

EASTERN REGIONAL POWER COMMITTEE

14, GOLF CLUB ROAD, TOLLYGUNGE
KOLKATA-700033

MINUTES OF 44th OCC MEETING HELD AT ERPC, KOLKATA ON 20.11.2009 (FRIDAY) AT 11:00 HRS

Sh. A. K. Rampal, Member Secretary, ERPC chaired the meeting. List of participants is at Annexure-I.

Member Secretary, ERPC welcomed the participants of 44th OCC meeting. He shared with the body that a workshop on “Black Start Operation and System Restoration” was jointly organized by ERPC Secretariat & ERLDC on 19.11.09 at ERPC conference Room and hoped that information disseminated during the workshop would be useful for all. He briefly deliberated on the following aspects of electricity sector:

- *Electricity generation from Eastern Region power stations in the month of October'09 (excluding Bhutan Import) registered a y-o-y growth of 1.78% against national electricity generation growth of 3.97% (provisional). This modest growth was mainly due to inadequate coal stock position of various thermal generating stations in Eastern Region.*
- *Import from Bhutan (Tala, Chukha and Kiruchi HEP) helped in improving power supply position of Eastern Region.*
- *He requested members to kindly get their names sent in advance to enable host to make proper infrastructure (Logistics) arrangements.*
- *He requested constituents to send the Single Line Diagram along with the grid disturbance report, so that grid incidents could be discussed properly.*
- *Eastern Region is haunted by coal shortage problems in spite its huge coal reserves.*
- *We are grateful that Coal India accepts our invitation to attend the meeting and help us in sorting out the issues.*
- *There is a need to use of heavy fuel oil as supplementary fuel in the coal shortage scenario.*
- *Import duty exemption on imported coal may be explored.*
- *NTPC may consider whether Kahalgaon U#7 is fit for declaring COD under coal shortage scenario.*
- *DVC may explore the possibility of putting in use their gas turbines by exploring to get deemed export status for Naptha supplied to this station.*

He requested Sh. A. K. Bandyopadhyaya, Superintending Engineer (Operation), ERPC to take on the agenda items.

Agenda items were then taken up one by one by SE (O).

ITEM NO. 1: CONFIRMATION OF MINUTES OF 43RD OCC MEETING OF ERPC HELD AT ERPC, KOLKATA ON 14.10.2009

The minutes were circulated vide letter no. ERPC/SE(OPRN)/OPERATION/2009/5634-81 dated 16th October 2009. NTPC vide its FAX message dated 03.11.09 has requested for modification of the minutes against item no. 4.

NTPC may clarify its position and members may kindly confirm the minutes.

Deliberation in the meeting

In the meeting, representative from NTPC raised their observation against the part of minutes i.e. "As far as possible, schedule given by beneficiary States should be in consonance with the nature of demand curve" and opined that "schedule given by beneficiary from NTPC should be maximum during peak hours" be a part of the minutes. Members convinced NTPC that normally nature of demand curve signifies higher demand during peak hours and lower demand during off-peak hours. Accordingly NTPC agreed to drop their observation against the above part of the minutes.

Besides, one more observation was received from OPTCL regarding item no. 13 i.e. "Issue of line clearance permit over telephone". In the minutes of 43rd OCC meeting, it was recorded that the issue was resolved. However, representative of OPTCL informed that the issue is still not resolved. Superintending Engineer (Operation), ERPC clarified that NTPC in the meeting had informed that the issue was resolved. However, he suggested that the issue could be again discussed in the present meeting.

With this observation, the minutes of 43rd OCC meeting were confirmed.

ITEM NO. 2: ACTION TAKEN ON DECISIONS OF EARLIER MEETINGS

2.1: TAPPING OF 66 KV RANGIT-MELLI LINE TO SUPPLY TO RAVANGLA

In the 41st OCC meeting of ERPC held on 18.08.09, the issue was discussed. During deliberation, it was understood that a meeting was held on 06.09.08 with representatives from Sikkim, Powergrid, and ERLDC to discuss and resolve the issue of T connection in the interstate tie lines of Govt of Sikkim with other utilities e.g. NHPC and Powergrid at Siliguri. In the meeting, ERLDC was requested to communicate to concerned parties regarding action to be taken on the above recommendations and inform the same in the next OCC meeting. The recommendations of the meeting on 06.09.08 were as under:

Sl No.	Recommendation	Concerned Party
1	T Connection existing in 66 kV Rangit-Melli line should be ceased and made LILO at Rohtak by providing incoming CB at Rohtak S/s	Sikkim
2	After installation of CB at Rohtak, SEM installed at Melli end in 66 kV Rangit-Melli line should be shifted to Rohtak	Powergrid
3	Distance protection of 66 kV Rangit-Melli/Rohtak tie line would be covered under zone-I protection from Rangit end	Rangit HPS
4	Any S/D of 132 kV Rangit-Melli line of Sikkim should have prior approval from ERLDC and S/D in 66 kV Rangit-Melli line must have concurrence from Rangit and Sikkim	Rangit and Sikkim

5	Overhauling of bay equipments at Melli S/s should be carried out jointly by Powergrid & Sikkim	Powergrid and Sikkim
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ERLDC may share the latest status.

Deliberation in the meeting

Representative from ERLDC intimated that ERLDC vide its letter no. ERLDC/OS/2009/1389 dated 25.08.09 had requested Chief Engineer, Department of Energy and Power, Sikkim to disconnect all tapping so far made without due intimation to and concurrence of CTU/NHPC/ERPC in the lines emanating from Rangit HPS. However, no response was received from Sikkim.

Representative from NHPC informed that 66 kV line from Rangit was charged from Rangit end. However, no power flow was observed in the line.

As representative of Sikkim was not present, the matter could not be discussed further.

OCC members decided that the status of circuit breaker and metering arrangement at Rohtak and Sagbari might be ascertained from Sikkim in subsequent meeting, when representative of Sikkim is available.

