

भारत सरकार Government of India विद्युत मंत्रालय Ministry of Power केन्द्रीय विद्युत प्राधिकरण Central Electricity Authority विद्युत प्रणाली परियोजना प्रबोधन प्रभाग Power System Project Monitoring Division

सं. के.वि.प्रा./पीएस/पीएसपीएम/7/7/ 2017/ सेवा में.

दिनांक: 22.08.2017

(संलग्न सूची के अनुसार)

विषयः उत्तराखण्ड, हिमाचल प्रदेश, सिक्किम में पनबिजली परियोजनाओं से जुड़े ट्रांसिमशन सिस्टम एवं गदरवाड़ा एसटीपीपी से जुड़े ट्रांसिमशन सिस्टम का पुनर्निर्धारण के संबंध में समीक्षा के लिए सदस्य (विद्युत प्रणाली), के.वि.प्रा. द्वारा 10.08.2017 को की गई बैठक का कार्यवृत्त । महोदया/महोदय,

उत्तराखण्ड, हिमाचल प्रदेश, सिक्किम में पनिबज्जी परियोजनाओं से जड़े टांसिमशन सिस्टम एवं गदरवाड़ा एसटीपीपी से जड़े टांसिमशन सिस्टम का पनिर्धारण के संबंध में समीक्षा के लिए सदस्य (विद्युत प्रणाली), के.वि.प्रा. द्वारा 10.08.2017 को की गई बैठक का कार्यवृत संलग्न है।

Minutes of the meeting taken by Member(PS), CEA on 10.08.2017 to review the progress of transmission system associated with hydro projects in Uttarakhand, Himachal Pradesh & Sikkim and rescheduling of transmission system associated with Gadarwara STPP (2X800 MW) is enclosed herewith for information and necessary action.

्री के भार्य

मुख्य अभियंता

प्रति स्चनार्थः

1. संयुक्त सचिव (ट्रांस.), विद्युत मंत्रालय, श्रम शक्ति भवन, रफ़ी मार्ग, नई दिल्ली-110001

2. प्रधान निजी सचिव, सदस्य(पीएस), केविप्रा

Minutes of the meeting taken by Member(PS), CEA on 10.08.2017 to review the progress of transmission system associated with hydro projects in Uttarakhand, Himachal Pradesh & Sikkim and rescheduling of transmission system associated with Gadarwara STPP (2X800 MW) of NTPC

List of participants is attached at Annexure-I.

Member (PS), CEA welcomed all the participants and briefly explained agenda of the meeting. Member(PS) expressed his concern on delays in implementation of transmission system planned and emphasized on timely completion of associated transmission system matching with the respective generating station. He requested Chief Engineer(PSPM) to take up agenda items. Brief of discussion is as follows:

(1) Construction progress of Legship - New Melli 220 kV line

Chief Engineer(PSPM) informed that this line is being constructed by PGCIL covered under T&D scheme for Sikkim and Arunachal Pradesh funded by MoP. The transmission line consists of 35 tower and 10 km of line length. PGCIL representative stated that all the towers had been erected and stringing was under progress in balance length of 1.5 km at loc no. 15/0 but unfortunately one tower no. 15/0 collapsed while stringing of conductor. Recasting of foundation is under progress and casting of stub for 2 legs has been completed and balance 2 legs would be completed by 15.8.2017. He further stated that tower material is available at site and line would be completed by the end of August month. CE(PSPM) stated that recently Member(Hydro) had taken a review meeting of hydro generation project wherein he suggested to use ERS at loc no 15/0 till tower gets erected as power generation is bottled up. PGCIL representative informed that due to limitation of hilly terrain as well as transportation of ERS material to the location, it would not feasible to use ERS in such a short span of time.

(2) Rescheduling of ATS of Gadrawara STPS (2x800 MW) of NTPC

Chief Engineer(PSPM) informed that NPTC had submitted a letter on 01.8.17 wherein NTPC had requested to postpone commissioning of balance 3 nos transmission elements (2 nos transmission lines and one substation) covered under ATS of Gadrawara STPS to Mar 18 from Nov,17. NPTC informed that first unit would be synchronised by Aug 17 with grid through Gadrawara- Jabalpur 765 kV D/C transmission line which was completed for drawl of startup power as well as evacuation of power and second unit of generation project is expected to

complete after Mar 18. M/s PWTL (A subsidiary of PGCIL) representative informed that out of 4 transmission elements covered under transmission scheme, one elemens has already been commissioned in May 17 and construction of balance 3 elements namely Gadarwara-Warora 765 kV D/C line, LILO of 400KV D/C Warora-Parli at Warora and 3500 MVA, 765/400KV Warora Substation is in advance stage of completion and PWTL is striving hard to complete within the schedule COD i.e Nov.'17 in spite of severe right of ways issues. PWTL informed that it would be difficult to postpone the transmission project due to contractual obligation as indicated in TSA. However, they would take up matter of postponement up to 2 months i.e. Dec 17-Jan.'18 with their management and also requested to CEA to take up issue with LTTC for their acceptance.

