	400 KV KAHALGAON - BANKA - II	03-09-2014	09:00	03-09-2014	17:30		NTPC	PM & RELAY TESTING	NLDC
								FOR STRINGING WORK OF 400KV D/C BOKARO-KODERMA BETWEEN LOC NO	
61 1	132 KV BTPS - KONAR S/C LINE OF DVC	03-09-2014	08:00	04-09-2014	18:00	ODB	ER-I	67/0 TO 68/0	DVC
62 3	315MVA ICT-II at Maithon	03-09-2014	09:00	03-09-2014	17:30	ODB	ER-II	LA replacement work & 220KV CT Connector replacement work	DVC
	315 MVA ICT #2 at Baripada	03-09-2014		03-09-2014		-	ER-II	Installation & commissioning of Remote OTI under NTAMC project	OPTCL
	400KV KTPP-KHARAGPUR#2	03-09-2014	07:00	03-09-2014	15:00	-		Mnt. Work(O.D.B.)	OTTOL
	DGP:BUS REACTOR	03-09-2014		03-09-2014	15:00			Mnt. Work(O.D.B.)	
	400 KV BSF - MUZ D/C		08:00	05-09-2014	18:00		ER-I	POWER LINE CROSSING WORK OF 400 KV BARH - GORAKHPUR LINE	NLDC
						-		Jumper tightening works, VD adjustment, Corona ring tightening and spacer	
67 4	400 KV SEL - Raigarh # 2	04-09-2014	09:00	04-09-2014	17:00	ODB	ER-II	tightening works at location Nos 374,426,432,433,434,441,498.	NLDC
68 8	80 MVAR L/R OF BSF - NPRN - I AT BSF	04-09-2014	09:00	04-09-2014	17:00	ODB	ER-I	FOR AMP WORKS	
50 0		04-07-2014	07.00	04-07-2014	17.00	ODD		BAY CONSTRUCTION WORK OF 400 KV PATNA - KISHAGANJ LINE (DURING THE	
69 4	400 KV BUS - II AT PATNA S/S	04-09-2014	10:00	05-09-2014	17:30	ODB		S/D, BOTH THE 125 MVAR B/RS WILL BE OUT AS THE 125 MVAR B/R - I & II ARE	
57 -		04-07-2014	10.00	03-07-2014	17.50	000		CONNECTED THROUGH 400 KV BUS - II ONLY)	
70 1	132kV Siliguri-Kurseong line	04-09-2014	11:00	04-09-2014	15:00	ODB	ER-II	Replacement of Insulator String	WBSETCL
	132 KV Main Bus at Siliguri	04-09-2014		04-09-2014			ER-II	Replacement of CVT	WBSETCL
	400 KV BUS-I at Rourkela	04-09-2014		04-09-2014	17:00			AMP & CRM of Isolators	WDJETCL
	63 MVAR Mendhasal Line 2 Reactor	04-09-2014		04-09-2014			ER-II	Installation & commissioning of Remote OTI under NTAMC project	
	400KV DGP-PPSP#1	04-09-2014	11:00	04-09-2014	16:00	-		Mnt. Work(O.D.B.)	
	KTPP: 315MVA IBT#1	04-09-2014		04-09-2014	16:00			Mnt. Work(O.D.B.)	
	80 MVAR L/R OF BSF - NPRN - II AT BSF	04-09-2014		05-09-2014			ER-I	FOR AMP WORKS	
	60 IVIVAR L/R OF DJF - NPRN - II AT DJF	00-09-2014						FOR TESTING & COMMISSIONING WORK OF AUXILLIARY BUS AND SWITCHING	
77 7	765 KV 3*80 MVAR B/R - II AT NRNC S/S	05-09-2014	08:00	07-09-2014	18:00	ODB	ER-I	SCHEME OF SPARE TRANSFORMER & REACTOR	NLDC
78 1	132 KV D/C SIWAN GOPALGANJ LINE OF BSPTCL	05-09-2014	08:00	06-09-2014	18:00	ODB	ER-I	POWER LINE CROSSING WORK OF 400 KV BARH - GORAKHPUR LINE	BIHAR
	220KV Maithon-Dhanbad-I	05-09-2014	08:00	05-09-2014	17:30		ER-II	Y-PH CVT replacement	DVC
	3 X 16.67 MVAR Keonjhar Line Reactor			05-09-2014	17:00			Installation & commissioning of Remote OTI under NTAMC project	DVC
	400KV DGP-PPSP#2	05-09-2014	11:00	05-09-2014	16:00			Mnt. Work(O.D.B.)	
