



सत्यमेव जयते

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

सं.उक्षेविस/ प्रचालन/108/04/2020/7243-7245
No. NRPC/OPR/108/04/2020/

दिनांक: 21.07.2020
Date: 21.07.2020

सेवा में / To,

संलग्न सूचीनुसार
As per List

विषय: टेस्ट उप-समिति की 17 वीं बैठक में पी.टी.सी.यू.एल. से सम्बंधित कार्यसूची के अंतर्गत विशेष बैठक का कार्यवृत्त ।

Subject: Minutes of special meeting in respect of Agenda Points related to PTCUL in 17th TeST Sub-committee meeting.

महोदय ,
Sir,

उपरोक्त विषय पर विडियो कॉन्फ्रेंसिंग से दिनांक 07.07.2020 को आयोजित की गयी बैठक का कार्यवृत्त संलग्न है ।

The minutes of the meeting held on 07.07.2020 via video conferencing on the above subject is enclosed herewith.

भवदीय
Yours faithfully,

-sd-

(आर.पी.प्रधान)
(R.P. Pradhan)
अधीक्षण अभियंता
Superintending Engineer

Minutes of
Special meeting in respect of Agenda Points related to PTCUL in 17th
TeST Sub-committee meeting

Date: 07.07.2020 via Video Conferencing

The 17th meeting of Telecommunication, SCADA & Telemetry Sub Committee was held on 06th May 2020 via video conferencing. Minutes of the same was issued vide letter dated 27/05/2020. Since no representative from PTCUL was present in the meeting, it was decided that the agenda points related to PTCUL may be discussed separately in a special meeting amongst NRPC, NRLDC, PTCUL and POWERGRID.

Accordingly, a separate meeting was held on 07/07/2020 at 11:00hrs. via WebEx video conferencing. List of participants is enclosed as **Annexure-1**.

MS, NRPC welcomed all the participants and asked SE(C), NRPC to take up agenda of the meeting

2. Agenda

2.1 Non-availability of Reliable / Redundant Communication System for PTCUL, SLDC (ICCP, PDC, VCS and VOIP Communication links outage)

POWERGRID has established OPGW link from Roorkee (Puhana) PG to Rishikesh and the OPGW link from Rishikesh to Dehradun (Majra), is owned by PTCUL. There are certain issues in PTCUL link and thus, they need to check the fibre losses in that section. As committed in various TeST and NRPC meetings, it was agreed that 6 fibres (3 pairs) have to be handed over to POWERGRID for ULDC purpose but only 2 fibres (one pair) were found in good condition i.e. within permissible loss limit and the same was configured. In order to achieve MSP protection, balance fibres need to be arranged as per discussion held in previous meetings.

Alternate optical connectivity arrangements were also done through Dehradun-Rishikesh-Kashipur on PTCUL network, then ULDC network. It was working fine since more than one year but at present, these links are also out of service since last 6 months due to OPGW breakdown in Kashipur-Rishikesh PTCUL link.

PGCIL informed that redundant/protection path has also been discussed through 132 kv Majra sub-station (SLDC building) to Dehradun PG station two and half years back, wherein POWERGRID planned to lay OPGW on this link to establish redundancy for SLDC Dehradun but PTCUL informed that they had planned to lay OPGW on this link on their own and required fibres shall be provided to POWERGRID for ULDC purpose for redundancy / protection of SLDC System, but till date neither any OPGW / fibre connectivity has been established by PTCUL nor they have issued permission to POWERGRID for laying of OPGW for ULDC purpose. POWERGRID has arranged ICCP link protection for all SLDCs of Northern Region on POWERTEL network on chargeable basis, however PTCUL has denied permission to establish fibre connectivity / space availability for their equipment at SLDC Dehradun.

