

**Central Electricity Authority, SP&PA Division**  
**Sewa Bhawan, R.K. Puram, New Delhi-110066**

No.66/5/99-SP&PA/

Dated: 11-01-2012

- |   |   |
|---|---|
| 1. Member (Transmission),<br>Bihar State Electricity Board<br>Vidyut Bhavan, Baily Road,<br>Patna-800021.       | 2. Director (System),<br>Damodar Valley Corporation<br>DVC Towers, VIP Road,<br>Kolkata-700054.   |
| 3. Member Secretary,<br>Eastern Regional Power Committee,<br>14, Golf Club Road, Tollygange,<br>Kolkata-700033. | 4. Director (Commercial),<br>Grid Corporation of Orissa Ltd,<br>Jan path, Bhubaneshwar-751022.  |
| 5. Director (Transmission),<br>Orissa Power Transmission Corporation<br>Ltd,<br>Jan path, Bhubaneshwar-751022.  | 6. Director (System Operation),<br>West Bengal State Electricity Transmission<br>Company Ltd, Vidyut Bhavan, 5th Floor,<br>Block-D, Bidhannagar, Sector-II<br>Kolkata-700091. |
| 7. Principal Chief Engineer cum Secretary,<br>Power Department<br>Government of Sikkim, Sikkim.                 | 8. Director (Projects),<br>Power Grid Corporation of India<br>"Saudamini" Plot No. 2, Sector-29<br>Gurgaon-122001   |
| 9. Director (Technical),<br>NTPC Limited,<br>Engineering Office Complex,<br>A-8, Sector 24, Noida.              | 10. Member (Transmission),<br>Jharkhand State Electricity Board,<br>In front of Main Secretariat,<br>Doranda, Ranchi-834002.  |
| 11. Executive Director (T&RE),<br>NHPC Ltd, NHPC Office complex,<br>Sector 33, Faridabad-121003.                | 12. General Manager,<br>Eastern Regional Load Dispatch Center, 14,<br>Golf Club Road, Tollygange,<br>Kolkata-700033.  |

Sub: Meeting of the 1<sup>st</sup> -2012 Standing Committee on Power System Planning in ER.

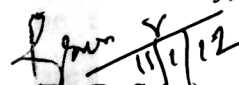
Sir,

The Standing Committee meeting on Power System Planning for Eastern Region is proposed to be held in the 3<sup>rd</sup> week of January 2012. The date and venue of the meeting shall be intimated shortly.

The agenda note has been uploaded on the CEA website: [www.cea.nic.in](http://www.cea.nic.in). (Path to access-Power System/Standing Committee on Power System Planning/EASTERN REGION). The date and venue of the meeting shall be intimated shortly.

Any additional issue to be discussed as an agenda for the meeting may please be communicated in advance.

Yours faithfully,

  
(Dr. R. Saha)  
Director (SP&PA)

Copy to:

- (i) Sh. S K Soonee, CEO, POSOCO, B-9 Qutab Institutional Area, Katwaria Sarai, New Delhi-110016  
- with a request to kindly attend the meeting.

## **Agenda Note for Standing Committee Meeting of Power System Planning in ER**

### **1.0 Confirmation of the minutes of the meeting held at NRPC, New Delhi on 28.12.2010.**

Minutes of the Standing Committee Meeting (SCM) held on 28.12.2010 at PGCIL, Gurgaon were circulated vide CEA letter No. 66/5/99/SP&PA/74-88 dated 20.01.2011. Subsequently, a modification in MoM were suggested by WBSETCL through their letter No. CE/CPD/CEA/22 dated 27-01-11. Accordingly, Item-2.0 of the MoM was revised and a corrigendum to the MoM was uploaded on 25-02-2011 to the CEA website.

