

**Agenda for 45<sup>th</sup> meeting of the STU Coordination Committee**  
**To be held under the chairmanship of Addl. Chief Secretary (MPP & Power)**

**Item No. 1**

**Progress Review of Transmission Projects being built by HPPTCL with Financial assistance by ADB and KfW in Different river basins: -**

Board of Directors of HPPTCL in its 34<sup>th</sup> meeting advised HPPTCL for rescheduling of projects so as to have more focus on those projects where generation is likely to be ready. Also there have been reasons for slippages such as FCA, Contractors Disputes, Court cases etc. The revised CODs shall accordingly be proposed and decided in the meeting.

Sr. No.	Name of Transmission Project/Distt	Loan	Upcoming generation based on connectivity application received	LTA Received	Target COD as committed in 44th STU meeting on 4.3.2017	Revised COD	Reasons for slippage
<b>A</b>	<b>SATLUJ BASIN</b>						
1	22/66/220 kV, (22/66 kV, 2x10 MVA+ 66/220 kV, 31.5 MVA) Pooling station at Bhoktoo.	HPPTCL/ ADB_Tr-I	1. Shyang (3 MW)-Completed	NIL	Commissioned 31.12.16		
2. Tangling (5 MW)-Completed							
3. Shaung (interim) (3 MW)-Completed							
4. Brua (Interim) (9 MW) - Completed							
5. Tidong-I (100 MW)							
6. Kashang (3x65 MW)- 100 MW commissioned							
2	220 kV Kashang-Bhaba D/C Line.	HPPTCL/ Domestic		NIL	Commissioned 31.05.16		

3	66 kV GIS Switching Stn at Urni and 66 kV Urni-Wangtoo D/C Line.	HPPTCL/ ADB_Tr-II	7. Raura (12 MW)- Original application indicated COD as <b>31.1.2017</b> <b>Revised COD to be given by Developer</b>	NIL	June-18		
			8. Shaung (final) (3 MW) Completed				
			9. Brua (final) (9 MW) - Completed				
4	66/220 kV, 2x80/100 MVA+220/400 kV, 2x315 MVA P.S at Wangtoo	HPPTCL/ ADB_Tr-I	10. Rala (13 MW)- as per LTA application indicated COD as <b>1.9.2017</b>	LTA 13 MW for 2% capacity	220 kV portion Dec 2017		
5	66/22 kV GIS substation at Nirmand and 66 kV Nirmand-Kotla D/C line	HPPTCL/ ADB_Tr-III	No connectivity application received	NIL	Dec-18		
<b>B</b>	<b>PABBAR BASIN</b>						
1	22/132 kV substation at Tangnu Romai and 132 kV Tangnu Romai-Sunda D/C Line.	HPPTCL/ (KfW)	1. Tangnu Romai-I (44 MW)-Original application indicated COD as <b>30.6.14 No progress</b>	NIL	Oct-18		
			2. Tangnu Romai-II (6 MW)- Original application indicated COD as <b>30.6 2012. Project commissioned and is evacuating power through HPSEBL system as Interim measures.</b>				

2	33/132 kV, 31.5 MVA sub station near Rupin HEP and 132 kV Rupin-Sunda D/C line.	HPPTCL/ (KfW)	3. Rupin (45 MW)-Original application indicated COD as <b>30.9.2018. No progress.</b>	NIL	Oct-18		
3	66/220 kV 80/100 MVA, 132/220 kV 2x100 MVA substation at Sunda with LILO of 66 kV Samoli-Andhra line & 220 kV Sunda-Hatkoti D/C line	HPPTCL/ (KfW) & ADB_Tr-II	4. Dhamwari Sunda (70 MW)- Original application indicated COD as <b>30.6 2012. No progress</b>	NIL	May-18		
			5. Paudital Lassa (24 MW)- Original application indicated COD as <b>31.3 2015. Revised COD to be given by Dev. of project</b>				
4	220 kV Switching station at Hatkoti.	HPPTCL/ ADB_Tr-III	6. Sawra-Kuddu (111 MW)- Original application indicated COD as <b>Dec, 2012. Expected COD- Dec, 2018.</b>	NIL	Mar-18		
5	220 kV Snail-Hatkoti D/C line	HPPTCL/ (KfW)		NIL	Dec-17		
6	220 kV D/C High Capacity Line from Hatkoti to 220/400 kV P.S near Pragati Nagar	HPPTCL/ ADB_Tr-I		NIL	Jun-17		
7	220/400 kV, 2x315 MVA P.S near Pragati Nagar	HPPTCL/ ADB_Tr-I & (KfW)		NIL	Dec-17		
<b>C</b>	<b>BEAS BASIN</b>						
1	Construction of 33/220 kV GIS Sub Station at Phojal in Naggar	HPPTCL/ (REC)	1. Baragaon (24 MW)- project completed and evacuating full power through this substation		Commissioned on 7.6.2016		

