

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 सं० 2, सेक्टर-29, गुडगाँव-122 001, हरियाणा
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संदर्भ संख्या/Ref. No.

C/CTU-PLG/N/C<A

Date: 19/02/2014

To

As per list attached

**Sub: Minutes for Connectivity/Long Term Access Meeting held on 23/12/2013
at NRPC Office, Delhi.**

Sir,

The Connectivity/Long Term Access Meeting was held on 23/12/2013 at NRPC Office, Delhi along with 33rd Standing Committee Meeting of Power System Planning of Northern Region. Various Long Term Access applications for transfer of power to Northern Region & Connectivity of generation to Northern Regional Grid were discussed. Please find enclosed the minutes for the same.

Thanking You,

Yours Faithfully,

Mukesh Khanna
19/2/14

(Mukesh Khanna)

DGM (CTU-Planning)

Copy to:

- GM I/c (Commercial)
- GM (NRLDC)

LIST OF ADDRESSES

1) Chairperson & Member(PS), CEA, Sewa Bhawan, R.K. Puram, New Delhi –110066	2) Chief Engineer (SP& PA), CEA, Sewa Bhawan, R.K. Puram, New Delhi –110066
3) Member Secretary, NRPC, 18-A, Qutab Institutional Area, Shaheed Jeet Singh Marg, Katwaria Sarai, New Delhi-110 016	4) CEO, POSOCO, B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi – 110016
5) Development Commissioner (Power), Power Development Department, Grid Sub Station Complex, Janipur, Jammu - 180 001	6) Director, H.P. Power Transmission Corporation Ltd. Barowalias House, Khalini, Shimla – 171002
7) Sh. S.K. Garg, Director(Transmission), UPPCTL, 3 rd Floor, Shakti Bhawan Extn, 14, Ashok Marg, Lucknow-226 001	8) Sh. Prem Prakash, GM(Technical), Delhi Transco Ltd., Shakti Sadan, Kotla Marg, New Delhi-110 002
9) Director(Technical), Punjab State Transmission Corporation Ltd. (PSTCL), Head Office, The Mall, Patiala-147001	10) Sh L.N. Nimawat, CE(MM), RRVPNL, Vidyut Bhawan, Jyoti Nagar, Janpath, Jaipur, Rajasthan-302005
11) Sh. Gurcharan Singh, CE(P), Power Transmission Corporation of Uttarakhand Limited(PTCUL), Vidyut Bhawan, Saharanpur Road, Majra, Near ISBT, Dehradun- 248001,Uttarakhand	12) Sh. J.K. Juneja, Chief Engineer(Planning), HVPNL, Shakti Bhawan, Sector-6, Panchkula-134109, Haryana
13) Sh. M.P Singh, Superintending Engineer, Electricity Operation Circle, Room No.-511, 5 th Floor, Delux Building, Sector-9D, U.T Chandigarh.	14) GM(Electrical), NTPC Ltd., NTPC Bhawan, Core-7, Scope Complex-6, Institutional area, Lodhi Road, New Delhi- 110003
15) DGM, Himachal Pradesh Power Corporation Ltd., Shanti Kutir, Kamna Nagar, Chakkar, Shimla, H.P.-171005	16) GM, Noida Power Company Ltd., Commercial Complex, H-Block, Sector Alpha-II, Greater Noida, U.P.
17) Mr. Rahul Goyal, Managing Director, Gamma Infraprop (P) Limited, M-3, First Floor, Hauz Khas, Aurbindo Marg, New Delhi-110016.	

Minutes for Connectivity/ Long Term Access Meeting with Northern Region Constituents held on 23/12/2013 at NRPC Office, Delhi.

CTU welcomed all the participants to the Connectivity/Long Term Access (LTA) meeting of Northern region and informed that following new Connectivity/ LTA applications need to be discussed. In addition to new applications, certain modifications/extensions of already granted LTA was also deliberated.

