



Annex-Agenda-11-1

**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/S/PLG

Date: 2<sup>nd</sup> June, 2016

Shri Pradeep Jindal,  
Chief Engineer (PSPA-II),  
Central Electricity Authority,  
SewaBhawan, R K Puram,  
New Delhi - 1100 066.

Sub: Approval for temporary arrangement at Bidadi GIS for connecting one Circuit of 400 kV D/c Tumkur(Vasanthanarasapura)-Bidadi Quad line with one circuit of 400 kV D/c Bidadi - Neelamangala Twin Line

*Ms. Shivani D. D.*  
*P. L. D. S.*  
*8/6/2016*

Dear Sir,

Kudgi Transmission Limited has informed that 400 kV D/c Tumkur(Vasanthanarasapura) - Bidadi line associated with NTPC Kudgi generation project is expected to be completed by June'16. Bays for termination of the lines are under implementation by POWERGRID and are expected by September, 2016. Considering the mismatch between completion of the line & associated bays, following contingency arrangement is proposed for charging & utilization of lines :

- For termination at Bidadi GIS, it is proposed to interconnect one circuit of 400 kV D/c Tumkur(Vasanthanarasapura) - Bidadi Quad line with one circuit of existing 400 kV D/c Bidadi - Nelamangala line and the remaining circuit from Tumkur(Vasanthanarasapura) will be terminated at Bidadi GIS utilizing the vacated bay.
- For termination at Tumkur(Vasanthanarasapura) S/S, available bays of 400 kV D/c Tumkur(Vasanthanarasapura) - Yelahanka line can be utilized(as this line is presently struck up in ROW issues) for 400 kV D/c Tumkur(Vasanthanarasapura) - Bidadi line.

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

The arrangement will result in following configuration :

- i. 400 kV S/c Tumkur-Nelamangala Line- Length 129 km
- ii. 400 kV S/c Tumkur-Bidadi Line- Length 93 km
- iii. 400 kV S/c Bidadi – Nelamangala line – Length : 37 km (rio change)

The original & proposed temporary arrangement is shown in Exhibit-I. It may be mentioned that proposed arrangement will provide alternate path & relieve loading on critical lines such as 400 kV S/c Gooty-Somanahally, 400 kV S/c Gooty – Nelamangala, 400 kV D/c Hiriyyur – Nelamangala and 400 kV D/c Kolar - Hoody lines. The contingency arrangement is temporary and would be restored once the under construction bays are commissioned. It is requested that in-principle approval may be given to proceed with the arrangement.

Thanking you,

Yours faithfully,

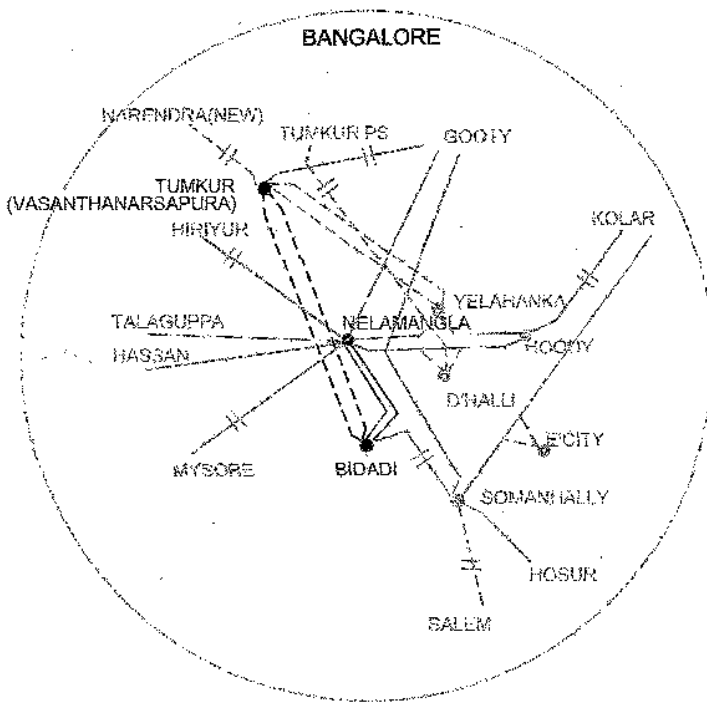
  
(Mukesh Khanna)

