

## EASTERN REGIONAL POWER COMMITTEE

### AGENDA FOR THE 8<sup>TH</sup> TCC MEETING OF ERPC

**Time & Date: 11:00hrs. on 20.11.2008 (Thursday)**

**Venue : Hotel Royal Residency, Bodhgaya**

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#### **ITEM NO.1 CONFIRMATION OF THE MINUTES OF 7<sup>th</sup> TCC MEETING OF ERPC HELD ON 25.07.2008 AT RANCHI**

The minutes of 7<sup>th</sup> TCC meeting of ERPC were circulated vide letter no. ERPC/Committee/2008/2893-2941 dated 01.09.2008.

Chief Engineer (Transmission, O&M),BSEB vide letter no.Com/ Misc-1067/98(P)/2033 dated 07.10.2008 has communicated their disagreement with the minutes of the 7<sup>th</sup> TCC & 7<sup>th</sup> ERPC meeting pertaining to deemed generation of Rangit HEP of NHPC during the period of flood and scheduling of Talcher Stage-II generation to SR by ERLDC via ER corridor and payment of transmission charges, on the ground that views of BSEB were not incorporated. BSEB's disagreement is primarily against the minutes of the 7<sup>th</sup> ERPC meeting and the issues have been slated for discussion in the ERPC meeting tomorrow. No comments have been received from any other constituents on the minutes of the 7<sup>th</sup> TCC meeting.

**In view of above observation TCC may please confirm the minutes.**

#### **ITEM NO.2 HIGHLIGHTS OF GRID PERFORMANCE FOR THE PERIOD JULY'08 TO OCTOBER'08**

##### **(A) FREQUENCY :**

Frequency profile for the period July'08 to October'08 and the corresponding period of the previous year (i.e. July'07 to October'07) are shown below:

Month	% of time of the month frequency remained							
	< 49.0 Hz		49.0--50.5 Hz		50.5—51.0 Hz		>51.0 Hz	
	2007	2008	2007	2008	2007	2008	2007	2008
Year								
July	1.55	9.26	98.42	90.74	0.03	0.0	0.00	0.00
August	3.25	5.21	96.70	94.45	0.05	0.34	0.00	0.00
September	5.12	13.04	94.83	86.95	0.05	0.01	0.00	0.00
October	8.41	9.13	91.58	90.8	0.01	0.07	0.00	0.00

**Observation :**

- Frequency profile below 49.0 Hz and within the IEGC band (49.0 to 50.5 Hz) has shown deterioration in comparison with the same period of last year.

The low frequency operation was mainly due to increase in demand in ER system and low availability of thermal units due to shortage of coal.

- The frequency profile above 50.5 Hz during the above months was found to be insignificant.

**(B) PERFORMANCE REVIEW**

Description	Average (MU)/Month			Oct'07	Oct'08	% Increase
	Jul'07 to Oct'07	Jul'08 to Oct'08	% Increase			
<b>Net Generation (MU/Month)</b>	7406	7827	5.7	7889	7715	(-)2.2
<b>Net Central Sector Thermal Generation (MU/Month)</b>	1811	1817	0.3	1917	1873	(-) 2.3
<b>Import from CPPs (MU/Month)</b>	93	122	30.9	117	137	17.6
<b>ER Consumption (MU/Month)</b>	6188	6719	8.6	6198	6491	4.7
<b>Net Export to Outside Region (MU/Month) including transmission loss</b>	1311	1230	(-) 6.2	1808	1362	(-) 24.7

Description	Jul'07 to Oct'07	Jul'08 to Oct'08	% Increase	Oct'07	Oct'08	% Increase
<b>Regional Peak Demand Met (MW)</b>	10699	11664	9.0	<b>10699</b>	<b>11216</b>	4.8
<b>Peak Export (MW)</b>	3741	3609	(-) 3.5	3741	3600	(-) 3.8

**Generation :** During the period under review, the overall generation in Eastern Region increased by about 5.7% compared to the same period of the last year mainly due to commissioning of Mejia Unit # 5 & 6 (2x250 MW) of DVC, Unit #7 (300 MW) of DPL, commercial operation of Purulia Pumped Storage Units (4x225 MW) of WBSEDCL, Kahalgaon STPS Unit # 5 (500 MW) of NTPC Sagardighi TPS (300 MW) of WBPDC and infirm generation from few new Units in State and Central Sector.

**Demand :** The Regional energy consumption and peak demand met during the period under review increased by 8.6% and 9% respectively compared to the same period of the last year. Export to the outside region decreased mainly due to increase in ER energy consumption and less central sector thermal generation during the period under review.

### (C) EXPORT

#### MONTHLY AND CUMULATIVE EXPORT OF POWER FROM ER (BASED ON SEM FIGURES)

Region  To	Export in MU		Export in MU		% Growth *	
	During October'08	Cumulative (July'08 to Oct'08)	During October'07	Cumulative (July'07 to Oct'07)	During October'08	Cumulative (July'08 to Oct'08)
NR	1135.3	4324.13	1438.64	5441.75	(-)21.09	(-)20.54
WR	78.0	486.62	578.55	1613.03	(-)86.52	(-)69.83
SR	236.4	767.96	0	0	-	
NER	0	0	0	0	-	
<b>TOTAL</b>	<b>1449.7</b>	<b>5578.71</b>	<b>2017.19</b>	<b>7054.78</b>	<b>(-)28.13</b>	<b>(-)20.92</b>

\* As compared to same period of last year.

#### MONTHLY AND CUMULATIVE IMPORT OF POWER BY ER (BASED ON SEM FIGURES)

Region  From	Import in MU		Import in MU		% Growth *	
	During October'08	Cumulative (July'08 to Oct'08)	During October'07	Cumulative (July'07 to Oct'07)	During October'08	Cumulative (July'08 to Oct'08)
NR	0	0	0	0	-	-
WR	0	0	0	0	-	-
SR	0	0	113.24	1167.15	(-)100	(-)100
NER	133.6	883.38	173.98	925.38	(-)23.21	(-)4.54
<b>TOTAL</b>	<b>133.6</b>	<b>883.38</b>	<b>287.22</b>	<b>2092.53</b>	<b>(-)53.49</b>	<b>(-)57.78</b>
<b>Net Export from ER</b>	<b>1316.1</b>	<b>4695.33</b>	<b>1729.97</b>	<b>4962.25</b>	<b>(-)23.92</b>	<b>(-)5.38</b>

\* As compared to same period of last year.

