

Eastern Regional Power Committee
Kolkata-33

Salient Decisions taken in 95th OCC meeting held on 21.03.13

1. Powergrid informed that the 400/220 kV Rangpo pooling S/S will be ready by 15th April, 2014. In view of the delayed commissioning of Rangpo S/s, OCC advised Chuzachen to explore the possibility of implementation of the revised SPS and to interact with ERLDC for execution.
2. It was informed that, SRLDC has prepared the draft operating procedure for re-commissioning of said line which has already been sent to both OPTCL and APTRANSCO for their consent/ comment. OPTCL was requested to send their comments/views, if any, at the earliest. OCC advised OPTCL to take necessary actions at their end for Re-commissioning of the line at the earliest.
3. Powergrid informed that, estimate has been prepared for purchase of two sets of 300 AH battery banks along with battery charger and same will be put up to JSEB by 25th Mar, 2014. Further, Powergrid informed that their engineers would visit Farakka, Lalmatia and Dumka S/s by 1st week of April, 2014 for checking healthiness of PLCC panels and the installation of UFR scheme will also be completed during the visit.
4. OCC advised Powergrid to replace/change three (3) SEMs namely both end meters of 400KV Meramundli-GMR line and GMR end meter of 400KV Talcher –GMR line by 31st March, 2014 which are required for calculation of GMR injection in view of scheduling of GMR by ERLDC.
5. OCC agreed to pre-pone the date of Scheduling of GMR by ERLDC from 7th April as earlier settled in the special meeting of 14.3.14 to 31st March, 2014 provided all the formalities as decided in the special meeting of 14.03.14 were complied.

Status of decisions taken in previous OCC meetings, not yet resolved

Sl. No.	Particulars	Present Status
1	OCC requested all the constituents to send the status of power supply to the villages including those which are electrified under RGGVY scheme in the prescribed format on regular basis.	MS I/C requested all the constituents to send the data of previous month on regular basis in the enclosed format positively by 10 th of the following month. All constituents agreed.
2	OCC decided to implement relief through operation of UFR in four stages with total load relief of 3320 MW as per CEA direction.	WBSETCL, DVC, BSPHCL and CESC implemented. OPTCL implemented except 2 s/s which will be installed by March, 2014. JSEB-order for UFR installation at five new sub-stations has been placed.
3	a) Testing and calibration of special energy meter in Eastern Region - Odisha informed that, some of their meters were not calibrated and Odisha representative were not involved in calibration process. b) Automatic Meter Reading (AMR)	ERLDC clarified that, as per the regulation meters are to be calibrated once in 5 years and as per this criterion 305 meters out of 650 were due for calibration. OCC advised Odisha to give the list of meters where the Odisha representatives were not involved during calibration. Powergrid informed that TCS engineers were not being allowed to work in few substations. OCC requested all the constituents to cooperate with TCS Engineers. In the meeting, Powergrid circulated the work schedule to all the constituents. Constituents agreed to cooperate with TCS Engineers.
4	Power Supply to Railway TSS from 132 kV Deogarh (JSEB) S/S	ERLDC presented the study result during the meeting. From the study result it was found that if bus coupler at Deoghar is closed some of the lines are getting overloaded during some contingencies and it is not fulfilling the n-1 criteria. After detailed deliberations OCC advised to review the relay settings of the lines which were being affected/ loaded and some load disconnection of non-essential loads may also be explored. After the review of protection schemes the bus coupler at Deoghar may be closed on trail basis to figure out the real-time situation.
5	Implementation of recommendations of various ERPC teams on JSEB protection coordination	CERC vide ROP dated 25.02.2014 in Petition No. 130/MP/2013 directed ERPC/ERLDC to submit the status of implementation of the protection system by JSEB, by 10.04.2014. JSEB representative was not available for discussion. OCC requested ERPC secretariat to take up the issue with JSEB.
6	Implementation of Grid Security Expert System (GSES)	It was informed that CERC vide order dated 20.02.2014 in Petition No. 265/MP/2012 expressed that the performance of grid in regard to parameters envisaged to be controlled under GSES scheme should be monitored for six months before considering the scheme for implementation of GSES. The petitioner was

		directed to file performance of grid after six months from the date of issue of the order indicating necessity of GSES, even after implementation of ADMS, SPS, AUFRS. Members noted.
7	Status of Third Party Protection Audit	<p>CERC vide order dated 21.02.2014 in Petition No. 220/MP/2012 has directed CTU, STUs and Generating Companies /Stations of all the regions to ensure rectification of defects in the protection system as pointed out in the protection audit within the time frame specified in paragraph 27 of the said order and submit the latest status of corrective actions to Member Secretary of the respective Regional Power Committee within one month of issue of this order.</p> <p>All RPCs are directed to furnish consolidated report with their observations/ recommendations to the Commission within 2 months of issue of this order.</p> <p>Thereafter, CTU and SLDCs shall submit quarterly report to the respective RPC latest by 15th day of the first month of next quarter and RPCs shall submit the report to the Commission latest by 15th day of the second month of next quarter.</p> <p>Members noted for compliance.</p>
8	Pollution mapping for Eastern Region	Minutes of the special meeting on Pollution Mapping held on 14.03.2014 was circulated in the meeting and OCC requested all the constituents to cooperate for successful implementation. Constituents agreed.

Agenda for 95th OCC Meeting to be held on 21st March, 2014 at ERPC, Kolkata

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

Item no. A.1: Confirmation of minutes of 94th OCC meeting of ERPC held on 21.02.14

The minutes were circulated vide letter dated 03.03.14 to all the constituents and also uploaded in ERPC website. No comments were received till date.

Members may confirm the minutes.

Deliberation in the meeting

Members confirmed the minutes of 94th OCC meeting.

PART B

Item no. B.1: Collection of data regarding power supply in RGGVY villages

Govt. of India launched Rajiv Gandhi Grameen Vidyutikaran Yojna (RGGVY) to provide access to electricity to all the rural households in the country. As per the scheme states have to provide minimum 6-8 hours power supply in the villages.

At higher level meeting taken by Secretary, MoP, it has been decided that the monthly status on the power supply to all the villages including villages electrified under RGGVY scheme may be collected by CEA through RPCs from the states of their region.

Accordingly, all are requested to furnish monthly data starting from December, 2013/January, 2014 in the circulated format to ERPC vide mail **mserpc-power@nic.in** or to CEA vide mail **cegmcea@yahoo.com** on regular basis.

In 94th OCC, MS I/C informed that MoP is now monitoring the status of power supply to the villages including those which are electrified under RGGVY scheme. OCC requested all the constituents to send the above data in the prescribed format on regular basis. All constituents agreed.

Members may note and provide the requisite information on monthly basis.

Deliberation in the meeting

*MS I/C requested all the constituents to send the data of previous month on regular basis in the enclosed format (given at **Annexure-B.1**) positively by 10th of the following month. All constituents agreed.*

Item no. B.2: Charging of 400/220/132 kV RANGPO substation

Construction of 400/220/132 kV GIS Rangpo Substation is in progress and likely to be charged by Mar'14. Further, for energization of the substation Powergrid has planned for LILO of 132 kV Chujachen-Melli at Rangpo substation in the month of Feb'14. Two Nos. 132 kV bays for making LILO of 132 kV Chujachen-Melli and Chujachen-Gangtok at Rangpo substation which are in the scope of Sikkim Govt. are yet to be constructed.

Further, Interim arrangement shall be made utilizing 132kV Melli bay of POWERGRID to terminate Chuzachen at Rangpo substation.

In 94th OCC, Powergrid informed that 132 kV bays of Sikkim at Rangpo S/s are not yet ready. However, temporarily 132 kV Melli bay of Powergrid can be used to terminate 132 kV Chuzachen-Melli at Rangpo substation and 132 kV Chuzachen – Gangtok will be directly connected to Gangtok S/s. Sikkim agreed for the above interim arrangement till Sikkim bays commissioned.

Powergrid informed that the 400/220 kV Rangpo pooling S/S will be ready by 31st March, 2014.

Powergrid and Chuzachen may update the status.

Deliberation in the meeting

Powergrid informed that the 400/220 kV Rangpo pooling S/S will be ready by 15th April, 2014. In view of the delayed commissioning of Rangpo S/s, OCC advised Chuzachen to explore the possibility of implementation of the revised SPS and to interact with ERLDC for execution.

132 KV Chuzachen-Gangtok LILO at Rangpo S/S- Powergrid informed that the termination work will be completed on 24-25th March, 2014.

Item no. B.3: Re-commissioning of 220kV Balimela-UpperSileru

In 26th TCC/ERPC meeting, Odisha confirmed that the line has already been charged from Balimela end and the Odisha portion is under charged conditions.

TCC agreed for re-commissioning of the line and referred the issue to ERPC for final concurrence.

Since a portion of the line is under SRPC jurisdiction TCC also advised secretariat to refer the issue to SRPC for further necessary action at their end after getting final approval from ERPC.

ERPC Secretariat vide letter dated 13.02.2014 and 13.03.2014 referred SRPC for re-commissioning of the said line.

Subsequently, in reply to above letters SRPC has communicated vide letter dated 17.03.2014 that the matter was discussed in the SRPC meeting held on 15th March, 2014. APTRANSCO has agreed in principle for trial operation for re-commissioning of the line and further modalities are being worked out in this regard.

Members may note.

Deliberation in the meeting

It was informed that, SRLDC has prepared the draft operating procedure for re-commissioning of said line which has already been sent to both OPTCL and APTRANSCO for their consent/comment. OPTCL was requested to send their comments/views, if any, at the earliest.

During deliberation OPTCL representative proposed to utilize the corridor for export of its surplus power on priority basis. OCC advised OPTCL to place their proposal in detail so that the same could be discussed in proper forum of ERPC under guidelines of CERC Regulations. OPTCL agreed.

Pending these OCC advised OPTCL to take necessary actions at their end for Re-commissioning of the line at the earliest.

Item no. B.4: Review of load relief under various stages of UFR

NPC in its 2nd meeting held on 16.07.2013 decided that total load relief based on UFR load shedding of ER is 3320 MW. Accordingly, OCC divided the total load quantum as per present proportionate for ER constituents as given below:

Control Area	Stage –I (49.2 Hz) (MW)	Stage –II (49.0 Hz) (MW)	Stage–III (48.8Hz) (MW)	Stage–IV (48.6Hz) (MW)	Total Relief by Control Area
BSEB	98	99	99	101	397
JSEB	61	62	61	62	246
DVC	134	135.5	136	137	542.5
Odisha	181.5	183.5	184	186	735
WB & CESC	345.5	350	350	354	1399.5
Total	820	830	830	840	3320

It was decided to implement the revised scheme within a month. The latest status updated in last OCC is follows:

- **DVC, WBSETCL, Bihar & CESC:** Implemented
- **Odisha:** Implemented except 3 Sub-stations namely Kesinga, Junagarh & Kalarangi. UFRs have been ordered for those Sub-stations and the same will be installed by February, 2014.
- **JSEB:** JSEB informed that, load shedding through UFR scheme has been implemented except 64 MW in different stages. This 64 MW load at five new substations have been replaced with existing Dumka and Sahebgunj loads in view of Farakka islanding scheme. JSEB informed that the order for UFR installation at five new sub-stations has been placed and expected to be completed by February, 2014.

OPTCL and JSEB may update the latest status.

Deliberation in the meeting

Members updated the latest status as follows:

- **DVC, WBSETCL, Bihar & CESC:** Implemented
- **Odisha:** installed at Kalarangi S/s & for rest two Sub-stations namely Kesinga & Junagarh UFRs have been ordered and the same will be installed by Mar, 2014.
- **JSEB:** JSEB representative was not present in the meeting.

Item no. B.5: 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:

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

In 94th OCC OPTCL informed the status as follows:

- LILO of OPTCL's Burla-Bolangir line at Bolangir (PG) —Work is in progress and it would be completed by June, 2014
- Bolangir(PG) –Kesinga S/C line —Tendering work is in progress and it would take one year.

OPTCL may update the status.

Deliberation in the meeting

OPTCL informed that they are maintaining the above schedule.

Item no. B.6: Consent for changing of all 160 KN insulators in 400 KV D/C (Quad) Siliguri-Purnea Line & Purnea-Saharsha section of 400 KV Purnea-Muzaffarpur Line -- Powerlinks

There were frequent failure of 160 KN insulators in our 400 KV D/C (Quad) Siliguri-Purnea Line and Purnea-Saharsha section of 400 KV Purnea-Muzaffarpur Line. This in turn had made the line unreliable and the entire grid vulnerable. These insulators were supplied by M/S Birla –NGK (Jayashree) during construction of the line in 2005-06. Since then trouble free operation continued upto 2010. Then 2011 onwards, failure had started and it reached alarming stage in December'12 when there were 12 failures in one single month. These insulators were tested at CPRI , Bangalore after removing the same from line. At CPRI, 20% of sample tested had failed. PID testing of these insulators were also carried out and result of PID test was alarming as it shows deviation in most of the strings. From the pattern of failure, it had been observed that only those 160 KN insulators are failing which were installed in between tower no.100 to 300 from Siliguri end. Subsequently, all 160 KN insulators were changed in all tension towers in between loc.100 to 300 fo Siliguri-Purnea Line in March'13 and April'13. As a result of this preventive action, the failure rate had gone down to great extent and there were only five failures during the period May'13 to October'13.

To analyse the root cause of the failure, the supplier M/S Birla-NGK was consulted and samples were tested extensively at the manufacturer's laboratory. During testing, it had been observed that those samples having hair line cracks on them had failed to pass the electrical requirements. In other words, it can be said that hairline cracks are the root cause of the failure of 160 KN insulators. The insulation resistance of these insulators is going down as moisture and other impurities are entering the cracks leading to flash over and failure of the string. This finding is supported by the fact that in all the cases of failure, hairline cracks were observed on the discs.

From above facts, it can be concluded that the present decrease in rate of failure is temporary and it is bound to increase with the passage of time as hairline cracks may develop at any point of time. This will seriously affect the reliability of the line and stability of the entire grid as a whole. As a preventive measure, it is planned to change all remaining 160 KN insulators in 400 KV D/C (Quad) Siliguri-Purnea Line and Purnea-Saharsha section of 400 KV Purnea-Muzaffarpur Line. This is necessary for the stability of the system and these two lines are very important part of the grid particularly of East-North Corridor. Total financial implication will be around Rs. 13 crores considering polymer insulators will be used. We are planning to submit a petition to CERC for capitalization of the expenditure.

In 92nd OCC, members opined that hair line cracks on insulators may be either due to design defects or due to normal adverse effects of operation. So OCC felt that some authority like CPRI must certify whether the present case is within the purview of design defects or because of other reasons. Powerlink was requested to place these details in next OCC so that decision on cost sharing by eastern region constituents, if required in the existing case, could be decided.

However as replacement of insulators is extremely necessary for reliability of the line OCC advised Powerlinks to replace the damaged/defective insulators at the earliest.

Subsequently, Powerlinks informed replacement of the insulators is in progress and the issue of identification of root cause of the insulator failures has been taken up with CPRI.

Powerlinks vide letter dated 11.03.2014 informed that in line with above they have planned to replace 160 KN insulators in 84 nos towers of 400 KV(Quad) Purnea-Muzaffarpur Line between Purnea and Saharsha by polymer insulators in the month of April'2014.

In view of above, a shutdown of 400 KV (Quad) Purnea-Muzaffarpur Circuit-I from 09:30 hrs to 17:00 hrs from 10.4.2014 to 30.4.2014 on daily basis is proposed for replacement of 160 KN insulators in 84 nos. angle towers in between Purnea and Saharsha.

Members may decide.

Deliberation in the meeting

OCC requested ERLDC to take care of the proposed shutdown for replacement of 160 KN insulators.

