

**Summary Record of discussions of the 19<sup>th</sup> meeting of the Standing Committee on Power System Planning of Southern Region held on 14<sup>th</sup> June 2004 at Hyderabad**

The list of participants is enclosed at Annexure-I.

Director (Tr/GO), APTRANSCO welcomed the participants and thanked CEA for providing opportunity to APTRANSCO for holding the meeting at Hyderabad.

Chief Engineer (SP&PA), CEA welcomed the participants and thanked Director (Tr), APTRANSCO for hosting the meeting and making excellent arrangements for the stay of all the delegates. Initiating the discussions he stated that the Government has drawn up an ambitious generation capacity addition programme of about 41,000 MW during the 10<sup>th</sup> Plan period. For evacuation and utilization of power from the proposed capacity addition the corresponding transmission system is required to be planned. In addition to the transmission system being planned under Central Sector, the transmission system required for evacuation of power from State sector stations and also for utilization of share of Central Sector power, matching 220/132 kV transmission system is required to be planned by the state utilities. In this connection, a letter along with the formats in which the information is to be supplied has already been addressed to all the constituents of the region. The details in respect of KSEB and APTRANSCO have already been received. He requested Karnataka, Tamil Nadu and Pondicherry to furnish the details of the works planned during 10<sup>th</sup> and 11<sup>th</sup> Plan urgently as Secretary (Power) has desired the presentation to be made regarding the quantum of works to be implemented by states during 10<sup>th</sup> Plan. In a recent meeting, Secretary (Power) desired the utilities to come up with the comprehensive transmission plan in respect of their state to absorb the capacity addition planned during the 10<sup>th</sup> plan to avoid the situation existing in the Eastern region (due to lack of transmission and sub transmission system, the generation capacity available is not able to be absorbed in the region). Chief Engineer (SP&PA), requested the participants to make presentation of the transmission works to be planned by them. He further stated that the transmission details being supplied by various utilities may also include the schedule of commissioning of each work and also show distinctly the proposed works on the grid map of the state.

CE (SP&PA) then asked Shri B.M. Sethi, Deputy Director to take up the agenda items one by one. Deputy Director (SP&PA) welcomed the participants and took up the agenda items:

## **1. Confirmation of the minutes of 18<sup>th</sup> Standing Committee meeting held on 5<sup>th</sup> March, 2004 at Chennai**

1.1 Deputy Director (SP&PA) stated that one of the decisions taken in the 18<sup>th</sup> Standing Committee meeting was establishment of 400 kV S/S at Hassan as part of regional system strengthening scheme in view of enhanced allocation of power from Kudankulam APP for Karnataka. However, the feeding arrangement for Hassan S/S was to be finalised based on system studies to be carried out jointly by CEA and KPTCL. Accordingly, the proposed studies were carried out and it was found that establishment of 400 kV S/S at Hassan with 2x315 MVA, 400/220 kV transformers to be established by LILO of one circuit of Talaguppa-Neelamangala 400 kV D/C line was the optimum one. The decision has already been intimated to SREB and POWERGRID.

1.2 Also TNEB in their letter dated 20.4.2004 had requested to consider an additional corridor from Kudankulam or Tirunelveli to Karaikudi anticipating delay in completion of the transmission system associated with Kudankulam APP in Kerala territory due to RoW problems etc. To the proposal CE (SP&PA) stated that while finalizing the transmission system associated with Kudankulam APP, possible operating conditions including the RoW problems in Kerala and outage of a D/C line have already been considered and the system finalised. It is in this context that Tirunelveli-Udumalpet 400 kV D/C line has been planned. As such the additional corridor suggested by TNEB was not considered necessary at this stage and could be taken up with the Kudankulam Stage II.

1.3 Consultant, TNEB wanted to know the completion schedule of Madurai-Tiruvanthapuram 400 kV D/C line (the section falling in Kerala territory is held up due to RoW problems). POWERGRID confirmed that the issues have already been resolved and the line is now likely to be completed by the end of the year.