2.2 POWER SUPPLY INTERRUPTION FROM OPTCL AT RAILWAY TRACTION SUB-STATION/ FEEDING STATIONS

S.E Railway avails power supply from OPTCL at 10 points namely Jaleswar, Balasore under Kharagpur division and Barajamda, Rourkela, Bhalulata, Chandiposi, Nawagaon, Rajgangpur, Bamra & Jharsuguda under Chakradharpur Division. The jurisdiction of Bhalulata, Rourkella, Rajgangpur & Bamra TSS is on density trunk route, carries heavy traffic of freight, mail and express trains of important routes.

In the past SE Railway pointed out about unreliable power supply to S.E. Railway and the matter was discussed in 41st OCC meeting of ERPC held on 18.08.09. In the meeting, members requested OPTCL and SE Railway to bilaterally sort out the matter and give feed back to ERPC Secretariat. However, no feedback was received till date.

OPTCL may share the latest status.

Deliberation in the meeting

Representative from OPTCL informed that a meeting was held between CGM (O&M), OPTCL and Railway Authority on 07/10/09 at Rourkella to discuss the issue. It was suggested by OPTCL for conversion of "T" off to LILO arrangement at Bamra, Bhalutala & Chandiposh with a cost involvement of about Rs. 4 crore in each S/s to have reliable power supply. Similarly, Railways would have to take over the Rourkella Traction S/s or construct a new traction S/s near Bandamunda. However, temporary problems such as increasing relay setting at Rajgangpur etc. were resolved.

As no representative from SE Railway was present, the matter could not be discussed further.

However, OCC Members requested OPTCL to pursue the case with SE Railway for a permanent solution to this sort of Power Supply Interruption problems to Railways and inform ERPC on further development on the subject matter.

2.3 OPERATIONALISATION OF BALIMELA-UPPER SILERU LINE

The issue was discussed in the 10th TCC meeting of ERPC held on 28th August 09. In the meeting, it was agreed that OHPC would organize a meeting with APGENCO, OPTCL, OHPC and any other concerned parties to resolve the issue. Meanwhile, OHPC vide letter no. OHPC-190/05/8054 dated 09.10.09 informed that OHPC had made correspondences with OPTCL for immediate handing over of the above mentioned line to OPTCL, which OPTCL agreed to. After handing over of the said line to OPTCL, operationalization of the line will be taken up by OPTCL.

OHPC/OPTCL may share the latest status.

Deliberation in the meeting

The issue of taking over of 220 kV Balimela-Upper Sileru line (Orissa portion) was raised by OHPC in the GCC meeting held on 21.09.09, wherein OPTCL assured to examine the proposal after holding meeting with APGENCO as well as APTRANSCO, the transmission utility which maintain AP portion of the line.

OCC members desired that the issue might be discussed in a separate meeting with representatives from OPTCL, OHPC, APGENCO, APTRANSCO and others.

In the meeting it was decided the meeting would be convened by ERPC after the ensuing TCC/ERPC meeting scheduled to be held on 3-4th December, 2009

2.4 OPERATIONAL CONSTRAINTS AT MEERAMUNDALI S/S

It was brought to the notice of OCC members that bus-I and bus-II at Meeramundali S/s was connected only by tie and main breaker of 400 kV Meeramundali-Jeypore line and any outage of these breakers might lead to decoupling of the buses. Non-availability of other tie breakers had forced the 400 kV Meeramundali System to act like single bus scheme and unless these tie breakers are provided, system security is heavily endangered which might eventually lead to system collapse.

The issue was discussed in the 42nd OCC meeting of ERPC held on 14.09.09, wherein it was decided that a Committee, comprising of representatives from OPTCL, PGCIL, ERLDC and ERPC would visit Meeramundali to ascertain the status of installation of remaining tie breakers and PGCIL and OPTCL would bilaterally decide program for shifting of ICT-II at Meeramundali from bus-II to bus-I.

The committee was formed under the Chairmanship of Shri J. P. Das, Chief General Manager, OPTCL with Sh. S. J. Lahiri, Chief Manager, PGCIL, Sh P. S. Das, Manager, ERLDC, and Sh. B. Sarkhel, Superintending Engineer, ERPC as other members. The committee visited the site on 30.10.09. Meanwhile, ICT-I at 400 kV Meeramundali was shifted from bus-II to bus-I on 25.10.09.

The committee members may apprise the latest status.

Deliberation in the meeting

The committee submitted the report in this regard (Copy at Annexure-II). The

Committee members also made a brief presentation on their findings. Since the visit of the committee to Meeramundali, four number of 400 kV breakers at Meeramundali including 2 nos of tie breakers were brought back into service by BHEL engineers. Those breakers were at Mendhasal-I, Duburi-II, Tie breaker of Mendhasal-I & Duburi-II and Tie breaker of ICT -II. It was noted that operational flexibility at Meeramundali S/s had increased with the changed configuration. Representative from OPTCL informed that D-402 would be fully operational by end of November'09. Presently two buses i.e. bus-I and bus-II are coupled through via D-401 and D-407.

2.5 AUTO RECLOSURE FEATURE AT TALA END AND SETTING OF OVER-CURRENT RELAYS OF 400 KV TALA-MALBASE SECTION

In couple of incidents, it was noticed that all units of Tala HEP tripped on transient fault due to loss of evacuation path. It was opined that had the Single phase Auto Reclosure feature kept operative at Tala end, complete loss of Tala generation could have been avoided. In the last (43rd) OCC meeting held on 14.10.09, Members requested Tala HEP to share the following information by next OCC meeting:

- ✓ The decision of Tala Management regarding keeping Auto Reclosure feature operating at Tala end.
- ✓ O/C setting at Tala-Binaguri(Malbase) feeder-3.

However, the above information was yet not received from Tala HEP.

TALA HEP may share the above information.

