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

No. 51/4/SP&PA-2011/ 1493-1504

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To	
1.The Member Secretary,	2.The Director (Projects),
Southern Regional Power Committee,	Power Grid Corp. of India Ltd.
29, Race Course Cross Road,	"Saudamini", Plot No.2, Sector-29,
Bangalore 560 009.	Gurgaon 122 001, Haryana.
FAX: 080-22259343	FAX: 95124-2571932
3. The Director (Grid Operation),	4.The Director (Transmission),
Transmission Corp. of Andhra Pradesh Ltd.,	Karnataka State Power Transmission Corp.Ltd.,
Vidyut Soudha, Hyderabad – 500 082 . FAX : 040-66665137 / 66665133	Cauvery Bhawan, Bangalore 560 009 . FAX: 080 -22228367
FAX: 040-00003137/ 00003133	FAX: 000-22220307
5. The Member (Transmission),	6. Member (Distribution),
Kerala State Electricity Board,	Tamil Nadu electricity Board (TNEB),
Vidyuthi Bhawanam, Pattom, P.B. No. 1028,	6 th Floor, Eastern Wing, 800 Anna Salai,
Thiruvananthapuram - 695 004.	Chennai - 600002.
FAX: 0471-2444738	FAX: 044-28516362
7.The Director (Power),	8.The Superintending Engineer –I,
Corporate Office, Block – I,	First Floor, Electricity Department,
Neyveli Lignite Corp. Ltd.,	Gingy Salai,
Neyveli , Tamil Nadu – 607 801.	Puducherry – 605 001.
FAX: 04142-252650/252570	FAX: 0413-2334277/2331556
9. Director (Projects),	10. Director (Operations),
National Thermal Power Corp. Ltd. (NTPC),	NPCIL, 12 th Floor, Vikram Sarabhai Bhawan,
NTPC Bhawan, Core-7, Scope Complex,	Anushakti Nagar,
Lodhi Road,	Mumbai – 400 094.
New Delhi-110003.	FAX: 022- 25991258
FAX-011-24360912	

Sub: 33rd meeting of the Standing Committee on Power System Planning of Southern Region
 Additional agenda.

Sir,

The 33rd meeting of the Standing Committee on Power System Planning of Southern Region is now scheduled to be held on 20th October, 2011 (Thursday) at 10:30 AM at Conference Hall of Northern Region Power Committee, Katwaria Sarai, New Delhi.

Additional agenda for the meeting is enclosed. It is also available at CEA's website (www.cea.nic.in) .

Please make it convenient to attend the meeting.

Yours faithfully,

Date: 13th Oct 2011

(Pardeep Jindal) Director (SP&PA)

(Telephone: 011 26198092, Fax No. 011 26102045)

Copy to:

Sh. SK Soonee, CEO, POSOCO, B-9, Qutub Institutional Area, Katwaria Sarai, New Delhi-110016 Sh. P.R. Raghuram, GM, SRLDC, 29, Race Course Cross Road, Bangalore 560 009.

FAX: 080-22268725

Additional agenda Note for 33rd Meeting of Standing Committee on Power System Planning in Southern Region (SCPSPSR)

A.1.0 Transformer Augmentation in Southern Region.

- **A.1.1** In addition to 400kV substation given by POWERGRID and SRLDC/POSOCO (given as agenda item no. 4.0 in main agenda), KPTCL has also planned for the installation of 3rd ICT of 500 MVA capacity in 400/220 kV Nelamangala and Hoody substation of KPTCL for improvement of the transformation capacity in existing substations.
- A.2.2 Members may discuss.

A.2.0 Construction of 220kV Mylatti- Puttur line as a System Strengthening Scheme

- A.2.1 KSEB has proposed the construction of 220kV inter state line from Mylatti S/s of KSEB to Puttur S/s of KPTCL as a regional system strengthening scheme. This proposed link at 220kV level would also provide an additional corridor from S1 to S2 thereby reducing the congestion to some extent. The matter was also discussed in 17th SRPC meeting held on 12-08-2011.
- A.2.2 The detailed KSEB proposal is given at Annex-I. Members may discuss.

