

भारत सरकार/ Government of India  
 विद्युत मंत्रालय / Ministry of Power  
 केंद्रीय विद्युत प्राधिकरण/ Central Electricity Authority  
 प्रणाली योजना एवं परियोजना मूल्यांकन प्रभाग  
 System Planning & Project Appraisal Division  
 सेवा भवन, आर.के. पुरम, नई दिल्ली - 110066  
Sewa Bhawan, R.K. Puram, New Delhi - 110066

No. 51/4/(38<sup>th</sup>)/SP&PA-2015/1318-27

Date: 9-June-2015

Sub: **38th meeting** of the Standing Committee on Power System Planning of **Southern Region - Corrigendum to Minutes** of the meeting

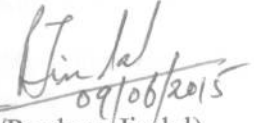
Sir,

The minutes of **38th meeting** of the Standing Committee on Power System Planning of Southern Region were issued vide our letter No. 51/4/(38<sup>th</sup>)/SP&PA-2015/731-744 dated 23 March, 2015. Based on observations/comments received from TANTRANSCO, corrigendum to the above minutes is enclosed at Annex-I.

It is also available at CEA's website ( www.cea.nic.in ).

This is issued with the approval of Member(Power System), CEA.

Yours faithfully,

  
 (प्रदीप जिंदल /Pardeep Jindal)

निदेशक (प्र यो एवं प मू)/Director (SP&PA) Division,  
 (Tel: 011-26198092, Fax: 011-26102945)

To

1. The Member Secretary, Southern Regional Power Committee, 29, Race Course Cross Road, <b>Bangalore 560 009.</b> FAX : 080-22259343	2. The Director (Projects), Power Grid Corp. of India Ltd. "Saudamini", Plot No.2, Sector-29, <b>Gurgaon 122 001, Haryana.</b> FAX : 95124-2571932
3. CEO, POSOCO, B-9, Qutub Institutional Area, Katwaria Sarai, <b>New Delhi-110016</b>	4. The Director (Transmission), Karnataka State Power Trans. Corp.Ltd., Cauvery Bhawan, <b>Bangalore - 560 009.</b> FAX : 080 -22228367

Corrigendum#1:

**Corrigendum to Minutes of 38th Meeting of the Standing Committee on Power System Planning in Southern Region (SCPSPSR) held on 7 March-2015 at NRPC, Katwaria Saria, New Delhi**

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1. The minutes of **38th meeting** of the Standing Committee on Power System Planning of Southern Region were issued vide our letter No. **51/4/(38<sup>th</sup> )/SP&PA-2015/731-744 dated 23 March, 2015.**
2. Based on observations/comments received from TANTRASCO vide their letters No **CE/Plg.&R.C./SE/SS/EE1/AEE1/F.38<sup>th</sup> Stg Comm Modification/D.172 dt 5.5.2015** following corrigendum has been suggested

- 2(i) Modification suggested by TNEB to the earlier minuted **para 2.4** of the minutes of 38<sup>th</sup> meeting of SCPSPSR is given below ('deletion' in strikethrough and 'addition' in italics)

**2.4** Accordingly, the minutes of 37<sup>th</sup> Standing Committee of Power System Planning of Southern Region along with the Corrigendum, as circulated were confirmed.

Further, the scope under Connectivity for Udangudi Power Project Stage-I (2x660MW) of Para 3.8 of the Minutes is now modified as below:

Connectivity for Udangudi Power Project Stage-I (2x660MW):

- (i) 400kV DC Quad line to the Udangudi Pooling station.
- (ii) 2X125 MVar, 400kV bus reactor at Udangudi Pooling station. *Udangudi Stage- I switchyard.*

- 2(ii) Modification suggested by TNEB to the earlier minuted **para 8.3** of the minutes of 38<sup>th</sup> meeting of SCPSPSR is given below: ('deletion' in strikethrough and 'addition' in italics)

**8.3** TNEB informed that reactor at Kayathar end of Kayathar- Karaikudi line was not shifted and instead a new reactor was installed at ~~Mettur Stage III end~~ *Thiruvalem end* of Thiruvalem- MTPS Stage III 400kV D/C line

3. In view of above, the **Para 2.4** and **Para 8.3** are being modified as given below:

**Para 2.4:** Accordingly, the minutes of 37<sup>th</sup> Standing Committee of Power System Planning of Southern Region along with the Corrigendum, as circulated were confirmed.

Further, the scope under Connectivity for Udangudi Power Project Stage-I (2x660MW) of Para 3.8 of the Minutes is now modified as below:

Connectivity for Udangudi Power Project Stage-I (2x660MW):

- (i) 400kV DC Quad line to the Udangudi Pooling station.
- (ii) 2X125 MVar, 400kV bus reactor at Udangudi Stage- I switchyard

**Para 8.3 :** TNEB informed that reactor at Kayathar end of Kayathar- Karaikudi line was not shifted and instead a new reactor was installed at Thiruvalem end of Thiruvalem- MTPS Stage III 400kV D/C line.

Director (Transmission), Transmission Corp. of Andhra Pradesh Ltd., (APTRANSCO) Vidyut Soudha, <b>Hyderabad – 500 082.</b> FAX : 040-66665137	6. The Director (Grid Transmission and Management), Transmission Corp. of Telangana Ltd., (TSTRANSCO) Vidyut Soudha, Khairatabad <b>Hyderabad – 500 082.</b> FAX : 040-23321751
7. The Member (Transmission), Kerala State Electricity Board, Vidyuthi Bhawanam, Pattom, P.B. No. 1028, <b>Thiruvananthapuram - 695 004.</b> FAX : 0471-2444738	8. Member (Distribution), Tamil Nadu electricity Board (TNEB), 6 <sup>th</sup> Floor, Eastern Wing, 800 Anna Salai, <b>Chennai - 600002.</b> FAX : 044-28516362
9. The Director (Power), Corporate Office, Block – I, Neyveli Lignite Corp. Ltd., <b>Neyveli, Tamil Nadu – 607 801.</b> FAX : 04142-252650	10. The Superintending Engineer –I, First Floor, Electricity Department, Gingy Salai, <b>Puducherry – 605 001.</b> FAX : 0413-2334277/2331556
11. Director (Projects), National Thermal Power Corp. Ltd. (NTPC), NTPC Bhawan, Core-7, Scope Complex, Lodhi Road, <b>New Delhi-110003.</b> FAX-011-24360912	12. Director (Operations), NPCIL, 12 <sup>th</sup> Floor, Vikram Sarabhai Bhawan, Anushakti Nagar, <b>Mumbai – 400 094.</b> FAX : 022- 25991258

**Copy to:**

1.	COO(CTU-Plg), Power Grid Corp. of India Ltd. “Saudamini”, Plot No.2, Sector-29, <b>Gurgaon 122 001, Haryana.</b> FAX : 95124-2571932
2.	GM, SRLDC, 29, Race Course Cross Road, <b>Bangalore 560 009</b> FAX – 080-22268725

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

No. 52/6/SP&PA-2015/ 1342-1364

Date: 10-June-2015

Sub: **Joint Meeting** of the Standing Committee on Power System Planning of **Southern** Region and **Western** Region - Corrigendum to Minutes of the meeting

Sir,

The minutes of **Joint Meeting** of the Standing Committee on Power System Planning of Southern Region were issued vide our letter No. 51/4/SR-WR/SP&PA-2015/845-867 dated 28<sup>th</sup> May 2015. Based on observations/comments received from PGCIL, corrigendum to the above minutes is enclosed at Annex-I.

It is also available at CEA's website ( www.cea.nic.in ).

