सत्यमेव जयते

भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
उत्तर क्षेत्रीय विद्युत समिति
Northern Regional Power Committee

सं. उक्षेविस/ वाणिज्यिक/ 209/ आर पी सी (57वीं)/2022/7669-7716 दिनाँक: 26.08.2022

सेवा में / To,

उ.क्षे.वि.स. के सभी सदस्य (संलग्न सूचीनुसार)
Members of NRPC (As per List)

विषय: उत्तर क्षेत्रीय विद्युत समिति की 57वीं बैठक की कार्यसूची ।
Subject: Agenda for 57th meeting of Northern Regional Power Committee-reg

महोदय / Sir,

उत्तर क्षेत्रीय विद्युत समिति की 57वीं बैठक दिनांक **31 अगस्त, 2022** को **1100** बजे विडियो कोंफ्रेंसिंग के माध्यम से आयोजित की जाएगी । बैठक की कार्यसूची संलग्न है। बैठक का लिंक एंव पासवर्ड नियत समय पर ईमेल द्वारा उपलब्ध करा दिया जायेगा ।

The 57th meeting of Northern Regional Power Committee (NRPC) will be held at **1100 Hrs** on **31st August, 2022** via video conferencing. Agenda for the same is attached. The link and password for joining the meeting shall be sent in due course of time.

भवदीय
Yours faithfully,

Naresh

(नरेश भंडारी) 26/8/22
(Naresh Bhandari)
सदस्य सचिव
Member Secretary

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List of NRPC Members

1. Chairperson, NRPC & CMD, Delhi Transco Limited (DTL), Shakti Sadan, Kotla Marg, New Delhi-110002
2. MD, PTCUL, Dehradun-248001, (Fax- 0135-2764496)
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4. CMD, RRVPNL, Jaipur-302005, (Fax -01412740168)
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6. CMD, PSTCL, Patiala-147001, (Fax-0175-2307779)
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10. Chief Engineer, UT of Chandigarh, Chandigarh-160066, (Fax-0172-2637880)
11. Managing Director, DTL, New Delhi-110002, (Fax-011-23234640)
12. General Manager, SLDC, DTL, New Delhi-110002, (Fax-011-23221069)
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14. Chief Engineer (SO&C), SLDC, HVPNL, Panipat, (Fax-0172-2560622/2585266)
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16. Representative of DHBVNL (Haryana Discom)
17. Managing Director, HPSEB Ltd, Shimla -171004 (Fax-0177-2658984)
18. Managing Director, HPPTC Ltd, Himfed Bhawan, Shimla-171005, (Fax-0177-2832384)
19. Managing Director, HPSLDC, HP State Load Despatch Authority, Totu, Shimla, (Fax-0177-2837649)
20. Managing Director, J&K State Power Dev. Corp., Srinagar, J&K, (Fax-0194-2500145)
21. Chairman and Managing Director, PSPCL, Patiala-147001, (Fax-0175-2213199)
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26. Managing Director, UPRVUNL, Lucknow-226001, (Fax-0522-2288410)
27. Representative of MVVNL (UP Discom)
28. Managing Director, SLDC, PTCUL, Rishikesh, (Fax-0135-2451160)
29. Managing Director, UJVNL, Dehradun-248001, (Fax-0135-2763507)
30. Managing Director, UPCL, Dehradun-248001, (Fax-0135-2768867/2768895)
31. Director (Technical), NHPC, Faridabad-121003, (Fax-0129-2258025)
32. Director (Finance), NPCIL, Mumbai-400094, (Fax-022-25563350)
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35. CMD, SJVNL, New Delhi, (Fax-011-41659218/0177-2660011)
36. Director (Technical), THDC, Rishikesh-249201, (Fax-0135-2431519)
37. Director (Commercial), POSOCO, New Delhi-110016, (Fax-011-26560190)
38. ED, NRLDC, New Delhi-110016, (Fax-011-26853082)
39. CEO, Aravali Power Company Pvt. Ltd., NOIDA, (Fax-0120-2591936)
40. CEO, Jhajjar Power Ltd., Haryana, (Fax-01251-270105)
41. Representative of Lanco Anpara Power Ltd., (Fax-124-4741024)
42. Station Director, Rosa Power Supply Company Ltd., (Fax-05842-300003)
43. Director and head regulatory and POWER Sale, JSW Energy Ltd., New Delhi (Fax- 48178740)
44. COO, Adani Power Rajasthan Ltd., Ahmedabad-380006 (Fax No- 07925557176)
45. COO, Talwandi Sabo Power Ltd. Distt: Mansa, Punjab-151302(Fax: 01659248083)
46. MD, Lalitpur Power Generation Company Ltd., Noida-201301(Fax: 01204045100/555, 2543939/40)
47. Director (Commercial & Operations), PTC India Ltd., New Delhi (Fax- 01141659144,41659145)
48. CEO, Nabha Power Limited, (Fax: 01762277251 / 01724646802)
49. Representative of Prayagraj Power Generation Co. Ltd.
50. Representative of Greenko Budhil Hydro Power Private Limited (Member IPP<1000 MW)
51. Representative of TPDDL (Delhi Private Discom)

Special Invitee:

i. Member Secretary, WRPC, Mumbai-400 093.
ii. Member Secretary, SRPC, Bangalore-560 009
iii. Member Secretary, ERPC, Kolkata-700 033.
iv. Member Secretary, NERPC, Shillong-793 003.

Contents

उत्तरी क्षेत्रीय विद्युत समिति की 57वीं बैठक

57th MEETING OF NORTHERN REGIONAL POWER COMMITTEE

Time & Date of NRPC meeting: 11:00 HRS; 31st August, 2022

Venue: Video Conferencing

AGENDA

A.1 Approval of MoM of 56th NRPC meeting

A.1.1 Minutes of 56th NRPC meeting has been issued on 18.08.2022. No comment has been received till the date.

Members may kindly approve.

A.2 Connectivity of Shri Cement (Generator) to ISTS communication network (Agenda by CTU)

A.2.1 Shri Cement (Generator) which is LILOed of 400kV Kota – Merta line is presently connected with RLDC via GPRS & PLCC, and there is no fibre connectivity with ISTS Communication Network.

A.2.2 To provide connectivity of Shri Cement on ISTS Communication Network, it is proposed that OPGW can be installed along with terminal equipment on the following lines:

A. 400kV Kota – Merta D/C line (256kms.)

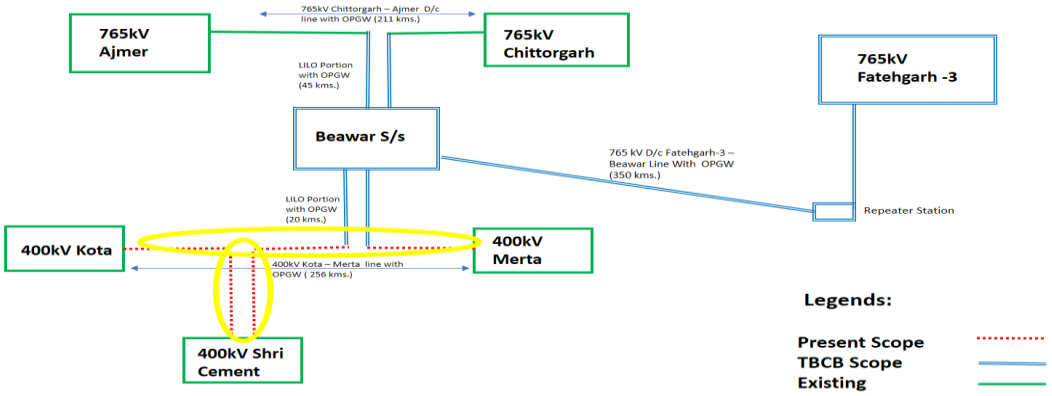
B. 400kV LILO of Kota – Merta line at Shri Cement (55 kms.)

A.2.3 Cost estimate for total 311 kms. (approx.) along with LILO portion is around Rs.14 Cr.

A.2.4 Further, LILO of Kota-Merta line is also proposed at upcoming ISTS Station at Beawar under TBCB scheme "Transmission system for evacuation of power from REZ in Rajasthan (20 GW) Phase III –Part F".

A.2.5 OPGW on the existing Kota-Merta line would also provide connectivity to the proposed Beawar S/s. OPGW on the LILO portion of Beawar S/s was considered under the scope of RFP of said TBCB scheme (Northern Region communication link map enclosed as **Annexure – A.I**).

Connectivity diagram of Shri Cement (Generator) to ISTS communication network



***Members may kindly deliberate*.**

A.3 Redundant communication path for Dulhasti (NHPC) Generator to ISTS communication network in view of AGC operation (Agenda by CTU)

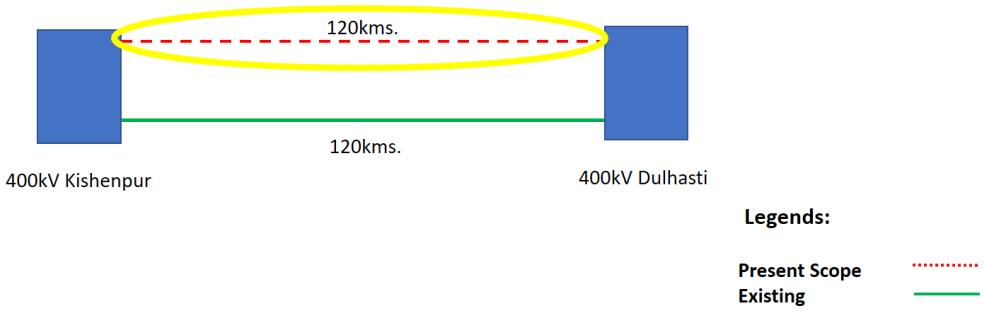
A.3.1 Presently Dulhasti (NHPC) generator is connected with single path via Kishenpur – Dulhasti S/s line with OPGW (on D/c Tower). As Dulhasti is radially connected and also on AGC operation, it is proposed to provide redundant communication path.

A.3.2 A separate 400kV Kishenpur-Dulhasti S/c line is available, where OPGW is not available. Therefore, it is proposed that OPGW may be installed along with terminal equipment on the following line for redundant path:

- Kishenpur-Dulhasti S/c line (120 kms.)

A.3.3 Total OPGW length 120 kms. with Cost Estimate Rs. 5.5 Crore (approx.).

