

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

विषय: उत्तर क्षेत्रीय विद्युत समिति की प्रचालन समन्वय उप-समिति की $211^{\, ext{fl}}$ बैठक के खण्ड-अ मे लिए गए निर्णयों का सार I

Subject: Gist of decisions taken in the Part-A of the 211th OCC meeting of NRPC.

उत्तर क्षेत्रीय विद्युत समिति की प्रचालन समन्वय उप- समिति की 211 वी बैठक दिनांक 19.09.2023 को आयोजित की गयी | उक्त बैठक की खण्ड-अ मे लिए गए निर्णयों का सार **अनुलग्नक – अ** के रूप मे संलग्न है |

The 211th meeting of the Operation Co-ordination Sub-Committee of NRPC was held on 19.09.2023. The Gist of the decisions taken in Part-A of this meeting is enclosed as **Annexure-A**.

(ओमकिशोर) कार्यपालक अभियंता (प्रचालन)

सेवा में,

प्रचालन समन्वय उप- समिति के सभी सदस्य ।

<u>अनुलग्नक – अ/</u> Annexure-A

Gist of decisions taken in the Part-A of 211th OCC Meeting

Agenda No. 1: Confirmation of Minutes

- Minutes of the 211th OCC meeting was issued on 12.09.2023.
- With regard to Agenda No. 13 (Part-A), PPGCL Bara vide mail dated 18.09.2023 requested OCC forum that following statement may kindly be added:

"In the meeting, PPGCL Bara representative suggested that UPSLDC may approach UPERC similar to the DSM 2022 regulation, wherein to adopt CERC regulation, UPSLDC approached UPERC to issue Suo-moto order to adopt the regulation."

"This would expedite the whole process in case of AGC implementation. CERC has already directed all SLDC/SERC to implement SRAS/TRAS to increase participation of Generators."

OCC confirmed the minutes with above modifications.

Agenda No. 2.1: Supply Position (Provisional) for August 2023

Reasons submitted by states for significant deviation of actual demand from anticipated figures during the month of August 2023 are as under:

Delhi

Delhi experienced high temperature and rain deficiency in month of August, 23, so peak demand and energy consumption was on higher side than expected.

Himachal Pradesh

The Anticipation in Energy Requirement as well as peak demand in respect of Himachal Pradesh for the month of August, 2023 came on the lower side due to continuous rainfalls in the month of August.

Rajasthan

The Actual Energy requirement and peak demand w.r.t. Anticipated Energy requirement and peak demand for the month August, 2023 increased by 28.5% and 22.7% respectively due to unexpected increase in domestic and agriculture demand due to no rains and rise in temperature during the month of August, 2023 in Rajasthan state.

Haryana

As far as reason of variation in anticipated vs Actual figure of PSP for August, 2023 is concerned, it is stated that August, 2023 is observed as driest month since 1901 i.e. driest in last 120 years. Accordingly, there is an abrupt rise in energy consumption during August 2023. However, variation in demand is within 5%.

Uttarakhand

The reason for negative variation in energy requirement and Peak Demand was due to significant rainfall above normal in first fortnight of month, however the energy

requirement and peak demand for the month was anticipated based on the available data/trend for the month of Aug 22, which has lead to forecasting error due to change in weather conditions.

Agenda No. 3: Maintenance Programme of Generating units and Transmission Lines

• The maintenance programme of generating units and transmission lines for the month of October 2023 was deliberated in the meeting on 18.09.2023.

Following shutdown request was also approved/denied in the OCC meeting:

Element Name	Owner	Reason	Request ed Date	Request ed Time	Daily/ Continuo us	Decisio n of OCC
765kV Jawaharp ur - Gr. Noida and 765kV Jawaharp ur - Mainpuri line	WUPPT	SPS to be taken into service before synchronisati on of 01 unit of Jawaharpur TPS for safe and reliable grid operation	20-Sep- 23	06:00 to 16:00	Daily	OCC approve d the shutdow n

Agenda No. 4: Anticipated Power Supply Position in Northern Region for October 2023

• The updated anticipated Power Supply Position for October 2023 is as below:

State / UT	Availability / Requirement	Revised Energy (MU)	Revised Peak (MW)	Date of revision	
	Availability	130	280		
OLIANDIO A DILI	Requirement	130	290	No Revision	
CHANDIGARH	Surplus / Shortfall	0	-10	submitted	
	% Surplus / Shortfall	0.0%	-3.4%		
	Availability	3721	5598		
DELLII	Requirement	2750	5450	40.000.00	
DELHI	Surplus / Shortfall	971	148	18-Sep-23	
	% Surplus / Shortfall	35.3%	2.7%		

State / UT	Availability / Requirement Availability	Revised Energy	Revised Peak	Date of revision	
	Availability	(MU) 6975	(MW) 8625		
HARYANA	Requirement	4497	9730	11-Sep-23	
	Surplus / Shortfall	2478	-1105		
	% Surplus / Shortfall	55.1%	-11.4%		
	Availability	1097	1777		
HIMACHAL	Requirement	1061	1840	12-Sep-23	
PRADESH	Surplus / Shortfall	37	-63		
	% Surplus / Shortfall	3.4%	-3.4%		
	Availability	1520	4120		
J&K and	Requirement	1770	2960	No Revision	
LADAKH	Surplus / Shortfall	-250	1160	submitted	
	% Surplus / Shortfall	-14.1%	39.2%		
	Availability	5090	11320		
PUNJAB	Requirement	5400	12200	18-Sep-23	
1 3110713	Surplus / Shortfall	-310	-880		
	% Surplus / Shortfall	-5.7%	-7.2%		
	Availability	8650	18260		
RAJASTHAN	Requirement	8525	14780	18-Sep-23	
	Surplus / Shortfall	125	3480		
	% Surplus / Shortfall	1.5%	23.5%		
	Availability	11160	23300		
UTTAR	Requirement	10540	23300	12-Sep-23	
PRADESH	Surplus / Shortfall	620	0	·	
	% Surplus / Shortfall	5.9%	0.0%		
UTTARAKHAND	Availability	1209	2180	12-Sep-23	
	Requirement	1240	2250		
	Surplus / Shortfall	-31	-70	_	
	% Surplus / Shortfall	-2.5%	-3.1%		
	Availability	39552	70800		
NORTHERN	Requirement	35913	68300		
REGION	Surplus / Shortfall	3640	2500		
	% Surplus / Shortfall	10.1%	3.7%		

Agenda No. 5: Follow-up of issues from various OCC Meetings - Status update

Updated status is enclosed as Annexure-A.I.

 In 211th OCC, SLDCs were requested again to coordinate with respective Transmission utilities of states/UT's and submit details about the updated status of downstream network by State utilities from ISTS Station (*Annexure-A-I.I*) before every OCC meeting.

Agenda No. 6. NR Islanding scheme

- In the meeting (211th OCC), UPPTCL representative apprised forum that with regard to Lucknow-Unchahar islanding scheme, delivery of UFR is almost complete and UFR installation has commenced at the site which is expected to be completed by 20th October 2023.
- With regard to Agra islanding scheme, UPPTCL representative apprised forum that as per the changes suggested, final report from CPRI has been received on 07th September 2023 and the same is being examined by UPPTCL and UPSLDC.
- Representative from RRVPNL intimated forum that draft DPR for Jodhpur-Barmer Rajwest and Suratgarh islanding scheme has been received and is under examination which is expected to be finalized by the October 2023 and thereafter it would be shared with NRPC Sectt. and NRLDC.
- With regard to Patiala-Nabha Power Rajpura islanding scheme representative from Punjab SLDC informed that technical specifications for procurement of UFR relays have been submitted for approval of their management. It is expected that scheme shall be operational by 31st March 2024.
- With regard to Kullu-Manali Islanding scheme, representative from HPSLDC apprised forum that HPSLDC had asked to HPSEB to address the shortcomings and re-submit the islanding scheme at the earliest. However, response from HPSEB is still awaited.
- SE(O), NRPC stated that it seems there is some lack of co-ordination between HPSEB and HPSLDC, therefore he suggested that a letter may be sent from MS, NRPC to higher management of both HPSEB and HPSLDC for expediting the implementation of the cited islanding scheme.
- With regard to Shimla-Solan islanding scheme representative from HPSLDC apprised forum that they have asked HPSEB to organize a meeting with the officials of BHEL to resolve the issue of switching of Bhaba HEP to automatic mode during the situation of islanding formation.
- DTL representative informed forum that the islanding scheme of their control area is expected to be implemented by 10th October 2023.