Issue of identification of root cause of the insulator failures, was not deliberated in the meeting as Powerlinks representative did not attend the meeting.

Item no. B.7: LILO of Talcher-Meramundali line-I at GMR

As per standing committee decision, LILO of Talcher-Meramundali line-II at Angul Pooling station was allowed, which shall be disconnected when Angul and Dhenakanal pooling stations at 765 kV were developed. Otherwise, it would cause increased short circuit level of the grid.

However, due to early commissioning of GMR project, LILO of Talcher-Meramundali line-I was done at GMR during May, 2012 only for start-up power and evacuation of power from 1st unit of GMR. (i.e. LILO to be withdrawn as and when 2nd unit is commissioned). The issue is discussed in 14th ERPC meeting and it was agreed as an interim arrangement and generating stations shall have to bring its own ATS before the commissioning of 2nd Unit.

Till date Talcher-Meramundali line-I is not restored and causing constraints in power evacuation when Talcher-Meramundali line-I trips at downstream of GMR. This causes a backflow power into TSTPS switchyard.

Members may discuss and decide further course of action.

Deliberation in the meeting

GMR informed that, erection of 79 towers out of 94 has been completed and stringing work is also in progress. The line will be brought into service tentatively by May, 2014 and LILO will be withdrawn tentatively by June, 2014.

On query GMR informed that the Unit #3 of GMR is expected to be declared commercially by March, 2014.

Item no. B.8: New Islanding Schemes in Eastern Region

B.8.1. FSTPS Islanding Scheme, NTPC

In 93rd OCC, members informed the islanding scheme would be implemented by March, 2014. The latest status on procurement & installation of equipments is as follows:

Requirement	Where Required	Action	Latest status
PLCC - 4 Panels	<ul style="list-style-type: none"> 220 kV Lalmatia – 1 220 kV Farakka – 1 132 kV Dumka – 1 132 kV Lalmatia – 1 	<ul style="list-style-type: none"> JSEB will shift 3 panels from Sahebgunj/Pakur to 132 kV Lalmatia S/s NTPC will take care of shifting 2 panels from 132 kV Lalmatia S/s to 220 kV Lalmatia and Farakka S/s. JSEB will shift one panel from Sahebgunj/Pakur to 132 kV Dumka S/s Installation of PLCC panels at 220 kV 	<ul style="list-style-type: none"> JSEB had already shifted 3 nos BPL make PLCC panels to 132KV Lalmatia S/S NTPC to take care of two nos PLCC panels stocked at Lalmatia 132 KV S/S of JSEB for onward shifting of

		Lalmatia and Farakka S/s will be done by NTPC • Installation of PLCC panels at 132 kV Lalmatia and Dumka S/s will be done by JSEB • Commissioning of all the four panels will be done by Powergrid.	the same to 220 KV Lalmatia & Farakka S/S
2 trip relays (220 V) having at least 03 nos NO contacts	• 132 kV Lalmatia – 1 relay • 132 kV Dumka – 1 relay	• JSEB will provide 2 trip relays. • Commissioning will be done by Powergrid.	• Trip Relay available at 132 KV Lalmatia S/S is with 3nos “NO” contacts.
4 wave traps	• 132 kV Lalmatia – 2 • 132 kV Dumka – 2	• JSEB will provide four wave traps. • JSEB will do the installation and erection • Commissioning will be done by Powergrid.	• JSEB confirmed that wave traps are available with them
2 LMUs	• 132 kV Lalmatia – 1 • 132 kV Dumka – 1	• JSEB will provide two LMUs. • JSEB will do the installation and erection • Commissioning will be done by Powergrid.	• JSEB confirmed that LMUs are available with them
4 UFR relays	• 132 kV Lalmatia – 2 • 132 kV Dumka – 2	• JSEB will provide and erect. • Commissioning will be done by Powergrid.	• JSEB confirmed that UFRs are available with them
2 nos 48 V Battery bank with charger	• 132 kV Lalmatia – 1 • 132 kV Dumka – 1	• Powergrid will arrange 300 Ah battery bank along with battery chargers at both stations.	
Coaxial Cable - As required at site	• 132 kV Lalmatia • 132 kV Dumka	• JSEB will provide and laying/cabling.	

In 94th OCC, Powergrid was advised to procure two sets of 300 AH battery banks along with battery charger for Dumka and Lalmatia S/s.

OCC advised Powergrid to visit the Lalmatia and Dumka S/s for checking the PLCC panels and give a status report to secretariat. OCC also requested PGCIL to complete the UFR scheme by 31st March, 2014.

Powergrid vide letter dated 10.03.14 informed that they were unable to depute their team for visit to Lalmatia and Dumka S/s during March, 2014. They will depute their team on 2-3rd April, 2014 and 4-5th April, 2014 to Dumka and Lalmatia S/s respectively for checking the PLCC panels.

Powergrid, JSEB and NTPC may update the status on islanding scheme of FSTPP, NTPC.

Deliberation in the meeting

Powergrid informed that, estimate has been prepared for purchase of two sets of 300 AH battery banks along with battery charger and same will be put up to JSEB by 25th Mar, 2014. Further, Powergrid informed that their engineers would visit Farakka, Lalmatia and Dumka S/s by 1st week of April, 2014 for checking healthiness of PLCC panels and the installation of UFR scheme will also be completed during the visit.

B.8.2. Chandrapura TPS Islanding Scheme, DVC

In 26th TCC/ERPC meeting, DVC expressed that because of some logistics problems the implementation got delayed but assured house that utmost care is now being taken at its highest authority level so that the scheme could be put in operation by April, 2014.

DVC may update the status.

Deliberation in the meeting

DVC informed that the order for implementation of scheme will be placed by April, 2014.

B.8.3. BkTPS Islanding Scheme, WBPDC

In 94th OCC, WBPDC informed that all the work order will be placed by April, 2014 the scheme will be completed by October, 2014.

WBPDC may update the status.

Deliberation in the meeting

WBPDC is reported that sincere efforts are there for maintaining the Schedule.

B.8.4. Tata Power Islanding Scheme, Haldia

In 94th OCC, WBSETCL informed that part order has been placed and the scheme will be completed by March, 2014.

WBSETCL may update the status.

Deliberation in the meeting

WBSETCL informed that tendering has been completed and the material will be available in Mar, 2014. The installation will be completed by May, 2014.

On all the above schemes 26th TCC/ERPC took serious note on delayed implementation and advised concerned implementers to complete the needful so that all the aforementioned schemes could come out at the earliest without further delay.

Members may note.

Deliberation in the meeting

Members noted.

Item no. B.9: (Item No. B1 of 84th OCC meeting)

In previous OCC meetings, Powergrid updated the latest status as given below:

a) Testing and calibration of special energy meter

- Total special energy meters in Eastern Region: 307
- Testing and calibration Completed: 307

In 94th OCC, Powergrid informed that the above work has been completed.

During visit to Odisha by ERPC team it was informed that many SEMs installed at GRIDCO control area (SEMs at GMR etc.) were not tested and calibrated.

Powergrid may update.

Deliberation in the meeting

Odisha informed that, some of their meters were not calibrated and Odisha representative were not involved in calibration process.

ERLDC clarified that, as per the regulation meters are to be calibrated once in 5 years and as per this criterion 305 meters out of 650 were due for calibration. OCC advised Odisha to give the list of meters where the Odisha representatives were not involved during calibration.

Powergrid informed that calibration of SEMs was completed as per the list provided by ERLDC and they have calibrated the meters in presence of State representatives.

During visit to Odisha by ERPC team as per the decision of last OCC, it was found that there was time drift in GMR end meter of GMR-Meramundali line. Odisha representatives also informed that the particular meters were showing export of power for some time blocks even when the GMR generation is zero. ERLDC also informed that both GMR as well as Meramundali end meters of GMR-Meramundali line have a significant (approx 3 & 15 min.) time drifts.

Therefore, OCC advised Powergrid to replace/change three (3) SEMs namely both end meters of 400KV Meramundli-GMR line and GMR end meter of 400KV Talcher –GMR line by 31st March, 2014 which required for calculation of GMR injection in view of scheduling of GMR by ERLDC.

b) Automatic Meter Reading (AMR)

- Total stations in Eastern Region: 98
- Survey Completed: 98
- DCU supply started and will be completed by November, 2013.

In 92nd OCC Powergrid informed that, DCU installation at Subhashgram would be completed within 2 weeks. DCU installation in ER would be completed by 31st March, 2014.

Chuzachen requested to include their station in AMR installation. Powergrid agreed to look into it.

In 93rd OCC Powergrid informed that, DCUs at Subhashgram and Durgapur have been installed and tested. DCU will be installed at Kolkata soon and data will be reported.

Powergrid agreed to install AMR at Chuzachen.

In 94th OCC, Powergrid informed that the installation work has been completed.

Further, Powergrid informed that the award has been placed on M/s TCS for implementation of AMR project. M/s TCS is now going to start DCU installation and cabling works at the substations during the period as part of AMR implementation works.

For AMR implementation works at sites, 220 V DC voltage is required and the same is to be provided. M/s TCS is encountering the problems during visit to the state utilities premises for implementation of AMR project. Hence, it is requested to nominate the nodal officers by each utility to extend help and co-operation to M/s TCS Engineers deputed for AMR implementation works.

Powergrid may update.

Deliberation in the meeting

Powergrid informed that TCS engineers were not being allowed to work in few substations. OCC requested all the constituents to cooperate with TCS Engineers.

Constituents informed that, they were not informed regarding the schedule of visit to their substations hence they are unable to convey the message to the substation representative.

In the meeting, Powergrid circulated the work schedule to all the constituents. Constituents agreed to cooperate with TCS Engineers.

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

B.10.1. Power Supply to Railway TSS from 132 kV Deogarh (JSEB) S/S

In last OCC, ERLDC informed that some data has been received from JSEB and they are analyzing it. OCC requested ERLDC to present the status in next OCC.

ERLDC may present the report.

Deliberation in the meeting

ERLDC presented the study result during the meeting. From the study result it was found that if bus coupler at Deoghar is closed some of the lines are getting overloaded during some contingencies and it is not fulfilling the n-1 criteria.

After detailed deliberations OCC advised to review the relay settings of the lines which were being affected/ loaded and some load disconnection of non-essential loads may also be explored. After the review of protection schemes the bus coupler at Deoghar may be closed on trial basis to figure out the real-time situation.

Further, OCC advised ERLDC/ERPC Secretariat to interact with system study group of CTU to explore the possibility of connecting these Sub-stations with nearby up-coming switching Station by constructing new lines in the nearby areas to relieve the loading in critical lines which are being overloaded.

B.10.2. Replacing/repairing of defective PLCC equipment at SgTPP end of 400 kV SgTPP-Farakka line

In 94th OCC, Powergrid informed that the work will be completed by April, 2014.

Powergrid and WBPDCCL may update the status.

Deliberation in the meeting

Powergrid informed that the work will be completed by May, 2014.

B.10.3. Restoration of 220 kV Meramundali - TSTPP -I

In last OCC OPTCL informed that, the line will be charged soon after rectification of breaker problem at Meramundali end, tentatively by 31st March, 2014.

OPTCL may update.

Deliberation in the meeting

OPTCL informed the same status.

B.10.4. The following line/Bus reactors are under presently under outage:

In last OCC, Members updated the status as follows:

- a) 80MVAR Line reactor of 400kV Meramundali-Anugul at Meramundali: Powergrid informed that work is in progress and it will be rectified by March, 2014.
- b) 50MVAR Line reactor of 400kV Rourkella-TSTPP-I at TSTPP: NTPC informed that it will be charged on 24th February, 2014.
- c) 63MVAR Line reactor of 400kV Baripada-Mendhasal-I at Mendhasal: Powergrid informed that it will be in service by March, 2014.

Members may update.

Deliberation in the meeting

Powergrid updated the latest status as follows:

- a) *80MVAR Line reactor of 400kV Meramundali-Anugul at Meramundali: Powergrid informed that work is in progress and it will be rectified by March, 2014.*
- b) *50MVAR Line reactor of 400kV Rourkella-TSTPP-I at TSTPP: NTPC informed that it was charged but tripped on backup impedance protection. The issue has been taken up with BHEL.*
- c) *63MVAR Line reactor of 400kV Baripada-Mendhasal-I at Mendhasal: Powergrid informed that it will be in service by March, 2014.*

B.10.5. Commissioning of 400 kV Ragunathpur-Ranchi line

In last OCC, DVC informed that, the line will be commissioned by April, 2014.

DVC may update.

Deliberation in the meeting

DVC informed that, the line will be commissioned by May, 2014.

On enquiry, DVC informed that test synchronization of Raghunathpur unit may be carried out during 21st – 25th March, 2014.

B.10.6. Depletion in OPTCL network due to impact of cyclone “Phailin”

OPTCL may update the latest status of 220 kV Narendrapur-Mendasal line

Deliberation in the meeting

OPTCL informed that, work is in progress.

B.10.7. Scheduling of power by ERLDC—GMR

A special meeting on was held on 14th March, 2014 at ERLDC for scheduling of GMR and related issues. The minutes of the above meeting is available at ERPC website (www.erpc.gov.in).

Members may note.

Deliberation in the meeting

OCC advised Powergrid to replace/change by 31st March, 2014 three (3) SEMs namely both end meters of 400KV Meramundli-GMR line and GMR end meter of 400KV Talcher –GMR line, readings of which are required for computation of GMR injection when generation of GMR will be scheduled by ERLDC.

GMR representative proposed to pre-pone the date of Scheduling by ERLDC from 7th April as earlier settled in the special meeting of 14.3.14 to 31st March, 2014.

OCC agreed to pre-pone provided all the formalities as decided in the special meeting of 14.3.14 are complied.

B.10.8. Power Evacuation from 400/ 132KV Lakhisarai Substation

In last OCC BSPTCL informed the status as follows:

1. Lakhisarai (PG) – Lakhisarai(BSPTCL) 132 kV D/c line – will be completed by June, 2014.
2. Lakhisarai (PG) – Jamui (BSPTCL) 132 kV D/c line – will be completed by Sept/Oct, 2014.

Powergrid informed that 400/132KV Lakisharai Substation will be ready by February, 2014.

Powergrid and BSTPCL may update the latest status.

Deliberation in the meeting

Powergrid informed that 400/132KV Lakisharai Substation will be ready by March, 2014.

BSPTCL informed the status as follows:

1. Lakhisarai (PG) – Lakhisarai(BSPTCL) 132 kV D/c line – will be completed by June, 2014.
2. Lakhisarai (PG) – Jamui (BSPTCL) 132 kV D/c line – will be completed by Oct, 2014.

B.10.9. Power Evacuation from 400/ 220KV Daltonganj and Chaibasa Substations

Powergrid informed that 400/220KV Daltonganj and Chaibasa Substations will be ready by May/June, 2014.

JSEB informed the status as follows:

1. 400/220 kV Daltonganj- will be connected to existing Daltonganj and Garwa S/s.
2. 400/220 kV Chaibasa- will be connected to Chaibasa S/s.

OCC advised PGCIL to ascertain whether construction of intermediate 220/132 kV ICTs is within its scope of work as per standing committee decisions. PGCIL agreed to give feedback.

Powergrid and JSEB may update the status.

Deliberation in the meeting

Powergrid informed that 400/220KV Chaibasa Substations will be ready by June, 2014 and Daltonganj S/S may take some more time to come.

Further, it was informed that construction of intermediate 220/132 kV ICTs is being executed by Powergrid under the consultancy work of JSEB.

Powergrid informed the status as follows:

1. 400/220 kV Daltonganj will be connected to existing Daltonganj and Garwa S/s under JSEB.
2. 400/220 kV Chaibasa connected to Chaibasa S/s- by June, 2014.