A.3.0 Connectivity for Nirmal 400kV S/S of APTRANSCO

- A.3.1 The connectivity for Nirmal 400kV S/S of APTRANSCO was discussed in the 32nd meeting of SCPSPSR. The Committee agreed for LILO of one of the circuits of Ramagundam Hyderabad 400kV lines at Nirmal by APTRANSCO for 2x315 MVA 400/220kV new Substation at Nirmal/Adilabad by APTRANSCO. It was decided that APTRANSCO would coordinate with CEA and POWERGRID in selection of circuit to be LILOed and reactive compensation, if required, to be provided at the new substation. It was also mentioned that the LILO arrangement is planned for drawl of power and at a later date if this LILO connection is used for the any injection of power then connectivity and LTA shall have to be obtained in line with the CERC regulations. SRPC letter in this regard is given at Annex-II.
- A.3.2 Members may discuss.

A. 4.0 Transmission System for evacuation of power from 2x500MW Neyveli Lignite Corporation Ltd. TS-I (Replacement) in Neyveli, Tamil Nadu.

A.4.1 Following transmission system was agreed in the 32nd meeting of SCPSPSR for evacuation of power from 2x500MW Neyveli Lignite Corporation Ltd. TS-I (replacement)

- (i) LILO of existing Neyveli TS-II Neyveli TS-I expansion 400 kV S/c at generation switchyard
- (ii) Provision of 2x315 MVA, 400/220 kV transformer at generation switchyard
- (iii) 1x80 MVAR Bus Reactor at generation switchyard
- (iv) Neyveli (replacement) Sholinganallur 400kV D/c line
- NLC has proposed to work out an alternate system instead of LILO of existing Neyveli TS-II Neyveli TS-I expansion 400 kV S/c at generation switchyard as the proposed system may create problem when the 400kV Neyvelli- Trichi line -1 is shut down for maintenance work. NLC letter in this regard is given at Annex-III-A
- A.4.2 TANGEDCO has also raised the issue that Neyveli (replacement) Sholinganallur 400kV D/C line was not proposed and also, Neyveli Sholinganallur 400kV D/C line may not be required as Chennai has more proposed power generation and the power flow is usually from Sholinganallur 400kV S/s to Singarapet 400kV S/s.TANGEDCO letter in this regard is given at Annex-III-B
- A.4.3 Members may discuss.

A.5.0 Transmission System for evacuation of power from 2400MW NTPC Kudgi TPS (Phase-I).

- A.5.1 During 32nd meeting of SCPSPSR it was decided to have a 765 kV Narendra (new) and connect it to the existing 400kV Narendra substation of PGCIL and extend the 765kV line towards 765kV Madhugiri (Tumkur) substation and 765 kV Kolhapur (Maharashtra) substation and charge the line between Narendra (new) and Kolhapur at 400 kV level in the beginning. For the 2400MW TPS generation of NTPC at Kudgi under phase-I in Bijapur it was decided to have a 765 kV substation with connectivity between 765 kV Raichur New (PGCIL) and 765 Narendra (New) and operation of above system at 765kV level.
- A.5.2 In this connection, KPTCL has proposed (KPTCL letter at Annex-IV-A and IV-B), that instead of having two substations as mentioned above within a distance of 150-170 kms, the 765 kV proposed substation at Kudgi may be connected to Kolhapur (Maharashtra) and there can be a 400 kV quad DC line from the 765 kV Kudgi substation to the existing 400 kV Narendra substation and a 765 kV interlink between the 765 kV Kudgi and Raichur New substation.
- A.5.3 KPTCL has proposed following transmission system for evacuation of power from 2400MW NTPC Kudgi TPS(Ph-I):
 - 1. Kudgi generation stepped up to 400 kV with 400/220 kV ICT of 2X500 MW capacity to meet local loads.
 - 2. Construction of 765/400kV substation at Kudgi by PGCIL to interconnect the Kudgi generation to the grid.
 - 3. Construction of 765 kV line from 765/400 kV Madhugiri to Kudgi765/400kV (PGCIL) substation 765/400kV Kolhapur (Maharastra) substation.

- 4. Construction of 400 kV Quad moose DC line from Kudgi (NTPC) 400kV generation switch yard of Existing Narendra 400 kV substation.
- 5. Construction of 400 kV Quad moose DC line from Kudgi (NTPC) 400kV generation switch yard to Raichur new (PGCIL) 400kV substation.
- 6. The proposal of establishing GIS 765 kV substation may be changed to an AIS substation as the land availability may not be a constraint in BB Wadi(Kudgi) area.
- A.5.4 Since, the Kudgi project has approached an advanced stage by having coal linkage and other clearances, the evacuation scheme needs to be finalized urgently to bring it in line with the commissioning of the TPS project
- A.5.5 Members may discuss.