**The minutes may be confirmed.**

### **2.0 System strengthening in Eastern Regional Grid**

#### **(i) Installation of 1x125 MVAR Bus Reactor at 400kV Biharsharif S/S (PG)**

Due to high voltage at 400kV Biharsharif sub-station of PGCIL resulting in persistent high voltage at 220kV Biharsharif, Bodhgaya and Begusarai substations of BSEB, it was decided in the 18<sup>th</sup> ERPC meeting held on 01-07-2011 at Ranchi that 1x125 MVAR Bus Reactor shall be installed at 400kV Biharsharif S/S (PG) to overcome high voltage problem at the aforesaid 220kV sub-stations.

**Members may kindly agree.**

#### **(ii) Replacement & Aug. of 220/132kV transformers capacity at 400kV Purnea S/S (PG) from 3x100MVA to (2x160 + 1x100)MVA**

At present there are 3x100 MVA, 220/132 kV transformers at Purnea 220/132 kV substation of Powergrid supplying power to BSEB. Out of the three transformers, two were commissioned in the year 1986, about 25years old, and one commissioned in the year 2003. The cumulative loading of these ICTs has exceeded 225 MW on several occasions and even touched 250 MW i.e. 83 MW per transformer. In view of above, it is proposed to replace 2x100MVA transformers which are completing economic life (commissioned in 1986) by 2x160MVA transformers in a phased manner.

ERPC in its 16th meeting of ERPC held on 18th December, 2010 at Bhubaneswar approved the above proposal along with its bay equipment at Purnea, and the transformers (2x100MVA, 220/132kV) thus released shall be added to the inventory of spare transformer.

**Members may kindly agree.**

**(iii) Replacement of 1x63 Mvar 420kV Shunt reactor with 1x125 Mvar capacity at 400kV Muzaffarpur S/S (PG).**

In the 69<sup>th</sup> OCC meeting of ERPC held on 28-12-11, it was agreed to replace 1x63Mvar reactor by 1x125Mvar shunt reactor at Muzaffarpur contain over voltage and the dismantled 63Mvar reactor will be used as regional spare to meet any contingency. .

**Members may kindly agree.**

**(iv) Proposal of POWERFRID for additional spare converter transformers(single phase unit) for 2x500 MW Gazuwaka/Vizag & 1x500MW Sasaram HVDC back-to-back (B-t-B) stations.**

The HVDC Back-to-Back (B-t-B) Stations at Vizag/Gazuwaka (1x500MW of AREVA + 1x500MW of ABB) and Sasaram (1x500MW of ABB) have since been in operation as given hereunder:

|  |             |
|--|-------------|
| <b><u>VIZAG/Gazuwaka B-t-B (2x500MW)</u></b> | <u>Date</u> |
| Pole-I :                                     | 01.09.1999  |
| Pole-II :                                    | 01.03.2005  |
| <b><u>SASARAM B-t-B (1x500MW)</u></b>        |             |
| Pole I :                                     | 01.12.2002  |

These links were planned for exchange of Power during contingencies. However, these links are being utilized for continuous exchange of Power between the two connected Regions and operated at times as Power evacuation corridor. The reliability and security of both the grids depend upon the reliable operations of these links.

Each Pole of a Back-to-Back station is equipped with six (6) units of single phase Converter Transformers/pole. Vizag HVDC B-t-B station is having population of twelve (12) nos. single phase Converter Transformers with a provision of one spare per pole, and Back-to-Back station at Sasaram is having six (6) nos. Converter Transformers with a provision of one spare. These Links/Transformers are being operated on continuous basis to control MW flow, voltage etc. in the integrated Grid and their onload tap changers are subjected to enormous stress causing long term effect on their life. For multiple unit failures at a station, it leads to long outage of a pole leading to reduction of evacuation capacity by 500MW.