Thereafter the summary record was taken as confirmed.

## **2. Review of the proposal for LILO of 400 kV Gazuwaka-Vijaywada D/C line of POWERGRID at Vemagiri S/S of APTRANSCO.**

2.1 Deputy Director (SP&PA) stated that though the proposal of LILO at Vemagiri was agreed in the 15<sup>th</sup> meeting of the Standing Committee, the need for review of the proposal came up in the 16<sup>th</sup> meeting held at Kaiga in view of the APTRANSCO and TNEB not agreeing for sharing for the Rourkela-Raipur-Chandrapur 400 kV line as a fall-back system for Talcher II and no decision was arrived at.

2.2 APTRANSCO had now intimated that the construction of their Vemagiri- Tadikonda 400 kV line has since been taken up and have requested that the Gazuwaka-Vijaywada D/C line may be LILOed at Vemagiri S/S. Director (Transmission), KPTCL and Executive Director (POWERGRID) wanted the presentation to be made by the APTRANSCO. Director (Transmission), KPTCL also wanted to know the cost impact of the proposal and the benefits to other constituents of the region. Consultant, TNEB did not have any objection to the proposal if uniform principle were adopted for such works in all the states. CE (SP&PA) explained that it may not be possible to evolve the uniform principle and the proposals have to be considered on a case-to-case basis which result in optimised regional transmission system. To a query by TNEB whether the exclusive system has been planned for Vemagiri and other stations coming up in the area, CE(SP&PA) stated that four gas based short gestation projects were likely to come up in the area and an exclusive 220 kV and 400 kV system for evacuation of power from these stations had been planned and the proposal made by APTRANSCO for LILO at Vemagiri will not be used for evacuation purpose under normal conditions and will act as a support under contingency conditions. Executive Director (POWERGRID) intimated that the additional cost of the proposed works would be around Rs. 60 crores requiring 32 kms of additional length of the transmission line. APTRANSCO confirmed that the Vijaywada-Tadikonda 400 kV line and the Substation at Vemagiri are likely to be ready by March 2005 and December 2004 respectively.

The proposal of LILO of 400 kV Gazuwaka – Vijaywada D/C line of POWERGRID at Vemagiri substation of APTRANSCO was agreed to. APTRANSCO would provide the terminal bays at Vemagiri

### **3. Additional spare Converter Transformers at Talcher and Kolar HVDC terminal stations**

3.1 Deputy Director (SP&PA) stated that presently the evacuation of power from Talcher Stage II was through 2000 MW HVDC bipole line from Talcher to Kolar and a proposal to enhance the transfer capacity from 1000 MW per pole to 1250 MW per pole has already been agreed to be implemented by POWERGRID as part of the regional scheme. POWERGRID have now proposed for providing additional one unit converter transfer each at Talcher and Kolar stations. The estimated cost is proposed to be about Rs. 75-80 crores each. He requested the Members to discuss the proposal.

3.2 The Consultant, TNEB stated as to why the states should pay for an idle equipment and wanted the POWERGRID to supply the details of the proposal along with commercial implications. Member (Generation and Trans) KSEB wanted to know why the requirement of spare transformer was not envisaged in the original proposal or even when the proposal for enhancement of the transfer capacity of bipolar line was considered in the 18<sup>th</sup> Standing Committee meeting. Director (Trans) KPTCL

wanted to know the failure rate of the transformers in the HVDC System, existing in the country as well as in other countries of the world. Executive Director (POWERGRID) intimated that they have come to know about the high failure rate of transformer in 2003 only through a CIGRE report. He further stated that recently a team of officers visited five countries and has found that most of the countries are having spare transformers in their HVDC substations to take care of the contingency of outage of the transformers. Secretary (Power) in a recent meeting on HVDC had also advised for spare transformer capacity to be provided at the substations. He stated that further deliberations on the subject could take place after the complete details including the commercial implications and failure rate of the transformers within the country as well as in other countries and technical justification etc. by POWERGRID is furnished to SREB. This was agreed to by the participants subject to furnishing of details by POWERGRID.