This is issued with the approval of Member(Power System), CEA.

Yours faithfully,



(Pardeep Jindal)  
 Director (SP&PA)

(Telephone: 011 26732325, Fax No. 011 26102045)

To

**Constituents of SR and WR SCPSP**

1. The Member Secretary, Southern Regional Power Committee, 29, Race Course Cross Road, <b>Bangalore 560 009.</b> <b>FAX : 080-22259343</b>	2. The Member Secretary, Western Regional Power Committee, MIDC Area, Marol, Andheri East, Mumbai Fax 022 28370193
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3. CEO, POSOCO, B-9, Qutub Institutional Area, Katwaria Sarai, New Delhi-110016	4. COO (CTU, Planning), Power Grid Corp. of India Ltd. "Saudamini", Plot No.2, Sector-29, Gurgaon 122 001, Haryana. FAX : 95124-2571932
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5. The Director (Transmission), Transmission Corp. of Andhra Pradesh Ltd., (APTRANSCO) Vidyut Soudha, Hyderabad – 500 082. FAX : 040-66665137	6. The Director ( Grid Transmission and Management), Transmission Corp. of Telangana Ltd., (TSTRANSCO) Vidyut Soudha, Khairatabad Hyderabad – 500 082. FAX : 040-23321751
7 The Director (Transmission), Karnataka State Power Trans. Corp.Ltd., Cauvery Bhawan, Bangalore - 560 009. FAX : 080 -22228367	8. The Director (Trans. & System Op.), Kerala State Electricity Board, Vidyuthi Bhawanam, Pattom, Thiruvananthapuram - 695 004. FAX : 0471-2444738
9. Member (Distribution), Tamil Nadu electricity Board (TNEB), 6 <sup>th</sup> Floor, Eastern Wing, 800 Anna Salai, Chennai - 600002. FAX : 044-28516362	10. The Superintending Engineer –I, First Floor, Electricity Department, Gingy Salai, Puducherry – 605 001. FAX : 0413-2334277/2331556

11. Director (Operation), MAHATRANSCO, 'Prakashgad', Plot No.G-9, Bandra-East, Mumbai-400051 Fax 022-26390383/26595258	12. The Chief Engineer, Electricity Department, The Government of Goa, Panaji Fax 0832 2222354
13. Chairman and Managing Director, MPPTCL, Shakti Bhawan, Rampur, Jabalpur-482008 Fax 0761 2664141	14. Executive Engineer (Projects) UT of Dadra & Nagar Haveli, Department of Electricity, Silvassa Ph. 0260-2642338/2230771
15. The Managing Director, CSPTCL, Dangania, Raipur (CG)-492013 Fax 0771 2574246/ 4066566	16. Executive Engineer Administration of Daman & Diu (U.T.) Department of Electricity Moti Daman-396220 Ph. 0260-2250889, 2254745
17. The Managing Director, GETCO, Sardar Patel Vidyut Bhawan, Race Course, Baroda-390007 Fax 0265-2338164	

18. The Director (Power), Corporate Office, Block – I, Neyveli Lignite Corp. Ltd., <b>Neyveli , Tamil Nadu – 607 801.</b> <b>FAX : 04142-252650</b>	19. Director (Projects), National Thermal Power Corp. Ltd. NTPC Bhawan, Core-7, Scope Complex, Lodhi Road, <b>New Delhi-110003.</b> <b>FAX-011-24360912</b>
20. Director (Operations), NPCIL, 12th Floor, Vikram Sarabhai Bhawan, Anushakti Nagar, Mumbai – 400 094. <b>FAX : 022- 25991258</b>	

Copy to:

1.	The Director (Projects), Power Grid Corp. of India Ltd. "Saudamini", Plot No.2, Sector-29, <b>Gurgaon 122 001, Haryana.</b> <b>FAX : 95124-2571932</b>
2.	GM, SRLDC, 29, Race Course Cross Road, Bangalore 560 009 <b>FAX – 080-22268725</b>
3.	GM, WRLDC Plot no F-3, MIDC Area, Msarol, Andheri(East) Mumbai-400093 <b>Fax no 022-28235434</b>

Corrigendum#1:

**Corrigendum to Minutes of Joint Meeting of the Standing Committee on Power System Planning in Southern Region and Western Region held on 20<sup>th</sup> April 2015 at NRPC, Katwaria Saria, New Delhi**

1 The minutes of **Joint Meeting** of the Standing Committee on Power System Planning of Southern Region were issued vide our letter No. 51/4/SR-WR/SP&PA-2015/845-867 dated 28<sup>th</sup> May 2015.

2 Based on the observations/comments received from PGCIL, received vide their letters No C/CTU/S/PLG dated 3 June, 2015, following corrigendum is issued.

2(i) Modification suggested in the earlier minuted **para 5.2( 'deletion' in Strike through and 'addition' in italic)**

**5.2 Scheme # 2: AC System strengthening at Pugalur end**

1. Pugalur HVDC Station – Pugalur (Existing) 400kV (quad) D/c line
2. Pugalur HVDC Station – Arasur 400kV (quad) D/c line.
3. Pugalur HVDC Station – Thiruvalem 400kV (quad) D/c line with 2x80 MVAR line reactor at Pugalur HVDC Station end and 2x63 MVAR line reactor at Thiruvalem 400kV end (*existing 1x63 MVAR bus reactor shall be utilized as line reactor in one circuit and the second circuit shall have new 63 MVAR line reactor*).
3. Pugalur HVDC Station – Edayarpalayam 400kV (quad) D/c line ~~with 63 MVAR switchable line reactor at Edayarpalayam end.~~
4. Edayarpalayam – Udumulpeta 400kV (quad) D/c line.  
(Establishment of 400/220kV substation at Edayarpalayam with 2x500 MVA transformers and 2x125 MVAR bus reactors would be under the scope of TANTRANSCO. The bay for ISTS transmission lines at Edayarpalayam would be implemented as ISTS.)

**Estimated cost of this scheme is Rs. 2008 crore**

3 As such, the modified **Para 5.2** is given below:

**5.2 Scheme # 2: AC System strengthening at Pugalur end**

1. Pugalur HVDC Station – Pugalur (Existing) 400kV (quad) D/c line
2. Pugalur HVDC Station – Arasur 400kV (quad) D/c line.
3. Pugalur HVDC Station – Thiruvalam 400kV (quad) D/c line with 2x80 MVAR line reactor at Pugalur HVDC Station end and 2x63 MVAR line reactor at Thiruvalam 400kV end. (existing 1x63 MVAR bus reactor shall be utilized as line reactor in one circuit and the second circuit shall have new 63 MVAR line reactor)
3. Pugalur HVDC Station – Edayarpalayam 400kV (quad) D/c line
4. Edayarpalayam – Udumulpeta 400kV (quad) D/c line.  
(Establishment of 400/220kV substation at Edayarpalayam with 2x500 MVA transformers and 2x125 MVAR bus reactors would be under the scope of TANTRANSCO. The bay for ISTS transmission lines at Edayarpalayam would be implemented as ISTS.)

**Estimated cost of this scheme is Rs. 2008 crore**



## पावर ग्रिड कारपोरेशन ऑफ इंडिया लिमिटेड

POWER GRID CORPORATION OF INDIA LIMITED

(A Government of India Enterprise)



पावरग्रिड

केन्द्रीय कार्यालय : "सौदामिनी" प्लॉट सं. 2, सेक्टर-29, गुडगाँव-122 001, हरियाणा  
 फोन : 2571700 - 719, फैक्स : 2571760, 2571761 तार 'नेटग्रिड',  
 Corporate Office : "Saudamini" Plot No. 2, Sector-29, Gurgaon-122 001. Haryana  
 Tel. : 2571700 - 719, Fax : 2571760, 2571761 Gram : 'NATGRID'

संदर्भ संख्या/Ref. Number

C/CTU/S/PLG

Date: 05<sup>th</sup> June, 2015**Shri Pradeep Jindal**

Director (SP & PA),  
 Central Electricity Authority,  
 Sewa Bhawan, R K Puram,  
 New Delhi-110 066.