Deliberation in the meeting

As no representative from TALA HEP was present, OCC members desired that TALA HEP might share the above information by next OCC.

2.6 REVIEW OF OVER-VOLTAGE SETTINGS IN ER

The matter was discussed in the 43rd OCC meeting held on 14.10.09. In the meeting it was decided to implement the revised over-voltage settings in ER as per letter from Powergrid, CC. It was also decided that for lines whose other end belongs to an agency other than Powergrid, PGCIL would communicate/co-ordinate with other agencies for implementing the same.

PGCIL may please share the latest status.

Deliberation in the meeting

It was noted that PGCIL has communicated to all concerned about the above settings. However, no response was received by PGCIL on the matter. Teesta HEP, NHPC informed that they had already implemented the above setting.

OCC members desired that PGCIL might communicate again to all concerned in this regard and any assistance, if required, would be extended by the forum.

2.7 FURNISHING OF INFORMATION ON CRISIS MANAGEMENT PLAN

In the 43rd OCC meeting, members agreed that following information on crisis management plan would be submitted to ERPC Secretariat by end of October 2009.

- (a) The last occasion on which mock trial for procedure for recovery from partial/total blackouts in accordance with clause 5.8(b) of IEGC was carried out and the schedule for next mock trial for the same.
- (b) Whether plans and procedures have been prepared for the generating stations, transmission line and substation for dealing with disasters due to natural calamities such as earthquakes, floods, storms, cyclones etc and crisis situation arising due to terrorist threats/attack & sabotage, bomb threats and explosions, fire etc.
- (c) If yes, when was last trial for the disaster management plan carried out, and
- (d) The schedule for next trial.

However, information has been received only from Farakka STPP, NTPC and Kolaghat TPS, WBPDCCL.

Others may kindly submit the same.

Deliberation in the meeting

It was informed by ERPC Secretariat that information was further received from Teesta HEP, WBSETCL and BSEB.

But information received from BSEB revealed that till date BSEB have no proper Crisis Management Plan. OCC forum requested BSEB to improve their position in respect of Crisis Management on urgent basis.

OCC members requested all constituents which have not submitted the information yet, to submit the information by end of November'09. OCC members also requested those which did not have any such disaster management plan to chalk out such plan for safety of their systems.

ITEM NO. 3: REVIEW OF COAL STOCK IN VARIOUS TPSs OF EASTERN REGION AS ON 02.11.09

- 8 stations were “Super-critical” (less than 4 days coal stock)
- 10 stations were “Critical” (less than 7 days coal stock)
- Coal stock position of 23 TPSs of ER is as below:

COAL STOCK OF ER TPS AS ON 02.11.09

Sl No.	Power Station / (Reason for low coal stock given in CEA website)	Capacity MW	Mode of transport	Linked Mines	Daily Coal Required '000 MT	Coal Stock in Days		Loss of generation in mu
						Normalive (CEA web)	Actual	
NTPC								
1	Farakka STPS a	1600	Pithead	ECL, BCCL, CCL, MCL and NEC	32.64	15	0 @@@	570
2	Kahalgaon STPS b	2340	Pithead		37.536	15	0 @@@	682
3	Talcher STPS c	3000	Pithead		61.2	15	1 @@@	173

DVC								
4	BTPS-B	630	Rail	ECL, BCCL, CCL and MCL	10.5	20	28	
5	Chandrapur	750	Rail		6.5	20	74	
6	Durgapur	350	Rail		5.46	20	31	
7	Mejia d	1340	Rail		22.5	20	0 @@@	
BSEB								
8	Barauni	320	Rail	ECL, BCCL	1	20	45	
9	Muzzafarpur	220	Rail		1	20	24	
JSEB								
10	Patratu e	840	Rail	CCL	4	20	2 @@@	
11	Tenughat	420	Road	CCL	6.6	20	9	
Orissa								
12	IB TPS	420	Pithead	MCL	8	15	11	20
13	Talcher Old	470	Pithead	MCL	8.3	15	14	
WBPDC								
14	Kolaghat TPS f	1260	Rail	ECL, BCCL and MCL	17.85	25	3 @@@	
15	Bakreswar TPS	840	Rail		10.8	25	7	
16	Santaldih TPS	730	Rail		6.235	20	10	
17	Bandel TPS	450	Rail		4.97	20	4 @@	
18	Sagardighi g	600	Rail		7.2	20	0 @@@	
DPL								
19	DPL TPS	690	Rail	BCCL, ECL, MCL	9.6	20	5 @@	
CESC								
20	Budge-Budge	500	Rail	ECL, BCCL and MCL	7.2	20	10	
21	Titagarh h	240	Rail		3.4	20	3 @@@	
22	Southern REPL	135	Rail		2.4	25	7	
23	New Cossipore	130	Rail		1.1	20	13	

“@@” stands for Critical station with less than 7 days coal stock

“@@@” stands for Super-critical station with less than 4 days coal stock

a: Delay in import and inadequate coal availability in linked mines

b: Delay in import and inadequate coal availability in linked mines

c: Delay in import

d: Unloading Constraints

e: Less receipt of coal from CCL

f: Less receipt

g: Unloading Constraints

h: Higher generation

In light of the above facts, following needs to be deliberated:-

- i) Farakka STPS has achieved PLF of 51.00% (provisional) during October'09 compared to 51.78% during September'09. Similarly Kahalgaon STPS (Stage I&II) has achieved PLF of 50.02% (provisional) compared to 45.42% during September'09 (source: CEA report). A marginal improvement in generation performance was noticed in Kahalgaon STPS. However, it is

understood that import of coal as committed has not yet been started by NTPC.

- ✓ CIL may please intimate the coal supply during October'09.
- ✓ NTPC may please opine on their plan for import of coal.

ii) During the month of Talcher STPS (Stage I&II) has achieved PLF of 87.97% (provisional) during October'09 compared to 84.65% during September'09 (source: CEA). CEA has reported delay in import as the reason for "Super-critical" coal stock position.