B.10.10. Commissioning of LBB protection at Chandil substations (JSEB)

JSEB informed that, some panels are not included in the proposal hence fresh proposal is being prepared.

In 93rd OCC, JSEB informed that three LBB panels has already been installed at Chandil S/s; however LBB panels for Chandil-Ramandrapur line and ICTs are yet to be installed. JSEB informed that, LBB scheme at Chandil S/s will be in service by 31st March, 2014.

JSEB may update.

Deliberation in the meeting

JSEB representative was not available for discussion.

B.10.11. Implementation of SPS for 500MW round the clock power through HVDC Bheramara

In 94th 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, 2014.
- 400 kV Sagardighi-Behrampur D/C (Quad): Work has been awarded and will be commissioned within a year.

Powergrid may update the status.

Deliberation in the meeting

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 (Quad): Work has been awarded and will be commissioned by Dec, 2014.*

Item no. B.11: Implementation of recommendations of various ERPC teams on JSEB protection coordination.

The latest status on implementation of recommendations of various ERPC teams as well as on zone settings towards full co-ordination of protection system of JSEB is placed at Annexure-B.11.

CERC vide ROP dated 25.02.2014 in Petition No. 130/MP/2013 informed that commission observed that the implementation of the protection system is extremely important in view of its requirement for safe and secure operation of the grid. All out efforts should be made to implement the recommendations of the Protection Committee by the end of March, 2014.

The Commission directed ERPC/ERLDC to submit the status of implementation of the protection system by JSEB, by 10.04.2014.

JSEB may update the latest status.

Deliberation in the meeting

JSEB representative was not available for discussion. OCC requested ERPC secretariat to take up the issue with JSEB.

Item no. B.12: Implementation of Grid Security Expert System (GSES)

In 82nd OCC meeting, Constituents principally agreed for the implementation of Automatic Demand Management System & GSES. Constituents felt that without effective automation in SLDC control area the implementation would not be feasible and unless exact schemes with

objective set-up are finalized/placed it would not be possible to assess the fund requirement for this automation. OCC felt that under present day complex grid scenario automatic operation is must but before finalizing detail deliberation is needed considering technical feasibilities along with the cost-benefit analysis of Automatic Demand Management System & GSES.

Subsequently, CERC vide order dated 20.02.2014 in Petition No. 265/MP/2012 expressed that the performance of grid in regard to parameters envisaged to be controlled under GSES scheme should be monitored for six months before considering the scheme for implementation of GSES. The petitioner was directed to file performance of grid after six months from the date of issue of the order indicating necessity of GSES, even after implementation of ADMS, SPS, AUFERS.

Members may note.

Deliberation in the meeting

Members noted.

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).

Subsequently, CERC vide order dated 21.02.2014 in Petition No. 220/MP/2012 has directed all the utilities to ensure rectification of defects in the protection system as pointed in the protection audit within the time frame as specified in the order and submit the latest status to Member Secretary within one month of the issue of the said order.

Members may note and ensure compliance.

Deliberation in the meeting

MS I/C informed that CERC vide order dated 21.02.2014 in Petition No. 220/MP/2012 decided that in order to implement the recommendations of the Protection Audit, a compliance mechanism with definite time line needs to be put in place as under:

- a) Each STU and CTU shall submit its action plan against each deficiency within one month from issue of this order clearly stating the deficiencies which can be corrected without any procurement (Category-A) and deficiencies involving procurement of equipment (Category-B). However, action plan for deficiencies dealt in Petition No. 146/MP/2013 shall be submitted therein;*
- b) The remaining deficiencies, if any, in Category-A shall be rectified by the concerned STU and CTU within 2 months of issue of the order and compliance report in this regard shall be submitted to respective RPC.*
- c) As protection is a matter of critical importance, a time period of one year, as informed by various agencies in RPC for rectifying the deficiencies, which involve procurement, cannot be allowed. All deficiencies of Category-B shall be rectified within 6 months of issue of the order. In this regard, reasons of non-availability of fund or delay in procurement process shall not be accepted. The procurement and implementation is to be completed by each STU using their own fund which can be reimbursed through a common request of funding through PSDF forwarded through RPCs as per procedure recently approved by Government of India.*
- d) Each SLDC shall be responsible to monitor the action taken by STU. If any deficiency in the STU system in regard to the Category-A deficiencies is not corrected after 3 months of issue of this order, the concerned SLDC may approach the respective State Commission for appropriate action against defaulting State entity in accordance with*

State Grid Code. The Office-in-Charge of the concerned SLDC shall be responsible for monitoring and ensuring compliance of the action plan and filing of the petition as directed herein.

- e) *RPCs at the end of each quarter shall prepare a report on the protection deficiencies and their rectification which shall be sent to this Commission with a copy to CTU not later than 45 days of expiry of the quarter. The report shall inter-alia identify deviations from time lines as well as the State sub-stations which have interface with ISTS system. CTU shall take necessary action and issue a show cause notice for disconnection to sub-station of STU for not complying with the Standards for Protection and Control as per Central Electricity Authority (Technical Standards for Construction of Electric Plants and Electric Lines) Regulations, 2010 and Central Electricity Authority (Grid Standards) Regulations, 2010.*

Accordingly, CERC has directed CTU, STUs and Generating Companies /Stations of all the regions to ensure rectification of defects in the protection system as pointed out in the protection audit within the time frame specified in paragraph 27 of the said order and submit the latest status of corrective actions to Member Secretary of the respective Regional Power Committee within one month of issue of this order. All RPCs are directed to furnish consolidated report with their observations/ recommendations to the Commission within 2 months of issue of this order. Thereafter, CTU and SLDCs shall submit quarterly report to the respective RPC latest by 15th day of the first month of next quarter and RPCs shall submit the report to the Commission latest by 15th day of the second month of next quarter.

Members noted for compliance.

Item no. B.14: 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 updated the status as given in **Annexure-B.14**.*

Item no. B.15: Proposed shutdown planning of MPL 400 kV Switchyard-- MPL

MPL vide letter dated 03.03.2014 informed that they are planning Annual Maintenance for MPL Shutdown for MPL 400 KV Switchyard equipments from 24th March 2014 onwards. Various maintenance and testing activities for the equipments are planned during this period.

Since last few months MPL is scheduling to full capacity and the same is going to continue in future. The high flow towards PGCIL Maithon is a matter of concern and the same was shared earlier vide letters No: MPL/400 KV SY/ ERPC/05 dtd 29/07/2013.

It is apprehended that in case of shutdown or tripping of either of Maithon lines, the flow in the other line may exceed its capacity. Hence, it was requested to advice on the following:-

1. The capacity of said lines, considering all relevant factors.
2. The action plan from MPL side while planning a scheduled shutdown of one of these lines.
3. The action plan from MPL side in case of tripping of one of these lines.

Members may discuss.

Deliberation in the meeting

OCC advised MPL to share the loading pattern of 400 kV MPL-Maithon D/C & 400 kV MPL-Ranchi D/C lines for different scenario with ERLDC and if required interaction with Standing Committee on issue of un-even load sharing by these lines could be made.

Item no. B.16: 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.17: 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.

Members may note and comply.

Deliberation in the meeting

Members noted.

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, CESC informed that their stations are certified with IS18001.

Members may note and update the status.

Deliberation in the meeting

OHPC informed, all their power stations are certified with IS 18001 and also submitted the certificate.

Item no. B.19: Pollution mapping for Eastern Region -- Powergrid

On the issue a special meeting was scheduled to be conveyed on 20th March, 2014.

Members may please note and comply.

Deliberation in the meeting

*Minutes of the special meeting on Pollution Mapping are circulated in the meeting and OCC requested all the constituents to cooperate for successful implementation. Minutes are enclosed at **Annexure-B.19** and also available in ERPC website.*

Item no. B.20: INVESTMENT APPROVAL FOR “PHASE I – UNIFIED REAL TIME DYNAMIC STATE MEASUREMENT (URTDSDM)”

Powergrid vide letter dated 21.01.2014 informed that the Board of Directors of POWERGRID, have accorded investment approval for “Phase I – Unified Real Time Dynamic State Measurement (URTDSDM)” in its 297th meeting held on 13th January 2014 for the estimated cost of the project based on October, 2013 price level is Rs. 374.63 Crore including IDC of Rs. 29.54 Crore.

The project is being funded through domestic borrowings (loans/bonds)/ External Commercial Borrowings (ECB) etc. and POWERGRID's internal resources with debt: equity ratio of 70:30. The project is scheduled to be commissioned within 27th months from the date of approval of Board of Directors, i.e. 13th January 2014.

In 94th OCC it was informed that in 24th ERPC it was decided to implement the above scheme through PSDF fund. OCC advised all constituents to communicate their views to PSDF Committee.

Subsequently, ERPC Secretariat had communicated to Powergrid vide letter dated 24.02.2014. WBSEDCL vide letter dated 24.02.2014 and GRIDCO vide letter dated 01.03.2014 have also communicated their views on the issue. Further, in response to ERPC Secretariat letter Powergrid has replied vide letter dated 27.02.2014 which is enclosed at **Annexure- B.20**.

Members may Note.

Deliberation in the meeting

Members noted.

Item no. B.21: Modification of 132kV Bus arrangement at 220/132kV Purnea Sub-station of POWERGRID

In 94th OCC Powergrid informed that tendering is in progress and bid opening is on 14/03/2014.

Powergrid may update the latest status.

Deliberation in the meeting

Powergrid informed that tendering is in progress and bid opening was extended for 10 days.

Item no. B.22: Procurement of Emergency Restoration System (ERS Towers) for Eastern Region constituents- Powergrid

In 25th TCC/ERPC, Powergrid was advised to procure four sets of ERS. It was also decided that these four sets will be kept at Sikkim, Siliguri, Ranchi and Gaya and will be used by all constituents of ER during emergencies.

In 93rd OCC Powergrid informed that, Feasibility Report is under preparation stage and the same shall be put up for approval of POWERGRID management.

In 94th OCC, Powergrid informed that feasibility report is under preparation stage.

Powergrid may update the latest status.

Deliberation in the meeting

Powergrid informed that feasibility report is under finalization stage and it will be approved by POWERGRID management by April, 2014.

Item no. B.23: Failure of Optical fibre link between Hatia- SLDC(Ranchi) -JESB

JSEB vide letter dated 08.01.14 informed that Hatia- SLDC (Ranchi) optical fibre link (UGFO) is under breakdown since September, 2013 which results non-reporting of four (4) nos. RTU viz. Patratu, Sikidiri, Tenughat and Hatia.

To rectify the above defect, several reminders in written as well as verbal request have been made to Powergrid and same has been raised in different forum of ERPC meetings.

In 93rd OCC JSEB requested Powergrid to restore the link temporarily till its final restoration. Powergrid agreed to look into the matter.

In 94th OCC, Powergrid informed that the offer for temporary restoration will be forwarded to JSEB soon and after the concurrence of JSEB, it will be restored within 15 days.

JSEB and Powergrid may update.

Deliberation in the meeting

Powergrid informed that JSEB consent is still awaiting. JSEB representative was not available for their comments.

Item no. B.24: Over voltage protection setting of 400 kV lines in Eastern region - ERLDC

The above issue was discussed in the last OCC meeting, wherein it was finalized that the over-voltage protection settings of all 400kV and 765kV lines in Eastern region would be furnished as per the circulated format.

NAME OF SUBSTATION	NAME OF THE LINE	OVERVOLTAGE STAGE-I SETTINGS					
		Local end		Remote end		Difference	
		% setting	Time Delay(se)	% setting	Time Delay(sec)	% difference	Time difference(sec)

The details of settings for pick up /drop off of the over-voltage relays could also be provided.

The above data may be mailed to erldc.cal@gmail.com / psdas_psd@yahoo.com / surojitb@gmail.com

In 92nd OCC ERLDC informed that, in view of commission of new transmission lines the over voltage settings needs to be reviewed to maintain proper coordination. House was informed that, the format will be made available at ERPC website (www.erpc.gov.in). OCC advised all constituents fill the latest status of requisite information and send to ERLDC.

Till date requisite data has been received only from PGCIL, NTPC, DVC, WBSETCL, Adhunik, GMR and Sterlite. Data from OPTCL, JITPL, MPL, Teesta & Tala are still pending.

In 94th OCC OPTCL informed that data will be submitted within a week. Tala informed they will re-send the data. MPL informed that data will be submitted at the earliest.

Subsequently, OPTCL, MPL and TALA have submitted their overvoltage data.

Members may update.

Deliberation in the meeting

ERLDC informed that they are compiling the data. The status will be informed in next meeting.

Item no. B.25: 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 15 November 2013 seeking comments as well as updates on following issues:

- Details of 220kV and above substation(s) not having synchronizing facility for synchronization of islands and time schedule for providing the same.
- Details of Minimum auxiliary power requirement and survival power requirement by unit/plant wherever left blank in the document

In 92nd OCC, House was informed that, the formats will be made available at ERPC website (www.erpc.gov.in). OCC advised all constituents to send their views as soon as possible.

Till date requisite data has been received only from DVC, CESC, Adhunik, Chuzachen and GMR

In 94th OCC, WBPDC/WBSEDCL, OPGC/OHPC, BSPHCL, JSEB agreed to submit the data at the earliest.

Subsequently, WBPDC/WBSEDCL and DPL had submitted the data.

Members are once again requested to supplement the missing data and furnish any other valuable comments.

Deliberation in the meeting

It was informed that relevant data from OPGC/OHPC, BSPHCL, JSEB is still pending. OCC once again requested to submit the missing data.

Item no. B.26: Mock Black start exercises in Eastern Region – ERLDC

i) The status of black start exercises

Mock blackstart of Upper Indravati HEP and Maithon HEP have been done successfully. The pending status as informed in the last OCC meeting is indicated below:

- a) Teesta HEP: will be done on 30th March, 2014.
- b) Subarnarekha HEP: ERLDC informed that mock exercise carried out successfully on 14.03.2014.

Members may update the status.

Deliberation in the meeting

Schedule for black start exercise decided in the meeting is indicated below:

- a) Teesta HEP: scheduled to be done on 31st March, 2014.

Further, ERLDC informed that schedule for black start exercise of Eastern Region Generators has been prepared for 2014-15 and will be placed in next meeting.

ii) Testing of DG sets meant for Black start

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

Constituents may kindly ensure compliance.

Deliberation in the meeting

Members noted.

Item no. B.27: Availability of data of real time power flow of feeders covered under Under frequency Load shedding scheme(UFLS) and lower relief expected to obtained in real time system operation

a) Availability of data of real time power flow of feeders covered under Under frequency Load shedding scheme (UFLS)

CERC has given order against the petition no 221/MP/2012 “Providing adequate load shedding through automatic under frequency and df/dt relays in the state systems of Northern region and keeping them functional in terms of Regulation 5.2 (n) of the Central Electricity Regulatory Commission (Indian Electricity Grid Code) (First amendment), Regulations 2012 for ensuring security of the Northern regional grid as well as the interconnected Indian grid.”

Quote

(vi) The UFRs and df/dt may be replaced with numerical type so that following features can be achieved:

- Storage of past data
- Remote programming and status monitoring at ALDC/SLDC/RLDC
- Remote on-line real time load flow of each feeders for local shedding

- Time synchronization from remote
- Tripping from remote under special protection scheme
- Easy for developing islanding scheme for the constituents by monitoring the relay condition with trip circuit healthy and real time load flow on feeders

(vii) Installation of OPGW / Fiber optic for direct speech (hot line) / data communication with ALDC/SLDC/RLDC

Unquote

In this connection, all SLDCs are requested to make available at ERLDC, the real time power flow data of the feeders earmarked for UFLS. This is essential so that RLDC can assess the relief actually obtained in real time whenever any stage of UFRs operates.

In 93rd OCC, ERLDC requested for real time telemetry data of feeders connected with UFR. OCC requested all the constituents to comply the CERC guidelines and communicate their experience.