The Connectivity/LTA applications discussed in the meeting were:

1. Connectivity and LTA to Faridabad Solar PV (5 MWp) Plant of M/s NTPC Limited in Haryana.
2. Connectivity and LTA to Sawra Kuddu HEP & Sainj HEP of M/s HPPTCL in Himachal Pradesh.
3. Connectivity & LTA to Singrauli Small Hydro (2X4MW) Plant & Singrauli Solar (15MW) Plant of M/s NTPC Limited in Uttar Pradesh.
4. Connectivity and LTA for Gama HEP
5. Long Term Access for 500MW to Noida Power Company Limited (NPCL)
6. Integrated transmission system in Uttarakhand being implemented by PTCUL

List of participants is enclosed at Annexure-I

Details of the discussions held are as below.

1. **Connectivity & LTA to Faridabad Solar PV (5 MW) Plant of M/s NTPC Ltd. in Haryana.**
 - 1.1. POWERGRID informed that the connectivity and LTA for Faridabad Solar PV Plant (5 MW) located at Faridabad Gas Based Generation project in Haryana to GRIDCO Ltd., Odisha in ER was discussed in the last Connectivity/LTA meeting. As per the connectivity application, the Solar power is pooled at 33kV & further connected through the existing electrical system of 220 kV Faridabad generating station. Accordingly, no transmission system was proposed for connectivity for 5MW.
 - 1.2. Regarding connectivity of the Faridabad Solar PV project CTU informed that the transmission lines emanating from existing Faridabad generating station are owned by POWERGRID and are ISTS lines hence connectivity to the Solar project can be

granted by the CTU. However, presently the Faridabad Gas generating station, which is the lead generator for Faridabad Solar Generation is an intrastate entity and scheduling/ metering etc for the lead generator is done by the State. CTU further proposed to grant the connectivity to 5 MW solar project, however the connection agreement shall be signed in coordination with HVPNL so that the issues of communication, metering etc are addressed. All the constituents including HVPNL agreed to the proposal.

1.3. NTPC insisted that the scheduling must be through NRLDC. The matter was discussed & agreed that as the Solar Plant at Faridabad is embedded in the Haryana Transmission System, its scheduling shall also be done by Haryana SLDC in accordance with the provisions of relevant regulations.

1.4. After the discussions, it was agreed that Connectivity for 5 MWp from Faridabad Solar PV Plant of M/s NTPC Ltd. shall be granted through existing system subject to:

- Under ISTS 2 nos. of 220 kV D/c lines, one D/c line towards 220 kV Samaypur Substation of BBMB and other line towards 220 kV Palla S/S of HVPNL is available from Faridabad 220kV switchyard. Further LILO of one circuit of 220 kV A5-A4 D/c line at Faridabad generating station by HVPNL has been approved in the 31st standing committee meeting.
- Presently metering & communication is under the purview of Haryana, as Lead generator is under the control area of Haryana.
- No new equipment is to be installed by CTU.
- Additional meters to be installed by Haryana.
- Connection agreement is to be signed in coordination with HVPNL.
- Connectivity is subject to all applicable conditions as listed in **Annexure-A**.

1.5. CTU further stated that M/s NTPC Ltd. has also applied for Long term Access (on behalf of GRIDCO) for transfer of 5MW power from Faridabad Solar PV Plant (5 MWp) to GRIDCO Limited, Odisha in Eastern Region. LTA has been sought w.e.f. 1/12/2013 upto 1/12/2038.

1.6. COO, CTU stated that existing Faridabad generation is a NTPC generation and entire power is allocated to Haryana and power from Faridabad generation project is being scheduled by Haryana. It was deliberated that as the lead generator is an intra state entity therefore the Faridabad Solar PV would also be the intra-state

entity. Accordingly NTPC shall have to submit the NOC from state utility as per the approved Detailed Procedure on grant of Connectivity, Long-term Access & Medium-term Open Access.