- ✓ CIL may please intimate the coal supply during October'09.
- ✓ NTPC may please opine on status of import of coal.

iii) GRIDCO has stated that even in case of availability of one 500 MW unit of Talcher STPS, Stage-I, its generation is same as that of all the four units of Stage-II, which is below the generating capacity of the available unit and the reason being furnished for such lower generation was cited as shortage of coal. As beneficiaries of Talcher Stage-I and Stage-II are different, GRIDCO opined that coal may be earmarked for Stage-I and Stage-II separately.

- ✓ NTPC may please opine.

iv) Coal stock position at Mejia TPS was nil. Besides, low coal stock position due to "Unloading Constraints" has resurfaced many a times in the various forums of ERPC. However, no fruitful result has yet been observed.

- ✓ CIL may please intimate the coal supply during October'09.
- ✓ DVC may please intimate the action taken by them to improve unloading infrastructure.

v) It may be seen that Patratu TPS has only 2 days coal stock as on 02.11.09.

- ✓ CIL and JSEB may please opine.

vi) It may be seen that Sagardighi TPS was having zero coal stock as on 02.11.09 due to unloading constraints. In the earlier meetings, it was ensured by CIL that unloading constraints (inadequate BOBR rake allotment) was sorted out. But, it has again resurfaced.

- ✓ CIL may please opine.

vii) IB TPS has reported loss of generation due to poor coal quality. Earlier, NTPC, WBPDC and DPL had also raised the issue of poor coal quality.

- ✓ CIL may please opine.

Deliberation in the meeting

Initiating the discussion, Member Secretary, ERPC proposed perusal of the following aspects which were pertinent to coal shortage problems discussed at various forums of ERPC.

- a. Seeking import duty exemption on imported coal, because import of coal is getting thrust upon Eastern Region TPSs.
- b. Exploring the use of heavy fuel oil in the coal shortage scenario and deemed export benefit for Heavy Fuel Oil supplied to Eastern Regional Thermal Station. This will improve average PLF and peak/off-peak ratio.
- c. In this regard, he requested NTPC to submit information as per Format (Annexure-III). NTPC agreed to submit the information within 3 days.
- d. Defining "Coal Shortage Condition" scenario in terms of normative coal consumption/day, coal stock at TPS and rate of coal dispatch from mine, which is yet to be defined.
- e. Whether Kahalgaon U#7 (500 MW) is fit for declaring COD under coal shortage scenario, when linked coal mine is yet to be developed.
- f. As discussed in Commercial sub-committee meeting of ERPC held on 16.11.09, NTPC might submit a detailed note to ERPC secretariat on declaration of DC and commercial arrangement under coal shortage condition.

Representative from CIL volunteered to give a presentation on how coal is allocated, the follow-up supplies and their role in shortage scenario in the next OCC meeting. On request from OCC members, CIL agreed to deliver the presentation both in TCC and ERPC meeting to be held on 3rd and 4th December 09 as well as in next OCC meeting.

During deliberation, followings were noted

- Coal Supply to Farakka and Kahalgaon STPP during the month of October'09 was 103.3% of contracted quantity. (CIL)
- Coal requirement for Kahalgaon U#7 is not included in 15 MMT coal allocated to Farakka and Kahalgaon STPP from CIL during the year 2009-10. (CIL)
- Import of coal would start by December'09. Order for Imported coal is for 4 MMT which is equivalent to 6 MMT of Indian coal. (NTPC)
- 2 MMT of Ranigang A/B grade coal equivalent to 3 MMT of normal grade coal has been arranged. (NTPC)
- Tied up with NCL for 30 days for 0.3 MMT of coal and also tied up with Singreni coal mines for 1 MMT coal. (NTPC)
- Rest 2 MMT requirement of coal is to be arranged through e-auction or forward auction. (NTPC)
- With this, generation from Farakka and Kahalgaon would start improving by December'09. (NTPC)
- Coal supply to Talcher STPP during the month of October'09 was 116.8% of contracted quantity. (CIL)
- Talcher STPP complained of receipt of poor quality coal (specific coal consumption higher than 0.9). (NTPC)
- There is no provision for separately earmarking coal for Talcher Stage-I and Stage-II as coal is allocated for total Talcher STPP. (NTPC)
- Declared capacity for Talcher Stage-I STPP during the month of October'09 was more than 100% and higher than DC of Talcher Stage-II STPP. (NTPC)
- However, efforts are there to maximise generation from the running unit of Talcher Stage-I STPP. (NTPC)

- Coal supply to Mejia TPS during the month of October 09 was 78.4% of contracted quantity. (CIL)
- Unloading constraints at Mejia TPS were already resolved and the current low coal stock position happened due to some problems in railway rake movement. (DVC)
- Coal supply to Patratu TPS during the month of October'09 was 113.8% of contracted quantity. (CIL)
- Coal supply to Sagardighi TPS during the month of October'09 was 46.9%. Current low coal stock position at Sagardighi TPS might have happened due to some problems in railway rake movement. (CIL)
- Unloading problem at Sagardighi TPS is resolved. Presently, entire supply of 2 BOBR rakes per day is consumed by Sagardighi TPS. (WBPDCCL)
- WBPDCCL has signed FSA with CIL. (WBPDCCL)
- IB TPS has contracted for Grade "F" coal and coal supplied to IB TPS has ash content of 38% and other grade "F" coal features. (CIL)
- Poor coal reported by NTPC, WBPDCCL and others needs further investigation. If specific poor coal quality problem is reported, CIL would look into it. (CIL)
- Coal stock position of Titagarh TPS has improved. As on 19.11.09, Titagarh TPS has 5 days coal. (CESC)
- DPL informed that they are facing some coal unloading problems due to supply of coal by suppliers mainly in non-BOBR rakes. They were requested to pursue the case with Railways.