The net export to outside Eastern Region was reduced due to growth in ER energy consumption and less central sector thermal generation.

### (D) IMPORTANT EVENTS

- Sagardighi Unit#1 (300MW) of WBPDC was declared under commercial operation w.e.f. 01.09.2008.
- Sagardighi Unit#2 (300MW) of WBPDC was test synchronized on 20.07.2008 and declared under commercial operation w.e.f. 04.11.2008.
- KhSTPP Stage-II Unit#5 (500 MW) of NTPC declared under commercial operation w.e.f. 01.08.2008.

- Mejia Unit#6 of DVC was declared under commercial operation w.e.f. 24.09.2008 and accordingly scheduling of LTOA power from Mejia Unit# 6 to Madhya Pradesh has started w.e.f. 24.09.2008.
- 2<sup>nd</sup> Power Exchange of the country “Power Exchange of India Ltd” became operational on 22.10.2008.
- 220 KV Jeerat-Subhasgram line of WBSETCL made LILO at Bantala on 14.09.2008.

**ITEM NO. 3 PATRATU-BODHGAYA 220 KV CKT-I, II & III BETWEEN BSEB & JSEB.**

In the 7<sup>th</sup> TCC meeting held on 25.07.2008 Powergrid agreed to submit the cost estimate of the work for restoration of the above lines after issuance of the minutes of the TCC meeting mentioning the cost sharing between BSEB and JSEB. It was also decided that the cost estimate would be submitted by Powergrid within a week’s time to JSEB/ BSEB for further examinations of their respective highest authorities.

**JSEB and POWERGRID may please appraise the latest status.**

**ITEM NO. 4 FREQUENT TRIPPING OF LINES FROM BUDHIPADAR ALONG WITH IB TPS UNITS – EVACUATION CONSTRAINTS**

The generation embedded in 220kV system around Korba complex of CSEB (WR) is of the order of 2800MW and generation capacity available in Western part of Orissa is 771 MW. The two systems are inter-connected through 220kV Budhipadar-Korba / Raigarh T/C line.

Under normal condition, there is a surplus of the order of 700 to 900MW in Korba complex, of which 500 – 600MW is evacuated through different 220kV lines of WR and around 200-250 MW through 220kV Korba - Budhipadar-Tarkera route into Eastern Region system.

Outage of one or more elements of these evacuation routes leads to evacuation constraints and overloading of remaining lines, resulting in their cascade tripping and islanding of Korba 220 kV complex along with West Orissa complex , which frequently causes tripping of IB units as had occurred on 18.05.08, 29.09.08 and 03.10.08.

Thus absence of adequate evacuation path capacity matching with the surplus of Korba 220 kV complex along with West Orissa is the reason for frequent disturbances involving that area.

**Suggested remedial measures :**

1. Strengthening of the evacuation system of Korba complex in Western Region.

While the matter is already under consideration by WRLDC, expeditious strengthening of Korba complex evacuation network needs to be pursued by all concerned.

2. The following actions need to be taken up by OPTCL :

- Augmentation of Commissioning of 400kV Ib–Meramundali D/C line
- Exploring possibility of reconfiguring OPTCL network around Budhipadar.
- Proper coordination and checking of the distance protection relays of lines emanating from Budhipadar 220kV S/S

Further, because of regular import of power by ER from WR through 220 kV East – West link, the scheduling limit of 1000 MW for export from ER to WR, as specified in IEGC, may no longer be valid. Under the circumstances, ERLDC may consider reducing the limit of scheduling power from ER to WR. (Agenda submitted by ERLDC)

**ERLDC may please appraise the TCC for deliberation.**

#### **ITEM NO. 5 CONGESTION MANAGEMENT DURING WINTER MONTHS**

During winter months, with good thermal availability from West Bengal and DVC and reduced demand in Eastern Region, congestion is likely to occur in 400kV Farakka – Malda corridor, in passing on power to Northern Region and North-Eastern regions, because of drastic reduction of generation from Tala and Teesta HEP and simultaneous high demand in NR. The problem becomes more acute in off-peak hours during which hydro dispatch is minimized from Tala and Teesta.

The estimated TTC for simultaneous export of power from ER to NR & NER for the months of December-08 and January-09 are as follows:

Month	Off-peak TTC to NR & NER
December-08	2400MW
January-09	2200MW

It is to be noted that the same TTC during monsoon is around 3500MW due to availability of high generation from Tala and Teesta (downstream of the congested corridor). Reduction in TTC would cause restriction in path reservation both for bilateral as well as PX transactions from ER.

In order to honour the security limits in the coming winter, RLDCs in ER, NR and NER have to be vigilant in curtailing overdrawal by NR/NER constituents. Further, as a last resort, power stations in West Bengal may be instructed to back down, irrespective of frequency.

(Agenda submitted by ERLDC)

**ERLDC may please appraise the TCC.**

## **ITEM NO.6 TRANSMISSION LINE /ELEMENT OUTAGES IN ER GRID SYSTEM**

At present the following important lines / elements in ER system are under outage. As non-availability of these elements are causing problem in Grid operation, restoration of above lines/elements may be expedited at the earliest.