Agenda No. 7. Coal Supply Position of Thermal Plants in Northern Region

- In the meeting, NRPC representative apprised the forum about the coal stock position of generating stations in northern region during current month (till 10th September 2023).
- Average coal stock position of generating stations in northern region, having critical stock, during first ten days of September 2023 is as follows:

Station	Capacity (MW)	PLF % (prev. months)	Normative Stock Reqd. (Days)	Actual Stock (Days)
ANPARA C TPS	1200	84.40	12	2.4
GOINDWAL SAHIB TPP	540	54.12	20	2.4
KAWAI TPS	1320	55.27	20	2.9
TALWANDI SABO TPP	1980	60.41	20	3.7

• In the meeting, above mentioned generating stations were requested to take adequate measures.

Agenda No. 8. Furnishing of Data for finalization of Generation programme 2024-25 (Agenda by OPM Division CEA)

- In the meeting, Chief Engineer (OPM), CEA stated that the Annual assessment and finalization of the generation program of generating units is undertaken by CEA every year. The generation performance of various stations and their planned & unscheduled outages are regularly monitored in CEA.
- Further, CE (OPM), CEA stated that the yearly assessment and finalization of the generation program for the year 2024-25 is being taken up now and it is requested that, the anticipated Generation details in regard to power generating units may be furnished. In view of the high peak demand, he emphasized to furnish the anticipated generation data for the year 2024-25 so that the generation Planning can be carried out. List of Station of northern region who has not furnished the data yet is attached as Annexure-III of agenda.
- CE (OPM), CEA requested the Generating Stations to furnish the data latest by 22.09.2023

Decision of the OCC forum

 Forum asked the generating stations of northern region who have not furnished the data for Electricity Generation Program 2024-25 to kindly furnish the data latest by 22.09.2023 to OPM division CEA at targetopmcea@gmail.com.

Agenda No. 9. Phaser Measurement Unit (PMU) for Naitwar Mori HEP (Agenda by SJVN)

- In the meeting, SJVN representative apprised the forum that as per the 64th NRPC meeting it was agreed for installation of PMU during First Time Charging (FTC) of Sub stations/Generating stations.
- Further, he submitted that the PMU was not been envisaged in original contract of EM package awarded to M/s Voith Hydro on 11.06.2018 for Naitwar Mori HEP. During the awarding of EM package of Naitwar Mori in 2018, such requirement of PMU was not there in the applicable CEA regulations.
- Presently, in view of 64th NRPC minutes, the planning including procurement, supply, erection, testing and commissioning action i.r.o of installation of PMU along with all associated item has been taken up by SJVN with M/s Voith Hydro (EM contractor)

under variation clause of existing EM contract. Additionally, SJVN is exploring the above item through tendering process in open market as well. After exploration of market, it has been observed that lead time for same is around 6-8 month.

- However, it is pertinent to mention here that project pre-commissioning work is in full swing and water filling & subsequent commissioning thereof is scheduled in next 15- 20 days.
- SJVN representative stated that in view of the above, PMU installation during FTC may not be feasible at Naitwar Mori HEP.
- Accordingly, SJVN submitted that "A relaxation/Wavier i.r.o installation of PMU during FTC at Naitwar Mori may be accorded for 6-8 Month".
- NRLDC representative suggested SJVN to approach HPSLDC on the cited matter, as Naitwar Mori HEP is connected at intra-state network.

Decision of the OCC forum

 Forum asked SJVN to approach HPSLDC for relaxation as Naitwar Mori HEP is connected at intra-state network.