A.6.0 Erection and Commissioning of Interstate line from 132kV Kistampeth S/S (AP) to proposed 132kV Sironcha S/s (MS)

- A.6.1 MSETCL has proposed an interstate line from 132kV Kistampeth S/S (AP) to proposed 132kV Sironcha S/s (MS). At present 66kV S/S at Sironcha is fed from 220kV Gadchandur S/s, which is situated about 240km away. Due to long lines passing through dense forest area, frequent supply interruptions and low voltage problem prevail in this area. MSETCL has already planned new 132kV S/S at Alapalli, Yetapalli and Sironcha. But due to dense forest it is not possible to construct 132kV lines from Alapalli to Sironcha. A 132kV S/s at Kistampeth in AP is 35km away from Sironcha and is fed from 220kV Ramagundam S/s. he load at Sironha S/s will be around 5.0MW & future load growth is also very small.
- A.6.2 Members may discuss.

A.7.0 1320 MW Bhavanapadu Thermal Power Project, Srikakulam District, Andhra Pradesh- Start up Power and Power evacuation.

- A.7.1 Following system was identified for evacuation of power from 1320 MW Bhavanapadu Thermal Power Project:
 - 1. For drawl of start up power LILO of one circuit of the Gazuwaka Behrampur 400 kV D/C line(being developed by RPTL)
 - 2. East Coast Energy generation switchyard Srikakulam Pooling Station 400kV D/C Quad lines (for evacuation of power).
- A.7.2 As the Gazuwaka Behrampur 400 kV D/C line (being developed by RPTL) is getting delayed, an alternative system for the start up power would be needed. For part evacuation, Srikakulam –Angul 765kV D/c line is to be expedited by PGCIL.
- A.7.3 Members may discuss.

A.8.0 Transmission System for evacuation of power from Yermarus TPS(2x800 MW)/Edlapur TPS(1x800 MW) of KPCL in Karnataka

- A.8.1 KPTCL vide their letter CEE(P&C)/KCO-97/37191/11-12 dated16-06-2011 (given at annex-V) has informed about the transmission system that they have planned to take up for evacuation of power from these generating stations.
- A.8.2 During the 32nd meeting of SCPSPSR transmission scheme for evacuation of power from Yeramaras(2x800 MW)/ Edlapur(1x 800 MW) was agreed. Follwing table presents the comparison of the two transmission systems:

S.no.	As per the 32nd meeting of SCPSPSR	As being taken up by KPTCL
1.	Edlapur TPS - Yermarus TPS S/S 400	Edlapur TPS - Yermarus TPS S/S 400
	kV D/C line	kV DC Twin moose line
2.	The existing Raichur TPS – Davangere	The existing Raichur TPS –
	400kV S/C line to be replaced with a	Davangere 400kV SC line to be
	new 400kV D/C line with QUAD	converted to 400kV DC line with
	conductors alongwith shifting of Raichur	QUAD conductors along with shifting
	termination point to Yeramaras TPS	of Raichur termination point to
	switchyard.(In case replacement is not	Yeramaras TPS switchyard.
	possible, Yeramaras – Bellary-	
	Madhugiri 400kV D/c line with Quad	
	conductor)	
3.	BTPS switchyard – Hiriyur (under	BTPS – Hiriryur (under construction)
	construction) – Madhugiri 400 kV D/c	400 kV DC twin line
	twin line	
4.	Yermarus TPS – Raichur(New) 400kV	Yermarus TPS – Raichur (New) 400kV
	Quad D/C line	Quad DC line
5.	BTPS – Madhugiri – 400 kV Quad D/c	BTPS – Madhugiri(Tumkur) – 400 kV
	line	Quad DC line
6.	Yeramaras – Basavanabagewadi (BB	
	Wadi) 400 kV D/c Twin line	
7.	Establishment of BB Wadi 400/220 kV	
	substation	

- A.8.3 It is felt that in the absence of part of transmission system, KPTCL may face bottleneck in evacuation of power from the Yeramaras and Edlapur TPS.
- A.8.4 Members may discuss

A.9.0 Establishment of 400/220kV S/s near Doni to facilitate Wind Energy Evacuation:

A.9.1 KPTCL has proposed for the establishing 400/220kV substation, near Doni cross in Gadag with LILO of Guddadahalli (Munirabad) PGCIL- Guttur (Davanagere) 400 kV SC line for a distance of nearly 30 Kms to facilitate wind energy evacuation.