	Valley/ Kullu & 220 kV line from Phojal to LILO point/ Kullu		2. Kesta (3 MW)- Original application indicated COD as <b>March 2016</b> .	NIL			
			3. Baloot fozal- Original application indicated COD as <b>Dec, 2018</b> .				
			4.Fozal (rev. capacity-16 MW)				
2	33/132 kV GIS SS at Barsaini/ Kullu and 132 kV Barsaini-Charor D/C line	HPPTCL/ ADB_Tr-III	Balarga (9 MW)- Original application indicated COD as <b>31.10.2013</b> .	NIL	Mar-19		
3	132/220 kV 100 MVA, 33/220 kV 100 MVA GIS SS at Charor/ Kullu and 220 kV Charor-Banala D/C line/ Kullu.	HPPTCL/ ADB_Tr-II & (KfW)			Aug-18		
4	33/132 kV, 2x31.5 MVA GIS SS at Pandoh/ Mandi	HPPTCL/ ADB_Tr-I & (KfW)	NIL	NIL	Aug-18		
5	132/220 kV, 2x100 MVA GIS SS at Patti/ Kangra & 220 kV Patti-Hamirpur (PG) D.C line	HPPTCL/ KfW	44 MW of small HEPs which cannot be evacuated through existing HPSEBL system	NIL	Oct-18		
6	33/132 kV, 2x31.5 MVA GIS SS at Chambi/ Kangra & LILO of 132 kV Dehra-Kangra line at Chambi	HPPTCL/ ADB_Tr-I & ADB_Tr-II	NIL	NIL	Aug-18		

7	33 kV Switching station at Palchan & 33 kV Palchan-Allian Dhuangan D/C line	HPPTCL/ (KfW)		NIL	NIL	Dec-18		
<b>HPSEBL WORKS</b>								System strengthening
8	33 Kv Baner-Drang-Kangra line/ Kamgra	HPSEBL				31.3.2017		
9	33 kV Maranda-Nagrota-Kangra line/ Kamgra	HPSEBL				31.3.2017		
10	33 kV Baner-Sidhpur-Kangra line/ Kamgra	HPSEBL				31.12.2016		
11	33 kV Baijnath-Bassi line/ Kangra	HPSEBL				31.3.2017		
<b>D</b>	<b>RAVI BASIN</b>							
1	33/220 kV, 50/63 MVA GIS substation at Karian and 220 kV S/C line on D/C towers between Karian and 400/220 kV Chamera pooling station (PG)/ Chamba	HPPTCL/ REC	Kurtha-5 MW	NIL	Substation Commissioned on 33 kV level & Line COD June-17			
Belij-5 MW								
Balij Ka Nalla-3.5 MW								
Dunali-5 MW								
			All the projects have been commissioned and partial evacuation is being done through HPSEBL existing 33 kV lines					
2	33/220/400 kV GIS SS at Lahal & 220 kV S/C line on D/C towers	HPPTCL/ ADB_Tr-II	Bajoli Holi (180 MW) Original application indicated COD as <b>June, 2018.</b>	LTA (180+51) MW for 37% capacity		June-18		

	between Lahal and Budhil HEP/ Chamba		<b>Kutehr-240 MW-</b> Original application indicated COD as <b>August, 2017.</b> <b>Revised COD to be given by Dev. Of project</b>	<b>NIL</b>			
			<b>Holi-II (7 MW)-</b> Original application indicated COD as <b>April, 2016.</b> <b>Revised COD to be given by Dev. Of project</b>	<b>NIL</b>			
			<b>Kiunr (5 MW)-</b> Original application indicated COD as <b>July, 2015</b> <b>Revised COD to be given by Dev. Of project</b>	<b>NIL</b>			
			<b>Dera (5 MW)-</b> Original application indicated COD as <b>30.4. 2017</b> <b>Tulang, Kurhed and Chirchind (5 MW) have been commissioned and partial evacuation is being done through existing 33 kV lines of HPSEBL</b>	<b>NIL</b>			
3	220 kV D/C line from Bajoli Holi to Lahal/ Chamba	HPPTCL/ ADB_Tr-III			Aug-18		
4	400 kV D/C line from Lahal to 400/220 kV Chamera P.S (PG)/ Chamba	HPPTCL/ ADB_Tr-III			Mar-19		