#### **4. 400/220 kV Kaiga substation and upgradation and operation of Kaiga -Davangere 220 kV D/C line at 400 kV**

Deputy Director (SP&PA) requested the NPCIL and KPTCL to intimate the latest status of construction of 400/220 kV S/S at Kaiga by NPCIL and 400 kV bay extension work at Davanagere S/S by KPTCL. The works were earlier scheduled to be completed by December 2003. Intimating the status of the works, the NPCIL representative indicated that most of the equipments have already been reached at site, the foundations were completed and the erection work has also started. There had been some delay by the contractor and the works at Kaiga APP were now scheduled for completion by October 2004. Regarding 400 kV bay extension works at Davangere, Director KPTCL intimated that most of the equipments have been received, foundations cast and the erection started. BHEL have targeted the completion of the works by July 2004.

#### **5. Construction of Nellore 2x315 MVA, 400/220 kV S/S by APTRANSCO and anchoring of Vijaywada-Nellore-Sriperumbudur 400 kV D/C line at Nellore S/S**

Deputy Director (SP&PA) requested the APTRANSCO to inform the present status of the substation erection work at Nellore. Director (Tr. & GO) APTRANSCO intimated that orders for all the major equipments have already been placed and the works were in progress. The substation was now scheduled for completion by December 2004.

## **6. 10<sup>th</sup> and 11<sup>th</sup> Plan transmission program of state utilities in SR and schedule for completion of various transmission works**

CE (SP&PA) intimated that he had already explained the issue during his opening remarks to the participants. He requested all states to forward the details required (hard and soft copies) urgently alongwith the schedule of commissioning of each work and also copy of the latest grid map showing distinctly the new proposals. He requested KSEB and APTRANSCO, who have already forwarded the material, to furnish the schedule of completion of the works and the grid map showing the new proposals.

## **7. 315 MVA, 400/220 kV 2<sup>nd</sup> transformer at Vijaywada covered under Kaiga-3&4 transmission system.**

Deputy Director (SP&PA) stated that the second 315 MVA, 400/220 kV transformer at Vijaywada was covered under Kaiga stage II transmission system. Also, in the 17<sup>th</sup> meeting of the Standing Committee it was decided that wherever one transformer was existing in the 400 kV substation, augmentation of the substation capacity by an additional transformer would be considered.

Since the Government approval to the Kaiga Stage II transmission scheme is yet to be accorded and the construction of the transmission system may take another 3 to 4 years, POWERGRID have requested to prepone the installation of 2<sup>nd</sup> transformer at Vijaywada. This was agreed to by all the participants.

In addition to the above Agenda items, KPTCL vide their D.O. letters No. D(T) 73 and 74 dated 7.6.04 have forwarded two more items to be considered in the Standing Committee meeting. These issues were:

### **i) Over voltage in the Southern Grid**

KPTCL have intimated that Southern Region was experiencing over-voltage situation for the past few days. KPTCL was constrained to open out more than 32 nos, of 400 kV and 220 kV lines on some instances to contain over voltages resulting in threatening stability of the system. The 400 kV substations at Kolar and Hiriyur had been recently commissioned but they do not have bus reactors. KPTCL have stated that in the interest of grid stability it is necessary to have 400 kV switch able bus reactors as part of all the 400 kV substations. CE (SP&PA) stated that this was an operational problem and requested GM (SR LDC) for his views. GM (SRLDC) made a presentation and stated that though the grid was experiencing over voltage problem but the solution may not lie in installation of reactors. He was of the view that even if the decision for procurement of reactors is taken now it may take about two years to install by which time the problem of over voltage may not be there and necessity of the reactors may not arise. He opined that one of the solutions could be to run most of the

Hydro machines as synchronous condensers during the off peak period as these units are causing reactive power imbalance. The non-operation of generators at leading power factors was also causing problems due to capability curves of generators. He suggested that Sharavathi machines should be run as synchronous condensers during night hours. CE (SP&PA) stated that with the anchoring of some of the long 400 kV lines in SR, the establishment of 400 kV S/S at Nellore, Vemagiri etc., the problem of over voltage may be contained to some extent. The implementation of 400 kV ring around Bangalore had resulted in bettering the voltage profile in the grid. He reiterated that APTRANSCO should expedite formation of 400 kV ring around Hyderabad. GM (SRLDC) suggested that immediate solution could be:

- a) To run some of the hydro machines as synchronous condensers and
- b) Action to be taken to improve the fault level at various substations.