As per NLDC, NRLDC and SLDCs connectivity, POWERGRID has to establish fibre optic connectivity with protection and they have planned total four alternate paths for SLDC Dehradun but due to reluctant approach of PTCUL since beginning, establishment of ICCP was delayed earlier in 2018 and still connectivity is working on linear path only, so PDC and VOIP services are out since more than 3 months and at present SCADA ICCP and Video Conferencing services are working through LAN cable inter-patching between ULDC and PTCUL equipment as interim solution, this temporary arrangement was done after almost one week complete outage of PTCUL-SLDC and no management is available with us to monitor the links. This type of arrangement may work some period of time but can't be used as permanent solution specially for grid operation services. PDC and VOIP communication links are down since April 2020 due to above outage in communication system in PTCUL network.

In view of above, PTCUL needs to rectify the OPGW cables in both the links on priority and permission of fibre laying / equipment installation may be arranged to POWERGRID, so that redundant paths could be established to avoid this type of outages in future. NRPC and NRLDC is also requested to intervene in this matter, so that required permissions from PTCUL can be arranged on priority and redundant paths can be established.

Deliberation

During the meeting, POWERGRID informed that as per ULDC scheme, POWERGRID has to establish reliable communication system between NLDC, RLDCs and SLDCs for grid operation as well as Telemetry and voice connectivity. Earlier, SLDC, PTCUL was located at Rishikesh and OPGW connectivity was established from Roorkee PG to Rishikesh SLDC. Subsequently, after shifting of SLDC from Rishikesh to Dehradun (Majra), POWERGRID had to lay OPGW on 132kV Rishikesh to Majra line for establishment of OPGW connectivity from NRLDC to Dehradun, however

PTCUL informed that they had already planned OPGW on this line. During a special meeting with PTCUL on 31.08.2017, it was agreed that PTCUL will provide 6 nos of fibres to POWERGRID from Rishikesh to Majra for ULDC purpose and POWERGRID will install their communication equipment (TEJAS) for configuration of two (02) nos of ICCP links along with one voice, one VCS link on wideband network.

Accordingly, POWERGRID has installed their equipment at New SLDC in Dehradun (Majra) on 2 nos. of fibres instead of 6 nos. as confirmed by PTCUL. PTCUL had been requested to provide balance 4 nos of fibres to POWERGRID, during the integration in Oct/Nov '2017 but PTCUL informed that they will provide the fibres after rectification of the OPGW link but till date balance fibre has not been provided by PTCUL. Since Mar'2020, 2 nos. of fibres are also out of service and hence, PTCUL link from SLDC, Dehradun to NRLDC is not working thereby affecting services like ICCP, PDC link, PMU data, VOIP and Video conferencing links. On the request of PTCUL/ NRLDC, ICCP link was restored temporarily through hard looping (interpatching) between Fibrehome and GE equipment at Rishikesh but all other services are still out of service since 3 months.

After discussion PTCUL agreed to test their link from Rishikesh to Majra and joint testing shall be done for re-establishing the communication link between SLDC to NRLDC within a week time.

POWERGRID further, requested that one alternate path from Majra to Dehradun PGCIL sub-station is available (220 / 132 kv line) and approx. 12-13 Kms of OPGW needs to be laid and POWERGRID is ready to lay within 2 months, so that redundant communication with NRLDC has to be established. PTCUL mentioned that they may take up the issue with their higher management for this work and inform accordingly. POWERGRID informed that they need to install one more communication equipment through their Telecom network for reliability of ICCP link and requested permission from PTCUL for installation of Telecom equipment. PTCUL agreed for the same.

Member Secretary, NRPC mentioned that telemetry is a critical issue and availability of reliable communication system is important. He opined that Director (Project), PTCUL may be invited as special invitee in forthcoming TCC meeting, so that issues may be escalated for early resolution. Further, a DO letter may also be written to Director (Technical), PTCUL for matters related to operation issues. Further, he mentioned that same agenda may be taken in the upcoming TCC board meeting.