In 94th OCC, Constituents expressed that the implementation of above scheme is quite difficult and needs re-investment in numerical UFRs and communication system. OCC requested all constituents to communicate their views/reply to CERC.

Members may update.

Deliberation in the meeting

Members assured that separate communications will be made to CERC with intimation to secretariat.

b) Lower relief expected from UFLS in real time system operation

Most of the constituents have furnished maximum MW demands of the feeders, which are covered under frequency load shedding scheme. But as there is time diversity among these demands, actual load relief that would be obtained in real time is likely to be less than the projected quantum. Constituents may therefore furnish the average demands of these identified feeders. Further, since in reality, some of them may be under planned or forced outage, it is essential to connect loads whose aggregated average demand is around 1.5 to 2 times the quantum of the agreed scheme; for each of the 4 stages.

In 93rd OCC, constituents felt that setting UFRs at average demand is not feasible due to huge variation in peak and average load. However, ERLDC opined that, the load quantum should be taken as average load for actual load relief.

The house was informed that the relief quantum from UFLs for each constituent in ER was set in line with decision taken in NPC followed by deliberation in previous OCCs. Therefore members felt it necessary to refer the same to NPC for further guidance.

Therefore, OCC requested all members to give their views and decided to take up the issue to NPC for review. ERPC vide letter dated 13th February, 2014 sought clarification on the matter from NPC.

In 94th OCC, MS I/C informed that the issue has been referred to NPC and will be discussed in next NPC meeting. ERLDC informed that as per CERC order for petition no 263/MP/2012 dated 19.12.2013 the UFR load shedding quantum should be considered on average load basis.

Members may update.

Deliberation in the meeting

Members noted.

Item no. B.28: 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

ERLDC may update.

Deliberation in the meeting

Maximum and minimum voltage observed (data taken from SCADA)

Generating stations have been monitored for sample dates in the month of Feb 14:

Power Plant	Max and Min Voltage observed for Feb 14 (KV)	Date for monitoring (Feb 2014)
Farakka STPS	425,406	15,17,28
Khalgaon STPS	421,401	15,22,28
Talcher STPS	412,398	19,20,23
Teesta	N/A	N/A
Bakreshwar TPS	413,389	16,17,28
Kolaghat TPS	425,392	16,17,23
Sagardighi TPS	425,404	15,16,17
MPL	430,414	20,27,28
Mejia-B	431,415	23,27,28
DSTPS	433,416	3,20,27
Adhunik TPS	432,411	23,27,28
Sterlite	435,419	23,27,28

Performance analysis:

I. Farakka: Both 210MW & 500MW units at FSTPP, absorbed VAR or injected zero VAR into the Grid for most of the time and hence performance of the units was satisfactory.

II. Kahalgaon : Both 210MW & 500MW units at khSTPP, absorbed VAR or injected zero VAR into the Grid for most of the time and hence performance of the units was satisfactory.

III. Sagardighi: Reactive performance of sagardighi was satisfactory.

IV. MPL: Performance of MPL was not adequate.

V. Sterlite: U#1 was not absorbed VAR during high voltage condition.

VI. Performance of Mejia-B, DSTPS and Adhunik TPS were not adequate.

Members noted.

b) Schedule for reactive capability tests

As discussed in the last OCC meeting, the status of reactive capability testing of identified generators is as follows:

- a) Adhunik TPS: In Nov, 13
- b) DSTPS: One unit is out due to coal shortage, test to be done on opportunity basis.
- c) Mejia & Koderma TPS: Test to be done when both units are in service.

Maithon RB had mentioned in the last OCC meeting that they had already carried out reactive capability tests of their machines in January/march, 2013 and report has been submitted.

Concerned members may update the status.

Deliberation in the meeting

Members reported the same status.

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

In the 88th OCC it was decided to change the relevant taps of identified units as follows:

DSTPS GT-1 and 2		MEJIA'B' GT - 1 & 2	
Present tap position & voltage ratio	Suggested tap position & voltage ratio	Present tap position	Suggested tap position
5 (21kV/420 kV)	7 (21kV /399 kV)	4 (21kV /430.5 kV)	7 (21kV /399 kV)

Adhunik GT-1 & 2	
Present tap position & voltage ratio	Suggested tap position & voltage ratio
8 (16.5kV /420kV)	12 (16.5kV /400.68 kV)

In last meeting, ERLDC informed that the presently voltage is within permissible range so the tap changing may be done during winter.

Deliberation in the meeting

ERLDC informed that, they have issued messages for changing of taps at DSTPS and Adhunik for changing GT tap position of both the units from present position of 5 to 6 and from present position of 8 to 10 respectively. The messages were issued using the opportunity when both the units of the plants were not on bar. However, no confirmation has been received from DVC and Adhunik in this regard.

Representative from Adhunik informed that, it is not possible to change the GT tap at their end. DVC informed that, they will change the tap during opportunity shutdown.

PART C:: OPERATIONAL PLANNING

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

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

ERPC/ERLDC facing difficulty in planning the shutdown of CTU lines with Orissa and these are affecting transmission line S/D programme of ER as a whole.

In 26th TCC/ERPC meeting Odisha assured to resolve the issue.

Powerlinks requested for shut down of 400 KV (Quad) Purnea-Muzaffarpur Circuit-I from 10.4.2014 to 30.4.2014 (09:30 hrs to 17:00 hrs) on daily basis for replacement of 160 KN insulators in 84 nos. tension towers between Purnea and Saharsha.

Shutdown of 400kV Bongaigaon - Siliguri D/C- ENICL

ENICL had applied for shutdown of said line for 16 & 17/03/2014 (6:00hrs to 16:00hr) for construction /commissioning of line.

ENICL may propose the new schedule.

Members may finalize the shutdown proposal and OPTCL may update the status.

Deliberation in the meeting

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

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

The abstract of peak demand (MW) vis-à-vis availability and energy requirement vis-à-vis availability (MU) for the month of Apr'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 for discussion.

Members may confirm.

Deliberation in the meeting

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

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

(i) Generating units:

Generating Station	UNIT NO	CAP(MW)	DATE	REASONS FOR OUTAGE	Date of restoration
BOKARO B	3	210	12.10.13	POLLUTION CONTROL	
BOKARO B	1	210	30.01.14	TUBE LEAKAGE	
KODARMA	2	500	03.11.13	SUPER HEATER TUBE	
MEJIA B	7	500	20.01.14	TUBE LEAKAGE	
MEJIA	1	210	05.01.14	TUBE LEAKAGE	
CHANDRAPURA	7	250	17.01.14	OVER HAULING	
STERLITE	4	600	23.10.13	F. D. FAN PROBLEM	
STERLITE	2	600	24.01.14	FURNACE PRESSURE	
BANDEL	5	210	16.11.13	MAINTENANCE	
ADHUNIK	1	270	29.11.13	GT FAILURE	
SANTALDIH	5	250	04.12.13	TURBINE PROBLEM	
KOLAGHAT	4	210	28.12.13	OVER HAULING	
GMR	2	350	23.01.14	AIR PREHEATER	

(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 MERAMUNDALI - TSTPS - I	24.08.13	BREAKER PROBLEM AT MERAMUNDALI	
220 KV MENDHASAL - NARENDRAPUR – II	12.10.13	TOWER COLLAPSE	

220 KV THERUBALI - NARENDRAPUR – I	12.10.13	TOWER COLLAPSE	
400/220 KV,315 MVA ICT - II AT JEERAT	29.10.13	BUCHHOLTZ OPERATED	08.02.14
400 KV PURNEA - BINAGURI – I	02.11.13	S/D	
400/220 KV,315 MVA ICT - I AT BIDHANNAGAR	18.01.14	FAILURE OF R PHASE BUSHING,HV SIDE.	
400 KV TALA-BINAGURI-I	22.01.14	S/D AVAILED BY TALA	

Members/ERLDC may update.

Deliberation in the meeting

Members updated the latest status.

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

1. 132/33 kV, 80 MVA, Alstom make transformer at Giridih S/s has been commissioned and charged at 21:08 hrs on 14/02/14.
2. 220 kV bay of same transformer No. II and 220/36 kV, 80 MVA transformer were charged at 17:26 hrs on 28/02/2014.
3. 33 kV incomer bay for transformer No. II was charged at 18:00 Hrs on 28/02/2014
4. 220/33 kV, 80MVA, power transformer at Purulia was charged on 08/02/14.
5. 220/132 kV, 160 MVA, Transformer-IV at Howrah was commissioned and loaded first time in parallel with other three transformer at 17:00 hrs on 24.02.2014
6. 220 kV Paradeep-IOCL Ckt was charged for the first time on 12.02.14 at 13:35 hrs.
7. 132 kV Chandaka-Nimapara Ckt was made LILO at Kesura S/S on 14.02.14 at 16:40 hrs
8. GT#I at Raghunathpur(DVC) was back-charged at 19:55Hrs of 21/02/14.
9. 220/132kv, 160MVA, ATR-4 at Howrah was commissioned and first time loaded on 24/02/14.
10. 400kV Kharagpur-KTPP-II first time idle charged at 18:35Hrs of 28/02/14 as antitheft measure from Kharagpur end upto the dead end tower at KTPP end.

ERLDC may update.

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.

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

New generating units:

S.No.	Power Plant	Plant Size	Expected date
1	GMR Unit#3	4x350MW	15 th Nov, 2013
2	Koderma Unit#2	2x500MW	Oct, 2013
3	Corporate Power Unit#1	2x270MW	
4	Teesta-III Unit#1	1x200MW	
5	Raghunathpur Unit#1	2x600MW	Nov, 2013
6	TLDP-IV	1x40MW	

New transmission elements:

SI No.	Name of Element	Expected date
1	400 kV Maithon-Gaya D/C	After December, 2013
2	400 kV Gaya-Koderma D/C	After December, 2013
3	LILO of 400kV Kahalgaon-Biharshariff 1& 2 at Lakhisarai	
4	400kV Sasaram-Daltonganj D/C &Daltonganj S/Stn	
5	400 kV Ranchi-Raghunathpur D/C	Mar, 2014
6	400 kV Meramandali-Dubri D/C	
7	400 kV Corporate- Ranchi D/C	
8	400 kV IB-Meramandali D/C	March, 2014
9	220 kV TLDP-IV – NJP ckt-2	2014
10	220 kV Kharagpur-Midnapur D/C	Commissioned in December,2013
11	220 kV Jeerat-Rishra D/C	
12	220 kV Latehar-Daltonganj D/C	
13	220 kV Lohardaga-Lathehar D/C	
14	220 kV Bidhansai-Cuttack D/C	June, 2014
15	220 kV Girdih-Koderma D/C	Mar, 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 Feb'14

ERLDC may update.

Deliberation in the meeting

System frequency touched 49.37 Hz in February'14. No report of operation of UFR is hence expected under above circumstances. Members noted.

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

ERLDC may update.

Deliberation in the meeting

ERLDC placed the grid incidences during Feb, 2014 and members noted.

SI no	Disturbance	Date	Time	Agencies involved	Report in format		DR/EL/Tripping analysis		Remarks
					Y/N	DATE	Y/N	DATE	
1	Due to bursting of R-Ø CT 400kV Meeramundali-JSPL-II at JSPL end & non-opening of breakers of the said line at Meeramundali end, all the 400kV lines & ICTs connected to Bus-I tripped at Meeramundali	06-02-2014	02:30 & 02:36	ER-II	N		Y	27-01-2014	Tripping analysis report along with relay indication obtained from OPTCL only.
				OPTCL	Y	07-02-2014	Y	07-02-2014	
2	All 220kV lines emanating from Theruvali end and 220/132kV Auto transformers at Theruvali	07-02-2014	13:49	OPTCL	Y	10-02-2014	y	10-02-2014	Tripping analysis report along

tripped due damage in Y-Ø insulator of 220kV Theruvali-Narendrapur-I at loc no-359								with relay indication obtained from OPTCL.
--	--	--	--	--	--	--	--	--

Item no. D.3: Methodology to be followed regarding commissioning new assets

The quantum of new assets which are in the process of getting commissioned are on an increasing trend. Accordingly, it was felt that certain guidelines/methodologies are to be fulfilled by the generating company & Transmission Utilities during the process of commissioning of new assets. A letter from has been received from NLDC in this regard intimating the methodology to be followed for commissioning of new assets.

Accordingly, the following methodology/guidelines are proposed:

- 1) Owner of the asset should submit the request for probable commissioning/charging of the new assets for the calendar month latest by 5th day of the month to ERLDC, along with status of activities mentioned as per checklist enclosed at Annexure-IV.
- 2) ERLDC shall study the impact of commissioning/charging of new asset and based on the examination of the preparedness of the utility (as per the check list), shall forward its recommendations to NLDC who would also examine the issue independently considering the all India grid scenario.
- 3) The owner of the new asset should inform ERLDC about commissioning/charging of the element, at least three (3) days in advance before the actual date of commissioning/charging. The owner shall also forward the requirements of the checklist (as mentioned above in) form of a consolidated document.

The above guidelines should be followed by all utilities to ensure grid security and reliability. It should also be ensured that after commissioning/charging of the new asset, a copy of the output of Data Acquisition System/ Event logger /Disturbance recorder shall be submitted to ERLDC which would give a clear position of its healthiness.

The letter from NLDC in this regard alongwith the checklist is attached at **Annexure-D.3**.

Members may note and comply.

Deliberation in the meeting

Members noted.

Item no. D.4: CERC order dated 22-02-14 on Grid Disturbances of 30/31 July, 2012

CERC has given certain directions vide above order, and made certain observations:

1. The fact that no load relief was obtained by UFR operation in the states of Odisha, Bihar and Jharkhand in Eastern Region, has been viewed seriously.
2. Taking planned shutdowns in real time should be coordinated with utmost care, according to topmost priority to grid security. All major shutdowns to be deliberated in RPC forum, before they are approved.
3. RPCs to ensure that the protection philosophy approved in RPC forum, is adhered to by all users of ISTS.
4. Protocols to be followed, while allowing collective transactions for the next day:

- a. The lines which are within a region and not part of limiting constraints or credible contingencies may be considered under service at scheduled revival time. Prior to scheduled revival time, status shall be reconfirmed and if necessary, transaction shall be rescheduled in case the line has not been restored.
 - b. The transmission lines which are inter-regional or part of limiting constraints or credible contingencies shall not be considered to be in service till these are actually brought back into service. After putting the revival status on web site of NLDC, the margin shall be released for contingency market, if required.
5. System operation should not be merely guided by ATC/TTC, which are pre-calculated estimates of allowable power transfer. Real time network security analysis needs to be used with half an hour scenario analysis. For effective working of this, it is required that real time data is integrated with EMS system and the deficiencies in data communication, if any need to be addressed and rectified on urgent basis.
 6. In the event of transmission constraints and congestion which threaten the security of the system, RLDCs may curtail short term transaction irrespective of the fact that unscheduled transactions are brought to zero. Otherwise, system security may worsen in the time efforts are made to bring unscheduled interchanges to zero
 7. Almost all the Constituents have not fully complied with the provisions of CEA Grid Standard and Grid Code related to submission of information required for analysis of grid disturbance. Even at present grid incidents and trippings are not being reported within the stipulated time and are not accompanied by DR / EL.
 8. All generating stations with black-start facility to maintain readiness at all times to extend support to the grid under any eventuality. During the current F.Y., black-start exercises have been conducted only once at U. Kolab, Rengali and Maithon hydro stations, and is scheduled to be carried out by 31-03-14 at Subarnarekha, Teesta-V HPSs. Whereas, the exercise could not be taken up at all for Balimela and Indravati hydro stations. As per provisions of IEGC, all eligible hydro stations should demonstrate their readiness twice in a year, through mock exercise.
 9. Voice recording facilities must be made operational (if not at present) at all SLDCs within a month
 10. The procedure for assessment of reliability of the system needs to be made more transparent. For this purpose NPC may suggest a structure for National Reliability Council inter-alia with the object of computation of ATC/TTC, develop reliability standards, suggest optimum outage planning and congestion management mechanism, etc

Members may note and comply.