	KTPP: 315MVA IBT#2	05-09-2014		05-09-2014	16:00			Mit. Work(O.D.B.)	
	400 KV MALDA-PURNEA-II.	06-09-2014	08:00	06-09-2014	17:00			Jumper tightenning.	NLDC
55 4	400 KV IVIALDA-PORIVEA-II.	00-09-2014				-		FOR STRINGING WORK OF 400KV D/C BOKARO-KODERMA BETWEEN LOC NO	
84 1	132 KV D/C BTPS - KONAR - BARHI LINE	06-09-2014	08:00	07-09-2014	18:00	ODB	ER-I	94/0 TO 95/0	DVC
85 2	220KV Maithon-Dhanbad-II	06-09-2014	09:00	06-09-2014	17:30	ODB	ER-II	LA replacement work	DVC
	3 X 16.67 MVAR Keonjhar Line Reactor	06-09-2014	09:00	06-09-2014	17:00		ER-II	Installation & commissioning of Remote OTI under NTAMC project	DVC
	400KV DGP-ARMBG LINE	07-09-2014		07-09-2014	16:00	-		Mnt. Work(O.D.B.)	
-	765 KV 3*80MVAR L/R OF 765KV NRNC-DHARAMJAIGARH AT							FOR TESTING & COMMISSIONING WORK OF AUXILLIARY BUS AND SWITCHING	ł
88	NRNC	08-09-2014	08:00	09-09-2014	18:00	ODB	ER-I	SCHEME OF SPARE TRANSFORMER & REACTOR	NLDC
	315MVA ICT-I at Maithon	08-09-2014	09:00	08-09-2014	17:30	ODB	ER-II	220KV Y& B-Ph Bushing inspection	DVC
	220 KV Main Bus-I at Siliguri	08-09-2014	09:00	08-09-2014	20:00		ER-II	Retrofitting of CVT under ADDCAP	WBSETCL
	220 KV BUS -II at Rourkela	08-09-2014	10:00	08-09-2014	17:00	-	ER-II	AMP & CRM of Isolators	OPTCL
	400KV Bus Reactor at Durgapur	08-09-2014		13-09-2014	17:00		ER-II	Offline Dry out of Line Reactor, Replacement of MOG, Oil leakage arresting work	
93 4	400KV DGP-PARULIA#2	08-09-2014	11:00	08-09-2014	16:00		WBSETCL	Mnt. Work(O.D.B.)	
	400 KV MALDA-FARAKKA-II.	09-09-2014	08:00	09-09-2014	17:00		ER-II	Isolator remote operation.	NLDC
	400KV DGP-PARULIA#1	09-09-2014	11:00	09-09-2014	16:00			Mnt. Work(O.D.B.)	
95 Tz		0 / U / ZUIT							
	400 KV KAHALGAON - BARH - II	10-09-2014	09:00	10-09-2014	17:30		NTPC	PM & RELAY TESTING	NLDC

98	JEERAT: 400KV MB-1	10-09-2014	07:00	10-09-2014	15:00		WBSETCL	Mnt. Work(O.D.B.)	
-	400KV ARMB-KTPP	10-09-2014	07:00	10-09-2014	15:00			Mnt. Work(O.D.B.)	
	400 KV BARH - PATNA - III	11-09-2014		11-09-2014	17:30		NTPC	PM & RELAY TESTING	NLDC
	132 KV Rajkhaswa - Kenduposi S/C Line (JSEB)	11-09-2014		11-09-2014	15:00	ODB	ER-I	For 132 KV line crossing of LILO line Ckt-2 at location 9/0 & 10/0	JHARKHAND
	400 KV BUS-II at Rourkela	11-09-2014	10:00	11-09-2014		ODB	ER-II	AMP & CRM of Isolators	STIMULIAND
	400KV ARMB-PPSP#2	11-09-2014		11-09-2014	16:00	000		Mnt. Work(O.D.B.)	
	DGP: 400KV TR. BUS	11-09-2014		11-09-2014	15:00			Mnt. Work(O.D.B.)	