Table Agenda No.1: High power loading in 400KV Bhadla PGCIL-Bhadla RVPN line 1 and 2. (Agenda by Powergrid-NR1)

- In the meeting, Powergrid NR-1 representative informed forum that due to recent change in RVPNL network (Bikaner RVPNL got disconnected from PGCIL Bikaner and got directly connected with Bhadla RVPNL) it is observed Line loading of 400kV Bhadla PGCIL- Bhadla RVPNL D/C lines increased from 350MW to 900MW in each circuit due to which severe hotspot issues in both ends are frequently observed.
- Therefore, Powergrid NR-1 requested that POWER loading may please be reviewed for healthiness of the system.
- NRLDC representative informed that Bhadla(PG) is connected to Bhadla-II (PG) which is further connected to upcoming Sikar_II(PG) which is expected by mid of July next year.
- Further, he mentioned that presently power from Bhadla_II S/s is not being able to evacuate through Sikar_II S/s and therefore it is flowing through Rajasthan network.
- Powergrid representative intimated that Fatehgarh-III PS Fatehgarh- II PS 400kV D/c line and Fatehgarh-III PS Jaisalmer-II (RVPN) 400 kV D/c line is expected to be charged by end of this month.
- NRLDC representative stated that considering these new circuits which are expected
 to be energized by end of this month they would be conducting a study to understand
 the power flow pattern.
- Further, CTU representative added that in winter power flow increases from NR to WR as wind generation decreases in Gujarat, therefore situation in expected to improve after October.

 MS, NRPC asked to again deliberate the issue in next OCC after the study by NRLDC and CTU.

Table Agenda No.2: High Loading in Jhatikara Substation. (Agenda by Powergrid-NR1)

- In the meeting, Powergrid NR-1 representative informed forum that in switchyard of Jhatikara substation, 400kV bus are in split bus arrangement to reduce the fault level of Delhi Ring Main system since commissioning.
 - 1500 MVA ICT 1 & 1500 MVA ICT 2 feed to 400 kV Jhatikara Bamnauli line & Jhatikara Dwarka Line and both are connected to 400 kV Bus -1 & 2.
 - Similarly, 1500 MVA ICT 3 & 1500 MVA ICT 4 feed to 400KV Jhatikara -Mundka ckt -1 & 2 and both are connected to 400KV Bus -3 & 4.
- To simulate the N-1 Criterion at Jhatikara Substation, typical load flow pattern on dt. 05/09/2023 is taken as shown below.

Line/Element	Load as on 05/09/2023	Remarks	
1500 MVA ICT-1	777MW	In case tripping/maintenance of any	
1500 MVA ICT-2	757MW	ICT, another ICT has loading beyond	
Total	1534MW	their capacity.	
400KV Jhatikara - Bamnauli Line.	912MW	In case tripping / maintenance of any	
400KV Jhatikara-Dwarka line	625MW	In case tripping / maintenance of any line, another line has loading beyond	
Total	1537MW	their capacity.	
1500MVA ICT - 3	816MW		
1500MVA ICT - 4	817MW		
Total	1633MW		
400KV Jhatikra-Mundka ckt-1	819MW		
400KV Jhatikara-Mundka ckt-2	816MW		
Total	1635MW		

- He stated that from the above table, it is evident that N-1 criterion does not meet for 1500 MVA ICT & 400 kV Line at Jhatikara Substation.
- CTU representative informed that loading of ICT's at Jhatikara S/s are mainly governed by the load at the downstream of Delhi. Further, he apprised forum that augmentation of 1X1500 MVA ICT (3rd), 765/400kV at Jhatikara S/s is already approved under Ph-III transmission scheme and is under implementation through Powergrid in RTM which is expected to be completed by early 2025.
- CTU representative suggested to have a separate meeting with NRLDC and Planning division of CEA to explore remedial measures to tackle the issue presently being faced by Powergrid.