After detailed discussion, OCC members decided that abysmal coal stock in various thermal stations in ER, declaration of COD of Kahalgaon U#7 when linked coal mine is not developed and definition of coal shortage condition needed further deliberation and referred the matter to TCC for further deliberation.

OCC members further directed NTPC to submit a note on definition of coal shortage condition (in terms of normative daily coal consumption, coal stock & the rate of dispatch from the sources of coal) and commercial arrangements (computation of DC when coal shortage condition is withdrawn for part of the day, commercial mechanism to recover cost of additional oil support when the unit is forced to run below its technical minimum level etc.) during coal shortage condition before ensuing TCC/ERPC meeting.

ITEM NO. 4: REVIEW OF GRID PERFORMANCE DURING OCTOBER, 2009

ERLDC may kindly give a brief on performance of ER grid during October 2009. Power Supply Position at Annexure-IV

Deliberation in the meeting

Representative from ERLDC made a brief presentation on grid performance during October 09 (Copy at annexure-V).

IMPORTANT EVENT-1: LILO of 400 kV KhSTPP-Patna-I at Barh was charged for the first time at 18:52 Hrs of 14/10/09. The line lengths before/ after the LILO are as follows:

Before LILO	After LILO
KhSTPP-Patna- I (length 257 kms)	KhSTPP-Barh (length 217kms) Barh-Patna (length 94kms)

Presently at Barh end only one breaker is in service acting as the tie breaker and connecting KhSTPP-Barh and Barh-Patna sections. Thus during this charging process only the tie bay was charged and there was no

generation/load at Barh. The Stage-I over-voltage settings at Barh had to be increased to 1.13 pu with 10 seconds delay.

ERLDC may explain the incident and NTPC may also furnish schedule of commissioning of lines/units at Barh.

Deliberation in the meeting

Representative from ERLDC explained the charging process. NTPC representative informed that 1st unit of Stage-II, Barh (U#4) would be synchronized by March'2012.

IMPORTANT EVENT-2 : As per decision of 42nd OCC meeting, ICT-I at 400 kV Meeramundali was shifted from bus-II to bus-I on 25.10.09 and this would increase operational flexibility at Meeramundali S/s.

Members may kindly note.

Deliberation in the meeting

Members noted the above.

IMPORTANT EVENT-3: CTPS Unit#7(250MW) was synchronised for the first time on 26/10/09 with upto 100MW generation.

Members may kindly note.

Deliberation in the meeting

Members noted the above.

IMPORTANT EVENTS-4: 63MVAR Line Reactor at Binaguri end of 400 kV Binaguri-Bongaigaon-II at Binaguri end was isolated on 31/10/09 and another 63MVAR line reactor connected to the line at Bongaigaon end. Thus presently both lines of 400 kV Binaguri-Bongaigaon are in possession of 1x63MVAR Line reactor at Bongaigaon end. The isolated 63MVAR line reactor would be connected to one of the lines in Tala-Binaguri section as per discussions in 2nd TCC meeting.

Members may kindly note.

Deliberation in the meeting

Members noted the above.

ITEM NO. 5: MAJOR GENERATING UNIT AND TRANSMISSION LINES/ELEMENTS OUTAGES IN ER GRID

Sl	Description	Date of Outage	Reason	Remarks
Lines / Elements under outage				
1	400 kV Tala - Binaguri-IV	02/05/09	CB problem at Tala end	Expected by November'09. Tala may share status.
2	400 kV Malda-Purnea D/C	24/07/09	Tower collapse at Loc.71	Expected by November'09. Powergrid may share status

3	220 kV Meramundali-Bhanjanagar D/C	21/07/09	Tower collapse	One circuit is restored on ERS. Balance is expected by November'09. OPTCL may share status.
4	50MVAR line reactor of PPSP-Durgapur at Durgapur end	31/10/09	Out of service for Oil filtration works	Expected by November'09. PGCIL may share status.

Deliberation in the meeting

Sl	Description	Date of Outage	Reason	Updated Status
Lines / Elements under outage				
1	400 kV Tala - Binaguri-IV	02/05/09	CB problem at Tala end	<i>Expected by March'10.</i>
2	400 kV Malda-Purnea D/C	24/07/09	Tower collapse at Loc.71	<i>Expected by November'09.</i>
3	220 kV Meramundali-Bhanjanagar D/C	21/07/09	Tower collapse	<i>Expected by December'09.</i>
4	50MVAR line reactor of PPSP-Durgapur at Durgapur end	31/10/09	Out of service for Oil filtration works	<i>Already in service.</i>

ITEM NO. 6: MOCK BLACKSTART EXERCISES IN EASTERN REGION --- ERLDC

It has been intimated that DVC had carried out a similar black-start exercise for its Maithon HEP station.

- ✓ DVC may share its experience of carrying out such an exercise.

To facilitate periodic testing of black-start facilities in Eastern Region, mock black start exercises are required to be carried out on a part by part basis. Teesta HEP may be taken up for carrying out mock exercise of black-start operation for which following sequence of activities would be needed:

- a. Charging of dead Bus at Teesta
 - b. Extension of one circuit of 400 kV Teesta-Binaguri D/C from Teesta end
 - c. Synchronisation of the line at Binaguri end.
- ✓ Teesta may convey its willingness to undertake such black-start exercise and intimate suitable date.
 - ✓ ERLDC may chalk out a plan for mock black start exercise for all critical elements in the grid.

Deliberation in the meeting

Representative of DVC shared the following:

- *As Maithon HEP U#2 was out due to bearing problem, black start operation was carried out for U#1 and #3.*
- *Black start operation was initiated with pump firing from DC source.*

- Detailed report will be sent shortly.
- If required, the entire black start operation could be carried out again.