<b>Sl. No.</b>	<b>LINES</b>	<b>OUTAGE SINCE</b>	<b>REASONS FOR OUTAGE</b>
1.	220 kV PTPS - Bodhgaya T/C	June'05	Break down & tower collapse
2.	315 MVA ICT-II at Maithon	16.06.08	Failure of R & Y Phase LA & Fire Hazard

The item under Sl.No.1 has been included under TCC agenda no.3. **POWERGRID may please intimate the action taken for restoration of the ICT at Maithon.** (Issue raised by ERLDC)

## **ITEM NO. 7 CONSTRAINTS IN EVACUATION OF POWER FROM TENUGHAT TPS AND PROPOSAL FOR 400 KV TTPS-RANCHI D/C LINE**

The existing arrangement for evacuation of power from Tenughat TPS (2x210 MW) of TVNL is through two transmission lines viz. 220 KV TTPS-Biharshariff S/C line and TTPS-Patratu TPS S/C line (both 400 KV S/C line but charged at 220 KV). TVNL has proposed construction of 400 KV TTPS-Ranchi(PG) D/C line at their cost to solve the constraints in evacuation of power from TTPS and submitted the following :

- The stability of TTPS-Biharshariff line is very poor. Due to its long length the disturbances are more.
- Due to evacuation constraints at Patratu for both PTPS & TTPS power, the power flow through TTPS-Patratu line is always restricted.
- Whenever both the units of TVNL are operational, there is a backing down of generation of about 5% due to grid constraints.
- The Board of Directors of TVNL has accorded the administrative approval for feasibility survey and preparation of DPR for the proposed line.
- POWERGRID has kept provision for two nos. bays for TTPS in its 400 kV Ranchi (Namkum) Sub-station.
- Jharkhand State Electricity Regulatory Commission has also advised TVNL to construct a dedicated line of 400 kV D/C line between TTPS and Ranchi.

**TVNL wanted to discuss the issue in the TCC meeting. The representative of TVNL may further appraise the TCC.**

## COMMERCIAL MATTERS :

### ITEM NO.8 SCHEDULING OF TALCHER STAGE-II GENERATION TO SR BY ERLDC VIA EASTERN REGION CORRIDOR AND RELATED ISSUE INCLUDING ER TRANSMISSION CHARGES

Issue of proportionate loading of ER transmission charges on SR for scheduling of Talcher Stage-II power through ER corridor to SR was deliberated in details in the last (7<sup>th</sup>) TCC and 7<sup>th</sup> ERPC meetings held on 25.07.2008 and 26.07.2008 respectively at Ranchi. After deliberations, the following unanimous decisions were taken :

- 1) No transmission charges would be payable by SR constituents for scheduling of Talcher Stage-II power through ER. This would be treated as contingency for this type of scheduling.
- 2) While scheduling, ERLDC would apply incremental transmission losses.
- 3) Priority of transaction of Talcher Stage-II to SR through ER would come after ER ISGS, LTOA, Bilateral / STOA and collective transaction of ER. As submitted by GM, ERLDC, this would be ensured by ERLDC while scheduling Talcher Stage-II power.
- 4) ERPC would issue a revision of the REA for the month of July,2007 in accordance with the above decision.

Accordingly, ERPC has issued a revision of REA for the month of July, 2007.

**TCC members may please note.**

### ITEM NO.9 DEEMED GENERATION OF RANGIT HPS DURING THE PERIOD OF FLOOD AND RESTORATION THEREOF

The issue of deemed generation of Rangit HPS during flooding from 11.07.2006 to 18.10.2006 was deliberated in details in the 7<sup>th</sup> meeting of TCC and 7<sup>th</sup> meeting of ERPC held respectively on 25.07.2008 and 26.07.2008 at Ranchi. In the ERPC meeting it was decided that “ERPC would issue a statement indicating the payment liability of the beneficiary constituents on account of demand of Rs.2.181 crores of NHPC towards deemed generation of Rangit HPS. Based on the statement issued by ERPC Secretariat beneficiary constituents of Rangit HPS would release payment to NHPC”.

Accordingly, ERPC vide its letters No. ERPC/COM-I/REA/2008/3258-64 dated 10.09.2008 and No. ERPC/COM-I/REA/2008/3688-94 dated 23.09.2008 issued statement indicating the amount payable by the beneficiaries of Rangit HPS towards deemed generation of Rangit HPS. On further scrutiny it has been found out that NHPC had imposed regulation on BSEB for certain period in 2006-07 for which the waited average allocation of share of Rangit HPS got modified. The revised liability of the beneficiary constituents would be as follows :

Beneficiary	% Share Allocation of Rangit HPS		Payment to be made by Beneficiaries on account of Deemed Generation of Rangit HPS during the period of Flood (from 11.07.06 to 18.10.06) for admitted amount of Rs.2.181 Crores by ERPC in its 7 <sup>th</sup> meeting held on 26.07.2008	
	Previously Considered	Actual	Previously calculated figure (Rs.)	Revised figure (Rs.)
<b>BSEB</b>	<b>35.000000</b>	<b>30.507392</b>	<b>8674432</b>	<b>7560980</b>
<b>JSEB</b>	<b>13.330000</b>	<b>13.330000</b>	<b>3303719</b>	<b>3303719</b>
<b>DVC</b>	<b>10.000000</b>	<b>10.000000</b>	<b>2478409</b>	<b>2478409</b>
<b>GRIDCO</b>	<b>0.000000</b>	<b>0.000000</b>	<b>0</b>	<b>0</b>
<b>WBSEB</b>	<b>28.340000</b>	<b>32.832608</b>	<b>7023811</b>	<b>8137263</b>
<b>SIKKIM</b>	<b>1.330000</b>	<b>1.330000</b>	<b>329629</b>	<b>329629</b>
<b>TOTAL</b>			<b>21810000</b>	<b>21810000</b>

Beneficiary constituents of Rangit HPS may please take a note of this and take necessary action.

**Deliberations in the Commercial Sub-Committee Meeting held on 11.11.08**

Members present noted the revised payment to be made by the beneficiaries on account of deemed generation of Rangit HPS during the period of flooding from 11.07.2006 to 18.10.2006 given by ERPC in the agenda.