**Sub: Connectivity and Long Term Open Access for 4000 MW Cheyyur UMPP in Tamil Nadu – reg.**

Sir,

This is with reference to your letter dated 23.04.2015 and discussions during the 38<sup>th</sup> SCM of SR wherein it was desired to get the latest status of generation project from M/s Coastal Tamil Nadu Power Limited. Accordingly, matter was taken up with them and Coastal Tamil Nadu Power Limited vide its letter dated 27.05.2015 (copy of Letter enclosed) had informed that MoP, Gol has listed Cheyyur UMPP under Plug and Play and proposed to bid out in the FY 15-16.

Thanking you,

Yours faithfully,

*Mukesh Khanna*  
 5/6/15  
 (Mukesh Khanna)  
 AGM (CTU-Planning)

*SKM*  
*SKM*  
*KK*  
*8/6/15*

# COASTAL TAMIL NADU POWER LIMITED

A wholly owned subsidiary of Power Finance Corporation Limited  
(A Govt. of India Undertaking)

CIN U40102DL2007GOI157615

RFQ No.: 03/UM08/2013/Cheyur UMPP/TR-LTA

May 27, 2015

To,

Sh. Mukesh Khanna,

AGM (CTU-Planning),

⇒ Power Grid Corporation of India Limited,

Saudamini, Plot No. - 2, Sector - 29, Near IFFCO Chowk

Gurgaon - 122 001,

Haryana

Sub : Connectivity and Long Term Open Access for 4000 MW Cheyur UMPP in Tamil Nadu-  
Reg.

Ref : PGCIL letter Ref No. C/ENG/SEF/LTOA/Cheyur dated 18.05.2015

Sir,

This has reference to your letter cited above regarding Connectivity and Long Term Open Access for 4000 MW Cheyur UMPP in Tamil Nadu. In this regards, it may be mentioned that Ministry of Power (MoP), Government of India (GoI) has listed Cheyur UMPP under Plug and Play and propose to bid out in the FY 15-16.

The above is for kind information and records.

Thanking you,

Yours faithfully,

  
Project In-Charge, CTNPL  
27/5/15

Copy to : Sh., P. D. Siwal, Chief Engineer (TP&I), CEA, Sewa Bhawan, R.K.Puram, New Delhi-  
110066.

82. V. T.  
Hd 4  
27/6/15

पावर ग्रिड कारपोरेशन ऑफ इंडिया लिमिटेड

(भारत सरकार का उद्यम)

POWER GRID CORPORATION OF INDIA LIMITED

(A Government of India Enterprise)



पावरग्रिड

केन्द्रीय कार्यालय : "सौदामिनी" प्लॉट सं. 2, सेक्टर-29, गुडगाँव-122 001, हरियाणा

फोन : 2571700 - 719 फैक्स : 2571760, 2571761 तार 'नेटग्रिड'

Corporate office : "Saudamini" Plot No. 2, Sector-29, Gurgaon-122 001 Haryana

Tel. : 2571700 - 719, Fax : 2571760, 2571761 Gram : 'NATGRID'

संदर्भ संख्या /Ref. Number

C/CTU/S/PLG

Date: 08/05/2015

**Shri P.Jindal**

Director (SP &amp; PA),

Central Electricity Authority

SewaShawan, RK Puram

New Delhi - 110 066.

**Subject: Studies for converting fixed line reactors into switchable line reactors-Deliberation on 38<sup>th</sup> SCSPSR-Regarding**

Sir,

We write with reference to the discussion during the 38<sup>th</sup> Standing Committee meeting and your letter dated 17/4/2015 in this regard. As discussed during the meeting, Dynamic over voltage studies has been carried out considering load throw off at line reactor end which is proposed to be made switchable. The results of Dynamic over voltage studies are enclosed in Annexure-I. From the study results it may be observed that as such for all the proposed lines the Dynamic Over Voltage is within limits even if line reactor is not in service. However in case of Gooty-Bangalore 400kV (sl.no -9) the Dynamic over voltage is close to design value. Hence, it is proposed that all the line reactors made switchable except for Gooty-Bangalore 400kV as mentioned in Annexure-I.

Thanking you,

Yours truly,

(Mukesh Khanna)  
AGM (CTU-Planning)

S. No	Transmission line	Length	Reactor		DOV				Proposal
			sending end	Receiving end	With Reactor (kV)	With Reactor (p.u)	W/O Reactor (kV)	W/O Reactor (p.u)	
1	Gazwel-Hyderabad II	62.5	-	50	431	1.26	441	1.29	Reactor at Hyderabad end may be made switchable
2	Nellore-Tiruvellam I & II (study has been carried out by switching off reactor at both ends)	173	50	50	461	1.35	468	1.37	Line Reactor at both ends may be made switchable
3	Sriperumbdur-Chittoor	105.7	50		447	1.31	454	1.33	Reactor at Sriperumbadur end may be made switchable
4	Thiruvananthapuram-Tirunelveli	160	63		420	1.23	445	1.30	Line Reactor at Thiruvananthapuram end may be made switchable
5	Trichur-Palakkad - I & II	84	50		389	1.14	396	1.16	Already being taken up under SRSS-XX.
6	Udumalpet-Salem II	137	63		400	1.17	411	1.20	Line Reactor at Udumalpet end may be made switchable
7	Madurai-Karaikudi	130	63		441	1.29	446	1.30	Line Reactor at Madurai end may be made switchable
8	Sriperumbadur-SV Chatram	18	50		413	1.21	415	1.21	Line Reactor at Sriperumbadur may be made switchable
9	Bangalore-Gooty (study has been carried out by switching off reactor at both ends)	302	63	63	497	1.45	512	1.50	Line reactor may be retained as fix reactors
10	Kochi-Tirunelveli-I & II (study has been carried out by switching off reactor at both ends)	231	63	63	457	1.34	482	1.41	Line Reactor at both ends may be made switchable
11	Madurai-Trichy	130	50		455	1.33	470	1.37	Line Reactor at Madurai end may be made switchable
12	Trichy- Nagapattinam I	159	50		456	1.33	466	1.36	Line Reactor at Trichy end may be made switchable
13	Trichy- Nagapattinam -II	159	63		449	1.31	460	1.35	Line Reactor at Trichy end may be made switchable
14	Salem- Hosur II	125	50		447	1.31	454	1.33	Reactor at Salem end may be made switchable
15	Malakaram-Hyderabad-II(Upto LILO point)	28		50	404	1.18	412	1.20	Reactor at Hyderabad may be made switchable
16	Kurnool-Gooty	113		50	439	1.28	451	1.32	Reactor at Gooty may be made switchable

Note :Studies have been carried out considering opening of circuit breaker near reactor.

Annex - 4.1

**KARNATAKA POWER TRANSMISSION CORPORATION LIMITED**

Telephone: 080-22210416  
Fax : 080-22292204



Office of the  
Chief Engineer Electy.,  
Planning & Co-ordination,  
Kaveri Bhavan, Bangalore-9

No. CEE (P&C)/SEE(Plg)/EE(PSS)KCO-97/34319/2015-16

Date: 8<sup>th</sup> June'2015

2305-2306

09 JUN 2015

The Director,  
System Planning & Project Appraisal Division  
Central Electricity Authority  
Sewa Bhavan, R.K.Puram,  
New Delhi-110 066.