In order to improve reliability of HVDC System, POWERGRID has proposed for provision of an additional spare single phase Converter Transformer unit for each Pole at Sasaram & Vizag HVDC links, which as a practice, is being followed at the other HVDC Stations viz. Talcher, Kolar, Biswanathchariyali, Agra, Balia, Bhiwadi etc. As per the present installation

& make of converter transformers at Sasaram & Vizag, **the following converter transformer** shall be needed to be procured by POWERGRID.

**Sasaram:** one single phase unit of  $400/\sqrt{3}/93/\sqrt{3}/93\text{kV}$ , 234MVA rating (AREVA)

**Vizag:** one single phase unit of  $400/\sqrt{3}/93/\sqrt{3}/93\text{kV}$ , 234MVA rating (AREVA) & one single phase unit of  $400/\sqrt{3}/74.5/\sqrt{3}/74.5\text{kV}$ , 201.2MVA rating (ABB)

It may be noted that the requirement of two spare converter transformers at Vizag/Gazuwaka HVDC B-t-B stations was agreed by the constituents of SR in the 33<sup>rd</sup> Standing Committee meeting of SR held on 20<sup>th</sup> October 2011 at NRPC, New Delhi.

**Members may deliberate.**

### **3.0 Proposals of JSEB:**

**(i) Construction of 400kV Ranchi (PG) – Patratu D/C line and 2x315MVA 400/220kV substation at Patratu by JSEB & provision of 2 nos. 400kV Bay at 400 Ranchi substation of PGCIL.**

JSEB vide their dated 30-08-2011 proposed to construct a 2x315MVA 400/220kV substation at Patratu and a 400kV Ranchi(PG) – Patratu D/C line to avail the State's share from upcoming IPPs viz. Essar Power and Corporate (Abhijeet) Projects, and also to facilitate evacuation of the existing Tenughat and Patratu TPS. Accordingly, they have requested to provide them 2 nos. 400kV line bays at 400kV Ranchi S/S of PGCIL.

It may be noted that Tenughat generation (2x210MW) of TVNL is evacuated through 400kV Tenughat- Patratu S/C and 400kV Tenughat- Biharshariff S/C lines, both are being operated presently at 220kV level. TVNL is upgrading the 400kV Tenughat- Biharshariff line for its operation at the designed voltage. Further, 400kV Tenughat-Ranchi D/C line which was approved earlier for Tenughat TPS Extension could not be materialized due to uncertainty of the Extension project.

It is to note that a number of new 765kV and/or 400kV ISTS sub-stations/pooling points viz. Jharkhand, Ranchi, Daltonganj, Chaibasa, have been planned in Jharkhand and these are at various stages of implementation by POWERGRID. Generations from Essar (1200 MW) and Corporate (540MW) IPPs have been planned to be injected to the Jharkhand pooling point being developed as ISTS grid point. In respect of the proposal, JSEB has not indicated the quantum of their share from the IPPs, load demand/growth around Patratu and the reinforcements plan for their downstream 220kV and 132kV networks at and around

Patratu. JSEB has to carry out the detailed exercise for technical viability of the proposal and its results may be furnished.

Instead of creating 400kV Patratu S/S, JSEB should explore the possibility of drawing power at 220kV level from Jharkhand pooling point/Ranch Pooling Point for which necessary 400/220kV ICT could be provided by POWERGRID.

**Members may kindly discuss.**

**(ii) Provision of 2 nos. 220kV line bays at 400/220kV Maithon S/S (PG) for construction of 220kV Maithon(PG) –Dumka D/C line by JSEB.**

JSEB has requested to provide them 2nos.220kV line bays at 400/220kV Maithon substation (PGCIL) for construction of 220kV Maithon (PG) –Dumka D/C line. In order to meet the growing load of Dumka area, this 220kV line was an approved work. However, due to delay in construction of the above line, the two 220kV line bays originally earmarked for JSEB (erstwhile BSEB) at Maithon (PGCIL) was allowed to DVC for their 220kV Maithon-Kalayaneswari D/C line. Availability of space for additional 2 nos. 220kV line bays at Maithon (PG) for construction of 220kV Dumka- Maithon(PG) D/C line has been confirmed.