**TCC members may please note.**

**ITEM NO.10 VISIT BY ERPC TEAM TO NHPC'S TEESTA STAGE-V SITE FOR ON- THE-SPOT STUDY AFTER HIGH SILT PROBLEMS LEADING TO STOPPAGE OF GENERATION – REPORTING THEREOF.**

Teesta Stage-V Power Station had to be completely shutdown for 44 days in 2008-09 due to high siltation. In addition to the loss of generation suffered by NHPC, the Eastern Regional constituents also suffered due to non-availability of cheap hydro power from Teesta Stage-V Hydro Power Station. In the 7<sup>th</sup> meeting of ERPC held at Ranchi on 26.07.2008, in the course of discussions on deemed generation of Rangit HPS, it was decided that “Member Secretary, ERPC would convene a meeting at Teesta Stage-V in which, besides ERPC, ERLDC & NHPC, experts from all beneficiary constituents would also participate and to take stock of the situation and submit a report to Chairperson, ERPC. In future, while deciding the claim of deemed generation etc of Teesta Stage-V, if any, the findings and recommendations would also be considered”.

Accordingly, ERPC Secretariat held a meeting on 29<sup>th</sup> August 2008 at Teesta Stage-V, Baltur East Sikkim in which besides the representatives of

NHPC, representatives from GRIDCO, OHPC, WBSEDCL, Government of Sikkim, ERLDC and ERPC were present. The members also made an on-the-spot visit of the dam site of Teesta Stage-V.

In the meeting at Teesta Stage-V, Shri D. Chattopadhyay, Chief Engineer (I/c), Teesta (Stage-V) PS gave a detailed presentation covering every aspect related to the problem. He also gave a video presentation which captured aerial view of the upstream Teesta River to pin point the problem areas. After the detailed presentation, the following points emerged :-

- 1.a) On 17<sup>th</sup> May 2008, it was observed that silt content surpassed 11995 PPM and powerhouse was shutdown on 17<sup>th</sup> May 2008 for 3 days upto 19<sup>th</sup> May 2008 when the silt content came down to around 5000 PPM.
  - b) Again, on 4<sup>th</sup> June 2008, the silt content rose to beyond 9000 PPM & powerhouse was shutdown on 4<sup>th</sup> June 2008 and power generation resumed on 5<sup>th</sup> June 2008.
  - c) On 10<sup>th</sup> June 2008, the PPM was observed to be above 10000 and powerhouse has shutdown for 12 hours.
  - d) On 12<sup>th</sup> June 2008, the PPM content was observed to be above 18000 PPM and powerhouse was shutdown. The PPM rose to above 100000 and remained continuously high leading to prolonged shutdown upto 23<sup>rd</sup> July 2008. The reservoir was flushed during this period and then filed up. The generation was resumed on 25<sup>th</sup> July 2008.
  - e) NHPC tried to locate source of silt. Landslides were reported in a tributary called Tolunmchu. Aerial surveys were carried out to assess the extent of damage.
2. The siltation problem faced in the year 2008 was unprecedented as was evident from the following table presented during deliberation by NHPC :

Period (Year/ Month)	Unit	April (Max/Min)		May		June		July (Max/Min)	
		Max	Min	Max	Min	Max	Min	Max	Min
Year-2000	PPM	329	72	1767	267	2214	419	2405	1292
Year-2001	PPM	543	154	3520	536	5778	1751	1918	1615
Year-2002	PPM	3369	389	1228	1226	4053	1298	4130	3258
Year-2003	PPM	1373	1301	1338	1251	3092	1275	10338	2565
Year-2004	PPM	853	834	1463	804	3100	1280	2900	2575
Year-2005	PPM	4756	108	2048	80	1747	169	2983	260
Year-2006	PPM	260	110	1021	270	1367	570	1309	669
Year-2007	PPM	172	147	479	170	3306	320	2258	907
Year-2008	PPM	<b>9398</b>	<b>133</b>	<b>21580</b>	<b>780</b>	<b>100050</b>	<b>2070</b>	<b>33391</b>	<b>2125</b>

It was stressed by NHPC during presentation that the siltation problem was unique and NHPC had no clue before hand for such a natural calamity and its origin.

It emerged from the presentation that on the upstream side there are a number of major tributaries of river Teesta. One of such tributaries is Tolungchu. There was heavy landslide and consequent siltation on both sides of Tolungchu as was captured pictorially during aerials survey.

It was clarified by Shri P. Wangchen, Secretary (Power), Government of Sikkim that the area adjoining the tributary Tolungchu is quite inaccessible. There was no road to approach the tributary. In fact, he informed that because of inaccessibility of the entire upstream course of Teesta, it was not possible to immediately find out the source of siltation. He thanked NHPC for making sincere efforts in locating the source of siltation problem. He assured that Government of Sikkim in co-ordination with NHPC would take necessary action to reduce the siltation problem in future.

3. The origin of the siltation problem lies in Tolungchu tributary on both sides of which are having dense reserved forest. Therefore, the involvement of Government of Sikkim particularly the Deptt. of Environment & Forest is required.

After a thorough deliberation, the followings were decided unanimously :

- a) As per the data furnished by NHPC, the siltation problem faced by Teesta (Stage-V) in 2008 was un-expected and was beyond the control of NHPC.
- b) Teesta (Stage-V) PS remained under shutdown as the siltation level reached much higher than the permissible limit of 5000 PPM. In fact, the highest PPM recorded was of the order of 1,00,000.
- c) On suggestion of Member Secretary, ERPC, NHPC agreed to undertake the catchment area treatment. Shri P. Wangchen, Secretary (Power), Government of Sikkim agreed to extend necessary assistance to NHPC to undertake the work.
- d) NHPC will be monitoring the catchment area through remote sensing studies in future.

### **Deliberations in the Commercial Sub-Committee Meeting held on 11.11.2008**

Members present in the Commercial Sub-Committee meeting noted the information furnished in the agenda including the decision taken in the meeting held on 29<sup>th</sup> August 2008 at Teesta Stage-V.

On query from ERPC, NHPC representative from Teesta Stage-V informed that survey is in progress for undertaking the catchment area treatment as well as monitoring the catchment area through remote sensing studies. Further development in this regard would be communicated in due course.