- 1.7. POWERGRID stated that as per 'Detailed Procedures of Central Transmission Utility under Regulation 27 (1) of the Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) Regulations, 2009'.

“In case an intra-State entity is applying for LTA, concurrence of concerned State Transmission Utilities of states having injection and drawl points shall be obtained in advance in the prescribed format [FORMAT-LTA-3] and attached with the application”

- 1.8. LTA is proposed to be granted to NTPC Faridabad Solar project as margins are available subject to that NTPC shall submit the NOC from State Utility as per the approved Detailed Procedure on grant of Connectivity, Long-term Access & Medium-term Open Access. Its control area & scheduling would be as per IEGC & other relevant regulations in this regard.

- 1.9. Long Term Access for 5 MWp solar power from Faridabad Solar PV Plant of M/s NTPC Ltd. was agreed to be granted subject to:

- Grant of Connectivity.
- Submission of NOC from State utility as per the approved Detailed Procedure on grant of Connectivity, Long-term Access & Medium-term Open Access.
- Signing of requisite Long Term Access Agreement and TSA for payment of the transmission system charges, as applicable, by GRIDCO Limited in case of firm PPA with GRIDCO is available or by NTPC Ltd in case PPA is not available.
- All Connectivity and LTA conditions are applicable.

2. Connectivity and LTA to Sawra Kuddu HEP & Sainj HEP of M/s HPPTCL in Himachal Pradesh.

- 2.1. HPPCL had been granted Connectivity and Long Term Access for their Sawra Kuddu HEP (111MW) and Sainj (100MW) in Himachal Pradesh. During the Connectivity/Long Term Access meeting and 31st Standing Committee Meeting of

Power System Planning of Northern Region held on 02.01.2013, it was discussed and agreed that HPPCL shall sign all required agreements within 6 month of issue of minutes and in case required agreements are not signed then the application would be closed as per CERC regulations.

- 2.2. HPPCL confirmed for signing of LTA agreement within next 4 months.
- 2.3. HPPCL confirmed the commissioning schedule of Sainj HEP as December 2014.

Members noted the same.

3. Connectivity & LTA to Singrauli Small Hydro (2X4MW) Plant & Singrauli Solar (15MW) Plant of M/s NTPC Limited in Uttar Pradesh.

- 1.1. POWERGRID stated that M/s NTPC Ltd. had applied for connectivity and LTA for 8MW Singrauli hydro Generation project located at existing Singrauli generation project of NTPC. The application was processed as per CERC regulations. Connectivity & LTA was discussed and agreed to be granted during the Connectivity and Long term Access meeting held on 31/08/2013.
- 1.2. POWERGRID informed that subsequently, NTPC has applied connectivity and LTA application for 15MW Solar Plant at Singrauli generation project. While processing the applications, it was noted that Hydro and Solar are connected at different locations (as seen from the drawing attached with the applications) within existing Singrauli project. Further, as per Statement of Reasons of CERC (Grant of Connectivity, Long term Access and Medium-term Open Access in inter-State Transmission and related matters) (Third Amendment) Regulations, 2013, it is stated under para-21

"It may also be possible that the existing generating station may have more than one renewable generating plant in the generating station premise or near its plant facilities. In such situation the existing generating station should act as "Principal Generator" and all such renewable generating stations shall be inter connected one single point for the purpose of scheduling and metering. "

- 1.3. Keeping above in view, the issue has been put up to CERC to decide whether the connectivity can be granted for the above renewables, when they are being pooled at two different points within the existing generation. Also, in this case one is a hydro

generation and other is a solar generation. As per CERC (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010

"No transmission charges for the use of ISTS network shall be charged to solar based generation. This shall be applicable for the useful life of the projects commissioned in next three years."

If metering is done at a single point, segregation of the energy generated cannot be done by solar and hydro generations which would be required for calculating transmission charges and losses.