CE (SP&PA) suggested that switch able reactors could be provided only on new long lines based on dynamic conditions. He also stated that the provision of series compensation in some of the lines once put in operation would control over voltage to some extent. The problem of over voltage was only for about 5 % of the time when the load was less than 60%.

Wrapping up the discussion, CE (SP&PA) stated that power system studies for light load conditions corresponding to 10<sup>th</sup> Plan period would be carried out in CEA to examine the proposal to contain the over voltages.

## **ii) Provision of second link between Western and Southern Region and setting up of 400 kV station at Bijapur in Karnataka**

Director KPTCL informed that the subject of formation of National Grid was earlier discussed in the Standing Committee meeting held at Kaiga in January 2003 wherein it was deliberated and agreed that detailed studies will be carried out in CEA. He mentioned that the existing inter-regional link between Southern and Western Region connecting Ramagundam and Chandrapur, with generating stations on both ends and the transmission system was constrained in case of high import from Western Region. He, therefore, suggested having another link connecting Maharashtra and Karnataka preferably between Parli and Bijapur to have a better transfer of power between the two regions. KPTCL wanted timeframe by which these links could be planned. Executive Director (Powergrid) intimated that it was not possible to commit the timeframe unless the operational experiences over inter regional lines was available. Chief Engineer (SP&PA) agreed 'in principle' that the additional inter regional links were required but the exact location (the type of link whether synchronous or asynchronous) and the time frame in which the links are to be made available, would be decided based on the system studies.

## Summary of Discussions

1. Summary record of discussions of the 18<sup>th</sup> Standing Committee meeting as circulated vide CEA letter No. CEA 51/4/SP&PA-2001/104-114 dated the 13<sup>th</sup> March 2004 with the addition of establishment of 400 kV substation at Hassan with 2x315 MVA 400/220 kV transformers by LILO of one ckt of 400 kV Talaguppa-Neelamangala D/C line were confirmed.
- 2 Members agreed to the proposal of LILO of 400 kV Gazuwaka-Vijaywada D/C line of POWERGRID at Vemagiri Substation of APTRANSCO.
- 3 Provision of additional spare Converter Transformers at Talcher and Kolar HVDC terminal stations was agreed subject to the complete details as to the failure rate of the transformer, commercial implications etc. furnished by POWERGRID to SREB, for further deliberations in the SREB/TCC meeting.
- 4 KPTCL to complete the 400 kV bay extension work at Davangere by July 2004 and NPCIL to commission the 400/220 kV substation at Kaiga by October 2004.
- 5 APTRANSCO is to complete the Nellore substation by December 2004.
- 6 All the state utilities to furnish the required details of 220/132/66 kV transmission works required during X and XI Plan, to CEA along with the scheduled date of completion of each of the works and the grid maps showing distinctly the new proposals. The details were to be furnished urgently to enable CEA to make presentation to the Secretary (Power). POWERGRID to furnish status of various transmission works being executed by them in the region in the next Standing Committee Meeting.
- 7 Members agreed to prepone the installation of second 315 MVA, 400/220 kV transformer at Vijaywada, covered under Kaiga Stage II transmission scheme, to be undertaken by POWERGRID in a separate system strengthening scheme.
- 8 For containing the over voltage problem in Southern Regional Grid it was decided that light load studies for 10<sup>th</sup> plan period would be carried out in CEA.