AGM (CTU-Planning)

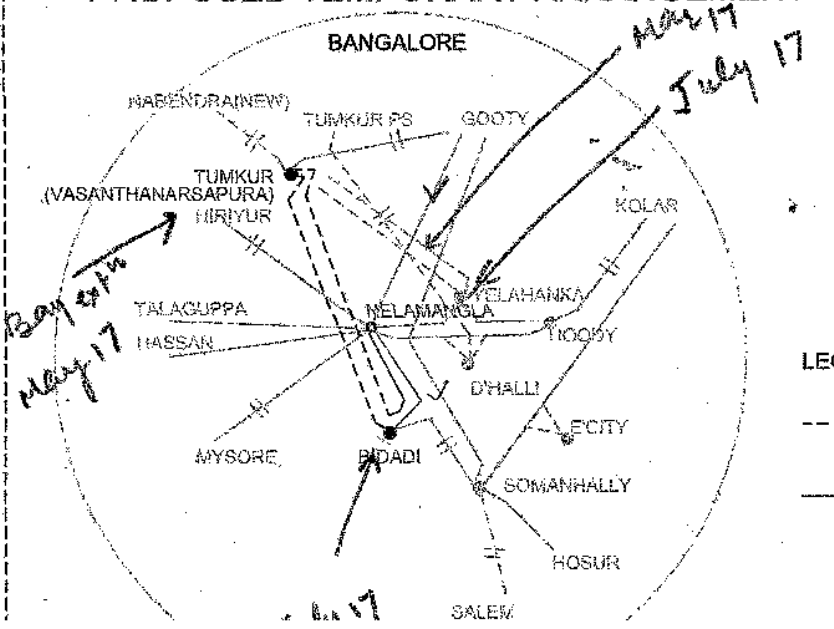
EXHIBIT-I

TEMPORARY ARRANGEMENT AT BIDADI GIS

ORIGINAL ARRANGEMENT



PROPOSED TEMPORARY ARRANGEMENT

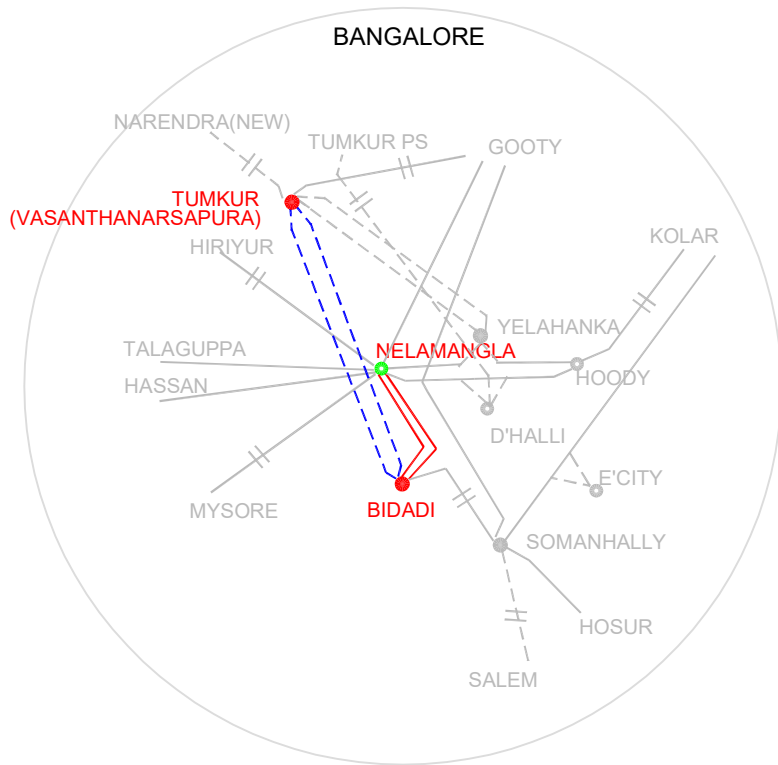


LEGEND

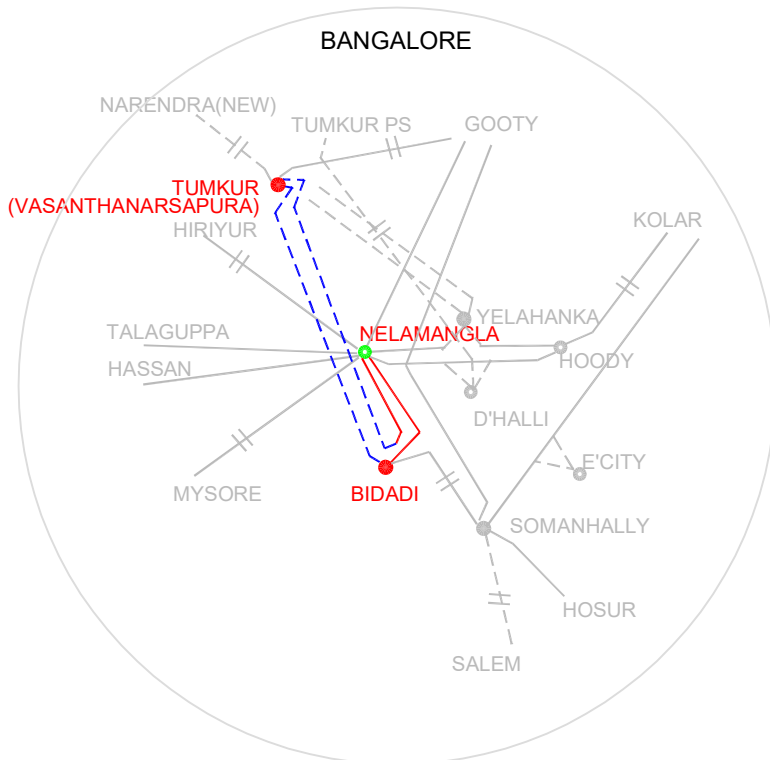
- TBCB LINE UNDER CONSTRUCTION
- POWERGRID LINE
- POWERGRID SUBSTATION
- VITAL SUBSTATION

### TEMPORARY ARRANGEMENT AT BIDADI GIS





#### ORIGINAL ARRANGEMENT



#### PROPOSED TEMPORARY ARRANGEMENT



#### LEGEND

-  TBCB LINE UNDER CONSTRUCTION
-  POWERGRID LINE
-  POWERGRID SUBSTATION
-  KPTCL SUBSTATION



केंद्रीय विद्युत प्राधिकरण  
**Central Electricity Authority**  
विद्युत प्रणाली योजना एवं मूल्यांकन -2 प्रभाग  
**Power System Planning & Appraisal -2 Division**  
सेवा भवन, रा. कृ. पुरम, नयी दिल्ली - 110066  
**Sewa Bhawan, R. K. Puram, New Delhi-110066**



[ISO:  
9001:2008]

No. 51/4/2016(40<sup>th</sup>)/PSPA-2/ 111-115

Dated 05.08.2016

To

1. Sh Mukesh Khanna, AGM(CTU-Planning) Power Grid Corporation of India Ltd., "Saudamini" Plot no-2, Sector-29, Gurgram- 122001, Haryana	2. Sh Nallarasan, DGM, POSOCO., B-9, Qutub Institutional Area, Katwaria Sarai, New Delhi-110016
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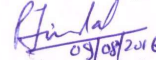
**Subject: Minutes of the meeting regarding "Temporary arrangement at Bidadi GIS for connecting one circuit of 400kV Tumkur(Vasanthanarasapura)-Bidadi Quad line with one circuit of 400kV DC Bidadi -Neelamangala Twin line " held on 02 August, 2016 in CEA.**

Sir/Madam,

A meeting was held on 2<sup>nd</sup> August, 2016 (Tuesday) in Central Electricity Authority in Sewa Bhawan, R. K. Puram, New Delhi to discuss issues regarding **"Temporary arrangement at Bidadi GIS for connecting one circuit of 400kV Tumkur(Vasanthanarasapura)-Bidadi Quad line with one circuit of 400kV DC Bidadi -Neelamangala Twin line "**.

The minutes of the meeting is enclosed herewith.