- 1.4. Direction has been sought from CERC. Connectivity and LTA intimation of Singrauli Hydro shall be issued based on directions from CERC, Similarly present Singrauli solar connectivity and LTA application shall also be processed accordingly.

Members noted the same.

4. Connectivity and LTA for Gama HEP

5. Long Term Access to M/s Gama Infraprop (P) Limited for 50 MW power transfer beyond Kashipur was agreed in the 30th SCM of NR. PTCUL had agreed that connectivity to M/s Gama Infraprop (P) Ltd. shall be provided by them with LILO of Kashipur – Pant Nagar 220 kV S/c line. The applicant had to submit the NOC from STU, i.e. PTCUL, in standard format to POWERGRID, after which LTA Intimation would be issued. POWERGRID informed that it has not received the NOC till date for the LTA. DGM, CTU asked M/s Gama Infraprop (P) Ltd. for the status of the project. M/s Gama Infraprop (P) Ltd. informed that gas for the project is not yet available. Director, CEA enquired PTCUL to inform when they would grant the NOC to M/s Gama Infraprop (P) Ltd. PTCUL Representative stated that it would inform the requirement of NOC to the concerned department for issuing the same as soon as possible. Matter shall be deliberated again after receipt of NOC.

6. Long Term Access for 500 MW drawl of power to Noida Power Company Limited (NPCL)

- 5.1 Director (SP&PA), CEA stated that during the 31st Standing committee meeting, Noida Power Company Ltd. (NPCL)'s application for connectivity for drawl of 500MW power for distribution in Greater Noida area in Uttar Pradesh was discussed. During

the meeting, it was informed that M/s NPCL had executed a Long Term PPA with M/s Essar Power (Jharkhand) Ltd for procurement of 240 MW power from April 2014 for 25 years and CTU had already granted Long Term Access of 400 MW (for Target Beneficiaries) in Northern Region to M/s Essar Power (Jharkhand) Ltd and they have requested to approve / provide LTA of 240MW to NPCL being the actual beneficiary, out of total approved 400MW LTA in NR. Presently 400/220 kV, 3x315MVA transformers are installed at Greater Noida substation of UPPTCL and the transformers are loaded heavily and to meet the future power demand another substation is required in the area. Considering the requirement of UP and of Noida Power Company following system was agreed as system strengthening scheme NRSS-XXXIII, to be implemented through Tariff Based Competitive Bidding route:

- Ballabgarh – Greater Noida (New) 400 kV D/c (5 km from Ballabgarh S/s on multi-circuit towers)
- Establishment of 2x500 MVA, 400/220 kV GIS substation at Greater Noida (New) with a short circuit current rating of 50 kA.

5.2 Director (SP&PA), CEA informed that the above transmission strengthening scheme was to provide connectivity & LTA to Noida Power Company and additional drawl of power by UPPTCL to meet future load growth in Noida & Greater Noida area. He further intimated that the PPA of NPCL with M/s Essar Power had gone in dispute and presently being heard in UPERC and in view of this, the implementation of NRSS-XXXIII transmission scheme was put on hold.

5.3 UPPTCL stated that they do not require this proposed new 400/220 kV substation as they have their own plans for supply of power in this area. POWERGRID informed that NPCL has now applied for Long Term Access for 500 MW with target source from Western (400 MW) and Eastern Region (100 MW).

5.4 Regarding connectivity application of Noida Power Company it was decided that Noida Power Company is already connected to STU grid and additional connectivity could not be provided. As the Greater Noida substation was planned as system strengthening scheme, the additional connectivity to Greater Noida was agreed from New Greater Noida substation considering the constraints in the existing system. Regarding LTA application of Noida Power Company it was deliberated that the Noida Power Company is a State embedded entity and therefore for providing LTA

to Noida Power Company, NOC from STU (UPPTCL) is required as per the CERC regulations. It was decided that after receipt of NOC from UPPTCL, the LTA application shall be processed and discussed with the constituents. It was requested to UPPTCL for early processing of NOC to NPCL.