**TCC members may please note.**

**ITEM NO.11 SCHEDULING OF LONG TERM POWER FROM DVC STATION TO NR AND WR**

GoI vide its different orders has allocated LTOA power from Mejia TPS of DVC to utilities of NR. Long term agreement between MP and DVC is already in place. Such agreements are purely bilateral in nature. Schedule for such transactions are essentially to be agreed to between buyer and seller and accordingly RLDCs may be advised to incorporate the same at the boundary schedule. Similarly any request for revision shall also have to be mutually agreed to between concerned buyer and seller. It is noticed that during outage of Mejia units request of revision of schedule at times is not agreed to by the buyer utility(ies) resulting in low frequency operation. CERC vide its order dated 16<sup>th</sup> October 2008 against Petition No. 115/2008 (suo-motto) has under Section 142 of the Act stated considering imposition of penalty of Rs. 1 lakh for each violation that includes overdrawal in each time block of 15 minutes, each reported overdrawal being considered a separate and distinct offence.

Under the circumstances and in the interest of DVC, it is proposed that DVC as a seller of this LTOA power may co-ordinate with its buyer for an agreed scheduling and revision modalities and advise ERLDC for incorporating the same at its boundary. *(Issue raised by ERLDC)*

**Deliberations in the Commercial Sub-Committee Meeting held on 11.11.08**

SE (Comml), ERPC explained in details the problem being faced by ERLDC regarding scheduling of export of DVC power from Mejia U # 5 & 6 to Madhya Pradesh. ERLDC representative present in the meeting further elaborated this issue. CE (Comml), DVC present in the meeting assured that they had already taken up with Madhya Pradesh for addressing the issue.

**TCC members may please discuss and opine.**

**ITEM NO.12 :**

**A) PAYMENT OF UI -- PRESENT STATUS**

- i) The UI payment status as disbursed to the constituents of ER is enclosed at **Annexure-I**. As directed by Hon'ble CERC vide order dated 04.06.2008 against Petition No. 54/2008 (suo-motto), BSEB has been releasing the outstanding payment of 20 crores per month for the year 2007-08 after due adjustment of its current receivables.

As on 4<sup>th</sup> November 2008, the final outstanding UI dues of BSEB stand as Rs. 40.71 Crores inclusive of its outstanding dues of Rs.24.54 Crores for 2007-08.

- ii) For the purpose of reconciliation, ERLDC vide its letter no. EASS/UI-13/2008/771-778 dated 30.07.2008 has communicated details of UI payment made to ER constituents and has requested them to reconcile and confirm within fifteen days of issue of the letter. While WBSETCL has confirmed the same, confirmations from the other utilities are yet to be received by ERLDC.

*(Issue raised by ERLDC)*

### **Deliberations in the Commercial Sub-Committee Meeting held on 11.11.2008**

Members noted the UI payment status given in the Annexure. It was informed by ERLDC that as per CERC order, BSEB had to pay Rs.20 Crores per month as liquidation of its outstanding dues for the year 2007-08 in addition to the current UI bill. However, BSEB has been making adjustment from the current receivable with the outstanding payment of Rs.20 crores per month which is contrary to the direction issued by CERC. As on date, BSEB is having UI outstanding of Rs.16 Crores approximately for the current financial year. With the outstanding dues of 24 Crores for the year 2007-08, the total outstanding UI amount for BSEB is around Rs.40 Crores.

ERPC advised BSEB to continue making payment of current dues, if any, in addition to outstanding dues for 2007-08.

Some members pointed out that in accordance with the CERC regulation governing payment of UI, a delayed payment surcharge is to be levied for the period beyond cut-off date of payment. ERLDC has been requested to compute this quantum and indicate it.

ERLDC informed that the detailed payment surcharge would be applicable only for BSEB and would be computed after liquidation of the outstanding dues.

Regarding furnishing of reconciled figures of UI payment made to the ER constituents, it was submitted by ERLDC that the same are required for audit purpose. After detailed deliberations, it was decided that ER constituents who would not furnish the reconciled figures within 15 days from today (11.11.2008), it would be presumed that the figures are reconciled and the audit would be accordingly informed. ER constituents agreed to this.

**TCC members may please note and discuss.**

## **B) DISBURSEMENT OF PAYMENT TOWARDS UI INTEREST**

As per the decisions taken during the 7<sup>th</sup> TCC / ERPC meeting, the disbursement of UI interest amount has been made to all concerned ER beneficiaries in proportion to the yearly UI receivables. The statement of Interest paid for 2005-06 and 2006-07 is shown at **Annexure-II.** Further the interest accrued for the UI charges for the period 2007-08 has already been reconciled with the bank. The interest accrued against UI account charges is Rs.35,67,307. The same is proposed to be disbursed to utilities in proportion to their respective yearly receivable of UI charges.

*(Issue raised by ERLDC)*

### **Deliberations in the Commercial Sub-Committee Meeting held on 11.11.2008**

Members noted the interest accrued in the bank for UI charges amounting to Rs.3567307 for the year 2007-08. Members also noted the ERLDC proposal regarding disbursement of the said amount in proportion to their respective yearly receivable UI charges as has been done for the year 2005-06 and 2006-07.

In this connection, Member Secretary, ERPC requested the constituents to explore the possibility of utilizing this accrued interest for imparting training (Inland and Foreign) to the constituent members of the Eastern Region.

Members present in the Commercial Sub-Committee meeting decided to place this in the forthcoming TCC for deliberations.

**TCC members may please note and discuss.**

## **C) REACTIVE ENERGY CHARGES -- PRESENT STATUS**

The updated position of Receipt/Payment in the pool as on 19.10.2008 as received from ERLDC is indicated at **Annexure – III.**

ERLDC is requested to indicate the year wise balance amount (if any) accumulated in the ER Reactive Pool Account upto 2007-08.