Yours faithfully,



(Pardeep Jindal)

Chief Engineer (PSPA-2)

**Copy to:**

1. COO,(CTU-Planning) Power Grid Corporation of India Ltd., "Saudamini" Plot no-2, Sector-29, Gurgram- 122001, Haryana	2. CEO, POSOCO, B-9, Qutub Institutional Area, Katwaria Sarai, New Delhi-110016
3. MS(SRPC) 29, Race Course Cross Road, Bangalore 560 009. FAX : 080-22259343	

Minutes of the Meeting on "Temporary arrangement at Bidadi GIS for connecting one circuit of 400kV Tumkur(Vasanthanarasapura)-Bidadi Quad line with one circuit of 400kV DC Bidadi -Neelamangala Twin line " held on 2<sup>n</sup> August, 2016 in the Office of Chief Engineer(PSPA-2), CEA, New Delhi

1. A meeting was held in CEA regarding- **Temporary arrangement at Bidadi GIS for connecting one circuit of 400kV Tumkur(Vasanthanarasapura)-Bidadi Quad line with one circuit of 400kV DC Bidadi -Neelamangala Twin line .** The meeting was participated by representatives of CEA, CTU, and POSOCO. List of participants is enclosed at Annex I.
2. Chief Engineer (PSPA-2 Division), welcomed the participants and requested AGM, PGCIL to inform about the issue. .
3. POWERGRID informed that the following transmission lines associated with NTPC Kudgi generation project are being implemented by Kudgi Transmission Limited.
  - i. Narendra(New) – Tumkur(Vasanthanarasapura) 765kV D/c line(charged at 400kV)
  - ii. Tumkur(Vasanthanarasapura) – Bidadi 400kV Quad D/c line.
4. POWERGRID further informed that Kudgi Transmission Limited has communicated that Tumkur(Vasanthanarasapura) – Bidadi 400kV Quad D/c line is ready for charging. However, line bays at Madhugiri and Bidadi for Tumkur(Vasanthanarasapura) – Bidadi 400kV Quad D/c line are expected by November, 2016
5. Considering the mismatch in completion of line and the associated bays, for termination at Bidadi GIS, PGCIL proposed to interconnect one circuit of 400kV Tumkur(Vasanthanarasapura –Bidadi line Quad line with one circuit of existing Bidadi- Neelamangla line and the remaining circuit from Tumkur(Vasanthanarasapura)will be terminated at Bidadi GIS utilizing the vacated bays.

He further said that for termination at Tumkur(Vasanthanarasapura) S/S, the 400kV bays available for 400kV DC Tumkur(Vasanthanarasapura)- Yelahanka line can be utilized, as this line is stuck up in RoW issue for 400Kv Tumkur (Vasanthanarasapura) –Bidadi line.

The arrangement will result in following configuration:

- i. 400 kV S/c Tumkur-Nelamangala Line- Length 129 km
- ii. 400 kV S/c Tumkur-Bidadi Line- Length 93 km
- iii. 400 kV S/c Bidadi – Nelamangala line – Length : 37 km (no change)

The original and proposed temporary arrangement is depicted at **Annexure-I**. Study has been carried out with the proposed arrangement and results are enclosed at **Exhibit-I,II&III**



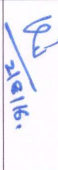


6. POSOCO opined that the Gooty- Tumkur- Bidadi 400kV DC line is parallel path to the 400kV Gooty- Nelamangala and Gooty-Somanhally 400 kV S/c lines. There is reduction in flow on 400kV Gooty- Nelamangala and Gooty-Somanhally and Hiriyr – Nelamangala lines with the above proposed arrangement.

He said that allowing this rearrangement may be having advantage compared to current scenario, however bay construction at 400kV Bidadi, for restoring to intended final configuration of lines, may be accelerated.