Sir,

Sub: Transformer Augmentation in Karnataka-Minutes of 38<sup>th</sup> meeting of SCPSPSR

Ref: CEA letter No: 54/1/2015-SP&PA/956-57 Dated: 16-04-2015

Adverting to the above subject, it may kindly be noted that in the 38<sup>th</sup> meeting of the Standing Committee on Power System Planning of Southern Region, the subject regarding Augmentation of Transformer capacities in SR was discussed and it was informed that there is necessity of augmentation at 17nos. of Power Grid sub-station in Southern Region. Out of which transformer augmentation at Madhugiri and Munirabad in Karnataka were proposed.

In this regard, Load flow study has been conducted for 2017-18 time frame to match the projected peak load of the State i.e., 14200MW. From the load flow study results it is observed that the load of 2 X 500 MVA, 400/220 kV transformers at Yelahanka (Singnayakanahalli) 400kV sub-station is exceeding 70% of its installed capacity. Hence there is a requirement for transformer augmentation at this sub-station. Likewise the transformers at Munirabad are loaded to 12% of its installed capacity and as such the proposal for transformer augmentation at Munirabad needs to be reviewed.

Yours faithfully

Chief Engineer (Electy),  
Planning and Co-ordination

Copy to :-

1. EA to D(Transmission), KPTCL

## पावर ग्रिड कारपोरेशन ऑफ इंडिया लिमिटेड

(भारत सरकार का उद्यम)

## POWER GRID CORPORATION OF INDIA LIMITED

(A Government of India Enterprise)



केन्द्रीय कार्यालय : "सौदामिनी" प्लॉट सं. 2, सेक्टर-29, गुडगाँव-122 001, हरियाणा

फोन : 2571700 - 719 फैक्स : 2571760, 2571761 तार 'नेटग्रिड'

Corporate office : "Saudamini" Plot No. 2, Sector-29, Gurgaon-122 001 Haryana

Tel. : 2571700 - 719, Fax : 2571760, 2571761 Gram : 'NATGRID'

संदर्भ संख्या / Ref. Number C\CTU-PIg\S\Trf-Augmentation

Date: 17<sup>th</sup> September, 2015**Shri Pradeep Jindal**Director (SP & PA),  
Central Electricity Authority,  
Sewa Bhawan, R K Puram,  
New Delhi - 110 066.**Subject: Transformer Augmentation in Yelahanka**

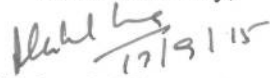
Dear Sir,

We write with reference to your letter dated 10<sup>th</sup> July, 2015 enclosing KPTCL letter dated 6<sup>th</sup> June, 2015 on the above subject. In this regard, it is to mention that 2 X 500 MVA transformers are being installed at 400/220 kV S/S of Yelahanka, which are yet to be commissioned, since 400 kV transmission line works are held up due to severe ROW issues.

Keeping above in view, It is suggested that requirement of transformer augmentation at Yelahanka may be reviewed after commissioning of Yelahanka Substation. It is further informed that space for future 1 no. 500 MVA transformer has been kept at Yelahanka 400/220 kV Substation.

Thanking you

Yours faithfully,

  
 (Mukesh Khanna)  
 AGM (CTU-PIg)



TRANSMISSION CORPORATION OF TELANGANA LIMITED  
Vidyut Soudha, Hyderabad – 500082, PABX:23396000

From  
The Director/Transmission,  
TSTRANSCO,  
Vidyut Soudha,  
Hyderabad.

To  
The Chairman,  
Central Electricity Authority(CEA),  
RK Puram, Sewa Bhavan,  
New Delhi-110066

Lr.No. SE (PS)/DE(SS&LTSS)/F.PTR augmentation/D.No. 140 /15, Dt: 20 /08/2015

Sir,

Sub: - TSTransco - 9 hours agriculture power supply scheme - Augmentation of Power Transformers at 400/220 kV Dichpalli SS and 400/220 kV Veltoor SS with 1 No. 315 MVA- In principle approval in view of the urgency -Requested - Reg.

Ref:- 1) Lr.No.SE/PS/DE(SS&LTSS)/F.Evacuation/D.No.114/15,dt.23-07-2015  
2) Lr.No.SE/PS/DE(SS&LTSS)/F.Evacuation/D.No.131/15,dt.13-08-2015

\* \* \* \* \*

Further to the correspondence cited above, TSTRANSCO has proposed to erect 1 No. additional 315 MVA, 400/220 kV Power Transformer at 400/220 kV Dichpalli SS and 400/220 kV Veltoor SS under the proposed 9 hours agriculture power supply scheme to be operational from April 2016. The Load flow results are herewith enclosed for your reference.

In view the above, we request you to arrange for the in principle approval for the proposed 1 No. 315 MVA at 400 kV Dichpalli SS and 1 No. 315 MVA at 400 kV Veltoor SS for taking up the works.

It is requested to take necessary early action.

Encl: As above.

  
Director/Transmission (2/3)

Copy to

✓ Sri Pardeep Jindal, Director(SP&PA), Central Electricity Authority(CEA),  
RK Puram, Sewa Bhavan, New Delhi-110066.

On No-7. PSP&PA-1  
8/9/15

Transformer Loadings at 400/220 kV Dichpally and Veltoor Substations									
Before Augmentation of 1 No. 315 MVA Transformer									
From Bus		To Bus			MW	MVAR	MVA	Loading as per the Planning criteria i.e 60% of 315 MVA	Loading as per Transformer Capacity 315 MVA
413	DICHPALLY	241	DICHPALLY	1	232.15	67.00	241.62	127%	77%
413	DICHPALLY	241	DICHPALLY	2	232.15	67.00	241.62	127%	77%
434	VELTOOR	378	VELTOOR	1	265.89	95.72	282.59	149%	90%
434	VELTOOR	378	VELTOOR	2	265.89	95.72	282.59	149%	90%
434	VELTOOR	378	VELTOOR	3	265.89	95.72	282.59	149%	90%
After Augmentation of 1 No. 315 MVA Transformer									
413	DICHPALLY	241	DICHPALLY	1	166.28	41.71	171.43	90%	54%
413	DICHPALLY	241	DICHPALLY	2	166.28	41.71	171.43	90%	54%
413	DICHPALLY	241	DICHPALLY	3	166.28	41.71	171.43	90%	54%
434	VELTOOR	378	VELTOOR	1	202.73	68.71	214.06	113%	68%
434	VELTOOR	378	VELTOOR	2	202.73	68.71	214.06	113%	68%
434	VELTOOR	378	VELTOOR	3	202.73	68.71	214.06	113%	68%
434	VELTOOR	378	VELTOOR	4	202.73	68.71	214.06	113%	68%





TRANSMISSION CORPORATION OF TELANGANA LIMITED  
Vidyut Soudha, Hyderabad – 500082, PABX:23396000

From  
The Director/Transmission,  
TSTRANSO,  
Vidyut Soudha,  
Hyderabad.

To  
The Chairman,  
Central Electricity Authority(CEA),  
RK Puram, Sewa Bhavan,  
New Delhi-110066

Lr.No. SE (PS)/DE(SS&LTSS)/F.PTR augmentation/D.No.140 /15, Dt: 20 /08/2015

Sir,

Sub: - TSTransco - 9 hours agriculture power supply scheme - Augmentation of Power Transformers at 400/220 kV Dichpalli SS and 400/220 kV Veltoor SS with 1 No. 315 MVA- In principle approval in view of the urgency -Requested - Reg.