Deliberation in the meeting

Members noted.

Item no. D.5: Changing of control area jurisdiction of JITPL and GMR and according status of regional entity

In the previous OCC meetings it had been re-iterated that the control area jurisdiction of JITPL and GMR could be changed to allow them the status of regional entity subject to furnishing of unconditional consent by SLDC, OPTCL. SLDC, OPTCL has granted unconditional consent for treating JITPL as a regional entity. Accordingly, w.e.f first synchronisation of the first unit, JITPL would be considered to be a regional entity and deviation pool member and the infirm power injected by JITPL would be settled in the ER Deviation Settlement Pool, as per provisions of the CERC regulations. JITPL may kindly expedite implementation of dedicated voice communication with ERLDC and telemetering of unit side data in this regard.

Also, SLDC, OPTCL has granted unconditional consent for transfer of control area jurisdiction of GMR to be a regional entity. Accordingly, a meeting was held between ERPC, OPTCL, GRIDCO, GMR and ERLDC on 14/03/14. In the meeting it was decided that scheduling of GMR by ERLDC would commence w.e.f 07/04/14 subject to fulfillment of the specified conditions.

Members may note.

Deliberation in the meeting

Members noted.

GMR requested ERLDC to start the scheduling on and from 31.03.14 instead from 07.04.14.

OCC advised ERLDC to do this provided all formalities as chalked out in the special meeting of 14.03.14 are complied.

Item no. D.6: Delay in generation ramp up by Purulia Pumped Storage Project(PPSP) and requirement of prolonged operation of PPSP during the evening peak hours

It has been observed that due to delay in pickup of PPSP generation and operation of PPSP at a reduced generation level and for a shorter duration, the line loadings of 400kV FSTPP-Behrapore are remaining on the higher side and touching levels of 750MW and more. Also, Bus voltage at Jeerat is dropping to 376kV during the peak hours. The above is occurring as the peak loads at Jeerat and Subhasgram have increased, while the generation at PPSP is not being increased as per demand ramp up in the South Bengal load area.

Accordingly, to mitigate the above situation being faced, the following actions are needed to be taken at the earliest:

- a) First unit at PPSP needs to be synchronized and generation of the unit maximized by 17:30Hrs.
- b) Subsequently, the other units of PPSP need to be synchronized and generation from the second, third and fourth units need to be maximised by 17:45Hrs, 18:00hrs and 18:15Hrs respectively.
- c) The generation of all the four units need to be maintained upto 20:15 Hrs, after which generation from the units may be gradually ramped down and the units desynchronized at the rate of maximum of one unit being desynchronized per time block, i.e the four units are gradually ramped down over a period of at least one hour.
- d) Any underdrawal of West Bengal due to synchronization and ramp up of PPSP units may be managed by delaying STOA import contracts and ensuring that all the STOAs are gradually ramped up/down gradually at a pre-determined ramp rate, instead of a sudden jump up of the STOAs at the onset of evening peak hours.

ERLDC would present the relevant graphs of PPSP Generation, West Bengal UI and 400kV FSTPP-Behrapore flow during the evening peak hours.

Deliberation in the meeting

ERLDC gave a presentation on this issue and requested PPSP to ramp up the generation by 1730hrs. On reply, WBSEDCL informed that, they are maintaining the schedule and ramping up generation at high frequency will increase their financial burden. OCC felt that grid security is prime importance than financial implications. Moreover as chance of interruption of export to Bangladesh through Behrapur corridor gets initiated also by this delayed ramp up of PPSP advised WBSEDCL to support the grid to the maximum extent possible in tune with Grid Operator's direction.

Item no. D.7: Repeated operation of LBB relays at Meramundali S/S

Unwarranted operation of LBB relays at Meramundali S/s have been occurring in the recent past. It has been observed in general that on occurrence of fault in an outgoing 400kV line from Meramundali S/s, the breaker at Meramundali end fails to open(stuck breaker condition) or suffers a delayed clearance leading to LBB operation and tripping of all lines connected to the Bus. Presently Bus-I & II are coupled vide only one Tie-Breaker i.e vide JSPL-II and 'Future' bays at Meramundali end and hence tripping of 400kV JSPL-Meramundali-II leads to decoupling of the 400kV Buses with GMR-Meramundali going under floating condition. Also, operation of Pole discrepancy relays have been observed at Meramundali end signifying significant breaker problems at Meramundali end.

The present Bus disposition of feeders at Meramundali S/S is given below:

Diameter	Bus I	Bus II	Tie-breaker(ON/OFF)
401	Angul	Ib TPSW-II	Angul main breaker not functioning
402	Mendhasal	Duburi New-II(bay)	Mendhasal main breaker ok. Tie breaker not functioning
403	Kaniha-II	Ib TPS-I(bay)	Tie breaker not functioning. Main breaker of IbTPS not functioning.
405	JSPL-I	GMR	Tie breaker not functioning.
406	ICT-1	SPARE	Tie breaker not functioning. Main breaker of "Future" bypassed.
407	ICT-2	SPARE	Tie breaker ok. Main breaker of ICT-II not OK. Main breaker of "Future" bypassed.
408	SPARE	JSPL-II	Tie breaker functioning. Main breaker of "Future" bypassed. Both the Buses connected through this Dia.

The above issue was discussed in the last OCC meeting wherein OPTCL informed that they are phasing out old BHEL breakers. OPTCL was also advised to submit their action plan in this regard. Till date no further action plan has yet been received from OPTCL. Also, OPTCL may indicate regarding whether any other additional main/tie bays have been commissioned leading to a stronger coupling between the Buses.

OPTCL may elaborate.

Deliberation in the meeting

OPTCL informed that action is being taken to replace the defective CBs. The breaker of 405 tie has already been replaced.

Item no. D.8: Methodology for calculation of additional deviation charges for over injection at frequency 50.01 Hz and above--- NTPC

NTPC vide letter dated 18th March, 2014 informed that, total volume of over injection beyond schedule generation is considered while calculating DCA where as deviation D12/150 (Deviation in excess of +/- 12% of Schedule Generation or 150 MW whichever is less in each time block) should be considered as per Annexure-II(C) of CERC Deviation Settlement Mechanism & related matters.

Methodology for calculating ADC may please be discussed.

Deliberation in the meeting

OCC referred the issue to next Commercial Committee meeting.

Meeting ended with vote of thanks to the chair.

Participants in 95th OCC Meeting

Venue: ERPC Conference Room

Time: 11:00 hrs

Date: 21.03.14 (Friday)

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Participants in 95th OCC Meeting

Venue: ERPC Conference Room

Time: 11:00 hrs

Date: 21.03.14 (Friday)

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Participants in 95th OCC Meeting

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Date: 21.03.14 (Friday)

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FORMAT FOR COLLECTION OF DATA REGARDING RURAL POWER SUPPLY

Name of the State :

Month & Year :

[illegible]

Name of Region : EASTERN REGION

Sl. No.	Details of stations/Units required to operate under RGMO/FGMO as per IEGC							Whether operating under RGMO	Whether operating in FGMO with manual intervention to achieve RGMO	whether exempted from FGMO/RGMO by CERC	Whether applied to CERC for exemption/extension	whether units operating with locked governors	indicate in case of status is not available
	Name of State	Type	Name of Utility	Sector (CS/SS/Private)	Name of Station	Name of Stage/ Unit	Installed capacity (MW)						
1	JHARKHAND	Thermal	TVNL	SS	Tenughat	1	210	No			No		Difficulties in implementing RGMO & exemption not applied
2				SS		2	210	No			No		
3		Hydro	JSEB	SS	Subarnrekha	1	65	Yes					
4				SS		2	65	Yes					
5	WEST BENGAL	Thermal	WBPCL	SS	Bandel TPS	1	82.5	No			Yes		
6				SS		2	82.5	No			Yes		
7				SS		3	82.5	No			Yes		
8				SS		4	82.5	No			Yes		
9				SS		5	210	No			Yes		
10				SS	Santalidih	5	250	Yes					Unit#6 could not be implemented because of some technical
11				SS		6	250	No					
12				SS	Kolaghat	1	210	No			Yes		
13				SS		2	210	No			Yes		
14				SS		3	210	No			Yes		
15				SS		4	210	No			Yes		
16				SS		5	210	No			Yes		
17				SS		6	210	No			Yes		
18				SS	Bakreshwar	1	210	Yes					
19				SS		2	210	Yes					
20				SS		3	210	Yes					
21				SS		4	210	Yes					
22				SS		5	210	Yes					
23				SS	Sagaridighi	1	300	No					Could not be implemented because of some technical
24				SS		2	300	No					
25		Hydro		SS	Raman Hydel	1	12.5	No					Station is not in RGMO. WBSETCL is pursuing with Ramnam
26				SS		2	12.5	No					
27				SS		3	12.5	No					
28				SS		4	12.5	No					
29				SS	PPSS	1	225	No			Yes		
30				SS		2	225	No			Yes		
31				SS		3	225	No			Yes		
32				SS		4	225	No			Yes		
33		Thermal	CESC	SS	Budge-Budge	1	250	Yes					
34				SS		2	250	Yes					
35		Thermal	DPL	SS	DPL	3	250	Yes					
36				SS		7	300	Yes					
37	Orissa		OPGC	SS	IB TPS	1	210	No					Not adequate response in RGMO
38				SS		2	210	No					
39		Hydro	OHPC	SS	Buria	1	49.5	No			Yes		
40				SS		2	49.5	No			Yes		
41				SS		3	32	No			Yes		
42				SS		4	32	No			Yes		
43				SS		5	37.5	No			Yes		
44				SS		6	37.5	No			Yes		
45				SS		7	37.5	No			Yes		
46				SS	Chiplima	1	24	No			Yes		
47				SS		2	24	No			Yes		
48				SS		3	24	No			Yes		
49				SS	Balimela	1	60	No			Yes		
50				SS		2	60	No			Yes		
51				SS		3	60	No			Yes		
52				SS		4	60	No			Yes		
53				SS		5	60	No			Yes		
54				SS		6	60	No			Yes		
55				SS		7	75	No			Yes		
56				SS		8	75	No			Yes		
57				SS	Rengali	1	50	No			Yes		
58				SS		2	50	No			Yes		
59				SS		3	50	No			Yes		
60				SS	Upper Kolab	4	50	No			Yes		
61				SS		5	50	No			Yes		
62				SS		1	80	No			Yes		
63				SS	Indravati	2	80	No			Yes		
64				SS		3	80	No			Yes		
65				SS		4	80	No			Yes		
66				SS	Indravati	1	150	No			Yes		
67				SS		2	150	No			Yes		
68				SS		3	150	No			Yes		
69				SS		4	150	No			Yes		
70		Thermal	DVC	CS	Bokaro-B	1	210	No			Yes		RGMO mode of operation would not be possible for units1, 2 and 3. Because of non-availability of electro-hydraulic governor, digital voltage recorder and CMC. DVC has already applied for exemption
71				CS		2	210	No			Yes		
72				CS		3	210	No			Yes		
73				CS	Chandrapura	1	140	No			Yes		RGMO mode of operation would not be possible for units1, 2 and 3. Because of non-availability of
74				CS		2	140	No			Yes		
75				CS		3	140	No			Yes		
76				CS		7	250	No					
77				CS		8	250	No					
78				CS	WARIA	3	210	No			Yes		Efforts are being made for RGMO mode of operation in the new
79				CS		4	210	No			Yes		
80				CS	Mejia	1	210	No			Yes		
81				CS		2	210	No			Yes		
82				CS		3	210	No			Yes		
83				CS		4	210	Yes					
84				CS		5	250	Yes					
85				CS	Mejia - B	6	250	Yes					
86				CS		7	500	No					Efforts are being made for RGMO mode of operation in the new
87				CS		8	500	No					
88				CS	DSTPS	1	500	No					
89				CS		2	500	No					Units 1 & 2 would put in RGMO within a short period.

[illegible]

Eastern Regional Power Committee

Minutes of Special Meeting on “Pollution Mapping of Eastern Region” held on 20.03.14 at ERPC, Kolkata

List of participants is at **Annexure-A**. Member Secretary I/c, ERPC welcome the participants to this meeting. In the meeting a detailed presentation was delivered by CPRI and Powergrid on the importance of pollution mapping and procedure of implementation. After detailed deliberation the following decisions were taken:

1. Constituents should nominate their coordinator (preferably from transmission line O&M) who will be responsible for carrying out the exercise of the pollution mapping in his control area. Co-coordinators nominations should be communicated to sksinghpg@yahoo.co.in with a copy to mserpc-power@nic.in by 31st Mar, 2014. Based on the identified locations coordinator will form teams as per their no of locations (each team will carry out pollution checks for 10 to 15 locations).
2. Transmission lines are to be identified as per the location given in excel format. Nearby village name and location names are already mentioned in the format. The format is available at ERPC website (<http://www.erpc.gov.in>).
3. Once the transmission lines get identified, one tower location should be identified suitably near to Sub-stations within that location. For high pollution zones (coastal, city, industrial belt zones etc) two locations may be identified to get better results.
4. For each locations utilities has to fill a format and send to sksinghpg@yahoo.co.in with a copy to mserpc-power@nic.in by 15th Apr, 2014. Formats were already made available in ERPC website (<http://www.erpc.gov.in>).
5. Respective utilities have to hang a dummy string of ten (10) insulators on all the identified tower locations. The punctured insulators may be used as dummy insulators but the surface should be in good conditions. This activity should be completed by 31st May, 2014.
6. 10% of the locations should be identified preferably nearer to Sub-stations where additional power supply (220 V) can be arranged and on these locations two sets of dummy insulators are required to be hanged.
7. To carry out the sampling/test for pollution mapping, Powergrid/CPRI will give training to all the team members on 12 locations. The training duration will be of 2 days. It was decided that the first training will be held on 23rd and 24th April, 2014 at ERPC conference hall, Kolkata and it should be attended by all the coordinators and the teams in and around

Kolkata. At other locations, training will be completed from 1st May 2014 to 30th June, 2014. It was decided that Powergrid will provide the training locations in the next OCC meeting and training schedule will be intimated at later stage.

8. Constituents should appreciate that, the pollution mapping is for benefit of all the utilities for planning of transmission systems. Implementation of this needs cooperation from all the constituents and their active participation.

Meeting ended with vote of thanks to the chair.



पावर ग्रिड कारपोरेशन ऑफ इंडिया लिमिटेड
(भारत सरकार का उद्यम)
POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)



केन्द्रीय कार्यालय: "सौदामिनी" प्लॉट सं. 2, सेक्टर-29, गुडगाँव-122 001, (हरियाणा) दूरभाष: 0124-2571700-719, फ़ैक्स : 0124-2571762,
"Saudamini" Plot No. 2, Sector-29, Gurgaon-122 001, (Haryana) Tel. : 0124-2571700-719, Fax : 0124-2571762, Web.: www.powergridindia.com

C/CP/9100/13-14/02/ERPC

27TH February 2014

Shri A.K.Bhandyopadhyay,
Member Secretary I/c
Eastern Regional Power Committee
14 Golf Club Road, Tollygunj,
Kolkata-700033

Subject: Investment Approval for "Phase-I-Unified Real Time Dynamic State Measurement (URTDSM)"

Dear Sir,

This has reference to your letter No. ERPC/MS/URTDSM/2014 dated 24th Feb 2014 on the subject.