Regarding mock start exercise of Teesta HEP, following was noted

- Teesta HEP vide its letter had already intimated its willingness to conduct such black start exercise.
- TCC and ERPC members will be present in Gangtok during 2nd -4th December 09 to attend TCC/ERPC meeting. OCC members desired that black start operation of Teesta HEP could be conducted during the above period.
- As representative from Teesta HEP, NHPC was not present in the meeting, participant from Rangit HEP, NHPC was requested to convey the above desire of OCC members to Teesta HEP.

Regarding mock start exercise of other plants in ER, following was decided

- Purulia Pumped Storage Plant (PPSP) will be requested to convey its willingness to carry out such mock start exercise.
- OHPC will conduct mock start exercise of its hydro unit during the month of January'10.

ITEM NO. 7: STRENGTHENING OF EVACUATION SYSTEM FROM SOUTH BENGAL TOWARDS NORTHERN PART OF ER GRID --- ERLDC

TTC/ATC declarations have been affected due to constraints in evacuation of surplus power from South Bengal to Northern part of ER grid and further onwards to NR/NER, during winter season due to high loading of 400 kV FSTPP-Malda-Purnea D/C sections. During winter season (December to February), low hydro availability of Teesta/Tala/CHPC/NER hydro stations coupled with high drawal by NR/NER results in heavy power flows through 400 kV Farakka-Malda-Purnea D/C line. These lines being of twin moose configuration have inherently lower power carrying capacity than that of Tala transmission system and thus affect TTC / ATC for export of power to NR and NER during winter.

Several schemes like 400kV D/C from Gokarno to Purnea / Binaguri; Gokarno-Malda and Malda - Purnea D/C had been proposed by WBSETCL in the past to help ease out the above constraint. 2nd 400KV FSTPP-KhSTPP D/C line associated with Farakka-III (500MW) was discussed in the 6th TCC meeting and concurred in 7th ERPC meeting. As per information available from CEA, the target date for completing this line is June 2011.

Therefore, upgrading of 400kV Farakka - Malda D/C by using high temperature INVAR conductor is urgently required to overcome the present constraints.

Members may please discuss.

Deliberation in the meeting

Following deliberation took place.

- Upgradation of Farakka-Malda-Purnea section was necessary to remove bottleneck in transfer of power from ER to NR during the winter months and the matter may be referred to TCC for further advice. (ERLDC)

- Any ER system up-gradation scheme is first vetted by Standing Committee on Power System Planning for Eastern Region and then put-up to TCC and ERPC for subsequent approval. (ERPC)
- Present strengthening scheme might be referred to Standing Committee. (ERPC)

OCC members agreed that the matter should be placed before TCC members for further advice.

ITEM NO. 8: DECLARING OF PEAK HOURS FOR SCHEDULING PURPOSES UNDER FUEL SHORTAGE CONDITIONS --- ERLDC

For purposes of scheduling under fuel shortage conditions prior declaration of peak hours needs to be done on a month ahead basis. Considering advancement of Sunset timings, it is proposed that peak Hours for the month of December'09 may be considered from 17:45 hrs to 20:45 hrs.

Members may deliberate & confirm.

Deliberation in the meeting

OCC Members agreed that peak Hours for the month of December'09 would be considered from 17:45 hrs to 20:45 hrs.

ITEM NO. 9: DC REVISION OF FARAKKA STPP, NTPC ---- NTPC

a) ON 21.10.09

FSTPP had originally declared DC of 731 MW during 2030 hrs to 2230 hrs. In the evening, NTPC had received a message from BSEB for maximizing their generation to meet their Chatt Puja demand. Keeping in view of the message from BSEB, FSTPP sent the message to ERLDC for revision of DC from 731 MW to 931 MW withdrawing coal shortage clause. Assuming that, ERLDC will accept the DC revision, FSTPP immediately raised the actual generation around 931 MW from 83rd to 90th block. As per implemented schedule, revision of DC was not accepted.

It is requested that revised DC of FSTPP to 931 MW may please be accepted from 83rd to 90th block for date 21.10.09.

Members may kindly discuss.

Deliberation in the meeting

Following deliberation took place:

- Normative procedure followed for revision of DC was not adhered to by FSTPP, NTPC and therefore the proposal for revision of DC was not acceptable to ERLDC. (ERLDC)
- The definition of DC during a day, when 22 hours under coal shortage and 2 hours without coal shortage contradicts the ambit of CERC regulation.
- As decided under item no. 3, NTPC would propose a definition of coal shortage condition.

OCC members decided that procedures for revision of DC during a day shall continue to be followed and desired that NTPC would come up with payment implication for taking a decision on the matter. It was further agreed that on the basis of note submitted by NTPC, the issue would be discussed again, if required.

b) ON 09.11.09

FSTPP had declared DC of flat 900 MW which is just technical minimum for running units. On 09.11.09 from block 3 to 11, schedule given to FSTPP was only 822.71 MW which much below the technical minimum. Clause no. 6.5 (14) protect the schedule of ISGS in terms of minimum and maximum generation level.

NTPC may explain and members may please discuss.

Deliberation in the meeting

Following deliberation took place

- *Surrender of WBSETCL share from this Station was the root cause. (ERLDC)*
- *Technical minimum load for thermal stations as percentage of full load is not prescribed in the IEGC. (ERLDC)*
- *Operation of thermal station below technical minimum level is dangerous from stability point of view and requires additional oil support. (NTPC)*
- *Whenever a thermal station operates below technical minimum level, the station should be compensated for additional oil consumption for which NTPC may furnish the break-up details for discussion. (ERPC)*

OCC members agreed that on the basis of back-up note submitted by NTPC, the issue could be discussed again.

ITEM NO. 10: GRID INCIDENCES IN ER SYSTEM DURING OCTOBER 2009

I. Tripping of all lines from Joda on 07/10/09

At 15:10 Hrs of 07/10/09 all 220 kV lines from Joda tripped interrupting power supply to Joda and adjacent areas. Snapping of 'R'-Ph conductor of 220 kV TTPS-Joda-II at Loc.92 was reported. The weather conditions were stormy with lightning prior to the incidence. 220/132 kV 100MVA ATR-I & II also tripped at 220KV side on E/F and 132KV side on O/C relay indication. All lines except 220 kV TTPS-Joda -II were restored by 15:50 Hrs. 220 kV TTPS-Joda was taken into service after rectification on 09/10/09.