Ref:- 1) Lr.No.SE/PS/DE(SS&LTSS)/F.Evacuation/D.No.114/15,dt.23-07-2015

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\*\*\*\*\*

Further to the correspondence cited above, TSTRANSO has proposed to erect 1 No. additional 315 MVA, 400/220 kV Power Transformer at 400/220 kV Dichpalli SS and 400/220 kV Veltoor SS under the proposed 9 hours agriculture power supply scheme to be operational from April 2016. The Load flow results are herewith enclosed for your reference.

In view the above, we request you to arrange for the in principle approval for the proposed 1 No. 315 MVA at 400 kV Dichpalli SS and 1 No. 315 MVA at 400 kV Veltoor SS for taking up the works.

It is requested to take necessary early action.

Encl: As above.

439-CE/PS&TD  
9-9-15

Director/Transmission

Copy to

Sri Pardeep Jindal, Director(SP&PA), Central Electricity Authority(CEA),  
RK Puram, Sewa Bhavan, New Delhi-110066.

O/o Member (Power System)

Dy. No. : 1840

Date : 9/9/15

The matter pertains to  
CE(ET)

9/9  
CE(ET), Katraia  
Sarai  
New Delhi

Central Electrical Inspector  
Dy. No. 2045  
Date 10/9/15

1840  
1840  
1840

**Transformer Loadings at 400/220 kV Dichpally and Veltoor Substations**

**Before Augmentation of 1 No. 315 MVA Transformer**

From Bus		To Bus			MW	MVAR	MVA	Loading as per the Planning criteria i.e 60% of 315 MVA	Loading as per Transformer Capacity 315 MVA
413	DICHPALLY	241	DICHPALLY	1	232.15	67.00	241.62	127%	77%
413	DICHPALLY	241	DICHPALLY	2	232.15	67.00	241.62	127%	77%
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434	VELTOOR	378	VELTOOR	2	265.89	95.72	282.59	149%	90%
434	VELTOOR	378	VELTOOR	3	265.89	95.72	282.59	149%	90%
<b>After Augmentation of 1 No. 315 MVA Transformer</b>									
413	DICHPALLY	241	DICHPALLY	1	166.28	41.71	171.43	90%	54%
413	DICHPALLY	241	DICHPALLY	2	166.28	41.71	171.43	90%	54%
413	DICHPALLY	241	DICHPALLY	3	166.28	41.71	171.43	90%	54%
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434	VELTOOR	378	VELTOOR	3	202.73	68.71	214.06	113%	68%
434	VELTOOR	378	VELTOOR	4	202.73	68.71	214.06	113%	68%

52/7  
Annex-5.1

Government of India  
Ministry of Power  
Central Electricity Authority  
Power System Planning & Project Appraisal –II Division  
Sewa Bhawan, R.K. Puram, New Delhi – 110066

No. 52/7/ 2015- PSP&PA-II/ 91-94

28  
Date: 24-Aug-2015

To

1. COO(CTU), Power Grid Corp. of India Ltd. "Saudamini", Plot No.2, Sector-29, Gurgaon 122 001, Haryana. FAX : 95124-2571932	2. CEO, PFC Consulting Ltd, 1 <sup>st</sup> Floor, "Urjanidhi" 1, Barakhamba Lane, Connaught Place, New Delhi-110001 Fax:+91 11 23456170
3. CEO, REC Transmission Projects Company Core – 4, Scope Complex 7, Lodhi road , New Delhi-110003 Fax: + 91 11 47964747.	

**Subject:** Change in scope of the schemes (i) "Strengthening of transmission system beyond Vemagiri", and (ii) "Additional inter-regional AC links for import of power into Southern Region", being implemented under TBCB

**Reference:**

1. PGCIL letter no. C/ENG/CTU/S/RECTPCL dated 09.05.2015
2. PGCIL letter no. C/CTU-Plg./S/CEA/GZ dated 13.04.2015
3. PGCIL letter no. C/CTU-Plg./REC dated 07.04.2015
4. PGCIL letter no. C/ENG/CTU/S/PFCCL dated 29-04-2015
5. KPTCL letter no. CEE (P&C)/SEE(Plg.)/EE (PSS)/KCO-97/34318/2015/16 dated 30.07.2015
6. PFCCL letter no. 03/ITP-215-16/WKTL/RFQ dated 10.07.2015
7. CEA letter no. 100/11/PFC-17/2015—SP & PA/1668-69 dated 27.07.2015
8. Gazette (Extraordinary) No. 329, Part-II- Section 3 -Sub section (ii) dated February 9, 2015

Sir/Madam,

1. This has reference to various proposals / reasons for changes in the scope of the following schemes being implemented under Tariff Based Competitive Bidding (TBCB):
  - (i) "Strengthening of transmission system beyond Vemagiri" - bidding by RECTPCL
  - (ii) "Additional inter-regional AC links for import of power into Southern Region" - bidding by PFCCL

2. The changes in scope of these two schemes would be required mainly because of the following reasons:

- a) Changes in rating (MVA) of some of the line reactors at various locations due to change in estimated length of the lines found out after preliminary survey by the BPCs.
- b) Inconsistency in the scope of the scheme 'as notified in the gazette' viz-a-viz the 'scope as agreed in the Standing Committee on Power System Planning in the Southern Region (SCPSPSR)'.
- c) Difficulty in obtaining Right of Way at existing Hoody 400kV S/S for the Cuddappah – Hoody 400kVD/c line under scope of (ii) scheme.
- d) The suggestion to keep the line bays and switchable line reactors, at Chilakaluripeta end of Warangal – Chilakaluripeta 765 kV D/c line, in the scope of (i) scheme in place of in the scheme(ii), due to ease of implementation and O&M.

3. To discuss the modifications in the scope of these two schemes, a meeting was held in the O/o CE(PSP&PA-II), CEA with officials from CTU, RECTPCL and PFCCL on 19-Aug-2015. Minutes of the meeting are enclosed. Based on these discussions, the scope of the two schemes is being modified as given in the following tables under Annex-I.

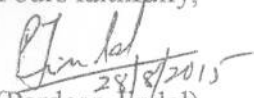
- |  |                      |
|--|----------------------|
| 1. Modified scope of the scheme - "Strengthening of transmission system beyond Vemagiri" - bidding by RECTPCL                      | Table – I / Annex-I  |
| 2. Modified scope of the scheme - "Additional inter-regional AC links for import of power into Southern Region" - bidding by PFCCL | Table – II / Annex-I |

Accordingly, we give our in-principle approval for the change in scope of these schemes which are being implemented under TBCB.

4. The 'Modified Scope' is proposed to be taken up in the forthcoming meeting of the Standing Committee on Power System Planning of Southern Region and would be notified in the Gazette after taking up in the Empowered Committee.
5. However, in the meantime, PFCCL and RECTPCL may continue the bidding process, with the modified scope, so that the two schemes can be completed in time. Further, PFCCL is advised to redo the RfQ with the modified scope.

This issues with the approval of Member(Power System).

Yours faithfully,

  
(Pardeep Jindal)

Director (PSP&PA-II)

Enc/I; As above.

Copy to:

CE (PSP&PA-I Division), CEA : For information and further necessary action please.