7. Chief Engineer(PSPA-2),CEA enquired about physical arrangement of bays at Tumkur(Vasanthanarasapura) & Bidadi and time required for restoring to the original arrangement after commissioning of bays at Bidadi. POWERGRID site representative explained physical arrangement of bays and informed that restoration to the original arrangement may take about 2 days.
8. CEA also enquired about the status of bays for termination of Narendra(New) – Tumkur(Vasanthanarasapura) 765kV D/c line(charged at 400kV) at POWERGRID Substations. POWERGRID informed that construction of these bays at Narendra(New) & Tumkur(Vasanthanarasapura) is completed and ready for charging
9. POSOCO opined that as the commissioning of Narendra(New) – Tumkur(Vasanthanarasapura) line is expected after commissioning of Tumkur(Vasanthanarasapura) - Bidadi line, study need to be carried out with and without Narendra(New) – Tumkur(Vasanthanarasapura) line. Study results are enclosed at **Exhibit-IV**.
10. After further discussions the rearrangement was agreed. POWERGRID will restore the final configuration by Nov 2016 i.e: Tumkur(Vasanthanarasapura) – Bidadi 400kV Quad D/c and Bidadi – Nelamangala 400kV DC line.

## Annex - 1

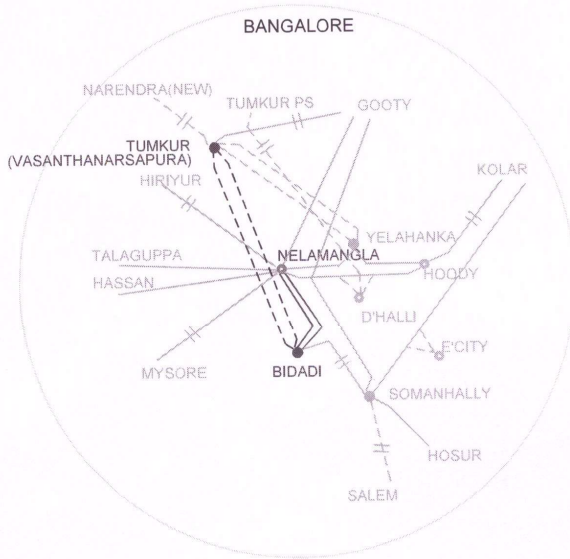
List of the participants of meeting, held on 02-08-2016 at CE (PSPA-2) room CEA, New Delhi.

Sl.No.	Name of the Participant	Designation	Organisation	Contact No	E-mail ID	Signature
1	V.H.S. PRATAP H. YERU BARDI	Sr. Engr (CTU-PJ)	POWERGRID	9560890012	svmspratik@powergrid.in powergrid.in@gmail.com	
2	MUKESH KHANNA	AAM CETO-PJ	POWERGRID	9910378098	mkhanna@powergrid.in powergrid.in@gmail.com	
3	K. Kiran	mgr (proj), sec-2	POWERGRID	9949596044	kiran.kanjula@gmail.com	
4	A. K. Vatsik	Consultant	Powergrid	9910999164	ajai.ku@hotmail.com	
5	N. NALLARASAN	DGM,	POSOCO	9827077022	nallarasan@posoco.in	
6	Randeep Sindal	CE	CEA			
7	Shivani Sharma	DD	CEA			
8	Ajay Kumar	AD	CEA			
9						
10						
11						

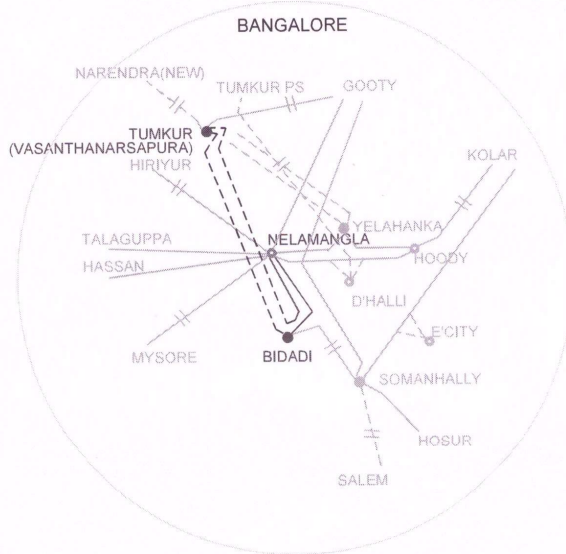


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ORIGINAL ARRANGEMENT



PROPOSED TEMPORARY ARRANGEMENT



LEGEND

- TCB LINE UNDER CONSTRUCTION
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