**Members may kindly discuss and note.**

**4.0 (i) LILO of 220kV Raigarh(CSPTCL)- Budhipadar (ER) line at 400/220kV Raigarh(PG).**

**(ii) LILO of Korba-Budhipadar 220kV S/C line (owned by CSPTCL) at Naharpalli 220kV S/S(WR) (as an interim arrangement).**

Presently, there are 3xS/C 220kV lines between Korba(E) and Budhipadar(ER), two lines owned by Chattishgarh State Power Transmission Company Limited (CSPTCL) and one line owned by PGCIL. One 220kV S/C line of CSPTCL was already LILOed at 220kV Raigarh S/S (CSPTCL) forming 220kV Korba(E)-Raigarh(CSPTCL)- Budhipadar S/C line.

The present proposal is for LILO of 220kV Raigarh (CSPTCL) - Budhipadar section of the Korba(E)- Raigarh (CSPTCL)- Budhipadar line at 400/220kV Raigarh(PGCIL) which would provide 3<sup>rd</sup> 220kV inter-connection between Raigarh (CSPTCL) - 400/220kV Raigarh (PGCIL) (one D/C between Raigarh (PG) and Raigarh (CSPTCL) already exists) to ease the over loading problem of the existing 220kV Raigarh (CSPTCL) - 400/220kV Raigarh (

PGCIL) D/C line.

Secondly, M/s Monnet Ispat and Energy Ltd(MIEL) is going to install a Captive Power Plant of 140 MW (2x45MW+ 1x80MW) near Naharpalli in Chattishgarh, and CSPTCL has to provide connectivity for Naharpalli CPP to Raigarh (CSPTCL) through 220kV D/C line for evacuation. But this line could not be completed by CSPTCL to match with the commissioning of the CPP at Naharpalli. As an interim arrangement for evacuation, it is intended that the Korba(W)- Budhipadar 220kV S/C (second line of CSPTCL) is proposed to be LILOed at Naharpalli CPP and when Naharpalli CPP - Raigarh (CSPTCL) 220kV D/C line would be completed the Korba(E)- Budhipadar 220kV S/C line will be restored.

It is to note that in the Standing Committee Meeting on Power System Planning in Western Region held on 13-05-11 at NRPC, New Delhi, both the proposals of CSPTCL were agreed by constituents of WR. Since the 220kV lines are inter-regional in nature, **ER constituents may give their concurrence.**

**5.0 (i) Establishment of 400kV Rajarhat as GIS in West Bengal under approved system strengthening scheme (ERSS-V ) and**

**(ii) GIS for 400 kV Jharkhand pooling station, 765/400kV Varanashi and 765/400kV Kanpur sub-stations as part of Common system strengthening for transfer of power from Phase-I generation projects in Jharkhand and West Bengal to NR/WR.**

**5.1** In the last Standing Committee Meeting of ER held on 20-09-10 at NRPC, New Delhi, the following system strengthening scheme were agreed to be implemented by POWERGRID on priority basis for reliable power supply to Jeerat area in West Bengal.

- Rajarhat-Purnea 400 kV D/c line (triple snowbird), with LILO of one circuit at Gokarna and other circuit at Farakka
- Establishment of 400/220 kV, 2X500 MVA Rajarhat substation with LILO of Subhashgram - Jeerat 400kV S/c line

POWERGRID vide their letters dated 7-6-11 informed that they explored a number of sites to identify land on preliminary survey for Rajarhat S/S, and the land so identified was not appropriate in view of severe RoW approachability problems for high density dwellings in the area and close to Kolkata Airport. They were facing difficulty to procure land for Rajarhat in WB. POWERGRID proposed to consider for 400kV GIS at Rajarhat.

