

Central Electricity Authority
System Planning & Project Appraisal Division
Sewa Bhawan, R.K. Puram, New Delhi – 110066.

No. 51/4/SP&PA-2001/

Date : 15-9-2005.

To

1.The Member Secretary, Southern Regional Electricity Board, 29, Race Course Cross Road, Bangalore 560 009. FAX : 080-22259343	2.The Director (Projects), Power Grid Corp. of India Ltd. “Saudamini”, Plot No.2, Sector-29, Gurgaon 122 001,Haryana.. FAX : 95124-2571760
3.The Director (Transmission), Andhra Pradesh Transmission Corp. Ltd., Vidyut Soudha,Hyderabad – 500 082. FAX : 040-55665137	4.The Director (Transmission), Karnataka Power Transmission Corp. Ltd.,Cauvery Bhawan, Bangalore 560 009. FAX : 080 -22228367
5.The Member (Transmission), Kerala State Electricity Board, Vidyuthi Bhawanam, Pattom, P.B. No. 1028, Thiruvananthapuram - 695 004. FAX : 0471-2446452, 2448213	6. Member (Distribution), Tamil Nadu Electricity Board (TNEB), 6 th Floor, Eastern Wing, 800 Anna Salai, Chennai - 600002. FAX : 044-28525587, 28525639
7.The Director (Power), Corporate Office, Block – I, Neyveli Lignite Corp. Ltd., Neyveli, Tamil Nadu – 607 801. FAX : 04142-252646	8.The Superintending Engineer –I, First Floor, Electricity Department, Gingy Salai, Pondicherry – 605 001. FAX : 0413-2334277
9. Director (Projects), National Thermal Power Corp. Ltd. (NTPC), NTPC Bhawan, Core-7,Scope Complex-7, Institutional Area, Lodhi Road, New Delhi-110003. FAX-011-24360912	10. Shri N. S. M. Rao Chief Engineer (Transmission), Nuclear Power Corp. of India Ltd., 12 th Floor,Vikram Sarabhai Bhawan, Anushakti Nagar, Mumbai – 400 094. FAX : 022-25556513/25563350
11. The Director (Operation), Power Trading Corpn. of India Limited, 2 nd Floor, NBCC Tower, 15 Bhikaji Cama Place, NewDelhi 110066. FAX-011-51659504	

Sub: Supplementary Agenda note for **21st meeting** of the Standing Committee on Power System Planning of Southern Region to be held on 22nd September, 2005 at 11-00Hrs at the Conference Hall of SREB.

Sir,

In continuation of our Ir. 51/4/SP&PA-2001 dated 12/13-09-05, supplementary agenda note relating to the back up transmission System for Talcher Stage-II (4x2000MW) evacuation is enclosed.

Encl. as above

Yours faithfully,

(B.M. Sethi)
Director (SP&PA)

Supplementary Agenda Note for 21st Standing Committee Meeting to be held on 22nd September, 2005 at 1100 hrs at the Conference Hall of SREB, Bangalore.

Item- Back up transmission System for Talcher Stage-II (4x500MW) power evacuation

As part of Talcher-Stage II (4x500MW) evacuation system, Talcher-Kolar \pm 500 KV 2000 MW HVDC bipole line is under operation. In the event of pole outage, there is no back up system available now. The issue had been discussed earlier and back-up system via WR was proposed. However, the constituents of Southern Region did not agree to the proposal and back up system could not be firmed-up at that stage. Subsequently, the constituents of Southern Region have agreed to create back up transmission facility for Talcher II in the SRE Board meeting held in March 2005.

Accordingly, a proposal for the back up transmission system for Talcher II has been evolved alongwith system strengthening scheme of ER. In this scheme, ER system upto Mendhashal is proposed to be strengthened. The system could be extended for benefit of SR by providing 400kV D/C line from Mendhashal to Gazuwaka via Berhampur and third 500MW b-t-b module at Gazuwaka. The additional works would be:

- (i) 400 kV Mendhashal-Berhampur D/C line.
- (ii) 400kV Berhampur- Gazuwaka D/C line with 40% series compensation.
- (iii) 3rd module of HVDC back to back (500MW) link at Gazuwaka

This system could be taken-up to provide back-up for Talcher-II transmission system for which SR constituents have to seek long-term open access through ER system for a capacity of 500MW of Talcher-II power. It is tentatively estimated that additional incremental transmission charges for the SR would work out as:

	<u>Rs crores per year</u> (indicative figures)
A. Total transmission charges for ER pre-above proposal:	920
B. Total denominator MW of ER pre-above proposal:	7200
C. Additional transmission charges of ER [(i) + (ii) + 50% of (iii)]	100
D. SR share of transmission charges [(A+C) * 500 / (B+500)]	65
E. Additional SR transmission charges for 50% of (iii)	35
F. Total incremental transmission charges for SR [D + E]	100
G. Transmission charges for existing Talcher Transmission System	500

The requirement of 3rd module of HVDC back-to-back at Gazuwaka could be deferred and in that case while the capacity at Gazuwaka for additional input would reduce by 500MW, the transmission charges would be reduced by about Rs.37 crores.

Members may discuss and decide.

If agreed in SR, the proposal would be taken up in ER.