3. ATS of various Hydroelectric Projects in Himachal Pradesh

Bajoli Holi HEP (3X60 MW)

Director (HPM), CEA informed that Bajoli Holi HEP (3X60 MW) is under construction and is expected to be commissioned by July, 2019. Following transmission system is associated with Bajoli Holi HEP (3X60 MW) for evacuation of power;

- 1. 220 KV D/C Bajoli Holi HEP Lahal line (36 ckm, 60 loc)
- 2. 400 KV D/C Lahal Chamera line (70 ckm, 109 loc)
- 3. 630 MVA, 400/220/33 kV GIS at Lahal

The representative of HPPTCL informed that both lines are passing through forest land and forest proposal would be submitted shortly. The contract for construction of Lahal GIS has been awarded and 15% civil work completed. The GIS is schedule to complete by Jun 18. Fund for Bajoli Holi – Lahal line is being arranged from ADB and proposal has been submitted and after its approval, the LOA would be issued. The line is scheduled to complete by Aug 18. Bid for Lahal – Chamera line is to be opened on 28.08.17 and line is scheduled to complete by April 19. PGCIL representative stated that HPPTCL is yet apply for connectivity for termination of Lahal-Chamera line. HPPTCL was advised to to approach PGCIL for termination of their line at Chamera substation.

Chango Yangthang HEP (140 MW)

Director (HPM), CEA informed that Chango Yangthang HEP (140 MW) has been dropped from generation program.

Chanju-I HEP (3x12 MW)

Director (HPM), CEA informed that Unit-I of Chanju-I (3x12 MW) has been commissioned and the balance unit are expected to be commissioned in August, 2017. HPPTCL representative stated that the associated transmission system was constructed by HPSEBL. HPPTCL was advised to submit updated status to CEA in coordination with HPSEBL.

Kashang-I, II & III HEP (65 + 2x65 MW)

Kashang-I unit has been commission and power is being evacuated through 220 KV D/C Kashang – Bhaba line (length-39 ckm). PGCIL representative stated that power of kashang and other generating projects in vicinity was planned to be pooled at Jangi pooling station, since other generating projects have withdrawn LTA therefore the construction of Jangi pooling station has been dropped for the time being. He further informed that Kashang – Bhaba 220 kV D/C line would be adequate to evacuate power from Kashang-I, II & III.

Shongtong Karcham HEP (3x150 MW)

Director (HPM), CEA informed that Shongtong Karcham HEP (3x150 MW) is expected to be commissioned in September, 2021.

Following transmission system is associated with Shongtong Karcham HEP (3x150 MW) for evacuation of power;

- 1. Shongtong Karcham HEP Wangtoo 400 KV D/C line (18 ckm)
- 2. 630 MVA, 400/220 KV GIS at Wangtoo

The representative of HPPTCL informed that 25% of civil work in wangtoo GIS has been completed and balance work would be completed in time. The GIS is scheduled to complete by Dec17. The contract of Shongtong Karcham HEP – Wangtoo 400 KV D/C line is to be awarded through TBCB route and BPC is yet to place RFQ/RFP. Member(PS), CEA advised CE(PSPM) to take up with respective BPC for award of transmission project.

Swara Kuddu HEP (3x37 MW)

Director (HPM), CEA informed that Swara Kuddu HEP (3x37 MW) is expected to be commissioned in FY 2018-19.

Following transmission system is associated with Swara Kuddu HEP (3x37 MW) for evacuation of power;

1. Swara Kuddu HEP(Snail) – Hatkoti 220 KV D/C line (27 ckm, 41 locs)

- 2. Hatkoti Gumma 220 KV D/C line (52 ckm, 80 locs)
- 3. LILO of Jhakri -Abdullapur 400 kV line at Gumma(6ckm, 15 loc)
- 4. 315 MVA, 400/220 kV substation at Gumma
- 5. 220kV switching station at Hatkoti

The representative of HPPTCL informed that work is under progress and schedule to complete by Dec 18. So far 10 foundations have been completed in Swara Kuddu – Hatkoti line. 66 foundations and 45 tower erection work have been completed in Hatkoti – Gumma line. 50 % of civil work has been completed in Gumma substation. Work in Gumma LILO line has been started.