2.2 Non-availability of Real-Time Data

As per details submitted by PTCUL, out of 51 Sub-Station/Generating Stations data from only 28 Sub-stations are integrated at SLDC. List of Sub-stations/Generating-Stations not integrated with PTCUL SCADA is attached as **Annexure-2.2.I**. The same issue was also informed to PTCUL vide letter no.NRLDC/SL-II/2019-20 dated: - 05.03.20.

In addition to the above, many feeders are not integrated even at the locations where RTUs are installed. Detailed issue are given at **Annexure-2.2.II**. PTCUL needs to arrange for the telemetry at the earliest and submit the time line for integration to NRLDC.

Digital Status is very important for smooth monitoring of the grid. Non-availability of digital status also leads to incorrect results from State Estimator and other Power System applications. It is requested to please arrange for improvement in digital status.

Deliberation

During the meeting PTCUL informed that installation of new RTUs will be covered under new project which is at tendering stage and may take around 2-3 years to execute.

NRLDC informed that non-availability of data for such a long period is not acceptable and requested that installation of the RTU may be expedited under the project. RTU may be given highest priority in the project and project implementation may be scheduled in such a way that supply and installation of RTU is covered during early phase of implementation. PTCUL informed that they will discuss with their management and revert.

PTCUL informed that issues in existing RTUs shall be rectified by September, 2020. NRLDC requested PTCUL to give monthly update of the rectification work so that the same can be verified at NRLDC also. PTCUL agreed for the same.

2.3 ICCP integration between PTCUL and Backup NRLDC

During SCADA upgradation at NRLDC, Backup of NRLDC, was also established at Kolkata. As per system architecture, all states shall be connected through ICCP to main and Backup NRLDC.

PTCUL is still not connected to Backup NRLDC. It is advisable to take up with OEM for ICCP integration with Backup NRLDC.

Deliberation

PTCUL informed that they will take up with OEM and confirmed that ICCP integration will be done by August, 2020.

It was also decided that configuration of Association at PTCUL end and router etc would be under the scope of PTCUL. Communication link will be provided by POWERGRID and configuration at NRLDC end, will be under the scope of NRLDC.

2.4 Signing of side letters of MoU for AMC

PGCIL informed that side letter of MoU for maintenance of OPGW, has been sent to PTCUL. However, side letter for MoUs are yet to be signed and payment has got stuck. The signing of side letter to MoU needs to be expedited otherwise it would be difficult to carry out the AMC works without MOU in place.

POWERGRID informed that they have received the signed copy of Side letters for AMC of OPGW

2.5 Delay in Payment on account of maintenance services

POWERGRID is providing consultancy services on OPGW/Wideband/RTU/APS maintenance to constituents on overhead charges basis as per MOU signed with respective Constituents. Constituents are paying on quarterly or yearly basis with advance payment, however even advance payments are being released on delay of 5-6 months or more. This issue has been raised by our Auditor several times and POWERGRID have no other option to deduct the overhead charges from advance 1% deposited and cancellation of AMC with immediate effect. PTCUL is again requested to deposit advance payment on yearly basis.

Deliberation

In the meeting, POWERGRID informed that receiving of payment against AMC works is a serious issue from past 2-3 years particularly after implementation of GST, they have to file timely returns and settlement of invoices after receiving the fund. However due to delay in receipt of funds, their auditors have raised audit para's against these pending invoices. PTCUL mentioned in the meeting that they are trying to settle all the balance payment within 2-3 months.

Further, POWERGRID requested that due to problem in quarterly return filing and audit issue, they are going to raise advance invoices on yearly basis, so that payment can be received in time and audit issues may also be settled. PTCUL agreed for yearly invoice instead of quarterly so that above issues may be taken care of.

2.6 Delay in Submission of Tripping Report

NRLDC stated that in compliance of IEGC code Section 5.2 (r), all users are supposed to submit tripping reports/disturbance recorder/event logger data to NRLDC within 24 hrs of tripping for purpose of analysis of any grid disturbance/event.