✓ OPTCL may like to detail the incident.

Deliberation in the meeting

It was noted that tripping of all lines occurred due to mal operation of relays. Soon after the occurrence of the incident, all relays at Joda grid s/s were checked and software was rectified by ABB.

II. Tripping of IBTPS units and lines from Budhipadar on 12/10/09

At 17:45 Hrs of 12/10/09, 220Kv side Y-Ph LA of 220/132Kv, 160MVA ATR-I at Budhipadar burst causing the following trippings:

- ATR-I at Budhipadar tripped at 220 kV side on differential protection
- ATR-II at Budhipadar tripped at 220 kV side on O/C R-Ph

- 220 kV Budhipadar-Raigarh tripped at Budhipadar end on E/F
- 220 kV Bhushan-I tripped at Budhipadar end on master trip relay
- 220 kV BUdhipadar-Korba-III tripped at Korba end
- 220 kV Bus coupler tripped on E/F relay indication
- Unit#1,2 at IBTPS tripped
- Unit#3,5 at Burla(only running units) and Unit#1,2,3 at Chiplima (only running units)tripped with failure of Station supply at Burla
- 220 kV bus-I at Budhipadar became dead.

✓ OPTCL may like to detail the incident.

Deliberation in the meeting

Due to a bursting of 220 kV side LA of ATR-I, all other lines including bus section breakers were tripped which were not supposed to. Representative from OPTCL informed that relay co-ordination at Budipadar S/s and downstream s/s and generating stations were taken up and would be completed to avoid such unwanted tripping.

III. Tripping of all units at Bokaro'B' on 20/10/09

At 10:25 Hrs of 20/10/09 all three running units at Bokaro'B' (Unit#1,2,3) tripped reportedly due to 220 kV Bus fault. DVC submitted a report (Copy at Annexure-VI)

✓ DVC may like to detail the incident.

Deliberation in the meeting

Members noted the incident.

IV. Tripping of all units of TSTPP-II on 26/10/09

At 12:55 Hrs of 26/10/09 LBB relays of breakers of Unit GTs picked up and Bus differential protection for Bus 2/4/5 operated resulting in Bus 3,4,5,6 becoming dead and tripping of TSTPP Unit# 3,4,5,6. Both poles of HVDC Talcher-Kolar also tripped simultaneously on 'Emergency switch off (ESOF) received from TSTPP' and external protection trip. TSTPP-HVDC-III was under shutdown prior to the incident. Only a preliminary report has been received from NTPC.

✓ NTPC may like to detail the incident.

Deliberation in the meeting

The incident occurred due to mal-operation of particular LBB relay. NTPC would put some auxiliary relay to prevent such incident.

In this regard, PGCIL enquired the status of 220 kV Bus-bar differential scheme at Biharshariff (BSEB) s/s. Representative of BSEB informed that it is not yet installed.

ITEM NO. 11: OPERATIONAL PLANNING

(A) SHUTDOWN PROPOSAL OF TRANSMISSION LINES AND GENERATING UNITS FOR THE MONTH OF DECEMBER'09.

The shut down proposals which are received by ERPC for the month of December' 09 are placed for discussion.

Members may please discuss and finalize the proposed programme.

Deliberation in the meeting

The approved shutdown programme for generating units and transmission lines are given at Annexure-VII.

(B) ANTICIPATED POWER SUPPLY POSITION FOR THE MONTH OF NOVEMBER'09 AND DECEMBER' 09

The abstract of peak demand (MW) vis-à-vis availability and energy requirement vis-à-vis availability (MU) for the months of November'09 and December'09 were prepared by ERPC Secretariat on the basis of finalized LGBR for 2009-10, keeping in view that the units are available for generation and expected load growth etc. The details are shown at Annexure- VIII.

Members may please discuss.

Deliberation in the meeting

Members noted the above.

ITEM NO. 12: ANY OTHER POINT

a) SUBMISSION OF INFORMATION FOR PREPARATION OF LGBR FOR THE YEAR 2009-10 --- ERPC

Superintending Engineer (PS), ERPC requested all constituents which have not submitted the information for preparation of LGBR for the year 2009-10 by end of this month.

b) ISSUE OF LINE CLEARANCE (L/C) PERMIT OVER TELEPHONE --- OPTCL

- ✓ *The maintenance unit of OPTCL stationed at Rengali is also looking after the maintenance work of 220 kV TSTPP-TTPS line. In case of any breakdown in the said line, OPTCL engineer has to go to TTPS via TSTPP to get the L/C since TSTPP does not issue L/C directly to the OPTCL engineer in charge of the maintenance of the line. By this, the concerned engineer has to travel another 30 km distance to reach TTPS from TSTPP. TSTPP is 30 km away from Rengali. Thus the engineer has to travel total 60 km to get the L/C.*
- ✓ *To get inside the TTPS, permission has to be obtained from CISF, which takes a lot of time.*
- ✓ *Sometimes, during shift change over, TSTPP takes about 1-2 hours form issuing the L/C.*
- ✓ *The above practice consumes lot of time and the line availability is also affected.*

It is proposed to introduce the issue and return of L/C over telephone with code word as it is being done with different units of OPTCL.

Deliberation in the meeting

It was decided that OPTCL and NTPC would bilaterally discuss the matter and revert back to ERPC secretariat.

ITEM NO. 13: DATE AND VENUE OF THE NEXT (45^h) OCC MEETING OF ERPC.

Date and venue of the next OCC meeting of ERPC would be intimated later on.

The meeting ended with thanks to the Chair.