**TCC members may please note.**

## **D) I.R.E. POOL ACCOUNT OF ER WITH OTHER REGIONS.**

The status of settlement of IRE account between ER- SR & ER- NR as on 31.10.2008, as received from ERLDC, is indicated below.

For the year 2008-09 IRE account between ER-SR has been reconciled and settled between ER and SR upto 14<sup>th</sup> week (i.e. 06.07.2008). Rs.5774.76393 lakhs has been received from SR on account of IRE and already distributed to ER constituents. Moreover, Rs.8360.60680 lakhs has also been received from SR for 15<sup>th</sup> to 25<sup>th</sup> week

(upto 21<sup>st</sup> September 2008) and will be disbursed to ER constituents by ERLDC in due course.

The net IRE amount receivable from NR upto 27.08.06 was Rs. 112.6463780 Crores out of which **an amount of Rs. 96.4274403 Crores is still pending**. Correspondence has been made several times with NRPC for reconciliation and settlement of the account. NRPC has examined and reconciled the IRE account upto 31.03.2006 and requested NRLDC to release payment of an amount of Rs.47.8661786 Crores to ER IRE Pool Account.

**Members may please note.**

**ITEM NO.13 INCENTIVE ENERGY STATEMENT FOR NTPC STATIONS IN EASTERN REGION FOR THE PERIOD APRIL, 2008 TO JUNE, 2008**

The provisional incentive energy statement for the period from April'08 to June'08 was issued by ERPC Secretariat vide its letter No.ERPC/COM-I/REA/2008/2729-60 dated 21.08.2008. As per the statement issued as above, the incentive energy eligible in respect of NTPC stations in ER were as under:

Farakka STPS : 189112.53 MWH; Kahalgaon STPS Stage-I : 254721.28 MWH and Talcher Stage – I : 307799.55 MWH.

The incentive energy as above booked to respective beneficiaries is furnished in **Annexure -IV**.

**TCC members may please note.**

**ITEM NO.14 REFRAMING OF 2.3-2.4 GHZ MICROWAVE FREQUENCY BAND BEING USED FOR UNIFIED LOAD DISPATCH AND COMMUNICATION SCHEME**

As per record notes of discussion issued by DoT, WPC wing of the meeting held on 11.08.2008, the 2.3-2.4 GHz frequency band is required to be vacated within a time frame of 3-6 months and out of this first 50 MHz continuous band would be withdrawn even earlier as this band was to be auctioned for Board band Wireless Access (BWA) services as per GoI mandate. WPC had advised the users to switch over to either 2.7-2.9 GHz frequency band or on OFC communication system. However, there was no commitment from WPC for allotment of 2.7 to 2.9 GHz band for long term usage. The available options are (i) either to shift to the new frequency band of 2.7-2.9 GHz (for which there is no guaranty from WPC for long term usage) or (ii) to replace present microwave links with fibre optic links. These options were deliberated in the 4<sup>th</sup> SCADA meeting of ER held on 3<sup>rd</sup> September 2008 wherein the following was reiterated :

- 1) Interruption free functioning of the wideband communication system is a mission critical requirement for real-time monitoring of the Grid and hence DOT to be requested not to disturb the present

arrangement till alternative communication links in place of present Microwave links are established.

- 2) In view of the uncertainty of long term usage of 2.7-2.9 GHz band and non-compatibility of the present microwave terminal equipment in the new frequency band, it would be appropriate to replace the present microwave links with the Fibre Optic links. Funding aspect of which need to be appropriately tied up.

Accordingly, requirement of fibre optic links for each State / System is being worked out by POWERGRID in coordination with the constituents. However, modalities for funding and implementation of the same need to be discussed and decided. **(Agenda submitted by ERLDC)**

**TCC members may please discuss.**

**ITEM NO.15 REPLACEMENT OF VARIOUS OLD SWITCHGEARS AND PROTECTION RELAYS IN THE STATIONS OF POWERGRID ER-I (Agenda submitted by POWERGRID)**

- i) **Replacement of old ABCBs at Purnea with SF6 Type CBs (ABB make)**

At Purnea S/S, there are 6 sets of ABCBs, the performance of which are not reliable. The CBs are already 22 years old and obsolete and therefore, getting spares is very difficult. In case of any major problem in the CBs, it may lead to long outage thus resulting into the problem of power evacuation from the 220 / 132 kV sub-station. Hence, the ABCBs are required to be replaced immediately with SF6 CBs as per modern trend. The cost involvement for the replacement will be Rs.99 lacs (approx.)

- ii) **Retrofitting of BOMCO & GRPS make Isolators and Earth Switches at Purnea S/s**

There are some 22 years old and obsolete pneumatic driven isolator and earth switches in the 220 kV/132 kV Purnea S/S. The isolators and earth switches are giving repeated problems and requiring frequent maintenance. As the equipments are very old, the service / spare for the equipments are also not available. Due to problem in these isolators / earth switches, power supply from 220 / 132 kV Purnea S/S to BSEB system frequently gets interrupted. These isolators and earth switches are required to be retrofitted immediately. The cost involvement for the retrofitting will be Rs.70.00 lacs (approx.)

- iii) **Retrofitting of Differential Relays of the Transformers connected with BSEB / JSEB at Jamshedpur and Biharshariff S/S (Make: ABB)**

At Biharshariff S/S, there are 3 nos. of 315 MVA, 400 / 220 kV ICTs and at Jamshedpur, there are 2 nos. 315 MVA, 400/220 kV ICTs for feeding power to BSEB/JSEB respectively. These ICTs are catering

major load of BSEB/JSEB systems. 2 nos. ICTs at Biharshariff and 2 nos. ICTs at Jamshedpur were commissioned in 1991/92. The main static type differential relays used for the protection of the ICTs are very old and obsolete due to which the manufacturer is not interested in providing any support services for repairing etc. In addition to that, in the ICT feeders disturbance recorders are also not installed, for analyzing the disturbances in the ICTs. Considering the high rate of failure of the ICTs in the recent times, it is proposed to replace the old differential relays with numerical type of differential relays having disturbance recorder feature. Therefore, in addition to having reliable protection, these new differential relays will help in analyzing the fault. The total cost involvement for the replacement of differential relays at Biharshariff and Jamshedpur will be Rs. 18 lacs (approx.).