In this regard, a lot of communication has been done with SLDC, Uttarakhand, however there is delay in submission of data and in some cases data is yet to be submitted.

Tripping data/DR submitted by SLDC, Dehradun/PTCUL during last month is mentioned below-

Post Desptach Report for 01.06.2020-28.06.2020																					
U t i l i t y	T o t a l	F I R T	F I R D	F I R N	F I R N A	D R T	D R D	D R N	D R N A	E L T	E L D	E L N	E L N A	T R T	T R D	T R N	T R N A	Timely sub mis sion of DR (in %)	Del aye d sub mis sion of DR (in %)	No Submi ssion of DR (in %)	DR not applic able (in %)
S L D C - U K	2 0	0	3	1 7	0	0	3	1 7	0	1	2	1 7	0	0	1	1 9	0	0	15	85	0

SLDC, Dehradun/PTCUL needs to take necessary action in this regard.
 FIR – First Information Report
 DR- Disturbance Recorder

EL – Event Logger
TR- Tripping Report
_T – Timely Submission
_D- Delayed Submission
_N-Not Submitted
_NA- Not Applicable

Deliberations:

NRLDC informed that each constituent shall submit tripping details on tripping portal of NRLDC. The matter has also been discussed in OCC Meeting. As per IEGC 5.2(r), all tripping details shall be submitted within 24 hrs of tripping. NRLDC informed that for the month of June, PTCUL has given 15 % delayed submission and details of 85% tripping are yet to be submitted.

NRLDC requested PTCUL to submit the tripping details within time.

<p>3. OTHER AGENDA</p>

3.1 Agenda raised by PTCUL

In the meeting, PTCUL informed that they need 4 nos of Data channel (E1) from Sitarganj to Rishikesh for reporting of their telemetry data and requested POWERGRID to provide the same. POWERGRID agreed for that.

Annexure-1

List of Participants present during the Meeting				
S. No.	Name	Designation	Organisation	E-mail
1	Sh. Naresh Bhandari	Member Secretary	NRPC	ms-nrpc@nic.in
2	Sh. R.P. Pradhan	S.E(C)	NRPC	sec-nrpc@nic.in
3	Sh. M Srikanth Reddy	E.E(C)	NRPC	
4	Sh. Manish Maurya	A.E.E.(C)	NRPC	
5	Sh. Shrey	A.E.E.(C)	NRPC	
6	Sh. Y.K.DIXIT	CGM	POWERGRID	
7	Sh. Narendra Kumar Meena	Manager	POWERGRID	nkmeena@powergridindia.com
8	Sh. Hitendra Singh Hyanki	CE	PTCUL	ce_tandc@ptcul.org
9	Sh. Uttam	SE	PTCUL	se_scada@ptcul.org
10	Sh. Vinayak Shaily	EE	PTCUL, SLDC	ee1_sldc@ptcul.org
11	Sh. Hare Ram	AE	PTCUL	ae1_scada_ksp@ptcul.org
12	Sh. Ankur Gulati	Ch. Manager	NRLDC	ankurgulati@posoco.in
13	Sh. Neeraj Kumar	DGM	NRLDC	neeraj.kumar@posoco.in
14	Sh. Manoj Kumar Agarwal	GM	NRLDC	mkagarwal@posoco.in
15	Sh. Alok	Sr.DGM	NRLDC	alok.kumar@posoco.in
16	Sh. Avadhesh Jha	JE	NRLDC	avadheshjha@posoco.in
17	Sh. Vinay kumar			vinayverma06ee50@gmail.com
18	Abhishek Jain			abhishekjvn@gmail.com