- A.9.2 In the proposal KPTCL has not mentioned the quantum for wind power to be evacuated, capacity of 400/220kV S/s, time frame by which this system is needed and relevant system studies.
- A.9.3 Member may discuss.

A10.0 Connectivity of Samalkot power project with CTU grid through LILO of 400kV Gazuwaka-Vijaywada line

- A.10.1 Reliance Power vide their letter SPL/BBY/BD/ dated 18-07-2011 has requested for LILO connectivity to 400kV Gazuwaka Vijaywada line for evacuation of power from Samalkot power Station on the opportunity basis as an intrim arrangement till commissioning of LTA system.Reliance letter in this regard is given at **Annex-VI.**
- A.10.2 In this regard following may be noted:
 - (i) Samalkot power project has been granted connectivity to CTU grid through 2x400kV quad D/C line connecting to Vemagiri-II 765/400kV pooling station.
 - (ii) APTRANSCO has given temporary connectivity through LILO of one circuit of Kalpakka-Vemagiri-I(AP) 400kV line for the purpose of drawing start-up power. For this, a part of one of the 400kV quad D/C line from Samlkot to Vemagiri(PG pooling station) will be utilized. On completion of Vemagiri-Khammam-Hyderabad 765kV line, this temporary LILO would be removed and the line taken to Vemagiri(PG)..
- A.10.3 Repersentative of M/s Samalkot Power Ltd may be allowed to present his case. Members may discuss.

A.11.0 Transmission System for evacuation of power from Simhadri-II TPS (2x500MW) of NTPC

- A.11.1 In the 32nd meeting of SCPSPSR, transmission system for evacuation of power from Simhadri-II TPS (2x500MW) of NTPC was discussed. It was agreed to plan a new 400kV S/S in Gazuwaka area with possibility of integrating transmission system for Simhadri-II, Vizag(Hinduja) and Srikakulam generation projects and providing a direct synchronous link between SR and ER.
- A.11.2 Members may discuss.

KERALA STATE ELECTRICITY BOARD

OFFICE OF THE MEMBER (TRANSMISSION AND GENERATION OPERATIONS), VYDYUTHI BHAVANAM, THIRUVANANTHAPURAM.695004

No.CP/SSG/SRPC/SCPSP/2011-12/

Dtd. 24.09.2011

To

1) Sri. Pradeep Jindal
Director
System Planning & Project Appraisal Committee
Central Electrical Authority
Sewa Bhavan, R.K Puram
New Delhi – 110066.

2) The Director (Projects)
Power Grid Corp. of India Ltd
"Saudamini", Plot no.2, Sector – 29
Gurgaon 122001, Hariyana.

Sir,

Sub: Construction of 220kV Mylatti – Puttur line as a System Strengthening scheme – Approval for the scheme – reg.

Ref: Minutes of 17th meeting of SRPC held on 12th August 2011 at Vishakapatanam.

During the discussions in the 17th SRPC, held on 12th August 2011 at Vishakapatanam, regarding the constraints in the transmission system in general and congestion issues in the S1 – S2 power corridor in particular, SRPC had considered a proposal from KSEB to construct a 220kV DC line from 220kV substation, Puttur of KPTCL to 220kV substation, Mylatti, owned by KSEB. The proposed link of about 40km, which is mainly through non-forest and generally uninhabited area, would provide an additional corridor at 220kV level from S1 to S2 area, thereby reducing S1-S2 congestion to some extent. A sketch showing the proposed routed of the line is attached for reference. The power availability through the proposed link is expected to be about 150MW. Already efforts are being undertaken for putting into operation various 220kV links between S1 and S2 area for improving the Available Transfer Capacity (ATC) of the S1 – S2 corridor. Hence in the SRPC meeting it was recommended to take up the above proposed scheme as a part of the Regional System Strengthening Scheme identified in the 32nd Standing Committee meeting to relieve the congestion between S1 – S2 bid areas.

Hence approval may please be accorded for the construction of 220kV DC line from 220kV substation, Puttur of KPTCL to 220kV substation, Mylatti, of KSEB as a part of the Regional System Strengthening Schemes identified in the 32^{nd} Standing Committee meeting to relieve the congestion between S1-S2 bid areas.