	400 KV BARH - PATNA - IV	12-09-2014		12-09-2014	17:30			PM & RELAY TESTING	NLDC
	220 KV BSF - TENUGHAT S/C	12-09-2014		13-09-2014	18:00	ODB	ER-I	FOR STRINGING WORK OF 400KV D/C BOKARO-KODERMA BETWEEN LOC NO 76/0 TO 77/0	JHARKHAND/BIHAR
107	765 KV 3*500MVA ICT-I AT NRNC	12-09-2014	08:00	15-09-2014	18:00	ODB	ER-I	FOR TESTING & COMMISSIONING WORK OF AUXILLIARY BUS AND SWITCHING SCHEME OF SPARE TRANSFORMER & REACTOR	NLDC
108	220 KV Main Bus-II at siliguri	12-09-2014	08:00	12-09-2014	20:00	ODB	ER-II	Retrofitting of CVT under ADDCAP	WBSETCL
	220 KV MALDA-DALKHOLA-I.	12-09-2014		12-09-2014	18:00	ODB	ER-II	CT change under ADDCAP.	
	400KV JEERAT-BKTPP	14-09-2014		14-09-2014	15:00	-		Mnt. Work(O.D.B.)	
	132 KV KISHANGANJ - FORBISGANJ LINE OF BSPTCL	15-09-2014		16-09-2014	18:00	ODB	ER-I	POWERLINE CROSSING OF 800 KV HVDC LINE	BIHAR
	400 KV JSR - RRKL - I	15-09-2014	09:00	15-09-2014	17:00	ODB	ER-I	To make LILO charging up to 400 KV BUS - I at New S/S Chaibasa.	
113	400 KV Maithon-Kahalgaon-I with LR	15-09-2014	09:00	15-09-2014	17:30	ODB	ER-II	PRD inspection/leakge arrest/PRD replacement of LR,Line CVT replacement	NLDC
114	125 MVAR B/R - I AT PATNA	16-09-2014	10:00	16-09-2014	16:00	ODB	ER-I	ERECTION OF FIRE FIGHTING SYSTEM	
	220 KV MALDA-DALKHOLA-II.	16-09-2014		16-09-2014	18:00	ODB	ER-II	CT change under ADDCAP.	
	400kV Rengali-Indravati Line	16-09-2014		17-09-2014	18:00	OCB	ER-II	765KV Angul-Jhansugoda Line-I part-I	NLDC
	JEERAT: 400KV MB-2	16-09-2014		16-09-2014	15:00			Mnt. Work(O.D.B.)	
	ARMBG: 50MVAR BUS REACTOR	16-09-2014	07:00	16-09-2014	15:00			Mnt. Work(O.D.B.)	
119	315MVA ICT-I at Rourkela	17-09-2014	09:00	17-09-2014	17:00	ODB	ER-II	To attend oil leakage in OLTC and rectification of driving mechanism problem by M/S BHEL	OPTCL
120	440/220 KV ICT & 220 FARAKKA - LALMATIA	18-09-2014	09:00	18-09-2014	17:30		NTPC	PM & RELAY TESTING	JHARKHAND
	220KV Maithon-Kalyaneswari-I	18-09-2014		18-09-2014	17:30	ODB	ER-II	Line isolator remote operation checking	DVC
	765 KV 3*500MVA ICT-II AT NRNC	19-09-2014		22-09-2014	18:00	ODB	ER-I	FOR TESTING & COMMISSIONING WORK OF AUXILLIARY BUS AND SWITCHING SCHEME OF SPARE TRANSFORMER & REACTOR	NLDC
123	400 KV Bus coupler & Bus-I at MALDA	19-09-2014	08:00	19-09-2014	18:00	ODB	ER-II	CT change under ADDCAP & Isolator maintenance.	WBSETCL
	315MVA ICT-II at Rourkela	19-09-2014		19-09-2014		ODB	ER-II		OPTCL
	220 KV PRN - SINGHESWAR (MADHEPURA) LINE OF BSPTCL	20-09-2014		21-09-2014	18:00	ODB	ER-I	POWERLINE CROSSING OF 800 KV HVDC LINE	BIHAR
	400KV JEERAT-KTPP	21-09-2014		21-09-2014	12:00			Mnt. Work(O.D.B.)	