**Table – I :** The modified scope of the “**Strengthening of transmission system beyond Vemagiri**” (RECTPCL as BPC) scheme is given below:

Scope as per Gazette Notification	Modified Scope
(i) Vemagiri-II – Chilakaluripeta 765kV D/C line with 240 MVAR switchable line reactors at both ends.	(i) Vemagiri-II – Chilakaluripeta 765kV D/C line with 240 MVAR switchable line reactors at both ends of each circuit. (The line bays and line reactors at Chilakaluripeta to be in the scope of TSP and those at Vemagiri end in the scope of CTU).
(ii) Chilakaluripeta – Cuddapah 765kV D/C line with 240 MVAR switchable line reactors at both ends.	(ii) Chilakaluripeta – Cuddapah 765kV D/C line with 240 MVAR switchable line reactors at both ends of each circuit. (The line bays and line reactors at Chilakaluripeta to be in the scope of TSP and those at Cuddapah end in the scope of CTU).
(iii) Chilakaluripeta – Narsaraopeta 400kV (quad) D/C line	(iii) Chilakaluripeta – Narsaraopeta (Sattenapalli) 400kV (quad) D/C line (The line bays at both ends to be in the scope of TSP)
(iv) Cuddapah – Madhugiri 400kV (quad) D/C line with 80 MVAR switchable line reactors at both ends.	(iv) Cuddapah – Madhugiri 400kV (quad) D/C line with 50 MVAR switchable line reactors at both ends of each circuit. (The line bays and reactors at both ends to be in the scope of CTU)
(v) Cuddapah – Hindupur 400kV (quad) D/C line with 80 MVAR switchable line reactors at Hindupur end.	
(vi) Srikakulam Pooling Station – Garividi 400 kV (Quad) D/C line with 80 MVAR switchable line reactor at Garividi end.	(v) Srikakulam Pooling Station – Garividi 400 kV (Quad) D/C line (The line bays at Garividi end to be in the scope of TSP and those at Srikakulam Pooling Station end in the scope of CTU).

## Scope as per Gazette Notification

- (vii) Establishment of 765/400 kV substation at Chilakaluripeta with 2x1500 MVA transformers and 2x240 MVar bus reactors each.  
Transformers: 765/400 kV, 7 x 500 MVA (One unit spare)

### 765 & 400 kV Bay Requirements

- (i) 765 kV line bays at Chilakaluripeta: 4 no.
- (ii) 765/400 kV Transformer bays at Chilakaluripeta: 2 no.
- (iii) 400 kV line bays Chilakaluripeta : 2 no.
- (iv) Space for future 765 kV line bays at Chilakaluripeta: 6 no.
- (v) Space for future 400 kV line bays at Chilakaluripeta: 8 no.

#### **Note:**

CTU to provide two nos. 765 kV bays at Vemagiri-II Pooling station for Vemagiri-II - Chilakaluripeta 765 kV D/C line

CTU to provide requisite no. of 765 kV and 400 kV bays and line reactors for termination of transmission lines at Cuddapah

CTU to provide two nos. 400kV bays & line reactors at Madhugiri 400 kV substation for Cuddapah - Madhugiri 400kV (quad) D/C line

CTU to provide two nos. 400 kV bays at Srikakulam 400kV substation for Srikakulam Pooling Station - Garividi 400 kV (Quad) D/C line

## Modified Scope

- (vi) Establishment of 765/400 kV substation at Chilakaluripeta with 2x1500 MVA transformers and 2x240 MVar bus reactors each.

**Transformers:** 765/400 kV, 7x500 MVA (Single-Phase units with one spare)

### 765 kV Bays (at Chilakaluripeta)

- ICT bays : 2 nos.  
Line bays : 4 nos.  
765 kV Bus Reactor Bays : 2 nos.  
Spare bays (Space) : 6 nos.

### 400 kV Bays

- ICT bays : 2 nos.  
Line bays : 2 nos.  
Spare bays (Space) : 8 nos.

### (vii) Note about provision of line reactors and bays:

- a) CTU to provide 2 nos. 765kV line bays along with 240 MVar switchable line reactors at Vemagiri-II Pooling station for termination of Vemagiri-II - Chilakaluripeta 765kV D/c line.
- b) CTU to provide 2 nos. 765kV line bays along with 240 MVar switchable line reactors at Cuddapah 765/400kV substation for termination of Chilakaluripeta - Cuddapah 765kV D/c line.
- c) CTU to provide 2 nos. 400kV line bays along with 50 MVar switchable line reactors at Cuddapah 765/400kV substation for termination of Cuddapah - Madhugiri 400kV (quad) D/c line.
- d) CTU to provide 2 nos of 400kV line bays along with 50 MVar switchable line reactors at Madhugiri 400kV substation for termination of Cuddapah - Madhugiri



pe as per Gazette Notification	Modified Scope
	<p>400kV (quad) D/c line.</p> <p>e) CTU to provide 2 nos. 400kV line bays at Srikakulam 400kV substation for termination of Srikakulam Pooling Station – Garividi 400 kV (Quad) D/c line.</p> <p>f) APTRANSCO to provide space for 2 no 400 kV, line bays at Narsaraopeta (Sattenapalli) 400kV sub- station</p> <p>g) APTRANSCO to provide space for 2 no 400 kV line bays at Garividi 400kV sub- station</p>

**Note-1:**

- CTU: Central Transmission Utility
- APTRANSCO: AP Transmission Company Limited
- TSP: Transmission Service Provider

**Note - 2:** The “Cuddapah – Hindupur 400kV (quad) D/C line with 80 MVAR switchable line reactors at Hindupur end” has been given to CTU for implementation under compressed time schedule.

**Table – II :** The modified scope of the “Additional inter-regional AC links for import of power into Southern Region” (PFCCL as BPC) scheme is given below:

Transmission Scheme as per Gazette Notification	Modified Scope
<p>1. Establishment of 765/400kV substations at Warangal (New) with 2x1500 MVA transformers and 2x240 MVAR bus reactors</p> <p>Transformers: 765/400 kV, 7x500 MVA (One unit Spare)</p> <p><u>765 &amp; 400 kV Bay Requirements</u></p> <p>(i) 765 kV line bays : 6 no.</p> <p>(ii) 765/400 kV Transformer bays : 2 no.</p> <p>(iii) 400 kV line bays : 2 no.</p> <p>(iv) Space for future 765 kV line bays : 6 no.</p>	<p>1. Establishment of 765/400kV substations at Warangal (New) with 2x1500 MVA transformers and 2x240 MVAR bus reactors.</p> <p>Transformers: 765/400 kV, 7x500 MVA (Single-Phase units with one spare)</p> <p><u>765 kV &amp; 400 kV Bay Requirements (in Warangal)</u></p> <p>(i) 765 kV line bays : 6 nos.</p> <p>(ii) 765 kV Transformer bays : 2 no.</p> <p>(iii) 400kV Transformer bays : 2 no.</p> <p>(iv) 400 kV line bays : 2 no.</p> <p>(v) Space for future 765 kV line bays : 6 no.</p>