In this regard, it may please be informed that the Investment Approval of the Subject project has been accorded in line with Page 24 of the CERC Order in Petition no. 129/MP/2012 dated 6th Sept 2013 which states:

Quote

"In our view, the projects should be funded through debt and equity in the ratio of 70:30. PGCIL shall contribute the equity and the debt portion shall be funded from the PSDF. PGCIL shall make an application before the Managing committee of PSDF for reimbursement of funds equivalent to the loan amount. Since there is a possibility of time lag between making of the application by PGCIL to PSDF and actual reimbursement of the fund, PGCIL shall arrange for loan for the matching amount, which shall be repaid on receipt of the funds from PSDF"


Unquote

In line with the CERC order, POWERGRID has already taken up the matter with the Nodal Agency, NLDC and has put up URTDSM project for consideration of PSDF Committee.

This is for your kind information, please

Thanking you,

Yours faithfully,


30/01/14
(Alok)
AGM (CP)

Attachment: As above.

CC: **Shri Ajay Joshi,**
Under Secretary (PG desk), Ministry of Power,
Shram Shakti Bhawan, New Delhi – 110 001.

ERPC: KOLKATA

Proposed Maintenance Programme of thermal units as per LGBR 2014-15 (Rev 1)

SYSTEM	POWER STATION	Unit NO.	Effective Capacity (MW)	Maintenance Programme	Remarks	No.of Days
DVC	DTPS	Unit No 3	140	02.04.2014 to 12.05.2014	AOH	40
NTPC	FSTPS	Unit No 3*	200	16.04.2014 to 20.04.2014	OH	25
		Unit No 5*	500	21.04.2014 to 25.05.2014	Boiler+HP & IP Module replacement+DDCMIS	35
		Unit No 6	500	01.04.14 to 14.04.2014	Condencer cleaning	15
	KhSTPP Stg-I	Unit No 2	210	Rescheduled from 15.06.14 to 14.07.14 because of Loksabha election.	Boiler	20

* : Subjected to receipt of spare of U#4. The final programme will be intimated by 10.04.2015.

**EASTERN REGIONAL LOAD DESPATCH CENTRE
KOLKATA**

TRANSMISSION ELEMENTS OUTAGE APPROVED IN 95TH OCC MEETING OF ERPC

Sr. No	S/D APPROVED IN OCC NAME OF THE ELEMENTS	DATE	TIME	DATE	TIME	REMARKS	S/D availed BY	Reason	SUBJECT TO CONSENT FROM AGENCY
1	A/R of Subhasgram - Jerat	22-03-2014	09:00	31-03-2014	17:00	ODB	ER-II	OPGW installation works	WBSETCL/ A/R SD WILL BE CLERAED 5 DAY BAIS PROVISIONALLY AND MAY BE RESCHEDULED IN CASE OF ANY PLANNED OR EMERGENCY SD IN THIS CORRIDOR
2	400 KV RNC-SIPAT-D/C	22-03-2014	07:00	23-03-2014	18:00	ODB	ER-I	FOR CONSTRUCTION OF RNC-CHANDWA TL	WRPC/NLDC
3	315 MVA ICT - II AT JSR S/S	23-03-2014	09:30	23-03-2014	13:30	ODB	ER-I	220 KV ISOLATOR BYPASSING FOR 220 KV ISOLATOR RETROFITTING WORK.	JHARKHAND
4	220KV RAMCHANDRAPUR- JODA (JSEB)	23-03-2014	08:00	24-03-2014	17:00	ODB	ER-I	FOR CONSTRUCTION OF LILO OF 400KV JSR-RKL AT CHAIBASA S/S	OPTCL
5	400KV RNC-RNC-I	23-03-2014	07:00	27-03-2014	18:00	OCB	ER-I	FOR CONSTRUCTION OF 400KV RNC-RNC-II,III & IV	
6	220KV ARA-KHAGAIL-I	24-03-2014	09:30	24-03-2014	17:30	ODB	ER-I	FOR LINE BAY AMP AT BSEB KHAGAIL END	BIHAR
7	400KV ROURKELA-SUNDARGARH-RAIGARH CKT-1	24-03-2014	08:00	25-03-2014	16:00	OCB	ER-II	FOR ATTENDING PUNCH POINTS.	WRPC/NLDC
8	220 KV Siliguri-Dalkhola Ckt I & II	24-03-2014	09:00	26-03-2014	14:00	ODB	ER-II	For stringing of 800 KV HVDC Transmission Line	
9	B/R - I AT MPL	24-03-2014	09:00	25-03-2014	18:00	OCB	MPL	AMC WORK	
10	132 KV CHUZACHEN - GANGTOK	24-03-2014	07:00	25-03-2014	16:00	ODB	ER - II	LILO AT RANGPO S/S	SIKKIM
11	125 MVAR B/R AT RNC S/S	25-03-2014	09:30	25-03-2014	17:30		ER-I	FOR CSD COMMISIONING WORK	
12	400 KV MTN - KODERMA D/C	25-03-2014	07:00	26-03-2014	18:00	ODB	ER-I	POWER LINE CROSSING WORK OF BOKARO - KODERMA	EITHER 400 KV BARH - KHG - D/C OR MTN - KODERMA - I WILL BE ALLOWED
13	315 MVA ICT - I AT BSF S/S	25-03-2014	11:00	28-03-2014	10:00	OCB	ER-I	IF TAN DELTA OF SAID BUSHING IS FOUND VOILATED	BIHAR
14	132 KV MOHANIA - KARMNESA	25-03-2014	10:00	25-03-2014	14:00		ER-I	FOR AMP WORK	BIHAR
15	220KV ARA-KHAGAIL-II	25-03-2014	09:30	25-03-2014	17:30		ER-I	FOR LINE BAY AMP AT BSEB KHAGAIL END	BIHAR
16	400kv New Siliguri - TALA Circuit # 4	25-03-2014	08:00	26-03-2014	17:00	ODB	ER-II	Replacement of broken insulator strings damaged by miscreants	NLDC
17	400 KV New Siliguri-New Purnea CKT-II	25-03-2014	08:00	25-03-2014	17:00		ER-II	AMP	NLDC
18	160 MVA ICT-I at Malda	25-03-2014	09:00	25-03-2014	18:00		ER-II	Inspection & measurment for commissioning of NIFS system, mainly at conservator line.	WBSETCL
19	400KV Line Reactor at Durgapur	25-03-2014	09:00	28-03-2014	15:00	OCB	ER-II	Off line Dry out	
20	400 kV Rourkela-Raigarh 1 & 2 (400 kV Rourkela-Sterilite-I & Rourkela-Sundargarh-I)	25-03-2014	08:00	25-03-2014	18:00		ER-II	For stringing work of 2 X 765 kV S/C Angul-Jharsuguda TL	WRPC/NLDC
21	132 kV D/C Budhipadar-Sundargarh	25-03-2014	08:00	25-03-2014	18:00		ER-II	For stringing work of 2 X 765 kV S/C Angul-Jharsuguda TL	OPTCL
22	125MVAR BUS REACTOR-2 at Sundargarh	25-03-2014	08:00	26-03-2014	16:00	OCB	ER-II	FOR CHECKING WATER SPRAY SYSTEM BY FIRE FIGHTING SYSTEM	
23	400kV Jeerat - Beharampur	30-03-2014	11:00	30-03-2014	12:00		ER-II	Replacement of link between LA base and surge monitor counter with 25x3 sq mm Cu flat in LAs installed at Behrampur which is currently linked by Cu wire of lower cross section area	NLDC/WBSETCL
24	400kV Jeerat - Beharampur	30-03-2014	07:00	30-03-2014	17:00		ER-II	Line Insulator Replacement / LA Replacement / LR AMP & SFRA	NLDC
25	400 KV Sundergarh - Raigarh - I	25-03-2014	09:00	25-03-2014	17:00		ER-II	Insulator replacement works at location No.- 757	WRPC/NLDC
26	50MVAR 400KV Bus Reactor at Rourkela	25-03-2014	09:00	25-03-2014	17:00		ER-II	AMP	
27	765 KV 1500 MVA ICT AT PSL S/S	26-03-2014	09:00	26-03-2014	17:00		ER-I	FOR R & Y PH RADIATOR REPLACEMENT FOR ARRESTING OIL LEAKAGE(765KV SSRM-FTP LINE WILL REMAIN OUT OF SERVICE)	NLDC
28	125MVAR B/R-II AT PTN	26-03-2014	09:30	26-03-2014	17:30		ER-I	FOR COMMISSIONING OF CSD	
29	125 MVAR BUS REACTOR-II at New Siliguri	26-03-2014	08:00	26-03-2014	17:00		ER-II	AMP Work	
30	400kV Malithon-RTPS Line	26-03-2014	09:00	28-03-2014	17:00	ODB	ER-II	PIR removal of Main bay CGL CB, Line may be charged through tie bay during non movement of crane etc /night through tie Bay only	DVC
31	220KV Malithon-Kalyaneshwari-I	26-03-2014	09:00	26-03-2014	17:00		ER-II	Hivelm Line Isolator arm replacement Y & B Ph	DVC
32	B/R - II AT MPL	26-03-2014	09:00	27-03-2014	18:00	OCB	MPL	AMC WORK	
33	220 KV PRN - NPRN - I	27-03-2014	10:00	27-03-2014	14:00		ER-I	FOR AMP WORK	
34	125MVAR B/R-I AT PTN	27-03-2014	09:30	27-03-2014	17:30		ER-I	FOR CT OIL SAMPLING AT PTN	
35	160 MVA ICT-II at Malda	30-03-2014	07:00	30-03-2014	15:00		ER-II	Inspection & measurment for commissioning of NIFS system, mainly at conservator line.	WBSETCL

36	125MVAR BUS REACTOR-1 at Sundargarh	27-03-2014	08:00	28-03-2014	16:00	OCB	ER-II	FOR CHECKING WATER SPRAY SYSTEM BY FIRE FIGHTING SYSTEM	
37	315MVA 400/220KV ICT-I at Rourkela	27-03-2014	09:00	27-03-2014	17:00		ER-II	AMP	
38	400 KV JSR - RKL - II	28-03-2014	07:00	28-03-2014	18:00		ER-I	FOR CONSTRUCTION OF LILO OF 400KV JSR-RKL AT CHAIBASA S/S	
39	315 MVA ICT - I AT JSR S/S	28-03-2014	09:30	28-03-2014	17:30		ER-I	220 KV ISOLATOR RECONNECTION AFTER RETROFITTING WORK.	JHARKHAND
40	400 KV MTN - KODERMA - II	28-03-2014	08:00	28-03-2014	18:00		ER-I	AFTER COMPLETION OF S/D LINE WILL BE CHARGED AS 400KV GAYA - MTN LINE- II	EITHER 400 KV BARH - KHG - D/C OR MTN - KODERMA - I WILL BE ALLOWED
41	132 kV D/C Budhipadar-Tarkera	28-03-2014	08:00	28-03-2014	18:00		ER-II	For stringing work of 2 X 765 kV S/C Angul-Jharsuguda TL	OPTCL
42	BUS - I CVT AT MPL	28-03-2014	09:00	28-03-2014	18:00		MPL	AMC WORK	
43	BUS - II CVT AT MPL	29-03-2014	09:00	29-03-2014	18:00		MPL	AMC WORK	
44	220KV Birpara-New Siliguri Ckt.-I	29-03-2014	08:00	30-03-2014	17:00	ODB	ER-II	Replacement of broken insulator strings damaged by miscreants	NLDC
45	132KV KONAR-HAZARIBAGH ROAD(DVC)	29-03-2014	07:00	30-03-2014	18:00	ODB	ER-I	POWER LINE CROSSING WORK OF BOKARO - KODERMA	DVC
46	315 MVA ICT - II AT JSR S/S	29-03-2014	09:30	29-03-2014	17:30		ER-I	220 KV ISOLATOR RECONNECTION AFTER RETROFITTING WORK.	JHARKHAND
47	765 KV 1500 MVA ICT AT PSL S/S	29-03-2014	09:00	29-03-2014	17:00		ER-I	TAP CHANGER MODIFICATION BY M/S MR AND AMP WORK(765KV SSRM-FTP LINE WILL REMAIN OUT OF SERVICE)	NLDC
48	50 MVAR Bus Reactor at Jeerat	29-03-2014	08:00	29-03-2014	16:00		ER-II	SFRA	
49	400 KV SEL - Raigarh - II	29-03-2014	09:00	29-03-2014	17:00		ER-II	Insulator replacement works and Jumper tightening works, VD adjustment, Corona ring Tightening and spacer tightening works.	WRPC/NLDC
50	400KV ROURKELA-SUNDARGARH-RAIGARH CKT-2	30-03-2014	08:00	31-03-2014	16:00	OCB	ER-II	FOR ATTENDING PUNCH POINTS.	WRPC/NLDC
51	315 MVA ICT#3 at Subhasgram	30-03-2014	08:00	30-03-2014	16:00		ER-II	Isolator CRM	WBSETCL
52	132 kV WBSETCL TCF Ph I to TCF Ph II	30-03-2014	09:00	01-04-2014	14:00	ODB	ER-II	For stringing of 800 KV HVDC Transmission Line	WBSETCL
53	315MVA 400/220KV ICT-II at Rourkela	30-03-2014	09:00	30-03-2014	17:00		ER-II	AMP	
54	400kV Jeerat - Subhashgram	31-03-2014	07:00	31-03-2014	15:00		ER-II	AMP / Isolator Maintenance at Jeerat	WBSETCL
55	400 kV Rourkela-Raigarh 3 & 4 (400 kV Sterlite-Raigarh-II & Rourkela-Sundargarh-II)	30-03-2014	08:00	30-03-2014	18:00		ER-II	For stringing work of 2 X 765 kV S/C Angul-Jharsuguda TL	WRPC/NLDC
56	400 KV MPL - RANCHI - II ALONGWITH L/R - II	31-03-2014	09:00	02-04-2014	18:00	ODB	MPL	AMC WORK	
57	220KV Birpara-New Siliguri Ckt.-II	31-03-2014	08:00	01-04-2014	17:00	ODB	ER-II	Replacement of broken insulator strings damaged by miscreants	NLDC
58	765 KV MID POINT REACTOR ALONGWITH 765 GAYA - FATEHPUR LINE	31-03-2014	09:00	31-03-2014	17:00		ER-I	STABILITY TEST WITH SPARE REACTOR AND AMP WORK	NLDC
59	400 New Siliguri- Tala-I	01-04-2014	08:00	01-04-2014	17:00		ER-II	Relay retrofitting under NTAMC Scheme	NLDC
60	400 KV JSR - ANDAL - II	01-04-2014	09:30	01-04-2014	17:30		ER-I	FOR AMP WORK	DVC
61	400 KV MTN - KODERMA - I	01-04-2014	08:00	04-04-2014	18:00	ODB	ER-I	AFTER COMPLETION OF S/D LINE WILL BE CHARGED AS A 400KV GAYA - MTN LINE-I & 400KV KOD-GAYA-I	EITHER 400 KV BARH - KHG - D/C OR MTN - KODERMA - I WILL BE ALLOWED
62	220KV Subhasgram-CESC Line#1	01-04-2014	08:00	01-04-2014	16:00		ER-II	CT ratio change along with relay setting	WBSETCL
63	132 kV D/C Budhipadar-Tarkera	01-04-2014	08:00	01-04-2014	18:00		ER-II	For stringing work of 2 X 765 kV S/C Angul-Jharsuguda TL	OPTCL
64	132 kV S/C Kuchinda-Rajgangpur (132 kV S/C Sambalpur-Rajgangpur LILO at Kuchinda)	01-04-2014	08:00	01-04-2014	18:00		ER-II	For stringing work of 2 X 765 kV S/C Angul-Jharsuguda TL	OPTCL
65	132 kV WBSETCL TCF Ph I to TCF Ph II	01-04-2014	08:00	03-04-2014	18:00	ODB	ER-II	For stringing of 800 KV HVDC Transmission Line	WBSETCL
66	A/R of Rourkela- Sudhargarh Ckt-I	01-04-2014	09:00	30-04-2014	17:00	ODB	ER-II	OPGW installation works	A/R SD WILL BE CLERAED 10 DAY BAIS PROVISIONALLY AND MAY BE RESCHEDULED IN CASE OF ANY PLANNED OR EMERGENCY SD IN THIS CORRIDOR
67	A/R of Purnea - Malda - I	01-04-2014	09:00	30-04-2014	17:00	ODB	ER-II	OPGW installation works	A/R SD WILL BE CLERAED 10 DAY BAIS PROVISIONALLY AND MAY BE RESCHEDULED IN CASE OF ANY PLANNED OR EMERGENCY SD IN THIS CORRIDOR
68	A/R of Bolangir - JITPL	01-04-2014	09:00	30-04-2014	17:00	ODB	ER-II	OPGW installation works	A/R SD WILL BE CLERAED 10 DAY BAIS PROVISIONALLY AND MAY BE RESCHEDULED IN CASE OF ANY PLANNED OR EMERGENCY SD IN THIS CORRIDOR
69	400 KV TALA - BINAGURI - I	01-04-2014	09:00	03-04-2014	17:00	OCB	TALA	INSPECTION & REPLACEMENT OF COMPONENTS(T-RING) OF GIS EQUIPMENT FOR THE ENTIRE BAY	NLDC
70	400 KV JSR - RKL - I	02-04-2014	07:00	11-04-2014	18:00	OCB	ER-I	FOR CONSTRUCTION OF LILO OF 400KV JSR-RKL AT CHAIBASA S/S	
71	132KV ARA-ARA	02-04-2014	10:00	02-04-2014	14:00		ER-I	FOR AMP WORK	BIHAR
72	220KV Dalkhola - Siliguri Ckt.-I	02-04-2014	08:00	03-04-2014	17:00	ODB	ER-II	Replacement of broken insulator strings damaged by miscreants	