Connectivity diagram for providing redundant communication to Dulhasti (Generator) to ISTS communication network in view of AGC



***Members may kindly deliberate*.**

A.4 OPGW installation on existing 400kV Jallandhar (PG) – Kurukshetra (PG) line & 400kV Koldam (Indigrid) – Ludhiana (PG) line which are to be LILOed at Dhanansu & Ropar substations of PSTCL respectively (Agenda by CTU)

A.4.1 PSTCL has given their agenda to CTU in ISTS communication planning meeting of Northern Region to provide fibre connectivity of their two nos. of substations viz. Dhanansu & Ropar which are to be LILOed at following existing lines respectively:

A. 400kV Jallandhar (PG) – Kurukshetra (PG) – 229 kms.

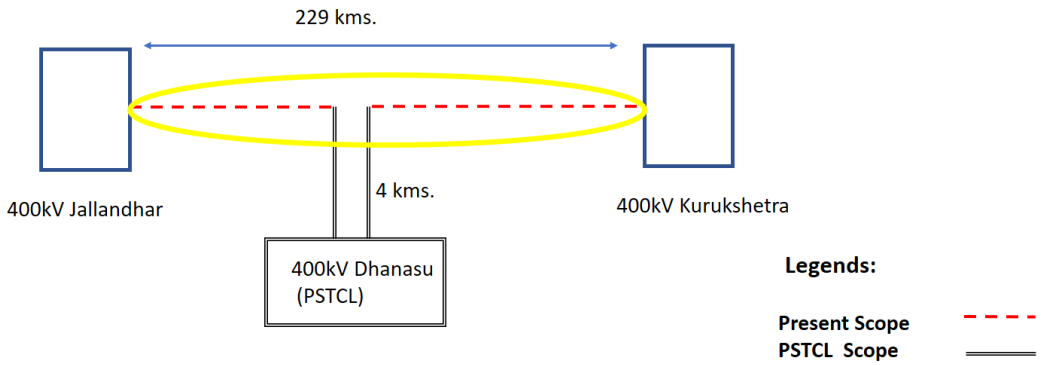
B. 400kV Koldam (Indigrid) – Ludhiana (PG) – 150 kms.

A.4.2 As these stations have no other connectivity to the ISTS/STU communication network. Therefore, it is proposed to install OPGW cable on above two ISTS lines.

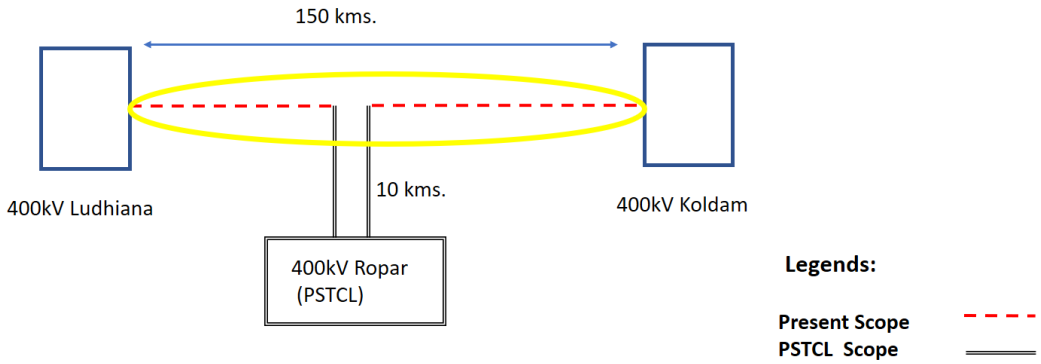
A.4.3 Total OPGW length is 379 kms. with cost estimate of Rs.17 Cr. (approx.).

A.4.4 Line mentioned at A above belongs to POWERGRID and B above belongs to Indigrid.

Connectivity diagram for providing communication to Dhanansu (PSTCL)



Connectivity diagram for providing communication to Ropar (PSTCL)



***Members may kindly deliberate*.**

A.5 Modalities for installation services for Special Energy Meters/Interface Energy Meters (IEMs) as per agreement between POWERGRID & CTUIL regarding Consultancy services to CTUIL (Agenda by CTU)

A.5.1 Electricity Grid Code (IEGC) 2010 & Amendments {Clause no. 6.4 (21)} mentions:

- ***The CTU shall install*** *Special energy meters on all inter connections between the regional entities and other identified points for recording of actual net MWh interchanges and MVArh drawls. The installation, operation and maintenance of special energy meters shall be in accordance with Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006. All concerned entities (in whose premises the special energy meters are installed) shall take weekly meter readings and transmit them to the RLDC by Tuesday noon The SLDC must ensure that the meter data from all installations within their control area are transmitted to the RLDC within the above schedule.*

A.5.2 Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006 and its amendment thereof mentions:

- **<u>Ownership of meters {clause no 6.0 (1a)}</u>**

  All interface meters installed at the points of interconnection with Inter-State Transmission System (ISTS) for the purpose of electricity accounting and billing shall be owned by CTU.

- **<u>Operation, Testing and Maintenance of meters</u> <u>{clause no 10} –</u>**

  *The operation, testing and maintenance of all types of meters shall be carried out **by the generating company or the licensee**, as the case may be.*

A.5.3 Accordingly, the procurement and installation of SEMs & DCD was being rendered by POWERGRID as CTU till 1st April 2021. Pursuant to Gazette Notification No. CG-DL-E-09032021-225743 dated 09.03.2021, CTUIL is to undertake and discharge all functions of CTU w.e.f. 1st April 2021.

A.5.4 In this regard, POWERGRID and CTUIL have signed an agreement as per which CTUIL has authorized POWERGRID for procurement & installation of SEMs and DCD/necessary accessories on behalf of CTUIL on chargeable basis to concerned agency as per the terms of agreement.

***Members may kindly deliberate*.**

A.6 Calibration of Interface Energy meters (Agenda by CTU)

A.6.1 Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006 and its amendment thereof states:

- **<u>Operation, Testing and Maintenance of meters</u> <u>{clause no 10} -</u>**

  *The operation, testing and maintenance of all types of meters shall be carried out **by the generating company or the licensee**, as the case may be.*

- **<u>Calibration and periodical testing of meters {Clause no 18} -</u>**

  (b) All Interface Meters shall be tested on-site using accredited test laboratory for routine accuracy testing at least once in five years and recalibrated if required. Provided that these meters shall also be tested whenever the energy and other quantities recorded by the meter are abnormal or inconsistent with electrically adjacent meters.

  (c) Testing and calibration of Interface Meters shall be carried out in the presence of the representatives of the supplier and buyer by giving the advance notice to the other party regarding the date of testing.

A.6.2 As per CEA metering regulation, Main/Check and Standby meters are being installed for each interconnection points. With this Main/Check and Standby arrangement of interface meters, the discrepancy of any meter is being identified by RLDC for validating meter data. Accordingly, instructions are being given by RLDC to respective agencies in whose premises the meter is installed for rectification of error or replacement of faulty meter.

A.6.3 As per regulations, the accuracy test is to be carried out on-site by the respective utilities using accredited test laboratory at least once in five years and in case of discrepancies, calibration is to be done.

A.6.4 Being the static meter without any moving part in it, as such no calibration is practically feasible for the present Interface Energy meters in case of discrepancies. Only option is to get the meter replaced in case the error is more than permissible limit.

A.6.5 The cost of testing / calibration depends on the charges of the accredited testing laboratory or the agency and varies based on the number of meters and the location. The charges for on-site testing using accredited test laboratory & calibration are generally very high due to outstation travel involvement for the testing laboratory, whereas in comparison the cost of new meters is minimal (typically in the range of Rs. 10000 – 12000 per meter).

A.6.6 From the above, it is evident that testing / calibration of meters once in five years are not effective as the faulty meter needs to be replaced in case of any discrepancy in general. Further, the testing/replacement are to be done on the basis of feedback given by RLDC with the help of main/check and standby meters irrespective of the routine testing time line mentioned in the regulation.

A.6.7 Presently around 8500 Interface meters are installed across the country in approximately more than 1100 locations. These number will further increase with the National plan of 500 GW RE and 820 GW total installed capacity by 2030 from the present capacity of around 400GW as on June'2022.

A.6.8 The Routine tests/calibration of these many meters shall require a huge cost & manpower by RE developers/Gencos/Transmission Licensees in a not so fruitful activity.

A.6.9 Considering the above points and continuous monitoring of meter performance already in place through Main, Check & standby arrangement by RLDCs the suitable amendment is required in the regulation.

A.6.10 Proposal of CTU is as under:

CEA may be approached to replace clause 18 (b) & (c) of the regulation with the following proposed clauses for better maintenance and replacement of the meters as per requirement:

a) The Interface Meter shall be tested on-site as and when discrepancies are observed by the respective RLDC depending on main/check & standby meter readings. All agencies shall keep one spare meter for testing purpose. Upon receiving instruction from RLDC, the respective agency in whose premises the meter is installed shall test the specific meter with the spare meter and replace the meter, if required, immediately with intimation to RLDC/CTU.

b) All the Interface meters shall be replaced in ten years in normal course (as life of meter has been defined 10 years in the standard technical specification finalized by Joint Committee chaired by Chief engineer, NPC CEA comprising members from all RPCs, CTU, POSOCO & POWERGRID).

***Members may kindly deliberate*.**

A.7 Unchahar#6 (St-IV U#1) FGD Unit PG Test (Agenda by NTPC)

A.7.1 PG Test of Unchahar#6 unit was scheduled from 00:00 hrs of 23.08.2022 to 24.00 Hrs of 25.08.2022 in compliance of MOEF Directives & strict Supreme court deadlines. Unit was to be Operated at full Load for above 72 Hrs, to meet the test conditions.

A.7.2 To ensure full load, major beneficiaries were approached to maintain full drawl schedule for above period. Rajasthan, J&K, Haryana have given their consent to maintain full drawl schedule. UP has not responded / not given consent for maintaining schedule.

A.7.3 With assumptions that technical minimum of UP & Full schedule of rest beneficiaries and some quantum of over injection, test conditions can be achieved, and Test can be performed at 75% load with minor deviations.

A.7.4 In real time, UP has restricted their drawl schedule (to 15 MW), less than their share of Tech. Minimum, even though other beneficiaries were drawing full share of allocation. Therefore, ongoing PG test have to be suspended on 23.08.2022.

A.7.5 This issue has been discussed in 198th OCC, but approval was not given on above dates in view of reservations from UP.

A.7.6 Meeting SO_X emissions within limits as per MOEF Directives is a statutory requirement and compliance of above is mandatory. Moreover, in future all Units with FGD installation must have to prove above compliance by conducting PG Test, which is not possible under the circumstances as above.

Members may kindly deliberate.

A.8 Assessment and usability of the interstate lines i.e 220 KV S/C MIA (Alwar) – BTPS (Badarpur) line and 132 KV S/C Hisar-Sadulpur (Rajgarh) (Agenda by RRVPNL)

A.8.1 RRVPNL vide letter dtd. 08/07/2022 (**Annexure-A.II**) has submitted that interstate lines i.e., 220 KV S/C MIA (Alwar)-BTPS (Badarpur) and 132 KV S/C Hisar-Sadulpur (Rajgarh) lines are very old and the-line condition is deteriorating day by day resulting in frequently breaking of the conductor and its accessories.