Though further inter connection of WR with SR was agreed 'in principle' the exact location, the type of link whether synchronous or asynchronous and the time frame by which the link is available, would be decided based on studies to be carried out in CEA.

The meeting ended with a vote of thanks to the chair.

### List of Participants

S,no.	Name	Designation/ Organisation	Tel. No.
	S/Shri		
1	V. RAMAKRISHNA	Chief Engineer (SP & PA), CEA	011-26104520
2	B.M. SETHI	Dy. Director (SP & PA), CEA	011-26108160
3	P.N. MOHANAN	Member (Gen & Tr), KSEB	0471/2446885
4	S. SHIVAMALLU	Director (Trans), KPTCL	080222294-96
5	B.S. HANUMANTHAPPA	CE (P&C), KPTCL	080-2220416
6	K. BALARAMAN	AEE (El) Plg; KPTCL	080-22123145
7	S. SOUMYANARAY ANAN	Consultant, TNEB	98400-30911
8	M.V. KRISHNAMOORTY	SE, TNEB	044-28520820
9	V. RAMAMURTHY	SE Elect. Deptt; Pondicherry	0413-2334277
10	S. CANDASAMY	EE (Elect.), Deptt; Pondicherry	0413-2331188
11	S.S. SHARMA	Sr. VP Power Trading Corp.	011-51652136
12	A.K. GUPTA	HOD (Elect) NTPC	0120-21410429
13	P. PATEL	SE, SREB, Bangalore	080-2225256
14	RAKESH KUMAR	AEE, SREB, Bangalore	080-22384335
15	R.N. NAYAK	ED (Engg), Powergrid	0124-2571801
16	N.R. CHANDA	Ex. Director (S&I), Powergrid	040-27801522
17	S.K. SOONEE	GM, SRLDC, Powergrid	080-2250047
18	K. ANAND KUMAR	ASM (O&M), Powergrid	040-27803566
19	Y.K. SEHGAL	DGM, Powergrid	0124-2571815
20	RAJESH LAAD	Dy. CE (Trans)	022 25563350
21	G. KESAVA RAO	Director (Tr/GO) APTRANSCO	98483-88998
22	P.N. SRIRAMARAO	CE Grid Operation	94408-11105
23	P. KUMARSWAMY	CE, Power System	040-23317645
24	M. SUNDERAIAH	CE (Tech), APTRANSCO	040 2317651
25	M. SITARAM SARMA	SE (Systemstudies), APTRANSCO	9849733103



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

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

Date: 18.06.2004

To

1.The Member Secretary, Southern Regional Electricity Board, 29, Race Course Cross Road, Bangalore 560 009. FAX: 080-2259343	2.The Executive Director (Engineering), Power Grid Corp. of India Ltd. “Saudamini”, Plot No.2, Sector-29, Gurgaon 122 001,Haryana.. FAX: 95124-2571802
3.The Director (Transmission), Transmission Corp. of Andhra Pradesh Ltd., Vidyut Soudha,Hyderabad – 500 082.  FAX: 040-55665137	4.The Director (Transmission), Karnataka State Power Transmission Corp. Ltd.,Cauvery Bhawan, Bangalore 560 009. FAX: 080 -2228367, 221352
5.The Member (Transmission), Kerala State Electricity Board, Vidyuthi Bhawanam, Pattom, P.B. No. 1028, Thiruvananthapuram - 695 004. FAX: 0471-446774	6.The Executive Director/ Planning, Tamil Nadu Electricity Board, 6 <sup>th</sup> Floor, Eastern Wing, 800 Anna Salai, Chennai – 600 002. FAX: 044-8521210, 8544528
7.The Director (Power), Corporate Office, Block – I, Neyveli Lignite Corp. Ltd., Neyveli, Tamil Nadu – 607 801. FAX : 04142-52646	8.The Superintending Engineer –I, First Floor, Electricity Department, Gingy Salai, Pondicherry – 605 001.  FAX: 0413-334277
9.Shri K. Prakasa Rao, General Manager I/C Engineering Division, NTPC Ltd., Engg. Office Complex, A-8 , Sector-24, Noida–201 301. FAX: 91-539462, 91-4410136, 91-4410137	10. Shri N. S. M. Rao The General Manager (Transmission), Nuclear Power Corp. of India Ltd., 12 <sup>th</sup> Floor,Vikram Sarabhai Bhawan, Anushakti Nagar, Mumbai – 400 094. FAX: 022-25556513/25563350
11. The Director (Tech), Power Trading Corpn. of India Limited, 2 <sup>nd</sup> Floor, NBCC Tower, 15 Bhikaji Cama Place, NewDelhi 110066. <b>FAX-011-51659504</b>	