73	220 KV Birpara-New Siliguri Ckt-II	02-04-2014	09:00	02-04-2014	17:00		ER-II	Conductor replacement work	WBSETCL
74	220kV Subhasgram-CESC Line#2	02-04-2014	08:00	02-04-2014	16:00		ER-II	CT ratio change along with relay setting	WBSETCL
75	INDRAVATI ICT-II(3X105 MVA) AT OHPC BAY	02-04-2014	08:00	02-04-2014	18:00		ER-II	AMP OF BAY EQUIPMENTS	OPTCL
76	220 KV BIRPARA - SALAKATI - D/C	02-04-2014	06:00	04-04-2014	16:00	ODB	ENICL	CONSTRUCTION OF 400 KV BINAGURI- BONGAIGAON D/C	NLDC/NERPC
77	400 KV MPL - RANCHI - I ALONGWITH L/R - I	03-04-2014	09:00	05-04-2014	18:00	ODB	MPL	AMC WORK	
78	400 KV New Siliguri-Purnea Ckt II	03-04-2014	09:00	06-04-2014	14:00	ODB	ER-II	For stringing of 800 KV HVDC Transmission Line	NLDC
79	400 KV BSF - GAYA	03-04-2014	08:00	09-04-2014	18:00	OCB	ER-I	FOR CHARGING OF 765 KV GAYA - BALIA LINE	NLDC
80	400 KV SSRM - BALIA	03-04-2014	08:00	09-04-2014	18:00	OCB	ER-I	FOR CHARGING OF 765 KV GAYA - BALIA LINE	NLDC
81	400 KV BSF - SSRM - III	03-04-2014	09:30	07-04-2014	18:00	OCB	ER-I	FOR CHARGING OF 765 KV GAYA - BALIA LINE	NLDC
82	132KV ARA-JAGDISHPUR	03-04-2014	10:00	03-04-2014	14:00		ER-I	FOR AMP WORK	BIHAR
83	400 KV Bus coupler, 400 KV Bus-I & 315 MVA ICT-V.	03-04-2014	09:00	03-04-2014	18:00		ER-II	For Isolator adjustment under NTAMC head/WTI/OTI adaption work of ICT & Isolator allinment and remote operation under NTAMC	
84	220kV Subhagram-WBSETCL Line#1	03-04-2014	08:00	03-04-2014	16:00		ER-II	Relay setting change due to line conductor change	WBSETCL
85	220 kv D/C Budhipadar-Tarkera	03-04-2014	08:00	03-04-2014	18:00		ER-II	For stringing work of 2 X 765 kV S/C Angul-Jharsuguda TL	OPTCL
86	220KV Dalkhola - Siliguri Ckt.-II	04-04-2014	08:00	05-04-2014	17:00	ODB	ER-II	Replacement of broken insulator strings damaged by miscreants	
87	400KV Durgapur Sagardighi#1	04-04-2014	11:00	04-04-2014	15:00		ER-II	Replacement of REL521	WBSETCL
88	315 MVA ICT#4 at Subhasgram	04-04-2014	08:00	04-04-2014	16:00		ER-II	Isolator CRM / Jumper Alignment	WBSETCL
89	220kV Subhagram-WBSETCL Line#2	04-04-2014	08:00	04-04-2014	16:00		ER-II	Relay setting change due to line conductor change	WBSETCL
90	50MVAR Line Reactor at Indravati	04-04-2014	09:00	19-04-2014	17:00	OCB	ER-II	Drying out of 50MVAR LR	
91	132 KV NBU - SILIGURI	04-04-2014	07:00	04-04-2014	15:00		WBSETCL	MAINTENANCE WORK	
92	400KV RNC-MTN(RB)-I & II	04-04-2014	08:00	05-04-2014	18:00		ER-I	FOR ATTENDING CLEARANCE FROM 220KV KOLESHWARI-DHANWAD D/C(DVC)	MPL
93	400kV S'Gram - Sgardighi Line	05-04-2014	07:00	06-04-2014	15:00	ODB	ER-II	VD Replacement, Jumper tightening, LR SFRA	WBSETCL/NLDC
94	220 KV BTPS - CTPS LINE OF DVC	05-04-2014	07:00	06-04-2014	18:00	ODB	ER-I	POWER LINE CROSSING WORK OF BOKARO - KODERMA	DVC
95	132 kV Sambalpur-Kuchinda & 132 kV Kuchinda0rajgangur (Double Circuit Portion of LILO 132 kV S/C Sambalpur-Rajgangpur line at Kuchinda)	05-04-2014	08:00	05-04-2014	18:00		ER-II	For stringing work of 2 X 765 kV S/C Angul-Jharsuguda TL	OPTCL
96	132 KV NJP - SILIGURI	05-04-2014	07:00	05-04-2014	15:00		WBSETCL	MAINTENANCE WORK	
97	400 KV TALCHER - MERAMUNDALI & GMR - MERAMUNDALI	06-04-2014	08:00	06-04-2014	18:00		ER-II	LINE CROSSING WORK	NLDC/OPTCL
98	315 MVA ICT - II AT ARAMBAG	06-04-2014	07:00	06-04-2014	15:00		WBSETCL	MAINTENANCE WORK	
99	STATION TRF - II AT MPL	07-04-2014	09:00	09-04-2014	18:00	OCB	MPL	AMC WORK	
100	400 KV Bongalgaon-New Siliguri Ckt-I	07-04-2014	09:00	12-04-2014	17:00	ODB	ER-II	Replacement of defective insulator strings damaged by miscreants	NLDC
101	400 KV PURNEA - BIHARSARIFF - II	07-04-2014	11:00	07-04-2014	13:00		ENICL	MAINTENANCE WORK	NLDC
102	400 KV TALA - BINAGURI - II	07-04-2014	09:00	09-04-2014	17:00	OCB	TALA	INSPECTION & REPLACEMENT OF COMPONENTS(T-RING) OF GIS EQUIPMENT FOR THE ENTIRE BAY	NLDC
103	220KV Malda Dalkhola-I	08-04-2014	08:00	08-04-2014	18:00		ER-II	Replacement of CT under ADDCAP	
104	400 KV PURNEA - BIHARSARIFF - I	08-04-2014	11:00	08-04-2014	13:00		ENICL	MAINTENANCE WORK	NLDC
105	400 KV B/T BAY AT KTHP	08-04-2014	06:00	11-04-2014	17:00	ODB	WBSETCL	MAINTENANCE WORK	
106	400 KV MAIN BUS - I AT KTHP	08-04-2014	06:00	08-04-2014	17:00		WBSETCL	MAINTENANCE WORK	
107	400 KV Rourkela-Sundargarh-Rajgarh I & II	09-04-2014	08:00	09-04-2014	18:00		ER-II	For stringing work of 2 X 765 kV S/C Angul-Jharsuguda TL	WRPC/NLDC
108	132 KV Siliguri-WBSETCL - II	09-04-2014	08:00	09-04-2014	20:00		ER-II	Retrofitting of CT under ADDCAP	WBSETCL
109	400 KV MAIN BUS - II AT KTHP	09-04-2014	07:00	09-04-2014	15:00		WBSETCL	MAINTENANCE WORK	
110	400 KV ARAMBAG - PPSP - II	09-04-2014	09:00	09-04-2014	16:00		WBSETCL	MAINTENANCE WORK	
111	400KV Rourkela - Sundargarh Ckt.-I	09-04-2014	10:00	09-04-2014	14:00		ER-II	Numerical Backup Impedence Relay retorfiting by M/s ABB	WRPC/NLDC
112	400 KV MAITHON - MPL - II	10-04-2014	06:00	12-04-2014	15:00	ODB	MPL	AMC WORK	
113	132 KV BTPS - CTPS LINE OF DVC	10-04-2014	07:00	11-04-2014	18:00	ODB	ER-I	POWER LINE CROSSING WORK OF BOKARO - KODERMA	DVC
114	220KV Malda Dalkhola-II	10-04-2014	08:00	10-04-2014	18:00		ER-II	Replacement of CT under ADDCAP	
115	400 KV PURNEA - MUZAFFARPUR - I	10-04-2014	09:30	30-04-2014	17:00	ODB	POWERLINK	REPLACEMENT OF 160 KN INSULATOR STRING IN 84 NOS OF ANGLE TOWER	NLDC
116	132 KV MALDA - MALDA - I	10-04-2014	07:00	10-04-2014	15:00		WBSETCL	MAINTENANCE WORK	
117	400 New Siliguri- Tala-I	10-04-2014	09:00	10-04-2014	17:00		ER-II	Replacement of SS fitting with DS fitting in Power line crossing at loc no-82-83 of Tala Ckt-I & II	NLDC
118	400KV Bus #2 at Durgapur	11-04-2014	09:00	11-04-2014	18:00		ER-II	400KV CVT Replacement under ADDCAP	
119	132 KV MALDA - MALDA - II	11-04-2014	07:00	11-04-2014	15:00		WBSETCL	MAINTENANCE WORK	
120	400KV Maithon-MPL-II	11-04-2014	08:00	11-04-2014	14:00		ER-II	Strengthening of strung BUS to avoid overheating	MPL
121	400 KV TALA - BINAGURI - IV	11-04-2014	09:00	14-04-2014	17:00	OCB	TALA	INSPECTION & REPLACEMENT OF COMPONENTS(T-RING) OF GIS EQUIPMENT FOR THE ENTIRE BAY	NLDC
122	400KV Rourkela - SEL Ckt.-I	12-04-2014	10:00	12-04-2014	14:00		ER-II	Numerical Backup Impedence Relay retorfiting by M/s ABB	WRPC/NLDC
123	132 KV Siliguri-WBSETCL - II	12-04-2014	08:00	12-04-2014	20:00		ER-II	Retrofitting of CVT under ADDCAP	WBSETCL
124	400KV Maithon-Kahalgaoon-I Line with LR	13-04-2014	09:00	13-04-2014	17:00		ER-II	Reactor Isolator checking,CVT inspection/replacement ,RWTT replacement	NLDC
125	315 MVA ICT - III AT ARAMBAG	13-04-2014	07:00	13-04-2014	15:00		WBSETCL	MAINTENANCE WORK	
126	STATION TRF - I AT MPL	14-04-2014	09:00	16-04-2014	18:00	OCB	MPL	AMC WORK	

127	400KV Malthon-Kahalgaon-II Line with LR	14-04-2014	09:00	14-04-2014	17:00		ER-II	PRD inspection/leakge arrest/PRD replacement of LR,Line CVT replacement	NLDC
128	400 KV KAHALGAON - MAITHON - II	14-04-2014	09:30	14-04-2014	17:30		NTPC	PM WORK & RELAY TESTING	NLDC
129	132KV RAJKHARSAWAN-KENDPOSI (JSEB)	14-04-2014	07:00	14-04-2014	18:00		ER-I	FOR CONSTRUCTION OF LILO OF 400KV JSR-RKL AT CHAIBASA S/S	OPTCL
130	400 KV Bongaigaon-New Siliquri Ckt-II	14-04-2014	09:00	19-04-2014	17:00	ODB	ER-II	Replacement of defective insulator strings damaged by miscreants	NLDC
131	400 kV Rourkela-Raigarh 3 & 4 (400 kV Sterlite-Raigarh-II & Rourkela-Sundargarh-II)	14-04-2014	08:00	14-04-2014	18:00		ER-II	For stringing work of 2 X 765 kV S/C Angul-Jharsuguda TL	WRPC/NLDC
132	400 KV TALA - MALBASE	15-04-2014	09:00	17-04-2014	17:00	OCB	TALA	INSPECTION & REPLACEMENT OF COMPONENTS(T-RING) OF GIS EQUIPMENT FOR THE ENTIRE BAY	NLDC
133	132 KV KAHALGAON - KAHALGAON	16-04-2014	09:30	16-04-2014	17:30		NTPC	PM WORK & RELAY TESTING	BIHAR
134	220 KV ICT-I Line Bay	16-04-2014	08:00	16-04-2014	20:00		ER-II	Retrofitting of CT under ADDCAP	
135	400KV Malda-Farakka-I	16-04-2014	09:00	16-04-2014	13:00		ER-II	For Relay Retrofitting & Oil sample collection	NLDC
136	400 KV MAITHON - MPL - II	17-04-2014	06:00	19-04-2014	15:00	ODB	MPL	AMC WORK	
137	132KV RAJKHARSAWAN-KENDPOSI (JSEB)	18-04-2014	07:00	18-04-2014	18:00		ER-I	FOR CONSTRUCTION OF LILO OF 400KV JSR-RKL AT CHAIBASA S/S	OPTCL
138	315 MVA ICT#1 at Durgapur	18-04-2014	09:00	21-04-2014	17:00	OCB	ER-II	Replacement of 220KV Isolator and leakage arresting of ICT#1	WBSETCL
139	400 KV TALA - MALBASE	18-04-2014	09:00	09-05-2014	17:00	OCB	TALA	AMC WORK	NLDC
140	220 KV D/C Birpara-Chukha Circuit-I	20-04-2014	09:00	20-04-2014	17:00		ER-II	Replacement of SS fitting with DS fitting in Power line crossing at loc no-82-83 of Tala Ckt-I & II	NLDC
141	400 KV ARAMBAG - BAKRESWAR	20-04-2014	07:00	20-04-2014	15:00		WBSETCL	MAINTENANCE WORK	
142	220KV KOLESHWARI-DHANWAD D/C(DVC)	22-04-2014	18:00	22-04-2014	18:00		ER-I	FOR ATTENDING CLEARANCE FROM 400KV RNC-MTN(RB)-I & II	DVC
143	132 KV Rangit - Rammam	22-04-2014	07:00	23-04-2014	15:00	ODB	ER-II	AMP and fitting & fixing of arcing horn	WBSETCL
144	400 KV B/C BAY AT ARAMBAG	22-04-2014	06:00	25-04-2014	17:00	ODB	WBSETCL	MAINTENANCE WORK	
145	400 KV KAHALGAON - BANKA - I	23-04-2014	09:30	23-04-2014	17:30		NTPC	PM WORK & RELAY TESTING	NLDC
146	220KV Malthon-Dhanbad-II	23-04-2014	09:00	23-04-2014	17:00		ER-II	TBC Isolator checking for remote operation under NTAMC	DVC
147	400KV RNC-MTN-I & 400KV RNC-RTPS	24-04-2014	08:00	24-04-2014	18:00		ER-I	FOR ATTENDING CLEARANCE FROM 220KV SANTHALDIH-CHANDIL S/C (WBSEB)	DVC
148	220KV SANTHALDIH-CHANDIL S/C (WBSEB)	24-04-2014	18:00	24-04-2014	18:00		ER-I	FOR ATTENDING CLEARANCE FROM 400KV RNC-MTN-I & 400KV RNC-RTPS	WBSETCL/JHARKHANDA
149	220KV Durgapur-DVC#2	24-04-2014	09:00	26-04-2014	17:00	OCB	ER-II	Replacement of Line isolator and 220KV CT (02 nos)	DVC
150	132 KV Rangit -Kurseong	24-04-2014	07:00	24-04-2014	17:00		ER-II	AMP and fitting & fixing of arcing horn	WBSETCL
151	400 KV Teesta- New Siliquri CKT-II	25-04-2014	07:00	25-04-2014	17:00		ER-II	LILO termination at Rangpo	NLDC
152	100 MVA ICT - I AT PRN S/S	26-04-2014	08:00	26-04-2014	14:00		ER-I	FOR AMP WORK	BIHAR
153	220KV Malthon-Kalyaneshwari-II	26-04-2014	09:00	26-04-2014	17:00		ER-II	Line isolator checking for remote operation under NTAMC, CVT replacement	DVC
154	100 MVA ICT - II AT PRN S/S	27-04-2014	08:00	27-04-2014	14:00		ER-I	FOR AMP WORK	BIHAR
155	100 MVA ICT - III AT PRN S/S	28-04-2014	08:00	28-04-2014	14:00		ER-I	FOR AMP WORK	BIHAR
156	ICT-1 (100 MVA) at Birpara	28-04-2014	09:00	29-04-2014	17:00	ODB	ER-II	Commissioning of RTCC panel	WBSETCL
157	132 KV Rangit -Gangtok	28-04-2014	07:00	29-04-2014	17:00	ODB	ER-II	Xing of CKT-II, LILO of Teesta-V at Rangpo/ AMP and fitting & fixing of arcing horn	SIKKIM
158	132 KV Chuzachen- Gangtok (Rangpo- Chuzachen)	28-04-2014	07:00	29-04-2014	17:00	ODB	ER-II	Xing of CKT-II, LILO of Teesta-V at Rangpo/ AMP and fitting & fixing of arcing horn	SIKKIM/ CHUZACHEN
159	400 KV BINAGURI - BONGAIGAON - D/C	30-04-2014	06:00	02-05-2014	16:00	ODB	ENICL	CONSTRUCTION OF 400 KV BINAGURI- BONGAIGAON D/C	NLDC/NERPC