- 5.5 Thereafter, POWERGRID would submit the petition for regulatory approval from CERC for implementation of the above identified scheme. After approval from CERC, the scheme can be taken up for implementation. In view of the above, it was decided that the implementation of NRSS-XXXIII scheme would be kept on hold.

Members agreed with the same.

7. Timely development of Evacuation system for Tapovan Vishnugadh Hydro-electric project of NTPC

DGM (CTU), POWERGRID stated that during the 31st Standing Committee Meeting of NR, it was agreed that PTCUL would make all efforts to complete the Pipalkoti-Srinagar-Kashipur 400 kV D/c (Quad) line matching with the commissioning of Tapovan Vishnugad HEP to facilitate the evacuation of power from Tapovan Vishnugad HEP.

NTPC informed that Tapovan Vishnugad HEP would be commissioned by Feb. 2017. PTCUL was requested to inform the status of the Pipalkoti-Srinagar- Kashipur 400 kV D/c (Quad) line. PTCUL stated that works for Pipalkoti- Srinagar 400 kV D/c (Quad) line have been re-tendered and NIT would be issued next month and the works would be awarded by May'14 with 30 month time for commissioning of above line works. For Srinagar- Kashipur 400 kV D/c (Quad) line it was informed that the award of the work is expected in Dec.'13 with commissioning schedule of 30 months. PTCUL informed that both the lines would be ready by Dec.'16. Regarding statutory clearances for execution of above works, PTCUL informed that no reserved forest and wild life sanctuary is involved and Forest clearance has been taken.

COO, CTU stated that Tapovan Vishnugad being a Greenfield project, PTCUL would have to expedite the evacuation works matching with the project commissioning schedule.

CTU stated that post CERC decision in which the UITP scheme of Uttarakhand had been declared deemed ISTS, all developers need to apply for Long term access to POWERGRID. Regarding Lata Tapovan- Joshimath- Pipalkoti 220kV D/c lines

required for 171MW Lata Tapovan HEP (NTPC), 250MW Tamak Lata HEP (UJVNL) & other HEPs in Alaknanda Basin, POWERGRID requested that PTCUL may provide information whether the scheme was part of UITP scheme approved by CERC. NTPC informed that schedule for Lata Tapovan HEP is June'17. POWERGRID informed that no LTA application has been received as on date for the above projects. PTCUL was also requested to inform the status of connectivity applications received by them from other hydro generators. PTCUL agreed to provide the above details.

THDC informed that Vishnugad Pipalkoti HEP (444MW) is scheduled to be commissioned in Jan.'18. POWERGRID advised THDC to apply for connectivity and LTA for this project.

After detailed deliberations, it was decided to call a meeting on 15th Jan, 2014 with CEA, POWERGRID, NTPC, THDC, NHPC, SJVNL, UJVNL (Uttarakhand), IPPs etc. in Dehradun to look into the status of the UITP transmission system & the commissioning schedules of the generations to be evacuated. PTCUL would issue the meeting notice to all the forum members.

Annexure- A

Connectivity:

- The applicant shall abide by all provisions of the Electricity Act, 2003, CERC (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State transmission and related matters) Regulations, 2009, Central Electricity Authority (Technical Standards for connectivity to the Grid) and Indian Electricity Grid Code as amended from time to time.
- The connectivity shall be as per the Detailed Procedures of Central Transmission Utility (POWERGRID) for Grant of Connectivity, Long-term Access and Medium term
- The applicant shall furnish additional details for signing Connection Agreement for the same and would sign the Connection Agreement as per the provisions of Connectivity.
- As agreed in 30th Standing committee meeting 50 MVAR bus reactor would be provided by all the generators having capacity of more than 100 MW and 80 MVAR bus reactor would be provided by all the generators having capacity of more than 300 MW.