Table Agenda No.3: S/D of 15 days of 765 KV Koteshwar-Meerut Ckt-2 for shifting of tower loc no 79 (D+0) due to landslide (Agenda by Powergrid-NR1)

- In the meeting, Powergrid NR-1 representative informed forum that due to incessant rain in August, 2023, near tower loc no 79 (D+0) in 765 KV Koteshwar Meerut Circuit-2 TL massive landslide has taken place leading to deformation in 15 nos. tower members of Tower no 79.
- Further, he mentioned that many cracks were developed in the ground near the tower no 79, the ground near the tower has been disturbed and has become unstable. As the ground near existing tower no.79 is disturbed, the existing tower no.79 is required to be abandoned & shifted to another safer location by about 90 meters towards tower no 78 in the same line corridor.
- Therefore, Powergrid NR-1 representative stated that new foundation of TW.79 shall be casted below the line corridor and for this shutdown of 15 days of 765 KV Koteshwar -Meerut is required from 25.10.22023 to 10.11.2023.
- SE(O), NRPC asked Powergrid to start the pre-activities and apply for the shutdown in next OCC meeting.
- Further, Powergrid NR-1 asked forum for consideration of deemed availability for outage of the aforesaid circuit.
- SE(O), NRPC stated that The request for deemed availability of the proposed shutdown of would be examined by NRPC Sectt.. as per CERC tariff regulation, 2019.
- MS, NRPC suggested Powergrid to submit a formal request for inspection of site by the committee as per the decisions of 59th NRPC meeting (held on 31.10.2022).

Table Agenda No.4: SPS scheme for safe evacuation of Power from Alaknanda-Vishnuprayag HEP complex (Agenda by UPSLDC)

- In the meeting, UPSLDC representative informed forum that at Vishnuprayag HEP, overcurrent protection is enabled at 120% on 400kV Vishnuprayag-Muzaffarnagar line. At normal operating condition, current on this line remains well below over current setting.
- However, in case of tripping of 400kV Alaknanda-Muzaffarnagar line and high injection of power from Uttarakhand through 400kV Srinagar-Alaknanda DC line, overcurrent protection at 400kV Vishnuprayag operates, tripping 400kV Vishnuprayg-Muzaffarnagar line. Therefore, due to loss of evacuation path, generation loss occurs at Alaknanda & Vishnuprayag HEP.
- To tackle this issue, UPSLDC representative presented to forum the proposed SPS logic (copy attached as Annexure-A.II) for safe evacuation of Power from Alaknanda-Vishnuprayag HEP complex.
- Power of 82.5*4 MW Alaknanda HEP, 100*4MW Vishnuprayag HEP and 33*3MW Singoli Bhatwari HEP evacuates through 400 KV Alaknanda GVK (UPC)-Muzaffarnagar(UP) ckt and 400 KV Muzaffarnagar(UP)-Vishnuprayag(JP) (UP) ckt.
- In case of tripping of any one line i.e., 400 KV Alaknanda GVK (UPC)-Muzaffarnagar(UP) ckt or 400 KV Muzaffarnagar(UP)-Vishnuprayag(JP) (UP) ckt, load

will shift to another line and total power flow on remaining line may increase to ~880MW.

- Representative from Alaknanda HEP suggested that generation should be backed down on pro-rata basis at all three HEPs rather than tripping of one unit of Alaknanda HEP as proposed by UPSLDC. He also suggested that another option is to open both the circuits of 400kV Srinagar-Alaknanda D/C line as then around 770 MW generation from both Alaknanda HEP and Vishnuprayag HEP can be safely evacuated.
- NRLDC stated that it if 400kV Srinagar-Alaknanda D/C is tripped then there would be complete black out at 400kV Khandu Khal S/s which is not desirable.
- MS, NRPC was of view that a separate meeting may be convened by UPSLDC with officials of Uttarakhand and all three concerned HEPs to arrive at a amicable solution on this issue and thereafter UP SLDC may submit revised SPS logic to OCC forum.