Annexure-2.2.I

Sl. No	Name	Voltage	Type	RTU/SAS	Integrattion Stat
1	ALMORA	132	SUB-STN	NO	NA
2	BAJPUR	132	SUB-STN	NO	NA
3	BHAGWANPUR	132	SUB-STN	NO	NA
4	BHOWALI	132	SUB-STN	NO	NA
5	BHUPATWALA	132	SUB-STN	NO	NA
6	BINDAL	132	SUB-STN	NO	NA
7	CHAMBA	220	SUB-STN	Yes	YES
8	CHIBRO-H	220	GEN-STN	Yes	YES
9	CHILLA-H	132	GEN-STN	Yes	YES
10	CHURDIYALA	132	SUB-STN	NO	NA
11	DHAKRANI-H	132	GEN-STN	Yes	YES
12	DHALIPUR-H	132	GEN-STN	Yes	YES
13	GAMMA GEN-T	220	GEN-STN	Yes	YES
14	IIP HARAWALA	220	SUB-STN	Yes	NO
15	JASPUR	132	SUB-STN	NO	NA
16	JAWALAPUR	132	SUB-STN	NO	NA
17	JHAJRA, DEHRADUN	220	SUB-STN	Yes	YES
18	KAMALWAGANJA, HALDWANI	220	SUB-STN	NO	NA
19	KASHIPUR 400KV	400	SUB-STN	Yes	YES
20	KASHIPUR 132KV	132	SUB-STN	Yes	YES
21	KATHGODAM	132	SUB-STN	NO	NA
22	KHATIMA-H	132	GEN-STN	Yes	YES
23	KHODRI-H	220	GEN-STN	Yes	YES
24	KICHA	132	SUB-STN	Yes	YES
25	KOTDWAR	132	SUB-STN	NO	NA
26	KULAHAL-H	132	GEN-STN	Yes	YES
27	LAKSAR	132	SUB-STN	Yes	YES
28	MAHUAKHERAGANJ	220	SUB-STN	Yes	YES
29	MAJRA, DEHRADUN	132	SUB-STN	NO	NA
30	MANERIBHALI-II-H	220	GEN-STN	Yes	YES
31	MANERIBHALI-I-H	220	GEN-STN	Yes	YES
32	MOHAMADPUR-H	33	GEN-STN	NO	NA
33	MANGLORE	132	SUB-STN	Yes	YES
34	PANT NAGAR	220	SUB-STN	Yes	YES
35	PATHARI-H	33	GEN-STN	NO	NA
36	PIRANKALIYAR	220	SUB-STN	Yes	YES
37	PITHORAGARH	132	SUB-STN	Yes	YES
38	PURKUL	132	SUB-STN	NO	NA
39	RAMGANGA-H	132	GEN-STN	NO	NA
40	RISHIKESH-I	400	SUB-STN	Yes	YES
41	RISHIKESH-II	220	SUB-STN	Yes	YES
42	RAMNAGAR	132	SUB-STN	NO	NA
43	ROORKEE	220	SUB-STN	Yes	YES
44	RUDRAPUR	132	SUB-STN	NO	NA
45	HARIDWAR(SIDCUL)	220	SUB-STN	Yes	YES
46	SITARGANJ	132	SUB-STN	Yes	YES
47	SARAVANTI INFRA -T	220	GEN-STN	Yes	YES
48	SATPULI	132	SUB-STN	NO	NA
49	SIMLI	132	SUB-STN	NO	NA
50	SRINAGAR-I	400	SUB-STN	Yes	YES
51	SRINAGAR-II	132	SUB-STN	NO	YES