**Sub:** 19<sup>th</sup> Standing Committee Meeting on Power System Planning in Southern Region.

Sir,

Enclosed please find a copy of the Summary Record of discussions of 19th Standing Committee Meeting on Power System Planning in Southern Region, held on 14th June 2004 at Hyderabad.

Encl: As above.

Yours faithfully,

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

**Agenda for 19<sup>th</sup> Meeting of the Standing Committee on Transmission System Planning in Southern Region**

**1. Confirmation of the minutes of 18<sup>th</sup> standing committee meeting held on 5<sup>th</sup> March, 2004 at Chennai.**

The minutes of 18<sup>th</sup> meeting of the Standing Committee on Power system planning of Southern Region held on 5<sup>th</sup> March, 2004 at Chennai were circulated to the constituents of Southern Region vide CEA letter No. 51/4/SP&PA-2001/104-114 dated 10-3-2004.

In accordance with the decision taken in this meeting, a 400kV S/S at Hassan in Karnataka was agreed to be established under regional system strengthening scheme in view of enhanced allocation of power from Kudankulam APP for Karnataka. The inter-connecting line with the 400kV Hassan sub-station was decided to be determined based on the system studies to be carried out jointly by CEA and KPTCL. Subsequently, the proposed studies were conducted in CEA with participation of engineers from KPTCL on 11-3-04. Out of the various alternatives considered in the studies, LILO of one circuit of Talaguppa-Neelamangala 400kV D/C line at Hassan S/S emerged as the optimal system and the same was finalized. Accordingly, the summary record of discussion held in CEA on 11-3-2004 with KPTCL was circulated to MS, SREB vide our letter No. 51/4/SP&PA-2001/115-116 dated 11-3-04 with a copy to the Executive Director (Engg.), POWERGRID. The additional regional system strengthening scheme as agreed in the meeting of the 18<sup>th</sup> Standing Committee to meet part of evacuation requirements of Kudankulam evacuation would comprise of the following:

- (i) LILO of one circuit of the 400Kv Madurai-Trichy line at Karaikudi alongwith 2x315MVA, 400/220kV S/S at Karaikudi .
- (ii) LILO of one circuit of the 400Kv Talaguppa-Neelamangala 400kV D/C line at Hassan S/S alongwith 2x315MVA, 400/220kV S/S at Hassan.

Subsequently, TNEB vide their letter No. SE/SS/EEI/F Stg Comm/D-123/2004 dt. 20-4-04 had requested to consider an additional corridor from Kudankulam or Tirunelveli to Karaikudi as part of Kudankulam APP in anticipation of delay in constructing the agreed transmission lines falling in the State of Kerala due to RoW problems etc. Possible operating conditions had already been taken into account at the time of finalization of Kudankulam transmission system. Accordingly, the need for additional corridor proposed by TNEB is not considered necessary at present. No other comments on the minutes of the meeting have since been received from the constituents. As such the minutes of the 18<sup>th</sup> standing committee may please be confirmed.

2. **Review of the proposal for LILO of 400 kV Gazuwaka-Vijaywada D/C line of POWERGRID at Vemagiri substation of APTRANSCO.**

The LILO of Gazuwaka-Vijaywada 400kV D/C line at Vemagiri was agreed to in the 15<sup>th</sup> meeting of the standing committee subject to completion of Vemagiri- Tadikonda 400 kV D/C lines by APTRANSCO. The need for review of the LILO proposal came up for discussion in the 16<sup>th</sup> meeting of the Standing Committee held on 20-1-03 at Kaiga in view of APTRANSCO and TNEB not agreeing for sharing for the Rourkela-Raipur-Chandrapur 400kV line as a fall-back system for Talcher-II and no decision was arrived at.