**5.2** POWERGRID highlighted also the land procurement problems for development of 400kV Jharkhand pooling station, 765/400kV Varanashi S/S and 765/400kV Kanpur S/S,

which were agreed in the SCM of ER dated 20-9-10 under ‘Common system strengthening for transfer of power from Phase-I generation projects in Jharkhand and West Bengal to NR/WR’. Keeping in view of such difficulties, POWERGRID proposed for construction of the above sub-stations as GIS instead of AIS.

5.3 In a meeting taken by Chief Engineer (SP&PA) with Member Secretary (ERPC) on 10-06-2011 in CEA, it was decided and in principle agreed **that all the above mentioned sub-stations/pooling points i.e. 400kV Rajarhat & 400kV Jharkhand in ER and 765/400kV Varanasi & 765/400kV Kanpur in NR would be established as GIS** which will reduce the land requirement to the extent of 60-70%. Subsequently, an alternative site for Rajarhat GIS was selected (through joint site visit) and in the meeting between CEA, WBSETCL and POWERGRID held on 21-11-11 at WBSETCL, Kolkata, site for Rajarhat S/S was firmed-up.

**Members may kindly note and concur.**

## **6.0 Re-grouping of Works on the approved System Strengthening Scheme (ERSS–V) in ER for evacuation of power from Phase-I IPPs in Jharkhand & West Bengal.**

6.1 The revised commissioning schedules of IPPs in Jharkhand & West Bengal are given below:

### **Phase-I IPPs in Jharkhand & West Bengal#:**

| Sl No                         | Projects  | Developer/Applicant   | Time Frame                 | Ins. Cap (MW) | LTO A (MW)  | Allocation(Mw) |             |            |             |
|-------------------------------|-----------|---|----------------------------|---------------|-------------|----------------|-------------|------------|-------------|
|                               |           |   |                            |               |             | NR             | WR          | ER         | Total       |
| <b>A Jharkhand Projects</b>   |           |   |                            |               |             |                |             |            |             |
| 1                             | Adhunik   | Adhunik Power & Natural Resources Ltd.                            | U-I Jan-12<br>U-II Mar-12  | 540           | 450         | 200            | 50          | 200        | 450         |
| 2                             | Corporate | Corporate Power Ltd   | U-I Sept-13<br>U-II Mar-14 | 540           | 480         | 240            | 240         |            | 480         |
| 3                             | ESSAR     | Essar Power (Jharkhand) Ltd.                                      | U-I Mar-13<br>U-II Sept-13 | 1200          | 1100        | 400            | 400         | 300        | 1100        |
|                               |           |   | <b>Subtotal</b>            | <b>2280</b>   | <b>2030</b> | <b>840</b>     | <b>690</b>  | <b>500</b> | <b>2030</b> |
| <b>B West Bengal Projects</b> |           |   |                            |               |             |                |             |            |             |
|                               |           | WBSEDCL (West Bengal State Electricity Distribution Company Ltd.) | <b>2013-14</b>             | <b>1000</b>   | <b>1000</b> | <b>600</b>     | <b>400</b>  | <b>-</b>   | <b>1000</b> |
|                               |           |   | <b>Total</b>               | <b>3280</b>   | <b>3030</b> | <b>1440</b>    | <b>1090</b> | <b>500</b> | <b>3030</b> |

#\* Furnished by POWERGRID

6.2 For transfer of power from the above IPPs, ‘Common system strengthening scheme for transfer of power from Phase-I generation projects in Jharkhand and West Bengal to WR/NR under the scope of POWERGRID’ were firmed-up and grouped into Part-A,

Part-B & Private Sector in the SCM of ER held on 20-9-10. According to the progress of the phase-I generation projects, **POWERGRID re-grouped the scope of Part-A works into two groups i.e. Part-A1 and Part-A2, whereas the scope of works under Part-B and private sector remain the same.** The details are given below.