Yours faithfully,

Member (Transmission & Generation Operations)



Government of India Central Electricity Authority Southern Regional Power Committee Bangalore- 560 009

- 560 009

 Email:mssrpc@ yahoo.com
 Phone: 080-22287205
 Fax: 080-22259343

 /No.
 SRPC/SE-I/2011
 / Date 23.09.2011

Chief Engineer (SP & PA) CEA New Delhi.

Sir,

Kind reference is invited to the Agenda for the 33rd Meeting of Standing Committee on Power System Planning for Southern Region. In this regard, following items may also be kindly included for discussion in the meeting slated for 30th September at Hyderabad:

- The connectivity for Nirmal 400 kV S/S of APTRANSCO was discussed in the 32nd Meeting of Standing Committee. The Committee had agreed for LILO of one of the circuits of 400 kV Ramagundam – Hyderabad lines. It was decided that APTRANSCO would coordinate with CEA and Power Grid in selection of the circuit to be LILOed. The final configuration and the reactive compensation etc were to be communicated in the 33rd Meeting.
- In the 32nd Standing Committee meeting, the transmission system for evacuation of power from Simhadri II TPS (2x500 MW) of NTPC was also discussed. It was informed that a new 400 kV substation was being planned in Gazuwaka area with possibility of integrating transmission system for Simhadri II, Vizag & Srikakulam generation projects.

Yours faithfully,

/ S.D. TAKSANDE) / Member Secretary I/c



NEYVEL! LIGNITE CORPORATION LIMITED

(A Nevratia" Government of India Enterprise)
OFFICE OF CHIEF GENERAL MANAGER
POWER STATION ENGINEERING, CORPORATE OFFICE
NEYVELI - 607 801, TAMIL NADU, INDIA

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Regd. Office: Neyveli House, 135, Periyar E.V.R. High Road, Kilpauk, Chennai-600 010

Lr.No GM/PSE/NNTPS/CEA/Elec/ 1399 /2011

Dt: 06.06.2011

To

The Director (SP & PA), Central Electricity Authority, Southern Regional Power Committee System Planning & Project appraisal division Sewa Bhavhawan, R.K.Puram, New Delhi – 110 066

FAX No: 011-26102045

Kind Attn.: Shri . Pradeep Jindal

Dear Sir,

Sub:- 33rd meeting of Standing committee on Power System Planning of Southern Region – Agenda for the meeting from NLC Ltd - Reg.

Ref:- No: 51 / 4 SP & PA - 2011 / 497-507 Dt: 23.05.2011

Please refer to the Agenda for the meeting on Standing committee on Power System Planning of Southern Region as per reference cited.

The following Agenda Point for the 33rd meeting may please be added under sub head as below:

Transmission system for Evacuation of Power from 2X 500 MW replacement units of Neyveli Thermal Power Station-I.

As per the system studies (Exhibit – Yeramaras) it is suggested that 400 KV Trichy Line-1 is made LILO for the proposed 2 X 500 MW replacement units of TPS-I of NLC. Already this line was made as LILO for the 2 X 210 MW TPS-I Expansion Units. The same line is proposed (As per the Exhibit) for the evacuation system of the new replacement



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unit of TPS-I of NLC (2X500MW NNTPS). The proposed system will create problem when the 400 KV Neyveli-Trichy I line is shut down for maintenance works. All the 4 units {(2X500) & (2X210)} will not have sufficient evacuation facility which may result in shutting down of these units. So an alternate system like LILO of other 400 KV lines (like Neyveli Trichy II line, Neyveli –Pugalur line) may be considered.

The above point may be further discussed and resolution taken.

Thanking you,

Yours faithfully, For Neyveli Lignite Corporation Limited

> R General Manager Power Station Engineering

Copy to the Member Secretary , Southern Regional Power Committee, 29, Race Course Road, Bangalore – 560 009, Fax: 080 22259343

Copy to GM/Commercial, GM/P&BD and GM/NNTPS - NLC Ltd

Copy submitted to CGM/ TS-I & TS-I Expansion

TAMIL NADU GENERATION AND DISTRIBUTION CORPORATION (Subsidiary of TNEB Ltd.)

From

Er.T.Jeyaseelan B.E., Director (Distribution) TANGEDCO 144, Anna salai Chennai-2.

To

The Member (Power System) Central Electricity Authority, Sewa Bhavan, R.K. Puram, New Delhi 110 066.