APTRANSCO vide their Fax message dated 11-3-2004 (copy enclosed) intimated that the construction work for their Vemagiri- Tadikonda (now changed to Narasaraopeta) 400 kV D/C line has been taken up by them and accordingly, have requested that the Gazuwaka-Vijaywada 400kV D/C line may be LILOed at Vemagiri s/s by POWERGRID.

**Members may concur on the LILO of the 400kV line at Vemagiri S/S.**

3. **Additional spare Converter Transformers at Talcher and Kolar HVDC terminal stations.**

Presently, evacuation of power from Talcher Stage-II is being done through 2000MW HVDC bi-pole line from Talcher to Kolar. In meeting of the 18<sup>th</sup> Standing Committee, it was agreed to enhance the capacity of each pole of Talcher-Kolar HVDC Bi-pole link from 1000MW per pole to 1250MW per pole by POWERGRID as part of regional scheme. In order to improve the reliability of HVDC system, POWERGRID vide their letter no. C/ENG/SEF/S/00/Talcher-II dated 13<sup>th</sup> May 2004 (copy enclosed), have proposed for a provision of additional one unit converter transformers at Talcher and Kolar stations. The estimated cost is proposed to be about Rs.75-80 crores each. POWERGRID have indicated that this cost would not cause additional financial burden to the SR constituents as its cost would be less than the saving made by POWERGRID as compared to the approved cost of the Talcher-II transmission system.

**Members may discuss the requirement.**

4. **400/220kV Kaiga sub-station and Upgradation and Operation of Kaiga-Davanagere 220kV D/C line at 400kV.**

In the 16<sup>th</sup> meeting of the Standing Committee, a decision was taken that Sirsi-Davanagere section of KPTCL would be an integral part of the Kaiga-Davanagere 400kV D/C line and qualify as a part of regional system. Nevertheless, it was decided that KPTCL would go ahead with the works for provision of 400kV bays at Davanagere in respect of upgrading/operation of Kaiga-Davanagere D/C line (being operated at 220kV) at 400kV. The construction work being executed by NPCIL for 400/220kV Sub-station at Kaiga APP and 400kV bay

extension work at Devanagere sub-station by KPTCL for 400kV operation were scheduled to be completed by December, 2003. NPCIL and KPTCL may inform the current status.

**5. Construction of Nellore 2x315MVA, 400/220kV S/S by APTRANSCO and anchoring of Vijayawada –Nellore-Sriperumbudur 400kV D/C line at Nellore S/S.**

While Krishnapatnam-B evacuation system in AP was approved, it was conceived that Krishnapatnam (Nellore) 400kV S/S with 2x315 MVA, 400/220kV transformer capacity would be established as part of the system by APTRANSCO. It would be contiguous to Nellore switching station of POWERGRID and share the same bus with Nellore by bus sectionalizing. In turn, it would provide the anchoring for the 400 kV D/C line without any requirement of reactor at Nellore. Anchoring of the existing 400kV Vijayawada –Nellore-Sriperumbudur D/C line is held up for want of Nellore 400/220kV S/s facility to be created by APTRANSCO. The SR-grid is experiencing operational problem of over-voltage etc. on account of the 400kV line being too long. As a short term measure, an 80MVAR switchable reactor at Nellore Switching Station has been agreed to be implemented by POWERGRID in the last Standing Committee meeting. APTRANSCO may inform the status of the sub-station erection work at Nellore and its target for completion.