Annexure- B

Long Term Access:

- Long Term Access is being processed subject to the condition that the applicant/beneficiaries, bears all applicable transmission charges as per CERC norms for transfer of power.
- In all cases wherein PPA agreement has not been signed, all beneficiaries indicated shall be assumed as target beneficiaries.
- Signing the requisite LTA / TSA for Transmission system charges.
- The applicant shall abide by all provisions of the Electricity Act, 2003, CERC (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State transmission and related matters) Regulations, 2009, Approved Detailed procedure of CTU, CEA (Technical Standards for connectivity to the Grid) and Indian Electricity Grid Code as amended from time to time.
- The Long term Access shall be as per the Detailed Procedures of Central Transmission Utility (POWERGRID) for Grant of Connectivity, Long-term Access and Medium-term Open Access to Inter-State Transmission and all provisions regarding LTA would have to be met.

Annexure-I

List of participants for the Connectivity/Long term Access meeting held along with 32nd SCM of NR held on 31.8.2013 at NRPC, Delhi.

	Name	Designation
CEA		
1.	Smt. Neerja Mathur	Chairperson & Member(PS)
2.	Sh. K.K. Arya	Chief Engineer (SP&PA)
3.	Sh. B.K. Sharma	Director (SP&PA)
NRPC		
4.	Sh. P.K. Pahwa	Member Secretary
PGCIL		
5.	Sh. Y.K. Sehgal	COO (CTU)
6.	Sh. Mukesh Khanna	DGM(CTU)
7.	Sh. V. Thiagarajan	CDE(CTU)
8.	Sh. A. Sensarma	DGM (OS)
9.	Ms. R.P. Joshi	Sr. Engineer(CTU)
10.	Ms. Ankita Singh	Engineer (CTU)
11.	Sh. Nunavath Ravi	Engineer (CTU)
12.	Ms. Shruti Tiwari	Engineer (OS)
NTPC		
13.	Sh. S.S. Mishra	AGM (Engg.)
14.	Ms. Sagarika Mohanty	DGM (PE-Elect.)
DTL		
15.	Sh. A.C Agrawal	DGM(T)
16.	Sh. Roop Kumar	GM (Plg.)
HPPTCL		
17.	Sh.R.K Sharma	Director (Proj)
18.	Sh. Sandeep Sharma	Sr. Manager(Plg)
HVPNL		
19.	Sh. R.K. Arora	Advisor

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|-----|------------------|----------------------|
| 20. | Sh. R.C Malhotra | Director (Technical) |
| 21. | Sh. J.K. Juneja | CE(Plg) |
| 22. | Sh. S.B. Moudgil | Chief Engineer |

RVPNL

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|-----|--------------------|----------|
| 23. | Sh L.N. Nimawat | CE(PPM) |
| 24. | Ms. Sona Shishodia | XEN(PSS) |

J&K PDD

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|-----|---------------------|---------------|
| 25. | Sh. Asgar Ali Majaz | Dev. Comm.(P) |
| 26. | Sh. Sanjay Sharma | E.E |

POSOCO

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| 27. | Sh. S.K. Soonee | CEO |
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NLDC

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| 28. | Sh. S.R. Narasimhan | DGM |
| 29. | Sh. N. Nallarasam | DGM |

NRLDC

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|-----|---------------------|---------------|
| 30. | Sh. P. Mukhopadhyay | GM |
| 31. | Sh Rajiv Porwal | Chief Manager |

PSTCL

- | | | |
|-----|----------------|----------|
| 32. | Sh. Anil Gupta | ASE(Plg) |
| 33. | Sh. V.K Garg | CE(Plg) |

BBMB

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| 34. | Sh. Kuldeep Singh | Addl. SE |
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NPCL

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| 35. | Sh. S.S. Rizvi | General Manager |
|-----|----------------|-----------------|

APL

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| 36. | Sh. M. R. Krishna Rao | Vice President |
|-----|-----------------------|----------------|