*[Signature]*

Transmission Scheme as per Gazette Notification	Modified Scope
(v) Space for future 400 kV line bays : 8 no	(vi) Space for future 400 kV line bays : 8 no
2. Warora Pool – Warangal (New) 765kV D/c line with 240 MVar switchable line reactor at both ends	2. Warora Pool – Warangal (New) 765kV D/c line with 240 MVar switchable line Reactor at both ends of each circuit  (The line bays and reactors at both ends to be in the scope of TSP)
3. Warangal (New) –Hyderabad 765 kV D/c line with 330 MVar switchable line reactor at Warangal end	3. Warangal (New) –Hyderabad 765 kV D/c line with <b>240 MVar switchable</b> line reactor at Warangal end of each circuit. (The line bays and reactors at Warangal end to be in the scope of TSP and the line bays at Hyderabad end in the scope of CTU)
4. Warangal (New) – Warangal (existing) 400 kV (quad) D/c line	4. Warangal (New) – Warangal (Existing) 400 kV (quad) D/c line (The line bays at Warangal (New) end to be in the scope of TSP and the line bays at Warangal (Existing) end in the scope of CTU)
5. Hyderabad – Kurnool 765 kV D/c line with 240 MVar switchable line reactor at Kurnool end	5. Hyderabad – Kurnool 765 kV D/c line with 240 MVar switchable line reactor at Kurnool end of each circuit (The line bays and reactors in the scope of CTU)
6. Warangal (New) – Chilakaluripeta 765kV D/c line with 240 MVar switchable line reactor at both ends	6. Warangal (New) – Chilakaluripeta 765kV D/c line with 240 MVar switchable line reactor at both ends of each circuit. (The line bays and reactors at both ends to be in the scope of TSP)
7. Cuddapah – Hoodi 400kV (quad) D/c line with 63 MVar switchable line reactor at both ends	
<p>Note :</p> <p>i) Warora Pool developer to provide space for two nos. 765 kV line bays at Warora Pool for termination of Warora Pool – Warangal (New) 765kV D/c line alongwith 240 MVar switchable line reactor</p> <p>ii) CTU to provide two nos. 765 kV bays at Hyderabad for termination of Warangal (New) –Hyderabad 765 kV</p>	<p>7. <u>Note about provision of line reactors and bays</u></p> <p>i) Warora Pool developer to provide space for 2 nos. 765 kV line bays at Warora Pool for termination of Warora Pool – Warangal (New) 765kV D/c line with 240 MVar <b>switchable line reactor</b></p> <p>ii) CTU to provide 2 nos. 765 kV bays at Hyderabad for termination of Warangal</p>



Transmission Scheme as per Gazette Notification	Modified Scope
<p>D/c line</p> <p>iii) CTU to provide two nos. 765 kV bays at Hyderabad for termination of Hyderabad – Kurnool 765 kV D/c line</p> <p>iv) CTU to provide two nos. 765 kV line bays at Kurnool for Hyderabad – Kurnool 765 kV D/c line with 240 MVAR switchable line reactor at Kurnool end</p> <p>v) CTU to provide four nos. 400 kV bays at Warangal (existing) for Warangal (New) – Warangal (existing) 400 kV (quad) D/c line</p> <p>vi) M/s KPTCL to provide two nos. 400 kV bays at Hoodi for termination of Cuddapah – Hoodi 400kV (quad) D/c line along with 63 MVAR switchable line reactors</p>	<p>(New) –Hyderabad 765 kV D/c line</p> <p>iii) CTU to provide 2-nos. 765 kV bays at Hyderabad for termination of Hyderabad – Kurnool 765 kV D/c line</p> <p>iv) CTU to provide 2 nos. 765 kV line bays along with 240 MVAR switchable line reactor at Kurnool end for Hyderabad – Kurnool 765 kV D/c line.</p> <p>v) CTU to provide 2 nos. 400 kV bays at Warangal (existing) for Warangal (New) – Warangal (existing) 400 kV (quad) D/c line</p>

**Note-1:**

- CTU: Central Transmission Utility
- APTRANSCO: AP Transmission Company Limited
- TSP: Transmission Service Provider

**Note - 2:** The “Cuddapah – Hoodi 400kV (quad) D/c line with 63 MVAR switchable line reactor at both end” has to be reviewed in later stage, therefore the same is now deleted from the scope of this scheme.

पावर ग्रिड कारपोरेशन ऑफ इंडिया लिमिटेड  
(भारत सरकार का उद्यम)  
**POWER GRID CORPORATION OF INDIA LIMITED**  
(A Government of India Enterprise)



केन्द्रीय कार्यालय : "सौदामिनी" प्लॉट सं. 2, सैक्टर-29, गुडगाँव-122 001, हरियाणा  
फोन : 2571700 - 719, फैक्स : 2571760, 2571761 तार 'नेटग्रिड',  
Corporate Office : "Saudamini" Plot No. 2, Sector-29, Gurgaon-122 001. Haryana  
Tel. : 2571700 - 719, Fax : 2571760, 2571761 Gram : 'NATGRID'

संदर्भ संख्या/Ref. Number

C/CTU/S/PLG

Date: 15<sup>th</sup> May, 2015

**Shri P.Jindal**  
Director (SP & PA),  
Central Electricity Authority  
SewaShawan, RK Puram  
New Delhi - 110 066.

**Subject: Modifications in Reactive Compensation Proposed in 37<sup>th</sup> Standing Committee**

Sir,

We write with reference to the discussions during the 37<sup>th</sup> Standing Committee meeting(SCM) regarding reactive compensation of following schemes.

1.0 **Scheme-I:** Additional inter-Regional AC link for import into Southern Region i.e. Warora-Warangal - Hyderabad- Kurnool 765kV link

2.0 **Scheme-III:** Strengthening of transmission system beyond Vemagiri.

The above schemes including reactive compensation have been approved in 37<sup>th</sup> Standing Committee. In this regard, it is mentioned that reactive compensation of following lines of aforesaid schemes appear to be on higher side & may be modified as given below.

Scheme	Transmission Line	Approx. Line Length	Existing Proposal	Modified Proposal
Scheme-I	Warangal (New) – Hyderabad 765 kV D/C	160 Km	330 MVAR switchable line reactors at Warangal end.	240 MVAR switchable line reactor at Warangal end.
Scheme-I	Cuddapah – Hoodi 400 kV (quad) D/C	200 Km	63 MVAR switchable line reactor at both ends.	63 MVAR switchable line reactor at Hoodi end.

Scheme	Transmission Line	Approx. Line Length	Existing Proposal	Modified Proposal
<b>Scheme-III</b>	Cuddapah – Madhugiri 400kV (quad) D/c	240 Km	80 MVAR switchable line reactor at both ends	<b>50 MVAR</b> switchable line reactor at both ends
<b>Scheme-III</b>	Srikaukulam Pooling Station – Garividi 400 kV (Quad) D/c	130 Km	80 MVAR switchable line reactor at Garividi end	<b>No Reactor required.</b>

Further, it may also be mentioned that aforesaid modifications have already been incorporated/proposed in the inputs provided to Bid process coordinators (i.e PFC for scheme-I and REC for Scheme-III) for issue of RFQ/RFP, subject to confirmation from CEA.

In view of above, the same may be informed to constituents in the next standing committee meeting.

Thanking you,

Yours truly,

*Mukesh Khanna*  
15/10/15

**(Mukesh Khanna)**  
**AGM (CTU-Planning)**

## पावर ग्रिड कारपोरेशन ऑफ इंडिया लिमिटेड

(भारत सरकार का उद्यम)

POWER GRID CORPORATION OF INDIA LIMITED

(A Government of India Enterprise)



केन्द्रीय कार्यालय : "सौदामिनी" प्लॉट सं. 2, सेक्टर-29, गुडगाँव-122 001, हरियाणा

फोन : 2571700 - 719 फैक्स : 2571760, 2571761 तार 'नेटग्रिड'

Corporate office : "Saudamini" Plot No. 2, Sector-29, Gurgaon-122 001 Haryana

Tel. : 2571700 - 719, Fax : 2571760, 2571761 Gram : 'NATGRID'

संदर्भ संख्या / Ref. Number

C\CTU-Plg\S\CEA\Hoodi

Date: 29-04-2015

**Shri K.K Arya**

Chief Engineer (SP & PA),  
Central Electricity Authority  
Sewa Bhawan, RK Puram  
New Delhi - 110 066.