**6. 10th and 11th Plan transmission program of State Utilities in SR and schedule for completion of various transmission works**

In the 10th & 11th plan period, generation capacity additions are being planned under State/Private/Central sectors to meet future load growth of the State Utilities in SR. As per the Electricity Act,2003 the responsibility for development of adequate intra State transmission is vested with the State Transmission Utility and accordingly, the details of the program for transmission works at 220kV,132kV and 66kV would require to be worked out by State Utility and the same needs to be furnished to CEA. The issue has already been addressed vide our letter No. 236/4/04-SP&PA/250-265 dt. 19-5-04 to the concerned Member(Trans./Plg.)/Chief Engineer(Trans./Plg.) of the State Utilities forwarding therewith a proforma for furnishing the requisite information by the Utilities (copy enclosed for ready reference).

**Members may furnish the programme as per the proforma and also make a presentation on the programme.**

**7. Any other issue with the permission of Chair.**

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

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

Date : 04-06-2004.

**To**

<p><b>1.</b>The Member Secretary, Southern Regional Electricity Board, 29, Race Course Cross Road, Bangalore 560 009. <b>FAX : 080-2259343</b></p>	<p><b>2.</b>The Executive Director (Engineering), Power Grid Corp. of India Ltd. “Saudamini”, Plot No.2, Sector-29, Gurgaon 122 001,Haryana.. <b>FAX : 95124-2571802</b></p>
<p><b>3.</b>The Director (Transmission), Transmission Corp. of Andhra Pradesh Ltd., Vidyut Soudha,Hyderabad – 500 082. <b>FAX : 040-3317652, 3320565</b></p>	<p><b>4.</b>The Director (Transmission), Karnataka State Power Transmission Corp. Ltd.,Cauvery Bhawan, Bangalore 560 009. <b>FAX : 080 -2228367, 221352</b></p>
<p><b>5.</b>The Member (Transmission), Kerala State Electricity Board, Vidyuthi Bhawanam, Pattom, P.B. No. 1028, Thiruvananthapuram - 695 004. <b>FAX : 0471-446774</b></p>	<p><b>6.</b>The Executive Director/ Planning, Tamil Nadu Electricity Board, 6<sup>th</sup> Floor, Eastern Wing, 800 Anna Salai, Chennai – 600 002. <b>FAX : 044-8521210, 8544528</b></p>
<p><b>7.</b>The Director (Power), Corporate Office, Block – I, Neyveli Lignite Corp. Ltd., Neyveli, Tamil Nadu – 607 801. <b>FAX : 04142-52646</b></p>	<p><b>8.</b>The Superintending Engineer –I, First Floor, Electricity Department, Gingy Salai, Pondicherry – 605 001. <b>FAX : 0413-334277</b></p>
<p><b>9.</b>Shri K. Prakasa Rao, General Manager I/C Engineering Division, NTPC Ltd., Engg. Office Complex, A-8, Sector 24, Noida – 201 301. <b>FAX: 91-539462, 91-4410136, 91-4410137</b></p>	<p><b>10.</b> Shri N. S. M. Rao The General Manager (Transmission), Nuclear Power Corp. of India Ltd., 12<sup>th</sup> Floor,Vikram Sarabhai Bhawan, Anushakti Nagar, Mumbai – 400 094. <b>FAX : 022-25556513/25563350</b></p>
<p><b>11.</b> The Director (Tech), Power Trading Corpn. of India Limited, 2<sup>nd</sup> Floor, NBCC Tower, 15 Bhikaji Cama Place, NewDelhi 110066. <b>FAX-011-51659504</b></p>	

**Sub:** 19<sup>th</sup> meeting of the Standing Committee on Power System Planning of Southern Region  
Sir,

In continuation to our earlier letter of even number dated 31-05-2004 enclosing agenda note for the above meeting, it is proposed to hold the meeting in the **Conference Hall, 6<sup>th</sup> Floor, Transmission Corporation of Andhra Pradesh Ltd., Vidyut Soudha, Hyderabad – 500 082, on 14<sup>th</sup> June, 2004 at 11.00 A.M.**

Kindly make it convenient to attend the meeting.

Encl: As above.

Yours faithfully,

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