**iv) Replacement of Pilot Wire Protection at Purnea S/S for the Kishanganj Line.**

As per the earlier scheme, the 132 kV Kishanganj feeder was connected to nearby BSEB S/S in Purnea (1 KM away). Accordingly, pilot wire protection was provided for the protection of the said line. However, later on this feeder is terminated at Kishanganj station of BSEB, which is around 70 KM from Purnea. As the pilot wire protection cannot be used for the said length of the line, therefore, the line is presently protected only by back up over current protection having high time delay. Hence, providing of a distance protection in the said feeder is required very urgently. For providing a modern numerical type distance protection relay in this feeder, total cost involvement will be Rs.2.5 lacs (approx.)

**v) Replacement of old Distance Protection Relays of Biharshariff and Jamshedpur S/S (Make : ABB)**

The Biharshariff and Jamshedpur S/S are very important stations of POWERGRID having connection with the generating stations as well as having inter-regional tie lines. These stations are also feeding important loads of BSEB/JSEB. In these stations the distance protections provided in some of the old feeders, commissioned in the year 1991-92 are quite obsolete and hence giving frequent problems, putting the system in danger. The distance protection relays are now not repairable and the manufacturers have also stopped providing services for these relays. Hence, the reliable operation of these feeders these old relays are required to be replaced immediately. At Jamshedpur S/S, 4 relays and at Biharshariff S/S 5 relays are required to be replaced and replacement cost of these old relays with numerical relays the cost involvement will be Rs.20 lacs (approx.)

Members of OCC have already agreed for the replacement of the above on operational ground. Approximate cost for replacement is Rs.2.10 crores.

### **Deliberations in the Commercial Sub-Committee Meeting**

Commercial Sub-Committee members noted the consent of the members of OCC regarding replacement of the above on operational ground. After deliberations, Commercial Sub-Committee recommended replacement of the above at a total cost of Rs.2.10 Crores subject to approval in TCC and ERPC meetings.

**TCC members may please approve.**

#### **ITEM NO.16 ALLOCATION FROM THE 15% UNALLOCATED PORTION OF ER CENTRAL SECTOR POWER (AGENDA SUBMITTED BY GRIDCO)**

Current average demand of Orissa is 2350 MW and the peak load demand is hovering around 3000 MW. The supply situation is almost matching the demand.

As per the CEA report on seventeenth electrical power survey of India the peak demand of Orissa in the year 2008-09 & 2009-10 will be 3257 MW and 3633 MW respectively.

Since current demand supply situation is neck to neck, days are not far away when the State will face severe power shortage keeping in view the rapid industrialization and massive rural electrification in the State.

The situation is more or less same in all other States of Eastern Region. In such a scenario it is high time MoP, GoI should consider restoration of total unallocated 15% share of ER CGSs to ER constituents.

### **Deliberations in the Commercial Sub-Committee Meeting**

Member Secretary, ERPC observed that Commercial Sub-Committee cannot take a decision regarding allocation of 15% unallocated power from ER ISGS among the ER constituents. He informed that the provision of 15% unallocated power has been kept to allow MoP, GoI to re-allocate same among the different constituents depending on several considerations. This aspect cannot be deliberated in the Commercial Sub-Committee meeting of ERPC. He advised GRIDCO to approach MoP on this issue. On request of GRIDCO, it was decided to include this as an agenda item of ensuing TCC and ERPC meetings.

**TCC members may please discuss and opine.**

#### **ITEM NO. 17 ANY OTHER POINT WITH PERMISSION OF THE CHAIR**

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# EASTERN REGIONAL POWER COMMITTEE

## AGENDA FOR THE 8<sup>TH</sup> MEETING OF THE EASTERN REGIONAL POWER COMMITTEE

**Time & Date: 11:00hrs. on 21.11.2008 (Friday)**

**Venue : Hotel Royal Residency, Bodhgaya**  
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**ITEM NO.1 WELCOME ADDRESS BY BSEB – The Host Organisation.**

**ITEM NO.2 INTRODUCTORY REMARKS BY MEMBER SECRETARY, ERPC**

**ITEM NO.3 REMARKS OF OTHER COMMITTEE MEMBERS**

**ITEM NO.4 ADDRESS BY CHAIRPERSON, ERPC & CMD, OPTCL**

**ITEM NO.5 CONFIRMATION OF THE MINUTES OF THE 7<sup>TH</sup> ERPC  
MEETING HELD ON 26.07.2008 AT RANCHI**

The minutes of the 7<sup>th</sup> ERPC meeting held on 26.07.2008 at Ranchi was issued vide letter no.ERPC/Committee/2008/2893-2941 dated 01.09.2008.

Chief Engineer (Transmission, O&M),BSEB vide letter no.Com/ Misc-1067/98(P)/2033 dated 07.10.2008 has communicated their disagreement with the minutes of the 7<sup>th</sup> ERPC meeting pertaining to the deemed generation of Rangit HEP of NHPC during the period of flood (agenda item no.6.4) and scheduling of Talcher Stage-II generation by SR by ERLDC via ER corridor and payment of transmission charges (agenda item no.6.5) on the ground that views of BSEB were not incorporated. BSEB requested for review of decision of ERPC on the above two issues.

The minutes of the agenda item no. 6.4 and 6.5 of 7<sup>th</sup> ERPC meeting is placed before the ERPC Members. The minutes reflect the consensus views arrived at the meeting after detailed deliberations. No comments received from any other constituents on the Minutes of 7<sup>th</sup> ERPC meeting.

**BSEB may put forward their views and Members may please discuss before confirmation of the minutes.**

**ITEM NO. 6 ISSUES REFERRED TO ERPC BY TCC MEMBERS OF THE 8<sup>TH</sup> TCC MEETING HELD YESTERDAY**

The issues referred to ERPC by the TCC are placed before the Committee Members for discussion and decision.