A.8.2 Yearly transmission charges (YTC) allowed by CERC in petition no. 362/TT/2019 for the line 220 KV S/C MIA (Alwar)-BTPS (Badarpur) is Rs.64.02 Lakh. The refurbishment work of line as R&M requires Rs.9.89 Cr and still after spending Rs.9.89 Cr, only half of the line is refurbished.

A.8.3 YTC allowed by CERC in petition no. 362/TT/2019 for the said line is Rs.37.94 Lakh. The YTC allowed is only towards O&M expenses and interest on working capital as useful life of 25 years has already been over. The work of replacement of line conductor with associated hardware, disc insulator, etc. requires estimated cost amounting Rs. 7.021 crores.

A.8.4 Based on above facts, following points need to be deliberated:

i. Assessment & usability of these Interstate lines i.e 220 KV S/C MIA (Alwar)- BTPS (Badarpur) line and 132 KV S/C Hisar-Sadulpur (Rajgarh) line.

ii. Recovery of capital expenditure on renovation and refurbishment through YTC for these Interstate lines, in case NRPC decides to retain these interstate line.

A.8.5 This issue was also deliberated in 198th OCC meeting held on 17.08.2022 wherein it was decided that agenda may be taken up in the NRPC meeting.

***Members may kindly deliberate*.**

A.9 Deemed Enhancement of ATC/TTC for Punjab due to unprecedented load growth of summer/paddy season. (Agenda by PSTCL)

A.9.1 The demand of the state during the current paddy season has been recorded as 14,208 MW by the SLDC which has been met successfully with ATC/TTC limits of 8500/9000 and full generation at 400 kV/220 kV/132kV generating nodes. In order to meet the state demand, ATC limit is required to be increased to at least 10,000 MW (for paddy 2023).

A.9.2 State distribution utility PSPCL has informed that there will be no significant addition of generation within the State in the coming year. State of Punjab has to deal with peculiar load profile wherein demand is nearly double during Paddy season i.e., June to September than that during the rest of the year.

A.9.3 The peak demand for next summer/paddy season is projected as 15,500 to 16,000 MW, which is likely to reach up to 18,000 MW by the year 2025. Hence, to meet the increasing power demand, immediate enhancement of ATC/TTC limits up to 10,000/10,500 MW and subsequently to 12,000 MW in the next 3 years is required.

A.9.4 Punjab is bringing the following 400 kV substations in the upcoming years:

Sr. No.	Substation name and installed capacity	ISTS connectivity	Approved in	Timeline (MM/YYYY)
1.	**400 kV Dhanansu** **Stage 1:** 1X315 MVA, 400/220 kV ICT	LILO of 1 circuit of 400 kV Jalandhar – Kurukshetra line	3rd NRSCT meeting held on 24.05.2019.	09/2023
	Stage 2: 1X315 MVA + 1X500 MVA, 400/220 kV ICTs	LILO of 1 circuit of 400 kV Nakodar – Kurukshetra line	Meeting held with CEA on 18.11.2021 through VC.	
2.	**400 kV Ropar** **Stage 1:** 2X500 MVA, 400/220 kV ICTs	LILO of 1 circuit of 400 kV Ludhiana – Koldam line	43rd TCC/46th NRPC meeting dated 24.09.2019.	12/2023
		Stage 2: LILO of 1 circuit of 400 kV Ludhiana – Koldam (via Nanje) line	Meeting to deliberate the transmission system for Luhri HEP dated 21.01.2022.	

Sr. No.	Substation name and installed capacity	ISTS connectivity	Approved in	Timeline (MM/YYYY)
3.	**400 kV Behman Jassa Singh** Switching station with 2X500 MVA, 400/220 kV ICTs	LILO of 400 kV Talwandi Sabo – Moga line	40th meeting of Standing committee on Power System Planning of Northern Region dated 22.06.2018	12/2025
		LILO of 400 kV Talwandi Sabo – Nakodar line		

A.9.5 In addition to the above, the 2 Nos. 315 MVA ICTs at 400 kV Nakodar shall be augmented to 500 MVA as per the following timeline (MM/YYYY):

1. Augmentation of 1st 315 MVA, 400/220 kV ICT: 05/2023
2. Augmentation of 2nd 315 MVA, 400/220 kV ICT: 09/2023

A.9.6 Moreover, Punjab is in the process of finalizing MYT for 3rd control period (2023 – 26) wherein the following new 400 kV projects are being proposed:

1. 400 kV substation Wadala Granthain with ISTS connectivity through LILO of 765 kV Moga – Kishanpur line (which is presently charged at 400 kV).
2. 4th 500 MVA, 400/220 kV ICT at 400 kV Rajpura.
3. Double circuit line between 400 kV Patran (TBCB) and 400 kV Dhuri after commissioning of 3rd 500 MVA ICT at 400 kV Patran in the year 2025.

A.9.7 Once these projects are approved by the PSERC, agenda will be submitted separately before the NRPC along with load flow studies.

A.9.8 It is pertinent to mention that the following works on the part of Punjab are also under execution/completed:

1. 400 kV Rajpura – 220 kV Gobindgarh HTLS (Already under execution and approved in MYT)
2. Shifting of 220 kV Patti and 220 kV Rashiana circuits from 220 kV Verpal to 400 kV Amritsar, already under execution.
3. 400 kV Ludhiana – 220 kV Lalton Kalan HTLS, already completed.
4. Bypassing of 220 kV Dhandari Kalan from 220 kV Lalton Kalan to 400 kV PGCIL Ludhiana which will further de-load the 400 kV PGCIL Ludhiana – 220 kV Lalton Kalan line.

A.9.9 For the upcoming paddy season 2023, load flow studies have been carried out and it is proposed to plan the following Transmission works at PGCIL sub-stations for enhancing ATC/TTC limits to 10,000/10,500MW (considering 1000 – 1500 MW annual load growth for FY 2022-23):

Sr. No.	Name of the substation	Description of Works	Timeline for completion
1.	400 kV PGCIL Ludhiana	Augmentation of 1 no. 315 MVA (3rd) 400/220 kV ICT to 500 MVA.	May, 2023
2.	400 kV PGCIL Ludhiana	Utilization of existing 220 kV bays for reorientation of 220 kV Lalton Kalan – Dhandari Kalan line to 400 kV PGCIL Ludhiana – Dhandari Kalan. Out of the 2 Nos. existing bays, 1 No.bay stands utilized for 220 kV substation Doraha. 2nd spare bay be utilized for Dhandari Kalan. PGCIL may confirm please.	May, 2023
3.	400 kV PGCIL Moga	Augmentation of 1 no. 250 MVA, 400/220 kV ICT to 500 MVA.	May, 2023
4.	400 kV PGCIL Patiala	2 Nos. 220 KV bays for evacuation of power to 220 KV Bhadson (which is being upgraded from 66 KV substation) Additional 500 MVA ICT is to be installed with a timeline of May, 2023. 2 Nos. 220 kV bays are existing at the PGCIL Patiala substation. PGCIL may confirm utilization of these bays for 220 kV Bhadson please.	Bay utilization by May,2024
5.	400 kV PGCIL Patiala	To control high loading of 220 KV PGCIL Patiala – Bhateri S/C line, it is proposed to terminate the 220 KV PGCIL Patiala – Rajpura S/C line at 220 KV Bhateri making it 220 KV PGCIL Patiala – Bhateri D/C Line	May, 2023
6.	400 KV Panchkula (Barwala)	2 Nos. 220 KV bays for 220 KV Dera Bassi to meet with unprecedented load growth in that area. PGCIL may confirm space for additional 2 Nos. bays please.	May, 2024
7.	400 KV Jalandhar	Two Nos. 220 KV bays for LILO of 220 KV Jalandhar – Butari Line. 2 Nos. bays are available at the substation. PGCIL may confirm please.	May, 2023

A.9.10 This issue was deliberated in 198th OCC meeting held on 17.08.2022 wherein POWERGRID agreed to the works for SI Nos. 2, 4, 5, 6 and 7 of above table.

A.9.11 Further, it was decided that agenda may be taken up in the NRPC meeting for deliberation in respect of Sl. No. 1 and 3 of above table.

Members may kindly deliberate.

A.10 Adequacy augmentation of Transmission Capacity at 400/220 kV level (Agenda by JKPTCL)

A.10.1 The JKPTCL envisages Transmission Capacity of 4000 MVA for Kashmir valley by 2025. At present the available Transmission Capacity at 220/132 & 220/33 kV levels is around 2495 MVA thereby creating a shortfall of around 1500 MVA. For the purpose, various projects are at different stages of execution. The projects include capacity addition by way of augmentation and construction of Grid Sub-Stations at 220/132 kV level by 965 MVA and 220/33 kV level by 870 MVA. To bridge this shortfall, in the first instance it is proposed to augment the Transmission Capacity at 400/220 kV level as detailed below:

1. Augmentation of 400/220 kV GIS Amargarh (Indigrid) from existing 630 MVA to 1260 MVA by addition of another Transformer Bank of 630 MVA.
2. Augmentation of 400/220 kV GSS New Wanpoh (PGCIL) from existing 630 MVA to 1260 MVA by addition of another Transformer Bank of 630 MVA.

A.10.2 This issue was deliberated in 198th OCC meeting held on 17.08.2022 wherein JKPTCL was requested to share the study which they have carried out for transmission capacity augmentation at 400/220kV level with NRPC Sectt. and NRLDC. Further, it was decided that agenda may be taken up in the NRPC meeting.

A.10.3 Study result is yet to be received from JKPTCL.

Members may kindly deliberate.

A.11 Conversion of existing conductor to its equivalent HTLS conductor (Agenda by JKPTCL)

A.11.1 Presently Gladni Grid Sub-station with installed capacity of 710MVA, at 220/132 KV level is being fed at 220KV level through three Single Circuit Transmission lines viz. Salal-Gladni Circuit-I (ACSR Zebra), Salal-Gladni Circuit-II (ACSR Moose) and Jatwal-Gladni Circuit-I (ACSR Zebra), which are at present to cater the load demand of Gladni Grid Station.

A.11.2 It is further apprised that another 220/33 KV, l60MVA Grid Station is coming up at Chowadi under PMDP-15, for which 220 KV Jatwal Gladni single circuit transmission line shall be looped in and looped out and in that case, there will be very less power flow in this transmission line towards Gladni and thus Gladni would be dependent only on two no. 220 KV single circuits from Salal Generating Station which would not suffice to the demand of Gladni Grid Station. It is in line here to mention that all three above mentioned transmission lines are loaded to the optimum capacity and there is no further scope of loading these lines beyond the thermal limit of the conductor being used in these lines.