**I. Transmission system for Phase-I generation projects in Jharkhand and West Bengal(WB) - Part-A1:**

- **Establishment of 400kV GIS Jharkhand Pooling Station** near Essar and Corporate generation projects (depending upon progress of Essar and Corporate IPPs). This will be a switching station without ICTs.
- **Ranchi – Gaya 400 kV D/C Quad line via proposed Jharkhand Pooling Station** near Essar/ Corporate generation projects

**II. Transmission system for Phase-I generation projects in Jharkhand and West Bengal - Part-A2:**

- Ranchi New (765/400kV S/s) – Dharamjayagarh/near Korba 765kV S/C line
- New 2x1500 MVA, 765/400 kV GIS substation at Varanasi
- Gaya – Varanasi 765 kV S/C
- LILO of one circuit of Gaya - Balia 765 kV line at Varanasi

**III. Transmission system for Phase-I generation projects in Jharkhand and West Bengal - Part-B:**

- New 2x1500 MVA, 765/400 kV GIS substation at Kanpur
- Varanasi – Kanpur 765 kV D/C
- Kanpur – Jhatikra 765 kV S/C
- 765/400 kV Kanpur – Kanpur(Existing) 400 kV D/C Quad line
- 400kV connectivity for new 765/400kV S/s at Varanasi
  - Varanasi - Sarnath (UPPCL) 400kV D/C Quad line
  - LILO of Sasaram - Allahabad 400kV line at Varanasi
  - Opening of LILO of one circuit of Sasaram-Allahabad 400kV D/C line at Sarnath.

**IV. Private Sector line:** In addition to the above work to be undertaken by PGCIL, Dharamjayagarh – Jabalpur 765kV D/C line (2nd line) would be under the scope of private sector. Associated 765kV line bays at Dharamjayagarh and Jabalpur S/S would be under the scope of POWERGRID.

**Members may kindly note and concur.**

**7.0 Establishment of 400kV sub-station at Chalbalpur (West Bengal) and LILO of one Ckt. of 400kV Mejia- Maithon D/C line at Chalbalpur by DPSC Limited.**

Dishergarh Power Supply Company (DPSC) Limited, a private sector distribution licensee in West Bengal, supplying consumers in the licensed area in Asansol, WB, has informed vide their letter No. CEO/CEA/2011/50 dated 20-10-2011 that load growth in the Asansol area



is expected to be of the order of 500 MW by 2015-16 and may ultimately be enhanced to 1000 MW progressively. In order to meet such growing load demand, they have proposed to avail 1000MW power from ISTS system as a bulk consumer to supply the load in the area after identifying the source of power. DPSC has already applied to POWERGRID for connectivity in May, 2010.

Considering that the primary responsibility of planning power supply to the distribution licensee's area is within the purview of the concerned state/STU, DPSC was advised to approach STU (i.e. West Bengal) by PGCIL to seek approval of West Bengal in this regard.

In order to avail power from CTU, DPSC proposes to establish a new 400kV sub-station at Chalbapur (West Bengal) with connectivity by LILO of one Ckt. of 400kV Mejia-Maithon D/C ISTS line at their own cost and accordingly applied to WBSETCL on 30-8-11 for their 'in-principle' approval to draw power from ISTS/ Central grid. WBSETCL may give their views.

**Members may kindly discuss and concur.**

#### **8.0 Temporary termination of 400kV Jamshedpur (PG)-Baripada D/C ISTS line at 400 kV Jamshedpur S/S of DVC.**

Due to RoW problem for terminating the ongoing **400kV Jamshedpur-Baripada D/c ISTS line** at Jamshedpur (PG), completion of this line is getting delayed. POWERGRID has informed that DVC intends to temporarily terminate this line at their 400 KV S/S at Jamshedpur(DVC) and the transmission charges will be borne by DVC (which in turn will be reimbursed by TSL) till the completion of the line upto Jamshedpur S/S of PGCIL. With the termination of the D/C line at Jamshedpur (PG), the approved work for single ckt LILO of 400kV Baripada-Jamshedpur(PG) D/C line at Jamshedpur (DVC) under the scope of POWERGRID will be implemented and transmission charge recovery will be made as per the pooled rate. The matter was discussed and agreed in the 20<sup>th</sup> TCC/ERPC meeting held on 16-17 Dec., 2011.