Lr.No.CE/Plg&RC/SE/SS/EE1/AEE2/F - Stg. committee/D246/2011 dt3c-07-11

Dear Sir,

Sub: NLC JV & NLC TS-I replacement (2X500MW) certain modification requested – Reg.

- 1.0 In the 32nd Standing committee meeting on Power system Planning of Southern Region, the following transmission system was finalised for the connectivity/LTA application of NLC TS -I 1000MW (replacement of existing 600MW capacity).
 - a. LILO of existing Neyveli TS-II Neyveli TS-I expansion 400 kV S/c line at the switchyard of NLC TS-1
 - Provision of 2X315MVA, 400/230kV transformer at generation switchyard. (Connecting the existing 230kV switchyard)
 - c. 1X80MVAR Bus reactor at generation switchyard.
 - NLC TS-1 switchyard to Sholinganallur 400kV D/C line as system strengthening.
- 2.0 In the above scheme, during the discussion in the meeting, the 400kV DC line from NLC TS-1 Sholinganallur 400kV SS was not proposed even though the same was available in the agenda only the LILO proposal was informed and that to propose under the scope of NLC. More over,the Neyveli Sholinganallur 400kV D/C line may not be required, as Chennai has more proposed power generation and the

power flow is usually from Sholinganallur 400kV SS to Singarapet 400kV SS. The Neyveli power may be consumed in Salem, Villupuram & Trichy area itself with up gradation of the existing 230kV network to improve the reliability as suggested by CEA.

3.0 In addition, the following system is approved in the 30th Standing committee meeting on power system planning of SR.

LILO of NTPL JV (2X500MW) switchyard – Checkanurani 400kV D/C line at the proposed Tuticorin 765/400kV pooling station. (The Tuticorin 765/400kV Pooling station was planned for LTA projects (Coastel Energen & Ind Bharat) in Tuticorin area.) since there is no bay availability (2 nos) at NLC JV switch yard to accommodate DC link line to pooling station as approved earlier in the Standing committee meeting.

The above scheme was agreed by TNEB with the assumption that the Coastal Energen (1020MW) and Ind Bharat (1200MW) generation will be transmitted through 765kV lines from the Tuticorin Pooling station to Salem 765/400kV Pooling station. At that time the results were not available. But now on going through all the exhibits, it is seen that the Tuticorin Pooling station to Checkanurani 400 kV D/C line is loaded to 1642 MW. Under n-1 condition, the other line may be critically loaded or over loaded. Also the 765kV D/C line between Tuticorin PS to Salem 765kV SS is loaded to a value of 553MW only. This will result in under utilization of 765kV system. Hence, the original proposal of connecting the NTPL JV project with Checkanurani 400kV SS by a 400kV D/C quad line may be considered instead of LILO of these lines at Tuticorin pooling station.

Hence, it is suggested that the above issues may be taken up in the next Standing committee meeting for clearance and approval.

Chief Engineer/Planning & R.C (For Director/Distribution)

KARNATAKA POWER TRANSMISSION CORPORATION LIMITED

Corporate Office

KPTCL, Kaveri Bhavan Bangalore – 560 009. Dated : 16th Jun' 2011

CEE(P&C)/KCO-97/37191/11-1

The Member (Power Systems)
Central Electricity Authority
Sewa Bhavan, RK PuramL
New Delhi – 110066

Sir,

Sub: -32nd meeting of standing committee and discussion to establish 765kV substation in New Narendra and Kudgi (NTPC generation near Basavana Bagewadi) Bijapur district in Karnataka-reg.

During 32nd meeting of standing committee of CEA on power system planning it was discussed to have a 765 kV Narendra new and connect it to the existing 400kV Narendra substation of PGCIL and extend the 765kV line towards 765kV Madhugiri (Tumkur) substation and 765 kV Kolhapur (Maharashtra) substation and charge the line between Narendra new and Kolhapur at 400 kV level in the beginning.

For the 2400MW TPS generation of NTPC at Kudgi in Bijapur it was discussed to have a 765 kV substation with connectivity between 765 kV Raichur New (PGCIL) and 765 Narendra New.

In this connection, KPTCL is of the opinion that, instead of having two substations as mentioned above within a distance of 150-170 kms, the 765 kV proposed substation at Kudgi may be connected to Kolhapur (Maharashtra) and there can be a 400 kV quad DC line from the 765 kV Kudgi substation to the existing 400 kV Narendra substation and a 765 kV interlink between the 765 kV Kudgi and Raichur New substation.