A.11.3 This issue was also deliberated in 198th OCC meeting held on 17.08.2022 wherein JKPTCL was requested to share the study for the three single circuit transmission lines at Gladni Grid Sub-station which they have carried out for transmission capacity augmentation at 400/220kV level with NRPC Sectt. and NRLDC.

A.11.4 Study result is yet to be received from JKPTCL.

Members may kindly deliberate.

A.12 Issue of inclusion of LTA quantum for calculation of transmission charges for UPPCL share in UCH Stage-II (132 MW), UCH Stage-III (66 MW) & ROSA Stage-II (300 MW) (Agenda by UPPCL)

A.12.1 The issue was discussed in 52nd NRPC meeting held on 31st March 2022. Further, it was again discussed in 54th NRPC meeting held on 31st May, 2022, wherein, agenda was closed mentioning that UPPCL may again raise this issue in upcoming meetings, if required. MS, NRPC also requested UPPCL to clear all pending dues. CTU was asked to expedite the submission of revised bills of Unchahar Stage-I, NAPP, Tanda Stage-II to UPPCL.

A.12.2 UPPCL vide letter dated 30.07.2022 has again raised this issue (copy enclosed as **Annexure-A.III**) and requested that necessary instruction may kindly be issued to CTU for non-inclusion of LTA quantum for calculation of transmission charges for UPPCL share in case of UCH stage-II (132 MW), UCH stage-III (66MW) & ROSA stage-II (300 MW).

***Members may kindly deliberate*.**

A.13 Modification Issues related to Power System Operation of J&K/Ladakh (Agenda by NRLDC)

A.13.1 Major issues related to Power system operation in J&K and Ladakh were discussed in detail in 47th TCC and 49th NRPC meetings and special meeting held on 28.07.2020 to deliberate on the issues related to UT of J&K and Ladakh.

A.13.2 Following issues still persist in J&K and Ladakh control areas:

i. Most of the 220 kV voltage level Substations of PDD-J&K, are being operated with only one Main and transfer bus scheme instead of double main transfer (DMT) bus as per CEA planning criteria and therefore bus shutdown requires shutdown of entire station which affects reliability of power supply.

   On 29.05.2022, complete shutdown of 220/132kV Hiranagar substation was taken by JKPTCL as there is only single bus and transfer scheme. This led to loss of generation at Sewa-II and load loss in Kathua area which could have been avoided if there were double main and transfer scheme available at 220/132kV Hiranagar substation. Same was also communicated vide NRLDC letter dated 28.06.2022 attached as (**Annexure-A.IV)**. Moreover, there have also been number of other such events previously.

ii. As per the agreed quantum relief for NR, total target in respect of J&K for UFR and df/dt are 336 MW and 270 MW respectively. Confirmation on relief quantum is yet to be received from J&K. Moreover, in compliance of NPC decision, NR states/constituents agreed to raise the AUFR settings by 0.2 Hz in 47th TCC/49th NRPC meetings. Status is still pending from J&K end.

iii. Two stages (450 MW each) of Baglihar HEP (900 MW) operate on two different buses and are being evacuated through two 400 kV lines connected to two different buses operating in disconnected manner. As a result, although each line has

capacity to evacuate power from both stages, under outage of one line, there is loss of one stage generation i.e 450 MW. UT-J&K to expedite the coupling of two buses of Baghlihar stage-1 & 2 to minimize the probability of generation loss.

iv. Delayed clearance of fault captured in most of the grid events in UT J&K/Ladakh control area. Availability of automatic DR (disturbance recorder) and station event logger needs to be ensured for all the 220 kV and above stations. DR/EL and preliminary report needs to be submitted within the stipulated timelines.

v. In order to make connectivity more reliable and for secure power supply to the valley, restoration of 220kV Kishenpur-Mirbazar and commissioning of underlying network at 400/220kV New Wanpoh to be expedited.

vi. Mock black start exercises of URI-I & URI-II HEP, Lower Jhelum HEP is yet to be conducted.

vii. Adequate reactive compensation i.e., reactor & capacitors to be planned and implemented.

viii. Data for monthly PoC case to calculate transmission losses and charges to be shared with NRLDC/NLDC.

ix. Need for establishment of SLDC Control Room (manned 24x7 by trained grid operators) in the UT of Ladakh

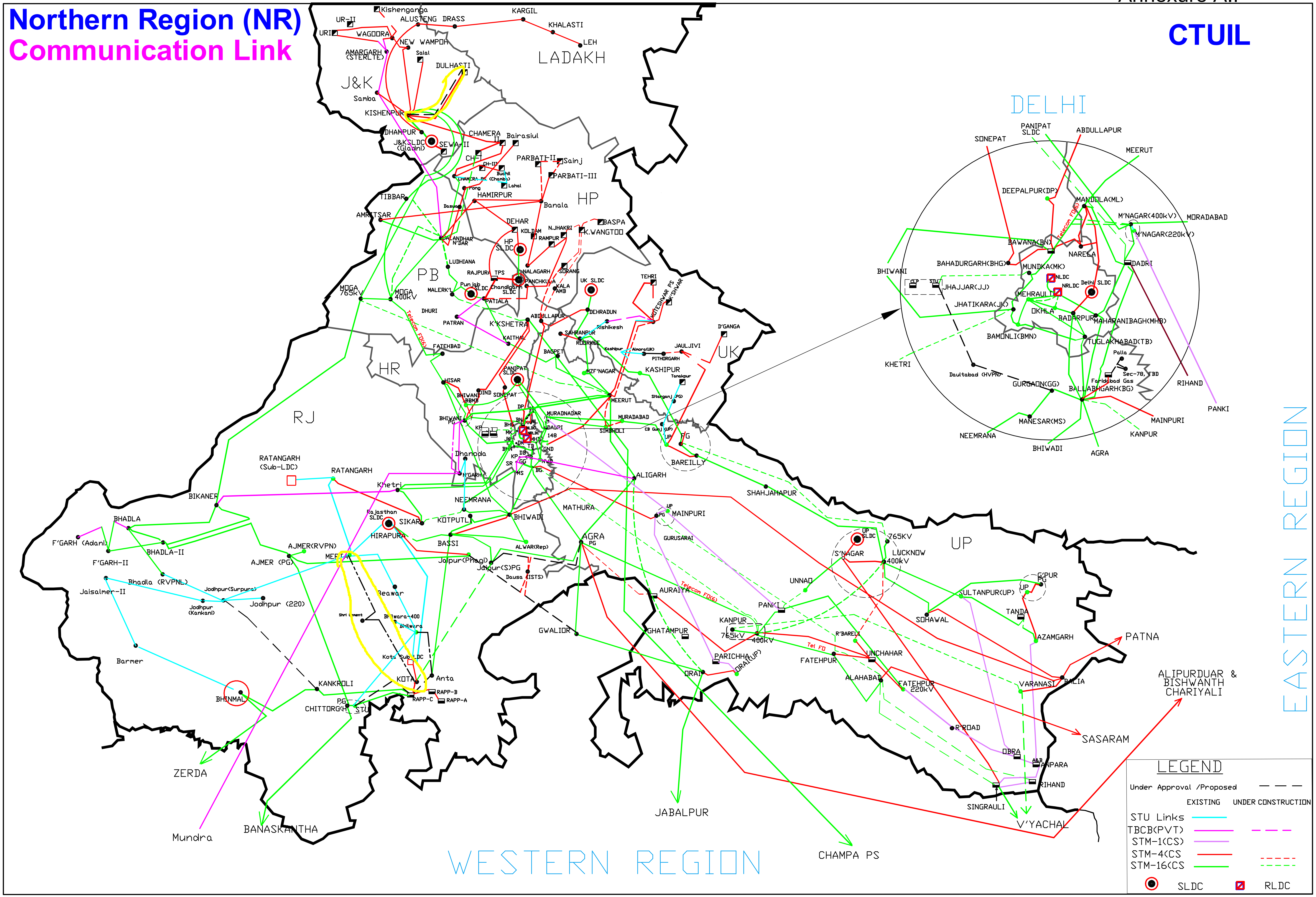
A.13.3 This issue was also deliberated in 198th OCC meeting held on 17.08.2022 wherein JKPTCL was asked to submit the list of 220 KV voltage level substations in their control area which are operated with only single Main and Transfer Bus scheme instead of Double Main Transfer (DMT) bus scheme as per CEA planning criteria.

A.13.4 In 198th OCC meeting, in regards to para 13.2.ii of the agenda (198th OCC), JKPTCL representative assured to submit the latest status of AUFR settings of J&K. For para 13.2.iii & iv of the agenda (198th OCC), JKPTCL representative mentioned that the status would be submitted by upcoming NRPC meeting. For para 13.2.vi of the agenda (198th OCC), J&K representative informed that shortly they would plan the Mock black start exercise of Uri-I, Uri-II HEP and Lower Jhelum HEP. For para 13.2.viii of the agenda (198th OCC), JKPTCL representative submitted that they will look into the requested data and would submit to NRLDC. For para 13.2.ix of the agenda (198th OCC), JKPTCL representative assured to seek the details of SLDC control room in UT of Ladakh and share it with NRPC Sectt and NRLDC.

JKPTCL may kindly update.