**Members may kindly discuss and concur.**

#### **9.0 Establishment of Uttara 400/220kV 2x315MVA S/S at Begunia (an alternative site) in Orissa as GIS with LILO of 400kV Mendhasal-Baripada D/C line under the approved ERSS-III scheme - Modifications in the ERSS-III Scheme.**

A 2x315MVA, 400/220kV substation at Uttara in Orissa along with 400kV D/c line from

Mendhasal was approved as a part of Eastern Region Strengthening Scheme (ERSS-III) in the Standing Committee meeting (14-9-2009) and 12<sup>th</sup> ERPC meeting.

POWERGRID has informed that the land identified initially for Uttara has been earmarked for construction of an International Airport and an alternate land has been identified at Begunia in co-ordination with OPTCL. Subsequently, PGCIL considering difficulty in getting adequate land has proposed vide their letter dated 28-12-11 to establish a GIS station at Begunia (Uttara). PGCIL has also proposed that their site engineers find it suitable to connect Begunia (Uttara) by LILO of 400kV Mendhasal-Baripada D/C line, instead of 400kV Mendhasal-Uttara 400kV D/C line approved under ERSS-III scheme. Considering land availability being a key problem for Uttara/Begunia, CEA has in principle agreed to the proposed modifications under ERSS-III and accordingly intimated POWERGRID & ERPC vide our letter dated 30-12-11.

**Members may kindly note.**

#### **10.0 Proposal of OPTCL,Odisha for provision of space for**

- (i) 2nos. 220kV line bays at 400/220kV 2x315MVA Jeypore S/S (PG) and**
- (ii) 4 nos. 132kV line bays at 400/220/132kV Baripada S/S (PG)**

OPTCL vide their letter No. CGM (Const)03/11/327 dated 30-8-2011 informed that they would like to connect their 220kV S/s at Jaynagar with the 400/220kV Jeypore S/s of PGCIL by an additional 220kV D/C line.

Further OPTCL have proposed to construct the following 132kV lines from the 2x160 MVA 220/132kV Baripada S/S (PG).

- 132kV D/C Baripadar(PG) - Jaleswar line.
- Conversion of existing 132kV existing 132kV S/C line between Baripada S/S of PGCIL to Baripada S/S of OPTCL to 132kV D/C line.
- Conversion of existing 132kV existing 132kV S/C line between Baripada S/S to Rairangpur S/S of OPTCL to 132kV D/C line.

PGCIL may confirm the space availability for 2 no. 220kV bays at the Jeypore S/S (PG) & four nos. 132 kV bays at Baripada S/S (PG) to enable OPTCL to provide the associated bay equipments for construction of the above 220kV and 132kV lines.

**Members may discuss and concur.**

## **11. Proposals of WBSETCL for**

- (i) **Execution of WBSETCL's 400 kV PPSP (WB)-Ranchi (PG) D/C & 400 kV Kharagpur (WB)-Chaibasa(PG) D/C lines ( including associated bays) POWERGRID to be shared on 100% tariff by WBSETCL.**

Establishment of 400 kV PPSP (WB)-Ranchi (PG) D/C & 400 kV Khadagpur (WB)-Chaibasa D/C line was agreed in the Standign Committee meeting dated 14.9.2009 as part of system strengthening works of WBSETCL. It was also decided that the lines would be implemented by POWERGRID as deposit works on behalf of WBSETCL. Subsequently, in the Standing Committee meeting held on 20.9.2010, construction of 400 kV Kharagpur-Chaibasa D/C line was approved in place of 400 kV Kharagpur-Jamshedpur D/C due to space constraint at 400 kV Jamshedpur s/s (PG).