-	220KV Maithon-Kalyaneswari-II	22-09-2014		22-09-2014		ODB	ER-II	Replacement of CVT due to humming sound	DVC
	400Kv Angul Bolangir	23-09-2014		24-09-2014	18:00	OCB	ER-II	765KV Angul-Jhansugoda Line-I part-I	NLDC
	132 KV KAHALGAON - SABOUR	24-09-2014		24-09-2014	17:30		NTPC	PM & RELAY TESTING	BIHAR
130	315 MVA ICT - I AT PSL S/S	24-09-2014		24-09-2014	17:00	ODB	ER-I	FOR AMP WORKS	BIHAR
	400 KV B/R - II AT FARAKKA	25-09-2014		25-09-2014	17:30		NTPC	PM & RELAY TESTING	NLDC
	315 MVA ICT - II AT PSL S/S	25-09-2014		25-09-2014		ODB	ER-I	FOR AMP WORKS	BIHAR
	400KV Maithon -Durgapur-II	25-09-2014		25-09-2014		ODB	ER-II	Line and Bay AMP	
134	315 MVA ICT-V & 400 KV Bus-II at MALDA	26-09-2014		26-09-2014	18:00	ODB	ER-II	Isolator remote operation.	WBSETCL
135	132 KV SONEBARSA - SINGHESWAR (MADHEPURA) LINE OF BSPTCL	28-09-2014	08:00	28-09-2014	18:00	ODB	ER-I	POWERLINE CROSSING OF 800 KV HVDC LINE	BIHAR

Annexure-C.2

Anticipated Power Supply Position for the month of Sep-14

		P A R T I C U LA R S	PEAK DEMAND	ENERGY		
5	SL.NO		MW	MU		
1		BIHAR				
	i)	NET MAX DEMAND	2700	1291		
	ii)	NET POWER AVAILABILITY- Own Source	100	51		
		- Central Sector	1400	1153		
	iii)	SURPLUS(+)/DEFICIT(-)	-1200	-87		
2		JHARKHAND	1000	100		
	i)	NET MAX DEMAND	1080	680		
	ii)	NET POWER AVAILABILITY- Own Source	500	230		
		- Central Sector	646	392		
	iii)	SURPLUS(+)/DEFICIT(-)	67	-57		
3		DVC				
	i)	NET MAX DEMAND (OWN)	2690	1615		
	ii)	NET POWER AVAILABILITY- Own Source	4569	2863		
	,	- Central Sector	488	342		
		Long term Bi-lateral (Export)	2069	1490		
	iii)	SURPLUS(+)/DEFICIT(-)	298	100		
	,		270	100		
4		ORISSA				
	i)	NET MAX DEMAND	3700	2268		
	ii)	NET POWER AVAILABILITY- Own Source	3011	1840		
		- Central Sector	1008	649		
	iii)	SURPLUS(+)/DEFICIT(-)	319	220		
5		WEST BENGAL				
5.1		WBSEDCL				
ļ	i)	NET MAX DEMAND (OWN)	5380	3011		
	ii)	CESC's DRAWAL	750	227		
	iii)	TOTAL WBSEDCL'S DEMAND	6130	3238		
	iv)	NET POWER AVAILABILITY- Own Source	3836	1786		
	,	- Import from DPL	90	44		
		- Central Sector	2064	1412		
	v)	SURPLUS(+)/DEFICIT(-)	-140	4		
	,					
5.2		DPL				
	i)	NET MAX DEMAND	310	215		
	ii)	NET POWER AVAILABILITY	400	259		
	iii)	SURPLUS(+)/DEFICIT(-)	90	44		
	,		,,,			
5.3		CESC				
	i)	NET MAX DEMAND	1850	959		
	ii)	NET POWER AVAILABILITY - OWN SOURCE	1100	703		
	,	FROM WBSEDCL	750	227		
	iii)	TOTAL AVAILABILITY	1850	930		
	iv)	SURPLUS(+)/DEFICIT(-)	0	-29		
	-					
6		WEST BENGAL (WBSEDCL+DPL+CESC)				
ļ		(excluding DVC's supply to WBSEDCL's command area)				
	:\		75.40	4105		
ļ	i)		7540	4185		
l	ii)	NET POWER AVAILABILITY- Own Source	5336	2748		
	iii)	- Central Sector SURPLUS(+)/DEFICIT(-)	2064 -140	1412 -25		
)		- 140	-23		
7		SIKKIM				
	i)	NET MAX DEMAND	95	46		
	ii)	NET POWER AVAILABILITY- Own Source	16	5		
		- Central Sector	130	84		
	iii)	SURPLUS(+)/DEFICIT(-)	51	43		
	,					
8		EASTERN REGION				
ļ		At 1.03 AS DIVERSITY FACTOR		1		
	i)	NET MAX DEMAND	17286	10085		
		Long term Bi-lateral	2069	1490		
	ii)	NET TOTAL POWER AVAILABILITY OF ER	16699	10279		
		(INCLUDING C/S ALLOCATION)				
	:::>	PEAK SURPLUS(+)/DEFICIT(-) OF ER	-587	194		
	iii)	(ii)-(i)				