*****

Annexure A.I



Northern Region (NR)
Communication Link
CTUIL
LADAKH
J&K
HP
PB
HR
RJ
UK
UP
DELHI
EASTERN REGION
WESTERN REGION
Kishenganga
URI-II
URI
WAGOORA
ALUSTENG
DRASS
KARGIL
KHALASTI
LEH
AMARGARH (STERLTE)
NEW WAMPOH
Salal
DULHASTI
Samba
KISHENPUR
DHAMPUR
J&K SLDC (Gladni)
SEWA-II
CHAMERA
Bairasiul
PARBATI-II
Sainj
PARBATI-III
HAMIRPUR
Banala
TIBBAR
AMRITSAR
DEHAR
BASPA
K.WANGTOO
HP SLDC
LUDHIANA
RAJPURA
NALAGARH
PANCHKULA
KALA AMB
UK SLDC
TEHRI
MOGA 765kV
MOGA 400kV
MALERK'L
Punjab SLDC
Chandigarh SLDC
PATIALA
DHURI
PATRAN
K'KSHETRA
KAITHAL
ABDULLAPUR
DEHRADUN
Rishikesh
SAHARANPUR
ROORKEE
D'GANGA
JAULJIVI
PITHORGARH
FATEHBAD
BAGPET
KASHIPUR
MZF'NAGAR
HISAR
PANIPAT SLDC
BHIWANI
SONEPAT
MEERUT
MURADNAGAR
MURADABAD
SIMBHOLI
BAREILLY
Dhanoda
ALIGARH
SHAHJAHAPUR
RATANGARH (Sub-LDC)
RATANGARH
Khetri
BIKANER
NEEMRANA
MATHURA
KOTPUTLI
BHIWADI
MAINPURI
Rajasthan SLDC
SIKAR
HIRAPURA
BASSI
BHADLA
F'GARH (Adani)
BHADLA-II
F'GARH-II
AJMER(RVPN)
AJMER (PG)
MERTA
Jaipur(Phagi)
Jaipur(S)PG
Dausa (ISTS)
ALWAR(Rep)
AGRA
GURUSARAI
Bhadla (RVPNL)
Jodhpur(Surpura)
Jaisalmer-II
Jodhpur (Kankani)
Jodhpur (220)
Beawar
Bhilwara-400
Bhilwara
Kota Sub LDC
GWALIOR
AURAIYA
UNNAO
PANKI
KANPUR 765kV
400kV
GHATAMPUR
PARICHHA
ORAI
ORAI(UP)
Barmer
KANKROLI
KOTA
Anta
RAPP-B
RAPP-C
RAPP-A
BHINMAL
CHITTORGH
S'NAGAR
765kV
LUCKNOW 400kV
G'PUR
SULTANPUR(UP)
SOHAWAL
TANDA
AZAMGARH
R'BARELI
UNCHAHAR
FATEHPUR
ALAHABAD
FATEHPUR 220kV
VARANASI
BALIA
PATNA
R'ROAD
SASARAM
OBRA
ANPARA
RIHAND
SINGRAULI
V'YACHAL
ALIPURDUAR & BISHWANTH CHARIYALI
ZERDA
Mundra
BANASKANTHA
JABALPUR
CHAMPA PS
SONEPAT
PANIPAT SLDC
ABDULLAPUR
MEERUT
DEEPALPUR(DP)
MANDOLA(ML)
M'NAGAR(400kV)
MORADABAD
M'NAGAR(220kV)
BAWANA(BN)
NARELA
BAHADURGARH(BHG)
MUNDKA(MK)
DADRI
BHIWANI
JHAJJAR(JJ)
NLDC
NRLDC
Delhi SLDC
MEHRAULI
JHATIKARA(JK)
OKHLA
BADARPUR
MAHARANIBAGH(MHB)
BAMONLI(BMN)
TUGLAKHABAD(TB)
KHETRI
Palla
Daultabad (HVPN)
Sec-78, FBD
Faridabad Gas
GURGAON(GG)
BALLABHGARH(BG)
RIHAND
PANKI
NEEMRANA
MANESAR(MS)
MAINPURI
KANPUR
BHIWADI
AGRA
LEGEND
Under Approval /Proposed
EXISTING
UNDER CONSTRUCTION
STU Links
TBCB(PVT)
STM-1(CS)
STM-4(CS
STM-16(CS
SLDC
RLDC

Annexure A.II

RAJASTHAN RAJYA VIDYUT PRASARAN NIGAM LIMITED.

[Corporate Identity Number (CIN):U40109RJ2000SGC016485]

(Regd. Office: Vidyut Bhawan, Jan Path, Jyoti Nagar, Jaipur - 302 005)

OFFICE OF THE SUPERINTENDING ENGINEER (PROJECT & PLANNING)

+91-141-2740623,Fax:+91-141-2740794;

e-mail: se.pp@rvpn.co.in; website:www.rvpn.co.in

RVPN An ISO 9001:2000 Certified Company

No. RVPN/SE(P&P)/XEN-2(P&P)/AE-2/ F. /D 799 Jaipur, Dt. 8/7/22

The Member Secretary,
NRPC, 18A, Shaheed Jeet Singh Marg,
Katwaria Sarai, New Delhi-110016.

Sub: Regarding inclusion of agenda on assessment & usability of the Interstate lines i.e. 220 kV S/C MIA (Alwar) -BTPS (Badarpur) Line and 132 kV S/C Hisar-Sadulpur (Rajgarh) in next NRPC Meeting.

Dear Sir,

On the above cited subject, it is submitted that the Interstate lines i.e. 220 kV S/C MIA (Alwar) -BTPS (Badarpur) and 132 kV S/C Hisar-Sadulpur (Rajgarh) lines are very old and the line condition is deteriorating day by day resulting in frequently breaking of line conductor and its accessories.

In this regard, kindly find enclosed herewith the agenda on assessment & usability of these Interstate lines i.e. 220 kV S/C MIA (Alwar) -BTPS (Badarpur) line and 132 kV S/C Hisar-Sadulpur (Rajgarh) line for deliberation & decision in next NRPC Meeting.

Encl: as above.

Your's faithfully,

(K.K. Meena)
Addl. Chief Engineer (PP&D)

Agenda Note for consideration & decision on Capital Expenditure to be incurred on Renovation & Refurbishment of existing Interstate lines i.e. 220 kV S/C MIA (Alwar) - BTPS (Badarpur) Line and 132 kV S/C Hisar-Sadulpur (Rajgarh) line

I. BACKGROUND & DETAILS:

There is an interstate line i.e. 220 kV S/C MIA (Alwar) -BTPS (Badarpur) owned by RVPN, commissioned in 1976, line length 131 kms., 428 nos. towers involved & present book value is Rs.1.08 Crore. The line condition is deteriorating day by day resulting in frequently breaking of line conductor and earth wire. The line is charged since 07.10.2020 on No Load. In normal conditions, there is no use of said line at 220 kV GSS MIA from loading point of view. The Yearly Transmission Charges (YTC) allowed by CERC in petition no. 362/TT/2019 for the said line is 64.02 lakh. The case for the refurbishment work of 220 kV S/C MIA (Alwar) -BTPS (Badarpur) as R&M requires 9.89 crores and still after spending Rs. 9.89 crores, only half of the line is refurbished.

Similarly, another interstate line i.e. 132 kV S/C Hisar-Sadulpur (Rajgarh) line interconnecting 220 kV GSS BBMB Hisar and 132 kV GSS Sadulpur (Rajgarh) is owned by RVPN, commissioned on dated 13.12.1959, line length 78 kms., 281 nos. towers involved & present book value is Rs. 8.57 Crore. The line condition is also deteriorating. Generally, this line remains charged on no-load since commissioning of 132 kV Bhadra-Sadulpur line in the year 2010 and there is no use of said line and may be dismantled. The Yearly Transmission Charges (YTC) allowed by CERC in petition no. 362/TT/2019 for the said line is 37.94 lakh. The YTC allowed is only towards O&M expenses and interest on working capital as useful life of 25 years has already been over. The work of replacement of line conductor with associated hardware, disc insulator, etc. requires estimated cost amounting Rs.7.021 crores.

II. DELIBERATION/DECISION:

Based on the above facts as discussed above, the following is to be deliberated in NRPC meeting:

i. Assessment & usability of these Interstate lines i.e. 220 kV S/C MIA (Alwar) - BTPS (Badarpur) line and 132 kV S/C Hisar-Sadulpur (Rajgarh) line.

ii. Recovery of capital expenditure on renovation & refurbishment through YTC for these Interstate lines, in case NRPC decides to retain these Interstate lines.

Annexure A.III

Office of Chief Engineer
Power Purchase Agreement Directorate,
14th Floor, Shakti BhawanExtn.,
14-Ashok Marg, Lucknow –226 001
TeleFax:0522-2218812,
Email:ppare@uppcl.org

Letter No. 1192/CE/PPA/NRPC Dated: -30/07/ 2022

To
The Member Secretary,
Northern Regional Power Committee,
New Delhi

Sub: UPPCL - CERC (Sharing of Inter State Transmission Charges and Losses) Regulations, 2020 Sharing of transmission charges in proportion to LTA — Wrongful inclusion of LTA for the assets owned by UPPTCL/UPPCL — reduction of LTA.

Res Sir,

Kindly refer to 53nd Meeting of Northern Regional Power Committee held on 29.04.2022, wherein the matter related to exclusion of LTA quantum by CTU for calculation of transmission charges for UPPCL share of UCH stage-II (132 MW), UCH stage-III (66MW) & ROSA stage-II (300 MW) Power Plants was raised by UPPCL.

In the subject meeting CTU while deliberation presented the Long Term Access agreement dated 26.03.2014 signed between M/s PGCIL & UPPCL for evacuation of 300 MW Power from Rosa TPS Stage-2 Project. NRPC after going through the LTA agreement presented by CTU decided as follows-

"As per input received from CTU, UPPCL shall bear the transmission charges as mentioned in the BPTA signed by UPPCL for Rosa-Stage-II (300 MW) Further, as the SRPC philosophy on exemption/non exemption of ISTS charges, mentioned by CTU, is generic in nature and all relevant documents are provided, UPPCL should bear applicable transmission charges for Unchahar-II (420 MW) & Unchahar-III (210 MW) also."

Further in the 54th Meeting of NRPC, held on 31st May'2022, it was submitted by UPPCL that reply from CTU is still awaited and reply/letter must be required from CTU wherein they have to mention the details of grounds of rejection of the claim of UPCL for exclusion of LTA quantum of UCH stage-II (132 MW), UCH stage-III (66MW) & ROSA stage-II (300 MW).

On the request of UPPCL, directions were issued by NRPC to CTU to submit their reply to UPPCL directly detailing the reasons of grounds on which claim of UPPCL is being rejected by CTU. Further following decision was also taken by NRPC in the meeting and same was recorded in MoM which was issued vide NRPC letter no उक्षेविस/वाणिज्यिक/209/आर पी सी (54वीं)/2022/5057–5104 दिनांक 27 जून, 2022 (Annexure-1) as follows :-

"Member Secretary, NRPC concluded the agenda by mentioning that UPPCL may raise the issue, if required, in upcoming meetings. MS, NRPC also asked UPPCL to clear all pending dues and CTU to expedite the submission of received bills after accounting for revision on exclusion of transmission charges for earlier agreed Unchahar Stage-I, NAPP, Tanda Stage-II to UPPCL."