In view of above 400kV line being inter-state in nature and some portion of line being outside the jurisdiction of West Bengal, WBSETCL has informed that they are facing difficulty to develop these lines due to the transmission assets to be lying in the two States. In order to avoid such eventuality and considering the urgency for development of the above 400 kV lines, WBSETCL/WBSEDCL has proposed to develop it by POWERGRID for which 100% transmission charges would be borne by them.

**Member may discuss and concur.**

- (ii) **Augmentation of 400/220 kV transformer capacity from 2x315 MVA to 3x315 MVA at Subhashgram (PG)**

Presently, Subhashgram (PG) s/s has 2x315 MVA 400/220 kV ICTs catering to the load requirement in the area. These ICTs are loaded at around 75% of its capacity.

Due to potential load growth at and around Subhashgram area and additional 220 kV interconnections being set up with the adjoining s/s of WBSETCL, these ICTs would be highly overloaded and unable to meet contingency. WBSETCL has proposed for augmentation of transformation capacity with third ICT of 1x315 MVA 400/220kV capacity at Subhashgram (PG).

**Members may agree to the proposal.**

- (iii) **Proposal of WBSETCL for 220 kV connectivity of their new 220 kV s/s at Sirakol to the 400/220 kV Subhasgram s/s (PG).**

WBSETCL has informed that they have contemplated establishment of one 220 kV s/s at Sirakol to meet the growing load demand in the vicinity of 400 kV Subhashgram s/s and it has been approved by their board. It is proposed that this new 220kV s/s could be connected

to Subhashgram(PG) by a 220 kV D/C line **to be established by WBSETCL at their own cost** to enable drawl of ISTS share and improving reliability of power supply in the area. Accordingly, WBSETCL has proposed to provide 2 Nos. 220 kV line bays at Subhashgram(PG) by PGCIL. PGCIL may confirm the availability/provision of line bays at their sub-station.

**Members may note and concur.**

**(ii) Creation of 400/220 kV Raghunathpur s/s with LILO of 400 kV Parulia(PG)-Maithon (PG) D/C line by WBSETCL.**

WBSETCL has proposed that they have planned to establish one 400/220/132 kV sub-station at Raghunathpur in Purulia district in 12th Plan for meeting the load demand in that area. The sub-station proposed to be established by LILO of one circuit of ongoing Parulia (PG) – Maithon (PG) 400 kV inter-state line for drawal of ISGS share of WBSEDCL. Also, one circuit of PPSP – Durgapur 400 KV D/C line will be LILOed at Raghunathpur and will be connected with STPS by 400 kV D/C line.

Establishment of 400 KV sub-station at Raghunathpur in the district of Purulia has been contemplated to meet the already committed bulk demand of WBSEDCL to M/s Shyam Steel Industries Ltd. (65 MVA), M/s Ankit Metal & Power Ltd. (40 MVA) & M/s Jai Balaji Industries Ltd. (15 MVA) and forth coming bulk consumers in that area as well as the normal system demand of the district & its adjoining areas.

The scheme has been approved by the Board of WBSETCL in its perspective plan of 12th Plan and petition for investment approval from WBERC has been made by WBSETCL. The entire scheme **will be executed by WBSETCL at their own cost.**

**Members may kindly note and concur.**

## **12.0 Review of Progress on Earlier Agreed Transmission Schemes**

POWERGRID may give the progress of earlier agreed transmission schemes under implementation giving:

- i) Date of firming-up in Standing Committee
- ii) Target as in the Standing Committee meeting
- iii) Date of FR for the scheme
- iv) Date of approval by PGCIL board or PIB as the case may be
- v) Date of award of the major part
- vi) Target date as of now
- vii) Reason for delay if any