Annexure-2.2.II

Station Name	Non available Analog data	Non available Digital data
Bhagwanpur	All	All
Chamba	All	All
Chhibro	Available	Line Isolator
Chilla	Bus 1 Frequency	Isolator Bus Coupler
Dhakrani	All	All
Dhalipur	All	All
Gamma	Bus 1 Voltage (data wrong)	Available
Jhajra	ICT 2 132 KV side - P, Q	All isolator data wrong (All open)
	132 KV Mazra - Q	some CB data wrong (analog flow is there but CB open)
	132 KV both buses- Freq	
	132 KV both buses- Voltage value wrong (0 KV)	
Kashipur 132	132 KV Bazpur, KVS IGL P, Q	All
	132/33 KV ICT 1,2,3 both sides P, Q	
Kashipur 400	400 KV Nehtaur Q	
	400 KV Bus 2 Frequency	400 KV CB Main bay Moradabad, Nehtaur, Bareilly-I, ICT-I, ICT-II
	220 KV Mahuakheraganj P, Q	400 KV CB all tie bay
	220 KV Sravanti P, Q	400 KV Bus and other Isolator Main bay Roorkee-I, Nehtaur, Bareilly-I, ICT-I, ICT-II
	220 KV Bus 2 and 3 Voltage and Frequency	220 KV CB ICT-II, Mahuakheraganj, Sravanti, TBC, Pantnagar-II
	132 KV Bazpur P, Q	220 KV Isolator Sravanti, Mahuakheraganj Bay
		220 KV Line Isolator ICT-I, II, Pantnagar-I (wrong status)
		132 KV CB Bazpur
		132 KV Line Isolator all(wrong status)
Khatima	All	All
Khodri	220 KV Rishikesh, Dhakrani P, Q	All CB and Isolator (wrong ststus)
	220 KV Bus 1 Frequency	
Kicha	ICT 3 P, Q	All CB
		Isolator Richa, Sitarganj, ICT 1, 2, 3
		Isolator CPP, Rudrapur (wrong status)
Kulhal	Mazra 1, II P, Q	CB Mazra 1, Giri, Unit 1,2,3
	Bus 1 Frequency	CB Dhalipur (wrong Status)
		All Bus Isolator (wrong Status)
Laksar	All	All
Mahuakheraganj	132 KV Bus 2 Voltage and Frequency	220 KV CB Gamma, MBC, ICT 2
	33 KV Bus 1 Voltage and Frequency	220 KV Bus 3 isolator Sravanti
		132 KV Line Isolator Kashipur 132

Manerbhali 1	Unit 3 P	CB Unit 1,2,3, ICT 1,2
	Bus 2 Frequency	Isolator ICT 2
	ICT 2 P, Q	All other Isolator (wrong status)
Manerbhali 2	Unit 1, 3 P, Q	All
Manglore	All	All
Mazra	All	All
Pantnagar	220 KV Bus 1 Voltage and Frequency	All (wrong and suspected)
	220 KV Bus 2 Voltage	
	220 KV side ICT 5, 6 P, Q	
	132 KV Bus 1 Voltage and Frequency	
	132 KV Rudrapur, Kathgodam P, Q	
Pirankaliyar	All	All
Pithoragarh	Bus voltage and Frequency	
	Almora, ICT 1,2,3 P Q	All
Rishikesh 220	220 KV Sidkul, khodri, Manerbhali 2, ICT 1,2 P, Q	220 KV CB Manerbhali 2, ICT 1,2
	132 KV ICT 1,2,3, Srinagar P,Q	220 KV all Isolator Manerbhali 2
		220 KV all Line Isolator
		132 KV all CB
		132 KV all line Isolator
Rishikesh 400	220 KV Voltage and Frequency	400 KV CB TBC
		400 KV Line isolator Nehtaur, Rishikesh
		220 KV Line isolator ICT 1,2
Roorkee	220 KV Bus 1 Voltage and Frequency	132 KV CB ICT3,4, Sidkul, BHGPR
	220 KV Bus 2 Voltage	132 KV isolator ICT 4
	220 KV ICT 1,2 P,Q	
	132 KV All	
Sidcul	All	All
Sitarganj	Bus Voltage and Frequency	
	Kicha, khatima, ICT1,2 P, Q	CB feeder 1, Pilibhit, Khatima, ICT 1,2, Sitarganj 2
		Isolator ICT1,2
Srinagar		Line Isolator ICT1,2,3,4 Both sides