**Sub: Bays at Hoodi substation**

Sir,

This is with reference to the scheme "Additional inter-Regional AC link for import into Southern Region i.e. Warora - Warangal and Chilakaluripeta - Hyderabad - Kurnool 765kV link" which is being implemented through TBCB route. In this regard, it may be mentioned that M/s KPTCL is to provide two nos. of 400kV line bays along with 63 MVAR switchable line reactors at Hoodi (KPTCL) substation for termination of Cuddapah-Hoodi 400kV (Quad) D/c line. However as per the information available from our site office, space constraint exists for provision of referred bays at Hoodi KPTCL substation.

The issue may be reviewed at your end and taken up with KPTCL.

Thanking you,

Yours faithfully,

*Mukesh Khanna*  
28/4/15  
(Mukesh Khanna)  
AGM (CTU-Planning)

(We have kept a copy of this letter to TBCB group.)  
28/4/15

CB (ST/4/15)

Shri P.J.  
*[Signature]*  
K.K. Arya

पंजीकृत कार्यालय : बी-9, कुतब इंस्टीट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली-110016 दूरभाष : 26560121 फैक्स : 011-26560039 तार 'नेटग्रिड'  
Registered Office : B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016 Tel. : 26560121 Fax : 011-26560039 Gram : 'NATGRID'

स्वहित एवं राष्ट्रहित में ऊर्जा बचाएं

Save Energy for Benefit of Self and Nation

CIN : L40101DL1989GOI038121

**KARNATAKA POWER TRANSMISSION CORPORATION LIMITED**

Telephone: 080-22210416

Fax : 080-22292204



Office of the  
Chief Engineer Electy.,  
Planning & Co-ordination,  
Kaveri Bhavan, Bangalore-9

No. CEE (P&amp;C)/SEE(Plg)/EE(PSS)KCO-97/34318/2015-16

Date: 30<sup>th</sup> July, 2015

4378-4375

1 AUG 2015

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

Sir,

Sub: Construction of 400 kV DC Quad line between Hoody and Cudappah-reg.

Ref: 1) Letter no. KREDL/07/SP/F-02/2015/613 dated 27-02-2015 of M/s KREDL

(Copy enclosed).

2) T.O Letter no. CEE(P&C)/SEE(PLG)/EE(PSS)/KCO-97/16068/2014-15/  
14741-744 dated 20<sup>th</sup> March, 2015.

Mr. Srinani  
12/8/15

Apropos to the above, there is a proposal for construction of 400 kV DC Quad Moose link line between Cudappah 400 kV sub-station and Hoody 400 kV sub-station which is approved in the 36<sup>th</sup> Meeting of the Standing Committee on Power System Planning of Southern Region as part of system strengthening scheme within SR to increase capacity of the transmission system for importing power in to SR.

In this context, it is to be stated that bringing 400 kV line in to Hoody is not feasible since 400/220 kV Hoody sub-station is located in densely populated and fast growing area. Hence 400 kV connectivity from Cuddapah to any of the other 400 kV sub-station instead of Hoody needs to be explored by conducting detailed system study considering the upcoming 2000 MW solar power generation near Pavagada in Tumkur District of Karnataka. (letter under reference)

KPTCL is establishing 2 X 100 MVA, 220/66 kV sub-station at Devanahalli Hardware Park for M/s Karnataka Industrial Areas Development Board at an estimated cost of Rs 50 Crores and also there is a proposal to establish 2 X 100 MVA, 220/66 kV sub-station at

O/o Member (Power System)  
Dy. No. : 1632  
Date : 11/8/15

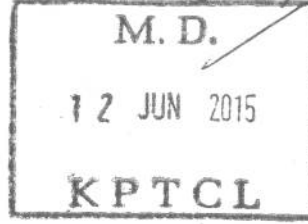
CE/SP/PA -  
11/8/15



ಕರ್ನಾಟಕ ನವೀಕರಿಸಬಹುದಾದ ಇಂಧನ ಅಭಿವೃದ್ಧಿ ನಿರ್ಮಿತ  
KARNATAKA RENEWABLE ENERGY DEVELOPMENT LIMITED  
(Government of Karnataka Undertaking)

KREDL/07/SP/ED/2015-16/2170

To,  
The Additional Chief Secretary,  
Energy Department, GoK,  
Bengaluru- 560001



Dated: 11-6-2015

Respected Sir,

Sub: SECI proposal to set up 250MW capacity of solar power project in upcoming  
Karnataka Solar Park with its own investment/other CPSUs investment- Reg  
Ref: SECI letter No. SECI/MD/KSP/15/3180 dated: 01.06.2015 addressed to  
ACS,ED,GoK

Inviting reference to the above, vide their letter SECI has stated that they are currently engaged in implementation of MNRE Schemes under which they have come up with the new Scheme in Kerala Solar Park. It is stated that a tripartite agreement involving KSEB, THDC/IREDA and SECI has recently been signed to set up 2\*50MW grid connected solar power projects in Kerala Solar Park being developed at Kasaragod District. The entire solar power will be purchased by KSEB at a tariff to be based on cost plus basis through a competitive bidding for EPC, after approval by appropriate Regulatory Commission. In a similar way, SECI has proposed to set up 250MW capacity of solar power project in the upcoming Karnataka Solar Park with its own investment/other CPSUs investment. The power generated under this scheme has to be purchased by ESCOMs, by entering in to agreement with THDC/IREDA and SECI.

In view of the above, acceptance/consent of ESCOMs for purchase of power generated from this scheme is required. This is for your kind information and instruction regarding further course of action to be initiated.

Yours faithfully,

Managing Director

Copy to,

1. The Managing Director, M/s. Soalr Energy Corporation of India, 1<sup>st</sup> Floor ,D-3 A Wing, Religare Building District Center, Saket New Delhi- 110017-for information.
2. MD, KPTCL/PCKL/BESCOM/CESC/MESCOM/HESCOM/GESCOM for kind information and needful.



# KARNATAKA POWER TRANSMISSION CORPORATION LIMITED

Telephone: 080-22210416

Fax : 080-22292204



Office of the  
Chief Engineer Electy.,  
Planning & Co-ordination,  
Kaveri Bhavan, Bangalore-9

**No. CEE (P&C)/SEE(Plg)/EEE(PSS)/KCO-97/16068/2014-15**

**Date:**

The Director (Projects)  
Power Grid Corporation of India Ltd,  
"Saudamani", Plot. No. 2, Sector-29,  
Gurgaon 122 001, Haryana.

14741-744

20 MAR 2015

Sir,

**Sub : Evacuating power from the proposed 2000 MW Solar Park at Pavagada Taluk, Tumakuru District, Karnataka**

**Ref : Letter No: KREDL/07/SP/F-02/2015/613/ Date: 27-02-2015.**

\*\*\*\*\*

Inviting your reference to the above, it is to be stated that Karnataka Renewable Energy Development Limited (KREDL), Bengaluru, Karnataka, has informed vide their letter cited in reference that M/s KREDL in joint venture with Solar Energy Corporation of India (SECI), New Delhi, has proposed to develop 2000 MW Solar park at Pavagada Taluk, Tumakuru District of Karnataka by 2018 in a phased manner.

Further they have proposed to develop 500 MW solar park in the first phase, by 2016, mentioning that the 400kV station/evacuation line to inject the power generated by proposed solar park to the grid will be in the scope of PGCIL and has requested KPTCL to conduct load flow studies in order to assess the requirement of strengthening of existing KPTCL network including stations and lines.

In this regard, you are requested to share the load flow study results and the finalized evacuation scheme of proposed Solar Park at Pavagada Taluk, Tumakuru District, Karnataka, to this office in order to take up the downstream system strengthening.

Yours faithfully,

  
Chief Engineer Electy.,

(Planning & Co - ordination)

Copy to:

1. The Managing Director, KREDL, No. 39, "Shanti Gruha", Palace Road, Bangalore-560001.