Tangnu Romai-I HEP(2x22 MW)

Director (HPM), CEA informed that Tangnu Romai-I HEP (2x22 MW) is expected to be commissioned in FY 2018-19.

Following transmission system is associated with Tangnu Romai-I HEP (2x22 MW) for evacuation of power:

- 1. Tangnu Romai-I HEP Sunda 132 KV D/C line (24 ckm, 41 locs)
- 2. Sunda Hatkoti 220 KV D/C line (50 ckm, 65 locs)
- 3. 100 MVA, 220/132 kV substation at Sunda

The representative of HPPTCL informed that 16 foundation completed in Sunda-Hatkoti line and contract of Tangnu Romai – Sunda line has been awarded and scheduled to complete by Aug18.

Tidong-I HEP (2x50 MW)

The representative of PGCIL informed that LTA has been surrendered by generating company. Director(HPM) stated that generation project has not been dropped from the generation program of CEA and construction activity is in progress at site and progress has also been discussed recently in review meeting held in CEA. HPPTCL was advised to submit details of transmission system associated with generation project and its progress.

Uhl-III HEP (2X50 MW)

No representative of HPSEB Ltd attended meeting. However, HPSEBL intimated through email that a 132kV D/C Transmission line(35.68Km) was envisaged for evacuation of Power from Uhl-III project and its construction has been completed/ commissioned on 6th March, 2014.

4. ATS of Hydroelectric Projects in Uttarakhand

Alaknanda HEP (6x50 MW)

Director(HPM) informed that generation project has been dropped.

Lakhwar HEP (300 MW)

PTCUL representative stated that the following transmission line has been planned for evacuation of power from Lakhwar HEP.

Lakhwar – Dehradun 220 KV D/C Line

The contract for construction of line has been awarded. Detail survey completed and line is passing through forest land. The forest proposal has been submitted to Regional MOEF for clearance. PTCUL was advised to complete the line matching with the generation project.

Vyasi HEP (120 MW)

Director (HPM), CEA informed that Vyasi HEP (120 MW) is expected to be commissioned in March, 2019.

Following transmission system is associated with Vyasi HEP (120 MW) for evacuation of power;

LILO of 220 KV D/C Lakhwar – Dehradun line at Vyasi

PTCUL representative informed that route survey has been completed, tower schedule and profile of line has been approved. Further, he informed that line is passing through forest land and forest proposal has been forwarded to regional MOEF, Dehradun from State Government, Uttarakhand and line is expected to be commissioned by Dec, 2018.

Lata Tapovan HEP (3x57 MW)

Director (HPM), CEA informed that Lata Tapovan HEP (3x57 MW) is expected to be commissioned in FY 2021-22 subject to restart of works, currently work is stalled.

Following transmission system is associated with Lata Tapovan HEP (3x57 MW) for evacuation of power;

- 1. 220 KV D/C Lata Tapovan Joshimath transmission line (24 ckm)
- 220 KV D/C Joshimath- Pipalkoti transmission line

PTCUL representative informed that contract has been terminated on 23.01.2017 as per the stay order of Hon'ble Supreme Court for Construction of Hydro electric project of Lata Tapovan HEP(171MW) after June 2013 Natural

Disaster in Uttrakhand State. The land for construction of 220 KV Substation at Joshimath and 400 KV Substation at Pipalkoti is also not available.

Phata Byung HEP (2x38 MW)

Director (HPM), CEA informed that Phata Byung HEP (2x38 MW) is expected to be commissioned in 2019-20.

Following transmission system is associated with Phata Byung HEP (2x38 MW) for evacuation of power;

- 1. 220 KV D/C Brahmwari Srinagar transmission line (182 ckm)
- 2. 220 KV D/C Phata Byung HEP Brahmwari transmission line

PTCUL representative informed that line is passing through forest land and stage —I forest approval has been obtained and compliance report for final approval of forest case has been submitted to Nodal Officer on 05 Aug 17. LANCO is contractor for both lines and M/s LANCO has been referred to NCLT by Banks and progress of Work is very slow at site at present. Notice has been issued to M/s LANCO & Bank Guarantees of LANCO against mobilization advance has been encashed by PTCUL. PTCUL informed that at present foundation at 68 locs out of 260 has been completed and work is in progress in 3 tower locations in Brahmwari — Srinagar line. PTCUL was requested to resolve the matter related to the contractor immediately and ensure to complete the construction of Line by March 2019 as this line would be required for power evacuation of Singoli Bhatwari HEP (99 MW) of L&T.