It may kindly be noted that as per instructions issued in the subject meeting, CTU vide their letter no. CTUIL/BCD/UPPCL/STU LTA/ dated 20.07.2022 (Annexure-2) submitted their reply enclosing the LTA agreement signed between CTU and UPPCL for staking their claim in case of ROSA stage-II (300 MW) and further mentioning the SRPC philosophy on exemption/non-

exemption of ISTS charges, in case of applicability of transmission charges on UPPCL for UCH stage-II (420 MW), UCH stage-III (210MW)

It may kindly be noted that on going through the subject SRPC minutes no. SRPC/MS/2021 dated 16.12.2021 (Annexure-3) regarding Exemption of LTA quantum (deemed) from the Central Generating Stations of SR connected to both ISTS & intra-state transmission system and only to STU system, it was observed that following decision was taken in the meeting:-

a) **Methodology/Philosophy for ascertaining the adequacy of intra-STU Network to evacuate their share from a GS connected to both STU system & ISTS as below:**
   i. The intra-STU network planned and implemented at the time of commissioning of the concerned Central Generation Station (CGS) only to be considered.
   ii. **ISTS Network connected to CGS may be taken out of services and CGS may be left connected with intra-state transmission system (STU network) of home state. If the home state STU system is meeting the all the requirements as per the transmission planning criteria to evacuate their share, then that quantum may be considered for exemption in the computation of sharing of transmission charges.**
   iii. Latest ATC/TTC All India Peak Base Case may be used for this purpose.
   iv. Ex-Bus Firm + Un-allocated quantum of the beneficiaries (i.e., 100% of CGS net capacity) to be considered to evaluate whether the home state STU system is capable of evacuating their share.

As it is clear from point no (ii) above if the home state STU system is meeting all the requirements as per the transmission planning criteria to evacuate their share, them that quantum may be considered for exemption in the computation of sharing of transmission charges.

In view of above, UPPCL wants to submit following to strengthen their claim for exclusion of LTA quantum for calculation of transmission charges for UCH stage-II and UCH stage-III in light of point no (ii) of above decision of SRPC:-

1. The UPPCL share in case of UCH stage-II and UCH stage-III is 132 MW and 66MW respectively totalling to 198 MW.
2. The STU system for Uchahar stage II & III is as below

   UPPTCL Transmission lines used for evacuation of power from UCH TPS stage II & III (UPPCL share)

   a) 220 KV Unchahar- Raibareilly (PG) ckt.- I & II
   b) 220 KV Unchahar- Fatehpur ckt- I & II

   - There are total four no. of Intra state line which is available for evacuation of UPPCL Share in UCH-II (132 MW) & UCH-III (66 MW).
   - The total quantum of UPPCL share in UCH-II (132 MW) & UCH-III (66 MW) is 198 MW and above 04 intra state lines is sufficient to evacuate 198 MW of UPPCL share of Power.
   - In case even if CTU wants to consider only 220 KV Unchahar- Fatehpur ckt- I & II line even than these two lines are sufficient to evacuate the UPPCL share of 198 MW of Power in case of UCH-II (132 MW) & UCH-III (66 MW).
   - It may further be noted that 220KV Unchahar- Fatehpur DC line had been built on Moose Conductor.
   - Further the 220KV Unchahar Lucknow DC line had also been built on Moose Conductor whose LILO was done at Raibarelly PG later on.

It is clear that above STU system fulfils the conditions as expressed at point no (ii) above of the decision of SRPC meeting. In view of above, CTU must be directed to remove/exclude the transmission charges of these generators viz UCH-II (132 MW) & UCH-III (66 MW).

Further in case of ROSA Stage-II (300 MW) it is too submit that LTA was signed 08 years back in year 2014 when Sharing Regulation 2010 was prevailing and transmission charges were allocated based on usage of transmission assets by the entities to draw their allocated power and were independent of the LTA quantum excepting the reliability support charges and HVDC charges. In contrary, the new Sharing Regulations 2020 allocates the charges based on LTA+MTOA quantum irrespective of usage of the ISTS assets except a small portion under usage based component. So with implementation new regulation may be taken/considered as change of law condition and requisite relief and consideration must be given in case of ROSA Stage-II (300 MW) also.

In view of above it is again requested that LTA of UPPCL share in case of Unchahar-II (232 MW) & Uchchar-III(132 MW) and ROSA Stage-II (300 MW) must be excluded with immediate effect by CTU while submitting the Transmission charges bill to UPPCL. It is requested that the matter must be taken up on priority in next NRPC meeting also to avoid any financial loss to UPPCL.

Encl:- As above

Yours Faithfully,

(Deepak Raizada)
Chief Engineer (PPA)

No. CE/PPA/NRPC /~~EE & PC~~/ **Dated: 2022**

Copy forwarded to following for information necessary action:-

1. Secretary, Central Electricity Regulatory Commission, 4th Floor, Chanderlok Building, 36, Janpath, New Delhi- 110001.
2. Managing Director, U.P. Power Corporation Ltd., 7th Floor, Shakti Bhawan, Lucknow
3. Director (Market Operation), POSOCO, B-9 (1st Floor), Qutab Institutional Area, Katwaria Sarai, New Delhi -110016.
4. Director (Corporate Planning), U.P. Power Corporation Ltd., 7th Floor, Shakti Bhawan, Lucknow
5. Director (Commercial), U.P.Power Transmission Corp Ltd., 5th Floor, Shakti Bhawan, Lucknow
6. General Manager/ Commercial, Powergrid Corporation of India Ltd., "Saudamini" Plot No.2, Sector-29, Gurgaon-122 001.
7. Chief Engineer (E&RS), UPSLDC, Vibhuti Khand, Gomti Nagar, Lucknow.

Yours Faithfully,

(Deepak Raizada)
Chief Engineer (PPA)

2

सत्यमेव जयते

भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
उत्तर क्षेत्रीय विद्युत समिति
Northern Regional Power Committee

सं. उक्षेविस/ वाणिज्यिक/ 209/ आर पी सी (54वी)/2022/ 5057-5104

दिनाँक: 27, जून, 2022

सेवा में / To,

उ.क्षे.वि.स. के सभी सदस्य (संलग्न सूचीनुसार)
Members of NRPC (As per List)

विषय: उत्तर क्षेत्रीय विद्युत समिति की 54वी बैठक का कार्यवृत ।
Subject: 54th meeting of Northern Regional Power Committee – MoM

महोदय / Sir,

उत्तर क्षेत्रीय विद्युत समिति की 54वी बैठक दिनांक **31 मई, 2022** को **1100** बजे **विडियो कोंफ्रेंसिंग के माध्यम से** आयोजित की गयी थी । बैठक का कार्यवृत संलग्न है। **यह** उ.क्षे.वि.स. की वेबसाइट (http://164.100.60.165/) पर भी उपलब्ध है।

The 54th meeting of Northern Regional Power Committee (NRPC) was held at **1100 Hrs** on **31st May, 2022** via video conferencing. MoM of the same is attached herewith. The same is also available on NRPC Sectt. website (http://164.100.60.165/).

भवदीय
Yours faithfully,

Naresh 27/6/

(नरेश भंडारी)
(Naresh Bhandari)
सदस्य सचिव
Member Secretary

Contents

उत्तरी क्षेत्रीय विद्युत समिति की5 4वीं बैठक
54th MEETING OF NORTHERN REGIONAL POWER COMMITTEE

Time & Date of NRPC meeting: 11:00 HRS; 31st May 2022

Venue: Video Conferencing

Minutes of Meeting

The meeting started with the opening remark from Chairman, NRPC. He emphasised on the crisis faced by states during summers and instructed everyone to work as a team and maintain grid discipline, thereby ensuring smooth and seamless power supply in the northern region.

Member Secretary, NRPC also mentioned that every constituent/SLDC should maintain grid discipline so that frequency remains within the permissible IEGC band so as to ensure secure grid operation. MS, NRPC urged the states to keep their drawl within the permissible limit so as to keep frequency near to 50 Hz.

A.1 Approval of MoM of 53rd NRPC meeting

A.1.1 Forum was apprised that Minutes of 53rd NRPC meeting was issued on 26th May, 2022. No comment has been received till the date.

A.1.2 Forum approved the minutes of meeting of 53rd NRPC meeting.

A.2 Non-inclusion of LTA quantum for calculation of transmission charges for UPPCL share in UCH Stage-II (132 MW), UCH Stage-III (66 MW) & ROSA Stage-II (300 MW) (Agenda by UPPCL)

A.2.1 Forum was apprised that the issue was discussed in 52nd NRPC meeting held on 31.03.2022, wherein, it was decided that matter may be discussed at NRPC Secretariat firstly and then may be taken in upcoming NRPC meeting.CTU stated that they have already shared all the relevant documents reg. Unch-II, Unch -III & Rosa-II in reference to Non-inclusion of LTA quantum for calculation of transmission charges for UPPGL vide mail dated 07.04.22 with NRPC secretariat.

A.2.2 The forum was apprised that para no. 6 of minutes of 27th meeting of the Standing Committee on Transmission System Planning of Northern Region held on 29th/30th May, 2009 at Nainital, Uttarakhand, issued vide CEA letter no. 1/9/06-SP&PA dated 11.06.2009 states as below:-

"6. Long Term Open Access to Rosa Power Supply Company Limited for transfer of 600 MW from their Rosa Thermal Power Project (Stage II) located at Shahjahanpur, Uttar Pradesh.

Concluding the discussions, following was agreed:

Long-term Open Access can be granted for 25 years subject to following:

- Long Term Open Access to Rosa Power Company shall be granted after the commissioning of following strengthening scheme:
  - One ckt of Lucknow – Bareilly 765 kV line.

- Bareilly – Meerut 765 kV S/c
- Bareilly-Kashipur-Roorkee-Saharanpur 400 kV D/c (Quad conductor)

➢ For connectivity of Rosa Power Plant with the grid the following was agreed:

- Rosa – Shahjahanpur 400 kV D/c

➢ For supply of power to Uttar Pradesh, Rosa Power Company shall provide 400/220 kV ICTs of adequate capacity at Rosa switchyard, therefore ISTS charges for supply of power to Uttar Pradesh would not be applicable.

➢ M/s Rosa Company would sign the requisite BPTA for Northern regional Transmission system charges for 300 MW (150 MW for Delhi & 150 MW for Haryana)."

A.2.3 UP mentioned that it is clear from above that no ISTS charges were applicable for supply of power from Rosa Power Company (Stage-II) to Uttar Pradesh.

A.2.4 M/s Rosa Power Company would sign the requisite BPTA for Northern Regional Transmission system charges for 300 MW (150 MW for Delhi & 150 MW for Haryana). However, later on Delhi and Haryana backed out to share 300 MW generation of power of Rosa Power Company. So, LTA charges on this account must either by borne by Delhi / Haryana or Rosa Power Company instead of being charged from UPPCL.

A.2.5 UP requested that LTA of Rosa Power Company (Stage-II) for 300 MW must be excluded with immediate effect by CTU while submitting the Transmission charges bill to UPPCL. Case of Unchahar-II & Unchahar-III, also may be taken up.