5	66/220 kV GIS SS at Heling with LILO of one circuit of 220 kV Bajoli Holi-Lahal D/C line	HPPTCL/ KfW	Kuwarsi-II (15 MW)	LTA 51 MW for 51% capacity	Oct-18		
			Salun (9 MW)				
			Chate Ka Nalla (9 MW)				
			Toral Kundli (18 MW) – application received for a total of 51 MW-COD as per application is 28.2.2017				
6	132/220 kV GIS substation at Mazra & 220 kV Mazra-Karian D/C line	HPPTCL/ ADB_Tr-III	Chanju_I (36 MW) - commissioned	LTA 36 MW for 18% capacity	Dec-18		
			Deonthal Chanju (18 MW)	NIL			
			Chanju-III (33 MW)- COD_31.12.2020	NIL			
7	33 kV Holi-Gharola D/c line	HPSEBL			31.3.2017		
8	33 kV Bharmour-Gharola D/C line	HPSEBL	System Strengthening		31.7.2016		

## **2. Evacuation arrangements for Small HEPs in Bharmour valley:**

In the 44<sup>th</sup> meeting of the Committee held on 4.3.2017, it was decided that a separate meeting shall be held to firm up interim arrangements for evacuation of power of Small HEPs in Bharmour valley till Lahal sub station is commissioned. HPPTCL had conducted a meeting with HPSEBL and generators in Bharmour valley on 3.4.2017 and it was decided that Director (Technical), HPSEBL shall convene a separate meeting of the stakeholders to firm up the interim arrangements. HPSEBL may apprise the Committee about firming up of interim arrangements.

## **3. Mismatch between Generation and transmission system being added by HPPTCL:**

In 44<sup>th</sup> meeting of Committee, it was apprised that there is a mismatch between generation and transmission infrastructure being added by HPPTCL. HPPTCL has identified some transmission projects which, if commissioned by committed time lines, shall remain unutilized for considerable time and there is urgent need for expediting the associated generation projects,

Sr. No.	Name of Transmission Project/Distt	Agency/ Source of funding	Upcoming generation based on connectivity/LTA application received	Target COD as committed in 44th STU on 4.3.2017	LTA %age against minimum requirement of 50% of station capacity
A	SATLUJ BASIN				
1	<u>66/22 kV GIS sub station at Nirmand/ Kullu</u>	HPPTCL/ ADB_Tr-III	No connectivity/LTA application received. One application received for Umli HEP with out any fee.	Dec 2018	0%
2	<u>66 kV Nirmand-Kotla D.C line</u>	HPPTCL/ ADB_Tr-III		Oct 2018	
B	PABBAR BASIN				
1	22/132 kV sub station in/close to the yard of Tangnu Romai-I (44 MW) HEP	HPPTCL/ (KfW)	1. Tangnu Romai-I (44 MW)- Original application indicated COD as <b><u>30.6 2014.</u></b> <b><u>No progress</u></b>	Oct 2018	0 %
2	132 kV D/C line from Tangnu Romai HEP to 132/220 kV Sunda sub station	HPPTCL/ (KfW)	2. Tangnu Romai-II (6 MW)- Original application indicated COD as <b><u>30.6 2012.</u></b> <b><u>Project commissioned and is evacuating power through HPSEBL system as Interim measures.</u></b>	Aug 2018	



3	33/132 kV, 31.5 MVA sub station near Rupin HEP	HPPTCL/ (KfW)	3. Rupin (45 MW)- Original application indicated COD as <b>30.9.2018. No progress</b>	Oct 2018	0%
4	132 kV Rupin – Sunda D/C line	HPPTCL/ (KfW)		Aug 2018	
5	66/220 kV, 80/100 MVA sub station at Sunda sub station with LILO of 66 kV Samoli-Andhra line	HPPTCL/ (KfW)		May 2018	
6	132/220 kV, 2x100 MVA sub station at Sunda	HPPTCL/ ADB_Tr-II	4. Dhamwari Sunda (70 MW)- Original application indicated COD as <b>30.6 2012. No progress</b>	May 2018	0%
7	220 kV Sunda-Hatkoti D/C line	HPPTCL/ ADB_Tr-II		Dec 2017	
C	<b>BEAS BASIN</b>				
1	33/132 kV GIS SS at Barsaini/ Kullu	HPPTCL/ ADB_Tr-III	Balarga (9 MW)- Original application indicated COD as <b>31.10, 2013.</b>	March 2019	0%
2	132 kV Barsaini-Charor D/C line/ Kullu	HPPTCL/ ADB_Tr-III		Dec 2018	
3	132/220 kV, 100 MVA GIS SS at Charor/ Kullu	HPPTCL/ ADB_Tr-II	No project is coming on ground	May 2018	
4	Addl 33/220 kV, 100 MVA transformer at Charor	HPPTCL/ KfW		Aug 2018	