Any generation planned to be given LTOA between Narendra and Kudgi may be either terminated to the two substations or a LILO of proposed 400 kv quad DC line between existing Narendra and Kudgi may be planned.

The detailed sketch showing the proposed connectivity is enclosed with this letter for ready reference.

Yours faithfully,

Director (Transmission) KPTCL, Kaveri Bhavan.

Copy: -

- 1. The Chief Engineer Electy (SP & PA), Central Electricity Authority Sewa Bhavan, RK Puram, New Delhi 110066.
- 2. The Director, (SP & PA), Central Electricity Authority Sewa Bhavan, RK Puram, New Delhi 110066.
- 3. The Chief Engineer Electy., Planning & Coordination KPTCL, Kaveri Bhavan Bengaluru.

Date: 7-10-2011

KARNATAKA POWER TRANSMISSION CORPORATION LTD

Telex: KEB IN/BG-0845-2435

Grams: KEPTRANS



CORPORATE OFFICE 'Kaveri Bhavan ' Bangalore-560 009.

No.: CEE (P&C)/KCO-97199/37/2010-11

The Member (Power Systems), CEA Sewa Bhavan, RK Puram, New Delhi – 110066 Sir,

Sub:-Subject additional agenda for 33rd Standing Committee of Power System Planning

(Proposed evacuation of 4000 MW NTPC Kudgi TPS).

Ref:- 1)This office letter No. CEE (P&C)/KCO-97199/37/2010-11 dtd: 6-4-2011.

- 2) Minutes of 31st and 32nd standing committee meeting of power system planning for Southern Region.
- 3) Agenda annexure XI of 16th TCC and 17th SRPC held on 11th & 12th Aug'2011 at Vishakapatnam, Andhra Pradesh.

Adverting to the above referred letters, it is to state that, Karnataka has already had two rounds of discussions with PGCIL SEF Division personnel and Executive Director SR-II along with the Officers of NTPC on the issues of evacuation of Kudgi, NTPC super critical TPS generation of 4000MW out of which 2400MW would be in first phase and the rest is the second Phase. The proposal of extending the 765 kV AC line from proposed 765/400 kV Madhugiri substation - Kudgi(BB Wadi) - Kollapur has been discussed and in principle agreed to.

Hence, the following interconnection may be taken up as additional agenda for the ensuing 33rd standing committee meeting.

The inter connection would be:

- 1. Kudgi generation stepped up to 400 kV with 400/220 kV ICT of 2X500 MW capacity to meet local loads.
- 2. Construction of 765/400kV substation at Kudgi by PGCIL to interconnect the Kudgi generation to the grid.
- 3. Construction of 765 kV line from 765/400 kV Madhugiri to Kudgi765/400kV (PGCIL) substation – 765/400kV Kolhapur (Maharastra) substation.
- 4. Construction of 400 kV Quad moose DC line from Kudgi (NTPC) 400kV generation switch yard of – Existing Narendra 400 kV substation.
- 5. Construction of 400 kV Quad moose DC line from Kudgi (NTPC) 400kV generation switch yard to Raichur new (PGCIL) 400kV substation.
- 6. The proposal of establishing GIS 765 kV substation may be changed to an AIS substation as the land availability may not be a constraint in BB Wadi(Kudgi) area.

Since, the Kudgi project has approached an advanced stage by having coal linkage and other clearances, the evacuation scheme needs to be finalized urgently to bring it in line with the commissioning of the TPS project.

Yours faithfully,

Director Transmission KPTCL, Kaveri Bhavan

Copy to:

- 1. The ED, SEF, CE & IT, PGCIL, "Saudamini", Plot NO. 2, Sector 29, Gurugaon, Haryana
- 2. The Member Secretary, SRPC, 29, Race Course Cross Road, A.R. Circle, Bangalore-9.
- 3. The Chief Engineer Ele (SP & PA), CEA, Sewa Bhavan, R.K. Puram, New Delhi-110066.
- 4. The Director (SP & PA), CEA, Sewa Bhavan, R.K. Puram, New Delhi-110066.

KARNATAKA POWER TRANSMISSION CORPORATION LIMITED



Corporate Office KPTCL, Kaveri Bhavan Bangalore – 560 009.

CEE(P&C)/KCO-97/37191/11-12

Dated: 16th Jun' 2011

The Member (Power Systems) Central Electricity Authority Sewa Bhavan, RK PuramL New Delhi – 110066

Sir,

Sub: - Information of proposed 400kV transmission system in Karnataka-reg.