A.2.6 Quoting Para 3 of conclusions of Point No. 6 of MoM of 27th meeting of the Standing Committee on Transmission System Planning of Northern Region held on 29th/30th May, 2009, CTU representative apprised the forum that, it was mentioned that for supply of power to Uttar Pradesh, Rosa Power Company shall provide 400/220 KV ICTs of adequate capacity at Rosa Switchyard, therefore ISTS charges for supply of power to Uttar Pradesh would not be applicable. So, this clause clearly mentionss about the 300 MW power that was allocated to U.P and nowhere deals with LTOA of 300 MW quantum that was allocated to Delhi (150 MW) and Haryana (150 MW).

A.2.7 CTU representative also highlighted that 400/220 KV ICT that Rosa Power Company had installed are of 2×200 MVA. So, on technical grounds, it could not be possible to put 600 MW on 400 MVA ICTs. The 2×200 MVA ICT was meant to carry 300 MW share of U.P for which CTU is already not charging to UPPCL.

A.2.8 In subsequent time, U.P had requested to take the remaining 300 MW allocation (earlier allocated as 150 MW of Delhi & 150 MW of Haryana). As a result of this, LTOA was revised from Delhi and Haryana to UPPCL. **UPPCL had also signed BPTA for Northern Regional transmission charges for 300 MW (150 MW of Delhi & 150 MW of Haryana) in this regard.**

A.2.9 With reference to revised intimation dated 3rd Feb, 2014 by CTU (POWERGRID) to Rosa Power Company Limited, it was mentioned that, as agreed in the minutes of Connectivity/LTA meeting held on 2nd January, 2013, now the beneficiary for

entire quantum of LTA shall be UPPCL. Also, as UPPCL has signed PPA with Rosa Power Company for said quantum of power as informed by Rosa Power Company. UPPCL shall make payment of transmission charges in line with CERC regulations. Therefore, bills for the same shall be raised on UPPCL.

A.2.10 UP was asked to submit reply on clarifications from CTU. However, no reply was received from UP rather they requested to submit their reply at later stage.

A.2.11 Member Secretary, NRPC concluded that as per the inputs received from CTU, UPPCL shall bear the transmission charges as mentioned in the BPTA signed by UPPCL for Rosa-Stage-II (300 MW). Further, as the SRPC philosophy on exemption/non exemption of ISTS charges, mentioned by CTU, is generic in nature and all relevant documents are provided, UPPCL should bear applicable transmission charges for Unchahar-II (420 MW) & Unchahar-III (210 MW) also.

A.2.12 Further, CTU representative also requested UPPCL to expedite the clearance of bills of payment of transmission charges.

A.2.13 Member Secretary, NRPC concluded the agenda by mentioning that UPPCL may raise the issue, if required, in upcoming meetings. MS, NRPC also asked UPPCL to clear all pending dues and CTU to expedite the submission of revised bills after accounting for revision on exclusion of transmission charges for earlier agreed Unchahar Stage-I, NAPP, Tanda Stage-II to UPPCL.

A.3 Default in release of outstanding dues by THDCIL's Beneficiary (agenda by THDCIL)

A.3.1 Forum was apprised that the issue was discussed in 51st and 53rd NRPC meeting also, wherein JKPCL stated that matter is taken up with government of J&K.

A.3.2 THDC vide mail dt. 19.05.2022 has mentioned that as on 18.05.2022, an overdue amount including LPS of approx. Rs.341.04 Cr. is due for payment. THDC India Ltd has been vigorously pursuing with JKPCL (J&K DISCOM) for expeditious payment. Despite vigorous follow up, JKPCL (J&K DISCOM) has still to liquidate its old outstanding due. The details of the overdue amount on JKPCL (J&K DISCOM), as on 18.05.2022, is as under:

DISCOMs	Principal Outstanding (Rs. in Cr.)	Late Payment Surcharge (Rs. in Cr.)	Overdue amount including LPS (Rs. in Cr.)
1	2	3	4=2+3
PDD & JKPCL, J&K	329.69	11.35	341.04

A.3.3 Long pending dues are to be liquidated by the JKPCL (J&K DISCOM). The amount is quite substantial and crucial. Due to scarce availability of funds with us, we are compelled to avail borrowings to meet our day-to-day requirements. Thus, immediate payment is very much crucial for sustenance of THDCIL.

A.3.4 JKPCL (J&K DISCOM) is requested to liquidate its above overdue amount immediately.

A.3.5 Representative from JKPCL informed the forum that JKPCL had released 8.90 crores to THDCIL.

A.3.6 Member Secretary, NRPC deliberated that the funds being released by JKPCL to THDCIL is meagre in comparison to overdue amount including late payment surcharge and with this rate, JKPCL could never be able to cover up their principal outstanding amount of Rs. 329.69 crores.

A.3.7 Member Secretary, NRPC asked JKPCL to expedite the release of fund to THDCIL, by mentioning that late payment surcharge is an important factor and present rate of release of funds by JKPCL could only be able to compensate for it and will not be able to cover principal outstanding amount.

A.4 Request for opening of Letter of Credit (agenda by THDCIL)

A.4.1 Forum was apprised that the issue was discussed in 51st and 53rd NRPC meeting also, wherein JKPCL stated that matter is taken up with government of J&K.

A.4.2 THDC vide mail dated 19.05.2022 has mentioned that despite repeated request and reminders, J&K has not opened the Letter of Credit (LC) amounting to Rs.14.45 Cr for Financial Year 2022-23.

A.4.3 It is requested to J&K to open the LC of requisite amount immediately.

A.4.4 JKPCL representative informed the forum that in response to deliberations made in 53rd NRPC meeting, they had taken up this matter with Gov. of J&K on 5th May, 2022.

A.4.5 Member Secretary, NRPC emphasised that opening of Letter of Credit (LC) is necessary and is a mandatory requirement as per the guidelines of Ministry of Power. Member Secretary, NRPC also asked J&K to open the LC of requisite amount at the earliest.

A.5 Transmission System for evacuation of power from Kaza Solar Power project (880 MW) (agenda by CTU)

A.5.1 Forum was apprised that in the 50th NRPC meeting held on 28.01.22, Transmission System for evacuation of power from Kaza Solar Power project (880 MW) was approved with an estimated cost of about Rs 2134 Cr.

A.5.2 During the 8th NCT meeting held on 25.03.22, above transmission scheme was also discussed & recommended the scheme to MOP for implementation through TBCB route. In the NCT meeting, CTU explained that based on availability of cost estimate on March 2020 PL (Price Level) as well as envisaged generation schedule of Mar'24 (24 months), cost of above scheme was estimated to be about Rs 2135 Cr which was put up to NRPC.

A.5.3 However, M/s SJVN vide letter dated 21.02.22 revised/postponed the generation schedule to Mar'25 from earlier Mar'24. Therefore, considering revised schedule (36 months) as well as latest available cost estimate (Sep'21 PL), the cost estimate for Kaza transmission scheme was revised to Rs 3251 Crore based on September, 2021 PL unit cost estimate. NCT also decided that CTU shall intimate NRPC regarding increase in estimated cost for Kaza transmission scheme.

In the meeting, POWERGRID representative expressed concern on the DC current quantum observed at Fatehgarh-II. It was observed that DC currents are exceeding 8-10A as per PQA measurements done by POWERGRID which are not designed to face such issues. Since the transformer design at RE ISTS pooling substation is similar to the transformer commissioned at other AC substations, therefore this reduces life of the transformer.

RVPN representative stated that only undertakings are being taken by SLDC as of now, no field measurements are being taken. It was informed that such tests are being done by MPTS wing and they shall share with CTU & POSOCO.

MS, NRPC enquired whether if RE generator can be disconnected if it is not able to comply CEA regulations.

CTU representative stated that as per amended CEA regulations on technical standards for connectivity to grid issuedin 2019, it is clear that the user may be disconnected from the grid in case of non-compliance of any provision of the regulations reported by licensee or SLDC/RLDC

MS, NRPC states that number of issues are being faced related to RE compliances. Same may also be discussed in a separate meeting with participation from CTU, NRLDC, NRPC, RVPN and RE developers.

POWERGRID representative also stated that regular protection audits may also be conducted by team from NRLDC, NRPC, POWERGRID and STU so that all RE developers are sensitized and remain active.

NRPC concurred with view of members.

A.10 Review of Transmission Planning criteria for RE (N-0) to N-1 (agenda by NRLDC)

A.10.1 Continuous overloading of 400/220 kV Transformers at Bhadla in early stage of substation: The ICT in Bhadla substation generally run under full load condition. In the initial period after commissioning (2019) the 03 ICTs (approx. 1470 MW) were running in overloaded condition. Sometimes, the loading went upto 110% loading with all fans & pumps operational. A sample datapoint for loading is exhibited below.

A.10.2 In Fatehgarh-II PS also similar loading levels are observed on 5 nos. 500 MVA ICTs. The overloading of transformers, variations in their loading throughout the day and heating/cooling cycle do affect the life of the transformer in the long run.

A.10.3 Therefore, it was discussed in the meeting that high RE capacity Substations must have N-1 compliance at 400/220 kV level i.e., Fatehgarh-II (both sections)/Fatehgarh-III PS, Bhadla-II PS etc. for which revised transmission planning criteria must have suitable provisions.

A.10.4 POSOCO representative that POSOCO has always advocating the N-1 compliance of ICTs, lines for evacuation of bulk RE power reliably and safely.

In addition, bus sectionalization at pooling station should have arrangements such that sharing on ICTs loading on each bus remain commensurate with underlying RE connected generation and ICTs on each bus should be N-1 compliant. Recently, in NR, it has been observed that at 765/400/220kV Bhadla, bus sectionalization couldn't be utilized because of unequal sharing of load amongst

ICTs. NRLDC has highlighted this issue vide NRLDC letter dated 26th April 2022 to CTU/CEA/PGCIL/NRPC, enclosed as Annexure VII of agenda.

A.10.5 NRPC forum agreed that CTU may explore possibility of ensuring N-1 non-compliance at 400/220kV RE pooling stations with higher 400/220kV capacity on case-to-case basis and take up the ICT augmentation proposal for approval on priority. CTU agreed for the same.

*****

सेंट्रल ट्रांसमिशन यूटिलिटी ऑफ इंडिया लिमिटेड
CENTRAL TRANSMISSION UTILITY OF INDIA LIMITED
(Wholly Owned Subsidiary of Power Grid Corporation of India Limited)
(A Government of India Enterprise)

Ref: CTUIL/BCD/UPPCL/STU LTA/

Date: 20.07.2022

To,

Superintending Engineer
Electricity Import-Export & Payment Circle
11th Floor, Shakti Bhawan Extn., 14 – Ashok Marg,
Lucknow – 226001

Sub: Deduction towards ISTS Charges of Unchahar- II , III and ROSA-II from the first bill.