**ITEM NO. 7 ISSUES REFERRED BY THE STANDING COMMITTEE ON POWER SYSTEM PLANNING OF ER**

The Standing Committee meeting on Power System Planning of Eastern Region was held on 8<sup>th</sup> November, 2008 at Bhubaneswar. The issues referred by the Committee for information and approval of ERPC has been received from CEA and are given at **Annexure-I**.

**Members may please discuss for approval.**

**ITEM NO.8 CONSTITUTION OF ERPC**

In pursuance of letter dated 02.05.2008 from Govt. of Jharkhand, Jamshedpur Utilities and Services Company Ltd. (JUSCO) is the new Member of ERPC for the year 2008-09 in the category of Distribution Company in the State of Jharkhand in place of SAIL- Bokaro Steel Plant.

ERPC Secretariat vide letter no.ERPC/TCC&COMMITTEE/2008/ 806-07 dated 13.05.2008 followed by letters dated 11.07.2008 and 06.11.2008 has requested the Managing Director, JUSCO to forward their nominations in ERPC and other Sub-Committees of ERPC. But no communication has been received so far from JUSCO authority.

In the 7<sup>th</sup> ERPC meeting held on 26.07.2008 at Ranchi, GRIDCO and PTC were inducted as Associate Member of ERPC. Accordingly GRIDCO and PTC were requested to send their nomination in the ERPC and other sub-committees. Nominations from GRIDCO have been received. CMD, GRIDCO has been nominated in the ERPC. Nominations from PTC are still awaited.

As per the resolution of MoP, Govt. of India, one representative from National Load Dispatch Center (NLDC) shall be a member of ERPC.

Number of communications has been issued to the Executive Director (NLDC) requesting for nominations in ERPC and other sub-committees. Nominations from NLDC are still awaited.

**This is for the information of the Members.**

## **ITEM NO.9 FUNDING OF ERPC SECRETARIAT**

### **( A ) ERPC- ESTABLISHMENT FUND**

#### **A) FOR THE YEAR 2007-08**

Contribution of Rs.10 lakh each from BSHPC and NESCO has not been received. Number of letters has been issued to BSHPC and NESCO but no payment has been received. It is requested that the matter may please be taken up by the Chairman, BSEB with BSHPC and CMD, OPTCL with NESCO respectively.

#### **B) FOR THE YEAR 2008-09**

Contribution approved for the year : Rs.14 lakh per member of ERPC.

Contributions @ Rs.14 lakh have been received from the following organizations : OHPC, WBPDC, BSEB, NTPC, OPGC, WBSETCL, NHPC, DVC, TVNL and PTC.

Contributions @ Rs.11 lakh have been received from the following organizations : CESC, POWERGRID, JSEB, Govt. of Sikkim.

Contribution of Rs.5.5 lakh has been received from WBSEDCL.

**The following organisations are requested to send their contribution for the year 2008-09 to the ERPC Secretariat :**

Rs. 14 lakh each by OPTCL, GRIDCO, BSHPC, JUSCO and SOUTHCO.

Rs. 3 lakh each by CESC, POWERGRID, JSEB, Govt. of Sikkim.

Rs. 8.5 lakh by WBSEDCL.

#### **C) INTERIOR RENOVATION OF ERPC BUILDING**

In the 7<sup>th</sup> ERPC meeting held on 26<sup>th</sup> July,2008 the Committee approved one time contribution of Rs. 5 lakh per member for internal renovation of ERPC building and augmentation of rooms and renovation of the guest

house accommodation at ERPC, Kolkata. Necessary budget estimate has been sent to CEA for this purpose. ERPC Secretariat will issue the letter shortly to the members requesting for their contribution.

**Put up for information of members.**

#### **ITEM NO.10 CONTRIBUTION TO ERPC FUND**

##### **1) Status of Contribution to ERPC FUND**

In the 6<sup>th</sup> ERPC meeting dated 19.02.2008 the Committee approved the annual contribution of Rs.50,000 per member to the **ERPC FUND**. The contributions for the year 2008-09 to **ERPC FUND** has been received from WBPDC, WBSEDCL, BSEB, NHPC, NTPC, POWERGRID, OPGC, CESC, Govt. of Sikkim, JSEB, TVNL and PTC. Contributions from the following organisations have not been received viz. OPTCL, GRIDCO, DVC, WBSETCL, OHPC, BSHPC, JUSCO and SOUTHCO. **The concerned members are requested to expedite their contribution to the ERPC FUND.**

Further, contributions @ Rs.38000 per year have not been received from BSHPC and NESCO for the year 2007 and BSHPC, Tata Steel Ltd. for the year 2006. The payments are long overdue and number of letters has been issued to the concerned organisations. While ERPC Secretariat is following up with the respective organisations for their contribution, CMD-OPTCL, Chairman-BSEB and Chairman-JSEB are requested to use their good offices to persuade NESCO, BSHPC and Tata Steel Ltd respectively for their contribution to the ERPC Fund.

#### **ITEM NO. 11 ANY OTHER POINT WITH THE PERMISSION OF CHAIR**

#### **ITEM NO.12 FINALISATION OF VENUE AND TENTATIVE DATE OF THE NEXT COMMITTEE MEETING**

As per the roster finalised in the first ERPC meeting held in Kolkata on 25.05.2006, next ERPC meeting is to be hosted by NTPC.

The roster approved in the first ERPC meeting is given below :

<b>Sl. No.</b>	<b>Host Organisation</b>
1.	WEST BENGAL
2.	DVC
3.	NHPC
4.	PGCIL
5.	SIKKIM
6.	MEMBER, IPP
7.	MEMBER, TRADER
8.	ORISSA
9.	JHARKHAND
10.	BIHAR
11.	NTPC

**NTPC may please agree to host the next ERPC meeting and members may please decide a tentative date and venue for the next meeting.**

**ITEM NO.13 VOTE OF THANKS BY BSEB**

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