Annexure-C.2

Anticipated Power Supply Position for the month of
Apr-14

SL.NO	PARTICULARS	PEAK DEMAND MW	ENERGY MU
1	BIHAR		
	i) NET MAX DEMAND	2700	1303
	ii) NET POWER AVAILABILITY- Own Source	274	112
	- Central Sector	1453	936
	iii) SURPLUS(+)/DEFICIT(-)	-973	-255
2	JHARKHAND		
	i) NET MAX DEMAND	1130	700
	ii) NET POWER AVAILABILITY- Own Source	417	297
	- Central Sector	553	350
	iii) SURPLUS(+)/DEFICIT(-)	-160	-54
3	DVC		
	i) NET MAX DEMAND (OWN)	2585	1550
	ii) NET POWER AVAILABILITY- Own Source	4526	3005
	- Central Sector	395	275
	Long term Bi-lateral (Export)	2069	1490
	iii) SURPLUS(+)/DEFICIT(-)	267	240
4	ORISSA		
	i) NET MAX DEMAND	3700	2146
	ii) NET POWER AVAILABILITY- Own Source	3030	1598
	- Central Sector	928	569
	iii) SURPLUS(+)/DEFICIT(-)	258	20
5	WEST BENGAL		
5.1	WBSEDCL		
	i) NET MAX DEMAND (OWN)	5350	3188
	ii) CESC's DRAWAL	700	201
	iii) TOTAL WBSEDCL's DEMAND	6050	3389
	iv) NET POWER AVAILABILITY- Own Source	3978	2086
	- Import from DPL	-50	82
	- Central Sector	1560	1038
	v) SURPLUS(+)/DEFICIT(-)	-562	-183
5.2	DPL		
	i) NET MAX DEMAND	300	220
	ii) NET POWER AVAILABILITY	250	302
	iii) SURPLUS(+)/DEFICIT(-)	-50	82
5.3	CESC		
	i) NET MAX DEMAND	1750	952
	ii) NET POWER AVAILABILITY - OWN SOURCE	1050	722
	FROM WBSEDCL	700	201
	iii) TOTAL AVAILABILITY	1750	923
	iv) SURPLUS(+)/DEFICIT(-)	0	-29
6	WEST BENGAL (WBSEDCL+DPL+CESC) (excluding DVC's supply to WBSEDCL's command area)		
	i) NET MAX DEMAND	7400	4360
	ii) NET POWER AVAILABILITY- Own Source	5278	3110
	- Central Sector	1560	1038
	iii) SURPLUS(+)/DEFICIT(-)	-562	-212
7	SIKKIM		
	i) NET MAX DEMAND	90	36
	ii) NET POWER AVAILABILITY- Own Source	0	0
	- Central Sector	104	62
	iii) SURPLUS(+)/DEFICIT(-)	14	26
8	EASTERN REGION		
	At 1.03 AS DIVERSITY FACTOR		
	i) NET MAX DEMAND	17092	10095
	Long term Bi-lateral	2069	1490
	ii) NET TOTAL POWER AVAILABILITY OF ER (INCLUDING C/S ALLOCATION)	15970	9861
	iii) PEAK SURPLUS(+)/DEFICIT(-) OF ER (ii)-(i)	-1122	-234

Power System Operation Corporation Limited
(A wholly owned subsidiary unit of Powergrid Corporation of India Limited)
Eastern Regional Load Despatch Centre
14, Golf Club Road, Tollygunge, Kolkata – 700033



Ref: ERLDC/SO/

Dated: 28th February, 2014

To: As per distribution list enclosed

Sub: Methodology to be followed regarding commissioning new assets-regarding

Sir,

The quantum of new assets which are in the process of getting commissioned are on an increasing trend. Accordingly, it was felt that certain guidelines/methodologies are to be fulfilled by the generating company & Transmission Utilities during the process of such commissioning. A letter from NLDC(Ref. POSOCO/NLDC/System operation/outage planning/1239 dtd.10/02/14) was received in this regard intimating the methodology to be followed. It may also be noted that formation of such guidelines are essential in view of better coordination and Grid security.


Accordingly, the following methodology/guidelines are proposed:

- 1) Owner of the asset should submit the request for probable commissioning/charging of the new assets for the calendar month latest by 5th day of the month to ERLDC, along with status of activities mentioned as per checklist enclosed at Annexure.
- 2) ERLDC shall study the impact of commissioning/charging of new asset and based on the examination of the preparedness of the utility (as per the check list), shall forward its recommendations to NLDC who would also examine the issue independently considering the all India grid scenario.
- 3) The owner of the new asset should inform ERLDC about commissioning/charging of the element, at least three (3) days in advance before the actual date of commissioning/charging. The owner shall also forward the requirements of the checklist(as mentioned above in) form of a consolidated document.

The above guidelines should be followed by all utilities to ensure grid security and reliability. It should also be ensured that after commissioning/charging of the new asset, a copy of the output of Data Acquisition System/ Event logger /Disturbance recorder shall be submitted to ERLDC which would give a clear position of its healthiness.

Thanking You,

Yours faithfully


 (U.K.Verma) 28/2/2014,

General Manager

Encl: Checklist

Checklist before charging of any new transmission/generation asset

1	List of elements to be charged along with the details of approval of the transmission scheme from Standing Committee / CTU / STU	<input type="checkbox"/>
2	Single Line Diagram of the concerned sub stations; along with status of completion of each dia /bus/breakers	<input type="checkbox"/>
3	Availability of real time data and communication to the designated SLDC/RLDC	<input type="checkbox"/>
4	Installation of Special Energy Meter complying with CEA's Regulations (Serial Number/Meter Number, CT/PT ratio to be indicated)	<input type="checkbox"/>
5	Charging Instructions by CTU/STU	<input type="checkbox"/>
6	Schedule and Sequence of charging of elements	<input type="checkbox"/>
7	Availability of line / bus reactors as per planning. In case the transmission system is planned to be charged without the planned line reactor, requisite authorization from CTU/STU supported by studies.	<input type="checkbox"/>
8	Connection Agreement (along with all annexures) with CTU or STU	<input type="checkbox"/>
9	Copy of Long Term Access (LTA) or Medium Term Open Access (MTOA) granted by CTU or STU as the case may be.	<input type="checkbox"/>
10	Copy of Power Purchase Agreement (PPA)	<input type="checkbox"/>
11	A signed comprehensive undertaking with name and designation of the officer clearly indicated covering the following: i) All Disturbance Recorders (DR) and Event Loggers (ELs) with time synchronization are commissioned. ii) All protective systems have been commissioned. iii) All statutory clearances have been obtained.	<input type="checkbox"/>
12	Output of EL and DR after charging	<input type="checkbox"/>

Note: Each document mentioned in the checklist from S no 1 to 10 must be attached for the sake of completeness and emailed as a consolidated document to the nodal RLDC involved well before the new element commissioning dates. In respect of S no 11, only undertaking is adequate.

Distribution list:

- ✓1. The Director (Transmission), West Bengal State Electricity Transmission Co. Ltd., Vidyut Bhavan, 7th Floor, Block-DJ, Sector-II, Bidhannagar, Kolkata-700 091 (Fax No: 033-2337-0206).
- ✓2. The Member (Transmission), Bihar State Electricity Board, Vidyut Bhavan, Bailey Road, Patna-800 021 (Fax No: 0612-2504557).
- ✓3. The Member (Technical), Jharkhand State Electricity Board, Engineering Building, HEC, Dhurwa, Ranchi-834004 (Fax No: 0651-2490486)
- ✓4. The Director (Commercial), Damodar Valley Corporation, DVC Tower, VIP Road, Kolkata-700 054 (Fax No: 033-2355-2129).
- ✓5. The Chief General Manager (O & M), Orissa Power Transmission Corporation Ltd., Janpath, Bhubaneswar-751 022 (Fax No: 0674-2541904/2542932).
- ✓6. The Chief Engineer-III, Energy & Power Department, Govt. of Sikkim, Kaji Road, Gangtok-737101 (Fax No: 03592-201148/228186).
- ✓7. The General Manager, FSTPS, NTPC Limited, P.O. Nabarun, Dist: Murshidabad, West Bengal-742 236 (Fax No: 03512-224214 /226085 /226124).
- ✓8. The General Manager, KhSTPS, NTPC Limited, P.O. Kahalgaon STP, District: Bhagalpur, Bihar-813 214 (Fax No: 06429-226082).
- ✓9. The General Manager, Talcher STPS, NTPC Limited, P.O. Deepshikha, District: Angul, Orissa-759 147 (Fax No: 06760-249053).
- ✓10. The Chief Engineer (E), Teesta (Stage-V), HE Project, NHPC, Singtam, East Sikkim-737134 (Fax No: 03592-247377).
- ✓11. The Chief Engineer, Rangit IIEP, NHPC, P.O. Rangit Nagar, South Sikkim-737111 (Fax No: 03595-259253).
- ✓12. The CEO, Maithon Power Limited, C-43, Sector62, Noida-201307(Fax- 0120-6663029)
- ✓13. The Sr. V.P. – Sterlite Energy Limited, 1st Floor , City Mart Complex, Opposite Rajdhani College Baramunda, Bhubaneswar-751003 (Fax- 06746610342)
- ✓14. General Manager(Projects),Adhunik Power and Natural Resource, Crescent Tower, 3rd Floor, 229, A.J.C Bose Road, Kolkata-700020 (Fax-033-30915346)
15. The General Manager(O&M),NHPC Ltd,Faridabad-121003(Fax-0129-2272413)
- ✓16. The General Manager,NTPC ER-I HQ ,2nd floor ,Lok nayak jay prakash bhavan,Dak Bungalow chowk,Patna-800001(Fax-0612-2224287/0612-2230035)
- ✓17. The General Manager,NTPC ER-II HQ ,OLIC Building,Plot no N17/2,Nayapalli,Bhubaneswar,Orissa-751012(Fax-0674-2500951/0674-2501919)

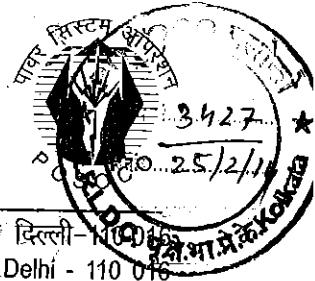
पावर सिस्टम ऑपरेशन कॉर्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

POWER SYSTEM OPERATION CORPORATION LIMITED

(A wholly owned subsidiary of POWERGRID)

पंजीकृत एवं केन्द्रीय कार्यालय: बी-9, प्रथम तल, कुतुब इंस्टीट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली-110 046
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Ref: POSOCO/NLDC/System.Operation/ Outage Planning/ 1239

Dated: 10th February 2014

To,

- 1) The Executive Director, SRLDC
- 2) General Manager NRLDC/ERLDC/WRLDC/NERLDC

Sir,

The Operating Procedures issued by the Regional Load Despatch Centres (RLDCs) as per the provisions of section 5.1 (f) indicate the guidelines to be fulfilled essentially by the Generating Company & Transmission Utilities before commissioning any new asset. The charging of new assets being proposed by the respective utilities is observed to be non-confirmatory in many cases. It is, therefore, felt that the attached checklist may be communicated once again to all the Utilities with a request to ensure strict compliance of the procedure. A need has also been felt for better coordination for charging of new assets. Accordingly, the following is proposed:

- 1) Owner of the asset shall submit the request for probable commissioning / charging of new assets for the calendar month latest by 5th day of the month to the respective RLDC & NLDC, along with the status of activities mentioned in the checklist which is enclosed as Annexure.
- 2) RLDC shall study the impact of commissioning / charging of new asset and, based on its examination of the preparedness of the Utility (based on the checklist), may forward its recommendations to NLDC who would also examine the issue independently considering the All India grid.
- 3) The owner of the new asset shall inform the concerned RLDC / NLDC about the commissioning / charging of the element, at least three (3) days in advance, with the current status of activities mentioned in the checklist.

This may be circulated to all the Generating companies and Transmission utilities in your respective system for better co-ordination. It may also be ensured that after commissioning / charging of the new asset, a copy of the output of Data Acquisition System / Event logger / Disturbance recorder shall be submitted which would give a clear position of its healthiness.

Thanking you,

Yours Sincerely

Amari
(A Mani)

General Manager

Encl: checklist

Copy to:

- 1) ED OS/NR-1/NR-2/ER-2/SR-1/SR-2/WR-1/WR-2/ POWERGRID
- 2) GM I/C ER-1/NER POWERGRID
- 3) Director (Operations), POWERGRID
- 4) COO, CTU

स्वहित एवं राष्ट्रहित में ऊर्जा बचाएं
Save Energy for Benefit of Self and Nation

*Pls put
up orig.
Name.
26/2/2014
Amari*