Vishnughad Pipalkoti HEP (4x111 MW)

Director (HPM), CEA informed that Vishnughad Pipalkoti HEP (4x111 MW) is expected to be commissioned in Dec, 2019.

Following transmission system is associated with Vishnughad Pipalkoti HEP (4x111 MW) for evacuation of power;

- 1. 400 KV D/C Vishnugad Pipalkoti HEP Pipalkoti (THDC) line (36 ckm)
- 2. 630 MVA, 400/220 KV GIS at Pipalkoti(THDC)

The representative of PTCUL informed that work has been awarded to Tata and route alignment & survey has been completed. Line is passing through forest land and forest proposal is under process. The line is expected to be commissioned by Sept, 2019. He further stated that acquisition of land for Pipalkoti substation is under process with THDC which would be resolved within a month. PTCUL was requested to complete the associated transmission system matching with generation project.

Singoli Bhatwari HEP (3x33 MW)

Director (HPM), CEA informed that Singoli Bhatwari HEP (3x33 MW) is expected to be commissioned in FY 2018-19.

Following transmission system is associated with Singoli Bhatwari HEP (3x33 MW) for evacuation of power;

 LILO of Baramwari – Srinagar 220 KV D/C line at Singoli Bhatwari HEP (Length-5 ckm)

PTCUL representative was requested to resolve the contractual issue of Baramwari – Srinagar 220 KV D/C line and complete it matching with the commissioning of Singoli Bhatwari HEP to avoid power evacuation from the project.

Tapovan Vishnugad HEP (4x130 MW)

Director (HPM), CEA informed that Tapovan Vishnugad HEP (4x130 MW) is expected to be commissioned in 2019-20.

Following transmission system is associated with Tapovan Vishnugad HEP (4x130 MW) for evacuation of power;

- 1. 400 KV D/C Pipalkoti Karanprayagag-Srinagar line (184 ckm)
- 2. 400 KV D/C Pipalkoti Tapovan Vishnugad line (36 ckm)
- 3. 400 KV D/C Srinagar Kashipur line

PTCUL intimated that price bids of all 3 packages has been opened and finalized for 400KV Pipalkoti – Karanprayag – Sringar Line. Tender shall be awarded in the month of Aug 2017 after getting approval of PTCUL Board. The line would be completed by Aug,19. PTCUL intimated that Construction of 400 KV DC Vishnugad-Pipalkoti line is under progress. Route alignment and forest proposal preparation is in progress. The line would be completed by Aug,19. PTCUL representative requested CEA to allow LILO of 400 KV DC Vishnuprayag-Muzaffarnagar line at Pipalkoti as an alternate arrangement for power evacuation of Tapovan Vishnugad (NTPC). PTCUL representative was advised to take up matter with UPPTCL alongwith detail System Study report as UPPTCL is the owner of 400 KV DC Vishnuprayag-Muzaffarnagar Line and subsequently take up with CEA for approval of Standing Committee of power system in NR. The System Study Report may also be submitted to CEA and PGCIL. PGCIL intimated that the construction of 400KV LILO Line at Pipalkoti is not approved in Standing Committee.

Regarding construction of 400KV D/C Srinagar – Kashipur Line PTCUL intimated that contract had been awarded to M/s Cobra but due to poor financial condition of company, M/s Cobra had abandoned the project. Bank Guarantees of M/s Cobra has been encashed on 16.06.2017 due to nonperformance of contract and termination/re-tendering/other parallel activities are being taken up. NTPC representative intimated that this line is very important element of UITP scheme for power evacuation from Hydro Projects in Alaknanada and Mandakini river basin and it would be difficult to evacuate power of Hydro Projects under construction. They requested PTCUL to take up construction of this line on top priority.

PTCUL was requested to award the work immediately as it has already delayed considerably and take up the work of line on priority to ensure power evacuation from generation project.

Tehri PSP (4x250 MW)

Director (HPM), CEA informed that Tehri PSP (4x250 MW) is expected to be commissioned in Sept, 2019.

Following transmission system is associated with Tehri PSP (4x250 MW) and its progress is as under;

1. 765/400kV Tehri Pooling Station GIS (NHVS/KEC)

NOA: Mar-15 Ant. Completion- June'18

Scope: 765kV 2 Line Bays (Meerut-1 &2), 400kV 1 Line Bay (Tehri-3), 765/400kV 4x800MVA ICTs (14no 1ph incl 2 spares) with 4no 765kV ICT Bays & 4no 400kV ICT Bays, 765kV 1x240MVAR Bus Reactor (4no 1ph incl 1 spare) with 1no Bus Reactor Bay

Supply:

- GIS Supply 1st Lot supply expected from Oct'17
- 14x267.67 MVA 765/400kV Auto Trf (ABB):
 - Supply expected by Jan18
- 4x80MVAR Bus Reactors (ABB):
 - -1 unit Supply expected by Oct'17, 2 Units by Nov'17 and balance 1 Unit by Dec'17
- All on shore supplies completed by M/S KEC except C&R Panels

Installation:

- Transformer Foundation- 14 Nos , Reactor Foundation- 01 No, completed
- 765kV GIS Building all foundations and plinth beam completed, PEB Erection completed, Internal cable trench works under progress

- 400kv GIS Building upto first beam completed, roof slab shuttering works U/p
- Ext. at 765/400kV Meerut substation for Koteshwar Meerut T/L (NHVS/KEC)

Scope:

765kV 2 Line Bays (Meerut-1 &2) 765/400kV 1x1500 MVA ICTs along with associated bays 765kV 2x240MVAR Line Reactors with associated bays

Supply:

- 3x500MVA 765/400kV Auto Transformers: expected in Dec'17
- 6x80MVAR Line Reactors (ABB): expected in Dec'17
- · All on shore supplies completed by M/S KEC.

Status/Remarks:

- 400kV & 765kV Tower & equipment foundation (Completed)
- Str Erection (75% completed), Equipment erection under progress.
- 3. 765KV S/C Koteshwar Meerut line I &II (Uttarakhand-UP) (TATA)

NOA:	Feb-15				Ant:	June-18
Bal	Fdn:	4/8	TE:	8/8	Strg:	2/2

- Detailed Survey completed,
- Foundation work in Progress
- 4. Tehri PSP Tehri Pooling Station 400kV S/C (Quad) line-(Tehri-Koteshwar III Line) (TATA)

NOA:	Feb-15				Ant:	June-18	
Bal	Fdn:	6/38	TE:	11/38	Strg:	10/13.4	

- Detailed Survey completed,
- Foundation work and TE in Progress

Chief Engineer(PSPM), CEA intimated that progress of transmission projects is not getting updated by PTCUL and HPPTCL in CEA IMS /NIC portal and in absence of correct data it is becoming very difficult to assess progress of transmission projects matching with generation project in HP and Uttrakhand. He further informed that the progress of transmission project is being published/uploaded in CEA website on monthly basis and in absence of updated status, progress report indicates nil progress in HP and Uttrakhand. Member(PS), CEA advised PTCUL and HPPTCL representative to instruct concerned officer to update status of their transmission projects regularly in CEA IMS/NIC portal through login ID and Password already issued to PTCUL and HPPTCL.

List of Participants

CEA

MEMBER (POWER SYSTM)- In chair 1. PRAKASH MHASKE 2. B. K. ARYA CHIEF ENGINEER(PSPM) 3. GIRDHARI LAL DIRECTOR(HPM) 4. N.R. MEENA DY. DIR(PSPM) 5. UGRASEN PRASAD DY. DIR(PSPM) 6. R. K. TIWARI DY. DIR(PSPM) 7. RAVI KANT AD-II(PSPM) 8. AVINASH PATHAK AD-II(PSPM)

POWERGRID

1. MUKESH KHANNA GM 2. POONAM VARSHNEY **AGM** 3. S. MAJUMDAR **DGM** 4. RASHMI PANT JOSHI MANAGER

PTCUL

1. ILLA CHANDRA SE 2. MUKESH CHANDRA BARTHWAL EE 3. MANOJ KUMAR EE

NTPC

1. NITIN AGRAWAL MGR(PP&M) 2. V.K. JAIN DGM(COMERL) 3. SUVEAN VYAS DGM(P&M-CE)

HPPTCL

1. A. K DHIMAN GM

SHIGA ENERGY PVT. LTD.

1. NUKALA KISHORE **MANAGER**

पते की सूची:

SI. No.	Organisation	Address	Tele/Fax No./email
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3.	HPSEBL	Managing Director, Himachal Pradesh State Electricity Board Ltd Vidyut Bhawan, Shimla, Himachal Pradesh-171004	0177-2813272 directorp@hpseb.in 0177-2812500 cepm@hpseb.in
4.	PTCUL	Managing Director, Power Transmission Corporation of Uttrakhand (PTCUL), 7B, Lane No.1, Vasant Vihar, Dehradun- 248 001	Ph: 0135 -2643460 Fax: 0135 -2762460/2768867, mdptcul@rediffmail.com Shrawan_k_sharma@ptcul.org
5.	CEA	Chief Engineer (HPM), Central Electricity Authority, Sewa Bhawan, R K Puram, New Delhi-110066	Ph: 011-2673 2767 hpmdivision@yahoo.com