4. **Evacuation arrangement for Salun HEP (9 MW):**

Salun HEP has been granted connectivity at 66/220 kV sub station of HPPTCL planned at Heling in Bharmour/ Holi valley. The power house is likely to be commissioned in December, 2017 where as 220 kV Lahal substation and 220 kV Lahal-Budhil line, the minimum system required for evacuation of power of Salun HEP shall not come up matching with generation of Salun HEP. Interim arrangements for evacuation through 33 kV lines of HPSEBL need to be devised. Committee may deliberate.

5. **Evacuation arrangement for Raura (12 MW) in Distt. Kinnaur:**

Raura HEP (12 MW) has been granted connectivity at 66 kV switching station of HPPTCL under construction at Urni. The power house is likely to be completed in April, 2018 where as the matching evacuation arrangement i.e. 66 kV Urni-Wangtoo D/C line and 66/220/400 kV Wangtoo substation shall not be ready by the completion date of Raura HEP. Interim arrangements for evacuation of power through existing system of HPPTCL and HPSEBL needs to be devised. Committee may deliberate.

6. **Construction of 132/220 kV GIS substation at Patti and 220 kV Patti-Hamirpur D/C Line:**

HPPTCL is implementing 132/220 kV substation at Patti and 220 kV Patti-Hamirpur D/C line with funds provided in the Green Energy Corridor-I Scheme. The substation and line are being constructed to give relief to 33/132 kV substation of HPSEBL at Dehan where evacuation constraints are being experienced. In the 37<sup>th</sup> meeting of the Committee held on 20.9.2014, it was agreed that 132 kV S/C line being constructed by M/S SPML shall be constructed on D/C towers and take 2<sup>nd</sup> circuit on these towers from Dehan to Patti.

In 39<sup>th</sup> meeting of the Committee held on 19.11.2014, HPSEBL had apprised that they had taken up the matter with M/S SPML for joint survey to ascertain the stretch where D/C towers are required.

Since, construction of 132/220 kV Patti substation and 220 kV Patti-Hamirpur line is about to commence, HPSEBL may give time line for implementation of down stream transmission system.

Proposal to LILO 132 kV Bassi-Dehan line of HPSEBL at Patti has been agreed in principle. HPSEBL needs to plan pre-construction activities reg. survey etc.

7. In the previous meetings of the Committee, HPSEBL had agreed to identify the points for drawal of free power from Allain Dhuangan HEP either at Prini or Phojal or Nalagarh. HPSEBL may update the committee on the finalization of drawal point.

8. **Plan for evacuation of power from 1000 MW Solar Park in Himachal Pradesh:**

A 1000 MW Solar park is planned in Spiti valley of Himachal Pradesh. HPSEBL has requested to take up the matter regarding evacuation of power from the Solar Park with CEA and PGCIL. HPPTCL has already planned 100 Kms, 400 kV D/C line from Pin valley to Wangtoo which can evacuate 1000 MW of Solar park and about 600 MW of Hydel projects in Spiti valley. The proposal was taken up for deliberations in the Preliminary Stakeholder meeting for Intrastate Transmission system Green Energy Corridor Scheme-II held on 23.8.2017 under the chairmanship of Secretary, MNRE, GoI. During the meeting, it was apprised that commitment of the state Govt. to buy at least 20% power produced in the Solar Park through its DISCOM is required for setting up of Solar Park. SECI also informed that the Solar Park would come up if an alternate buyer is identified as the same will not be consumed by H.P.

HPSEBL may update the Committee.

9. In the 44<sup>th</sup> meeting of the Committee, agenda items submitted by HPSEBL were discussed and it was decided that the proposals submitted by HPSEBL may be discussed separately between HPPTCL and HPSEBL. The proposals have been discussed in a meeting in HPPTCL on 13.7.2017 and it was agreed that HPSEBL shall send detailed justification supported by system studies for further consideration by HPPTCL. The studies are yet to be received.