The following 400kV transmission system are planned to be taken up by KPTCL to cater the power from the generation points to the load centers as well as the improvement in transformation capacity in the existing 400/220 KV substation at the load centers.

- 1. The transmission system associated with the proposed Edlapur 1x800MW & Yeramaras 2x800MW TPS generation by M/s KPC limited is:
 - a) Edlapur TPS Yermarus TPS S/S 400 kV DC Twin moose line
 - b) The existing Raichur TPS Davangere 400kV SC line to be converted to 400kV DC line with QUAD conductors along with shifting of termination point to Yeramaras TPS switchyard.
 - c) BTPS Hiriryur (under construction) 400 kV DC twin moose line
 - d) Yermarus TPS Raichur (New) 400kV Quad DC line
 - e) BTPS Madhugiri(Tumkur) 400 kV Quad DC line
- 2. Installation of 3rd ICT of 500 MVA capacity in 400/220 kV Nelamangala and Hoody substation of KPTCL.
- 3. Establishing 400/220kV substation, near Doni cross in Gadag with LILO of Guddadahalli (Munirabad) PGCIL- Guttur (Davanagere) 400 kV SC line for a distance of nearly 30 Kms to facilitate wind energy evacuation.

Yours faithfully,

Director (Transmission) KPTCL, Kaveri Bhavan.

Annex-VI



SPL/BBY/BD/ 18th July, 2011 Samalkot Power Limited Dhirubhai Ambani Knowledge City I Block, 1st Floor, North Wing Navi Mumbai 400 710 Maharashtra, India

Tel: +91 22 3038 6600 Fax: +91 22 3038 6799 www.reliancepower.co.in

- The Chief Engineer (SP&PA), Central Electricity Authority, Sewa Bhawan, R.K.Puram, New Delhi – 110066
- The Executive Director (SEF& CE), Power Grid Corporation of India Limited, Saudamini, Plot No.2, Sector-29, Gurgaon – 122001

Dear Sir.

Sub: Samalkot Power Limited – Request for temporary interconnection with CTU grid through LILO arrangement.

This is with reference to our gas based power project at Samalkot in East Godavari District, Andhra Pradesh. We have been granted connectivity through 2x400kV quad D/C lines connecting to 765/400kV Vemagiri pooling station being developed by POWERGRID and for onward evacuation, 765kV D/C lines from Vemagiri pooling station to Hyderabad via Khammam alongwith 765/400kV substations at Khammam and Hyderabad have been planned. Our Long Term Access for 2200MW has been granted linked to completion of these lines and substations.

Construction activities at our Samalkot CCPP are progressing on full swing and the first set of Gas turbines have already reached the site. As per expected schedule, all six Gas Turbines would be commissioned by March 2012 and all three STs by December 2012. However, you are aware that the 765kV line from Vemagiri being undertaken through competitive bidding route will take 3-4 years time and could be available only by March 2015 or so. As the time gap between commissioning of power plant and availability of long-term system would be more than 2 years, it is important to find suitable interim solution so that evacuation bottleneck is mitigated to whatever extent it is possible.

As one of the arrangements, our request for temporary connectivity through LILO of one circuit of Kalpakka-Vemagiri(AP) 400kV line has been accepted by APTRANSCO but, for the purpose of drawing Start-up power. For this, a part of one of 400kV quad D/C line from Samalkot to Vemagiri(PG pooling station) will be utilized. On completion of the Vemagiri-Khammam-Hyderabad 765kV line, this temporary LILO would be removed and line taken to Vemagiri(PG). However, power evacuation through this arrangement alone would be extremely restricted. To overcome the bottleneck in immediate evacuation from power plant, and with a view to avail opportunity evacuation to the extent of available margins in onwards system from time to time, we would request that as interim arrangement for connectivity with CTU grid, connection of the second 400kV quad D/C line from Samalkot power plant may be allowed by providing LILO to 400kV Gazuwaka – Vijaywada line. This would also be a temporary arrangement till commissioning of LTA system.

Request

In view of the project timelines, approval for LILO connectivity on PGCIL 400kV Gazuwaka-Vijayawada line for the evacuation of Power from Samalkot Power station on the opportunity basis as an interim arrangement until the final solution is made ready."

Thanking you,

Yours Sincerely,

(Sameer Kumar Gupta) Authorised Signatory

Somme