ANNEXURE- VII**Approved Programme of Maintenance Of Transmission Lines And Generating Units as proposed for****DECEMBER, 2009****(A) GENERATING UNITS:**

Organization	Name of the Element	From		To		Remarks
		Date	Time hrs	Date	Time hrs	
WBDCL						
Bandel TPS	Unit#5	27.11.09	OCB	26.12.09	OCB	Boiler overhauling
Sagardighi TPS	Uni#2	05.12.09	OCB	14.12.09	OCB	Generator gas leakage attending
OHPC						
Burla HPS	Unit#1	01.12.09	OCB	30.12.09	OCB	Annual Maintenance
Chiplima HPS	Unit#1	01.12.09	OCB	30.12.09	OCB	
Balimela HPS	Unit#4	17.12.09	OCB	16.01.10	OCB	
Rengali HPS	Unit#4	17.12.09	OCB	18.01.10	OCB	
Upper Kolab HPS	Unit#3	02.12.09	OCB	18.12.09	OCB	
NHPC						
Rangit HEP	Unit#2	01.12.09	OCB	25.12.09	OCB	Annual Maintenance
DVC						
CTPS	Unit#3	3 rd week of Nov09	OCB	60 days	OCB	Capital O/H
CHPC						
Chukha HEP	Unit# III & IV	16.12.09	OCB	31.12.09	OCB	Surge Shaft maintenance

(B) TRANSMISSION ELEMENTS:

Organization	Name of the Element	From		To		Remarks
		Date	Time hrs	Date	Time hrs	
FARAKKA STPP, NTPC						
	400 kV Farakka-Kahalgaon line 2	18.12.09	0930	18.12.09	1630	Relay testing
	400 kV Bus reactor -2	15.12.09	0930	15.12.09	1630	Relay testing
	220 kV Farakka-Lalmatia	09.12.09	0930	09.12.09	1630	Relay testing
KAHALGAON STPP, NTPC						
	400 kV Kahalgaon-Biharshariff line-1	10.12.09	ODB	10.12.09	ODB	Preventive maintenance and testing
	400 kV Kahalgaon-Farakka line -1	15.12.09	OCB	17.12.09	OCB	
	400 kV Kahalgaon-Farakka line -2	18.12.09	OCB	20.12.09	OCB	
	132 kV Kahalgaon-Sabour line	08.12.09	ODB	08.12.09	ODB	
TALCHER STPP, NTPC						
	400 kV TSTPP-Rengali #1	08.12.09	OCB	10.12.09	OCB	Preventive maintenance and testing
	400 kV TSTPP-Rengali #2	12.12.09	OCB	14.12.09	OCB	
	400 kV TSTPP-Rourkela#1	22.12.09	OCB	24.12.09	OCB	
	400 kV TSTPP-Rourkela#2	28.12.09	OCB	30.12.09	OCB	
ERTS-II, PGCIL						
	400 kV New Siliguri -Bongaigaon#2	01.12.09	OCB	15.12.09	OCB	Reactor Shifting
	400 kV New Siliguri-Tala#1	16.12.09	OCB	15.01.10	OCB	,,
	132 kV Siliguri-Rangit line	01.12.09	ODB	02.12.09	ODB	Annual Maintenance
	132 kV Melli-Siliguri line	04.12.09	ODB	05.12.09	ODB	Annual Maintenance
	220 kV Siliguri-Dalkhola ckt-1	07.12.09	ODB	07.12.09	ODB	Annual Maintenance
	220 kV Siliguri-Dalkhola ckt-2	10.12.09	ODB	10.12.09	ODB	Annual Maintenance
	132 kV WBSETCL line at Siliguri	17.12.09	ODB	17.12.09	ODB	Annual Maintenance of bay equipments at Siliguri
	315 MVA ICT-1 at Baripada S/s	01.12.09	ODB	02.12.09	ODB	Annual Maintenance
	400 kV Subhashgram-Jeerat line	03.12.09	ODB	04.12.09	ODB	Annual Maintenance
	400 kV Subhashgram-Sagardighi line	10.12.09	ODB	11.12.09	ODB	Annual Maintenance
	50 MVAR bus reactor at Durgapur	02.12.09	ODB	02.12.09	ODB	Annual Maintenance
	400 kV New Siliguri-New Purnea ckt-II	21.11.09	OCB	15.01.10	OCB	Modification work for bay equpt under ERSS-I
	400 kV Kahalgaon-Maithon ckt-1	02.12.09	ODB	02.12.09	ODB	For replacement of bushing of line reactor

ERTS-I, PGCIL					
315 MVA ICT-III at Biharshariff S/s	25.11.09	ODB	26.11.09	ODB	Annual Maintenance
315 MVA ICT-I at Muzaffarpur S/s	02.12.09	ODB	03.12.09	ODB	Annual Maintenance
400 kV Jamshedpur-Rourkela cktII	03.12.09	ODB	04.12.09	ODB	Annual Maintenance
132 kV Purnea (PG)-Purnea (BSEB)-I	14.12.09	ODB	14.12.09	ODB	Annual Maintenance
132 kV Purnea (PG)-Purnea (BSEB)-II	15.12.09	ODB	15.12.09	ODB	Annual Maintenance
132 kV Purnea (PG)-Purnea (BSEB)-III	16.12.09	ODB	16.12.09	ODB	Annual Maintenance
80 MVAR bus reactor at Ranchi S/s	21.12.09	ODB	21.12.09	ODB	Annual Maintenance
CHPC					
220 kV Chukha-Binaguri ckt-I	02.12.09	ODB	05.12.09	ODB	Annual Maintenance
220 kV Chukha-Binaguri ckt-II	07.12.09	ODB	10.12.09	ODB	Annual Maintenance
220 kV Chukha-Malbase	16.12.09	ODB	20.12.09	ODB	Annual Maintenance

OCB: On Continuous basis, ODB: On Daily Basis

Note: 1) All shutdowns are cleared on tentative basis and concurrence from ERLDC needs to be taken before availing actual shutdown.