Sir,

This is with reference to deduction of transmission charges by UPPCL against Unchahar-II, III, and ROSA-II in first bill raised by CTU on monthly basis.

It may be mentioned that, vide letters dated 08.02.22 & 17.02.2022, CTU had already clarified that, exemption of transmission charges recommended for only LTAs availed from Unchahar-I NAPP, Tanda -II as these generation projects were planned with Intrastate Transmission System and the same is being exempted from determination of transmission charges by NLDC w.e.f Mar'22 billing month. Further, it was also clarified that, other generation projects viz Unchahar-II, III, and ROSA-II were planned along with Inter-state transmission system, therefore, transmission charges for LTA allocated from these generating projects has not been exempted.

Further, the same issue was deliberated in 54th NRPC Meeting held on 31.05.2022, MS, NRPC concluded that, UPPCL shall bear the transmission charges as mentioned in the BPTA signed by UPPCL for Rosa-Stage-II (300 MW). Further, as the SRPC philosophy on exemption/non-exemption of ISTS charges, mentioned by CTU, is generic in nature and all relevant documents are provided, UPPCL should bear applicable transmission charges for Unchahar-II (420 MW) & Unchahar-III (210 MW) also.

In view of the above, it is requested that the UPPCL may release the payment in full against the bills raised by CTU without deducting transmission charges in respect of billing of LTA pertaining to the generating stations i.e., Unchahar-II, III, and ROSA-II.

We solicit your kind cooperation in the above matter.

Thanking you,

Sri R.N. Kushwaha EE
AM
20/07/22

4232 20/7/22

Yours faithfully
On behalf of CTUIL

20/7/22
(V. Srinivas)
Chief GM(Commercial)

Email/ Speed Post

भारत सरकार केंद्रीय विद्युत प्राधिकरण दक्षिण क्षेत्रीय विद्युत समिति 29, रेसकोर्स क्रास रोड बेंगलूरु -560009	सत्यमेव जयते	Government of India Central Electricity Authority Southern Regional Power Committee 29, Race Course Cross Road Bengaluru-560 009
Email: mssrpc-ka@nic.in	Web site: www.srpc.kar.nic.in	Fax: 080-22259343
सं/No. SRPC/ MS/ 2021/	दिनांक /Date	16th December 2021

सेवा में / To
The Executive Director
NLDC, New Delhi.

Subject:	Exemption of LTA quantum (deemed) from the Central Generating Stations of SR connected to both ISTS & intra-state transmission system and only to STU system -reg.
Ref:	1) TANGEDCO's letter dated dt:24.03.2021 addressed to SRPC
	2) SRPC's letter No.SRPC/SE-I/2021/773-76 dt. 29th March, 2021
	3) TANGEDCO's letter dated dt:30.03.2021 addressed to SRPC
	4) NLDC letter dated 06.04.2021 addressed to CERC
	5) NLDC letter dated 24.08.2021 addressed to TANGEDCO
	6) CERC's letter dated 11.08.2021 addressed to NLDC
	7) TANGEDCO's letter dated dt:30.03.2021
	8) CTUIL's letter dated 24.09.2021 addressed to SRPC

Sir,

This has reference to the correspondences cited above with regard to the issue of exemption of LTA quantum (deemed) raised by TANGEDCO. The Regulation 13(11) of the Sharing Regulations 2020 stipulates that in the case of a generating station is connected to both ISTS and intra-State transmission system, only ISTS charges and losses shall be applicable on the quantum of Long Term Access and Medium Term Open Access corresponding to capacity connected to ISTS.

In this context, based on the request of CTUIL and TANGEDCO, a special TCC meeting was convened. Subsequently, a Sub-Group under SRPC Secretariat comprising Members from CTUIL, NLDC, SRLDC and SLDCs/STUs/ Discoms of Southern Region has been constituted to formulate Objective Methodology/ General Philosophy to be adopted for determining Long Term Access and Medium Term Open Access quantum corresponding to capacity connected to ISTS in case of Generating Stations connected to both ISTS and intra-State transmission system in line with the decision in the special meeting of TCC of SRPC held on 18.10.2021. The Sub-Group had conducted two meetings and a Joint study meeting, and had recommended the following:

a) Methodology/ Philosophy for ascertaining the adequacy of intra-STU Network to evacuate their share from a GS connected to both STU system & ISTS as below:

i. The intra-STU network planned and implemented at the time of commissioning of the concerned Central Generating Station (CGS) only to be considered.

ii. ISTS Network connected to CGS may be taken out of service and CGS may be left connected with intra-state transmission system (STU network) of home state. If the home state STU system is meeting the all the requirements as per the transmission planning criteria to evacuate their share, then that quantum may be considered for exemption in the computation of sharing of transmission charges.

iii. Latest ATC/TTC All India Peak Base Case may be used for this purpose.

iv. Ex-Bus Firm + Un-allocated quantum of the beneficiaries (i.e., 100% of CGS net capacity) to be considered to evaluate whether the home state STU system is capable of evacuating their share.

b) As per the above methodology, the following two Stations have been found to fit and falling within the ambit of Regulation 13(11) of the Sharing Regulations 2020, where deemed LTA may be exempted:

i. Telangana for its quantum of share from Ramagundam STPS Stage-I & II.

ii. Tamil Nadu for its quantum of share from NLC TPS II Stage I.

In the 39th meetings of TCC/ SRPC held on 03.12.2021/06.12.2021, the recommendations of the Sub-Group have been further deliberated and decided the following:

a) The Implementing Agency (NLDC) may exempt deemed LTA quantum from the computation of monthly transmission charges in respect of the following:
   i. Telangana quantum of share from Ramagundam STPS Stage I & II
   ii. Tamil Nadu quantum of share from NLC TPS II Stage I.

b) NLDC may be requested to exempt deemed LTA of Tamil Nadu from Madras Atomic Power Station (MAPS), NPCIL (connected to only TN STU system) in line with the CERC Orders of similarly placed generators.

In view of the above, it is requested that NLDC may kindly implement the above decisions of SRPC favorably.

While approving this letter, Chairperson, SRPC opined to exclude the deemed LTA of Tamil Nadu and Telangana in respect of the above three Stations and also to revise the ISTS transmission charges and losses from the effective date of implementation of the Sharing Regulations 2020 i.e. 01.11.2020.

Thanking You,

भवदीय/Yours faithfully,

नं० भंडारी

(एन एस भंडारी /N S Bhandari)

सदस्य सचिव / Member Secretary

Copy to:

1. Secretary, CERC, New Delhi
2. COO, CTUIL, New Delhi

पावर सिस्टम ऑपरेशन कॉर्पोरेशन लिमिटेड
(भारत सरकार का उद्यम)
POWER SYSTEM OPERATION CORPORATION LIMITED
(A Govt. of India Enterprise)

उत्तरी क्षेत्रीय भार प्रेषण केन्द्र/NORTHERN REGIONAL LOAD DESPATCH CENTRE
कार्यालय : 18-ए, शहीद जीत सिंह सनसनवाल मार्ग, कटवारिया सराय, नई दिल्ली-110016
OFFICE : 18-A, Shaheed Jeet Singh Sansanwal Marg, Katwaria Sarai, New Delhi-110016
CIN: U40105L2009GOI188682, Website: www.nrldc.org, www.nrldc.in, Tel.: 01126519406, 26523869, Fax: 011-26852747

संदर्भ सं॰ : उ.क्षे.भा.प्रे.कें/प्र.सं/151/ **दिनांक :** 28 जून, 2022

सेवा मे,

प्रबंध संचालक,
जम्मू और कश्मीर पावर ट्रांसमिशन कॉर्पोरेशन लिमिटेड,
सिविल सचिवालय, जम्मू .

विषय : Regarding Double Main Transfer (DMT) bus arrangement at JKPTCL Substations .

महोदय,

The complete shutdown of 220/132 kV Hiranagar substation was taken by JKPTCL on 29.05.2022. The complete shutdown of the station was necessitated in view of only Single Bus and Transfer scheme at Hiranagar and is also resulting in loss of generation at Sewa-II and load loss at Kathua and Hiranagar. However to minimize power outage, NRLDC proposed to operate Sewa-II units in islanded mode with the load of Kathua and Mahanpur station of J&K. This attempt was only partially successful in view of load generation mismatch, lack of telemetry etc. Further, discussions and coordination would be done to make it a complete success.

Further, if Hiranagar bus switching scheme been Double Main & Transfer one, complete outage of 220 kV substation would have been avoided and thus, outage of generation and load. There are other stations in J&K as well with similar deficiency. This issue has also been discussed in the Protection Sub Committee (PSC) and Operation Coordination Committee (OCC) of Northern region in the past. In this regard, please refer the minutes of special meeting held on 28.07.2020 to deliberate on issues related to UT of J&K and Ladakh,

Quote

"Most of the 14 numbers of 220 kV voltage level stations of PDD-J&K have or operated with only one Main and transfer bus scheme instead of double main transfer (DMT) bus arrangement as per CEA planning criteria and therefore bus shutdown requires shutdown of entire station which affects reliability of power supply. J&K representative informed that they are planning to approve the scheme in PSDF scheme-1 to implement the bus sectionaliser / coupler for reliability improvement wherever scope is available. In the new upcoming GIS stations, no such issue will be observed but for existing stations there is space constraint issue. It was also informed that J&K is planning to change the existing transmission lines with HTLS conductor in PSDF scheme-2. SE (O), NRPC requested J&K representative to submit details of substations which are covered under PSDF scheme-1. J&K representative informed that there are 6-7 stations where bus coupler

will be implemented; however, exact details and location will be shared later on. J&K representative agreed to further share the complete details of PSDF scheme-1 & 2 by next month."
Unquote

Therefore, it is requested that concerned may please be advised to take action on priority to implement Double Main Transfer (DMT) bus arrangement at all the 220kV substations, which are having single main and transfer bus scheme to avoid load/Generation loss and to improve overall reliability of the system.

सादर धन्यवाद

राजीव पोरवाल
मुख्य महाप्रबंधक (प्रभारी),
उत्तरी क्षेत्र भार प्रेषण केंद्र, नई दिल्ली

विनम्र सूचनार्थ :

1. सदस्य सचिव, उत्तरी क्षेत्र विद्युत् समिति
2. कार्यपालक निदेशक, राष्ट्रीय भार प्रेषण केंद्र
3. सदस्य (पावर सिस्टम) , केंद्रीय विद्युत प्राधिकरण
4. सदस्य (GO & D), केंद्रीय विद्युत प्राधिकरण
5. प्रमुख सचिव (पावर), जम्मू एंड कश्मीर (केंद्र शासित प्रदेश)
6. अध्यक्ष और प्रबंध निदेशक (पोसोको)