Table Agenda No.5: Construction of 220/132 KV, 80/100 MVA Sub-Station at Tahliwal (Distt. Una in Himachal Pradesh) by S/C LILO of 220 KV Bhakra-Jamalpur line of BBMB. (Agenda by HPPTCL)

- HPPTCL vide letter dated 31.08.2023 (copy attached as Annexure-A.III) submitted a scheme for construction of 220/132 KV, 80/100 MVA Sub-Station at Tahliwal (Distt. Una in Himachal Pradesh) by S/C LILO of 220 KV Bhakra-Jamalpur line of BBMB.
- In the meeting, HPPTCL representative intimated forum that this revised plan has been approved by BBMB constituents in 148th meeting of Power subcommittee of BBMB held on 25.08.2023 (copy of MoM is attached in above cited letter).
- He further stated that this substation is required on urgent basis to provide construction power to Bulk Drug Pharma Park proposed in Haroli Distt-Una of Himachal Pradesh.
- He also apprised forum that in view of Himachal Pradesh's need of 50MVA power for construction of its Drug Pharma Park, PSTCL has given its concurrence to LILO of single circuit of 200kV Bhakra-Jamalpur double circuit line at 220kV substation Tahliwal subject to installation of suitable SPS by HPPTCL for restricting drawl of power to 50 MVA by Himachal Pradesh and to prevent any drawl from Jamalpur in case of outage of Bhakra-Tahliwal section.
- Further, HPPTCL informed that as long term plan they have submitted a proposal to CEA for approval of construction of 220/132 kV, 200 MVA Substation near Una and 200kV (Twin Zebra) D/C line from 220/132 kV Nehrian Substation to proposed 220/132 kV, 200 MVA Substation near Una.
- MS, NRPC asked NRLDC to examine the HPPTCL proposal and thereafter a separate meeting would be conveyed with the official of NRPC, NRLDC, CTU, HPPTCL and PSTCL for further deliberation on the matter.

	Down Stream network by State utilities from ISTS Station	Augmentation of transformation capacity in various existing substations, addition of new substations along with line bays as well as requirement of line bays by STUs for downstream network are under implementation at various locations in Northern Region. Further, 220kV bays have already been commissioned at various substations in NR. For its utilization, downstream 220kV system needs to be commissioned.	
2	Progress of installing new capacitors and repair of defective capacitors	Information regarding installation of new capacitors and repair of defective capacitors is to be submitted to NRPC Secretariat.	Data upto following months, received from various states / UTs: CHANDIGARH Sep-2019 DELHI Jun-2023 HARYANA May-2023 HP Jul-2023 J&K and LADAKH Not Available PUNJAB Jun-2023 RAJASTHAN Aug-2023 UP Aug-2023 UTTARAKHAND Aug-2023 All States/UTs are requested to update status on monthly basis.
3	Healthiness of defence mechanism: Self-certification	Report of mock exercise for healthiness of UFRs carried out by utilities themselves on quarterly basis is to be submitted to NRPC Secretariat and NRLDC. All utilities were advised to certify specifically, in the report that "All the UFRs are checked and found functional". In compliance of NPC decision, NR states/constituents agreed to raise the AUFR settings by 0.2 Hz in 47th TCC/49th NRPC meetings.	Data upto following months, received from various states / UTs: © CHANDIGARH Not Available DELHI Jun-2023 Maryana Jun-2023 Jak and LADAKH Not Available PUNJAB Jun-2023 Jun-2023

4	Status of FGD installation vis-à- vis installation	List of I finalized meeting of	l in the	36th TO	CC (spe	cial)			rmation submission (month) ties is as under:
	plan at identified	regularly	request	ed sinc	e 144t	h OC	3	0	HARYANA	Sep-2022
	TPS	meeting 1	take u	o with	the co	ncer	ned	0	PUNJAB	Ju1-2023
		generator	rs where	FGD was	requi	red	to be		RAJASTHAN	Ju1-2023
		installed	l.						UP	Aug-2023
		Further,	progress	of FGI) insta	llat	ion		NTPC	Feb-2023
		work on meetings.	monitore	d in 00	CC			A. :	I. II.	are enclosed as Annexure- es are requested to update
		mee erngs.						sta		Illation progress on
5	Submission of	All state	s/IITs ar	e realie	sted t	0		St	atus of the infor	rmation submission (month)
	breakup of Energy	submit th		_			he			ties is as under:
	Consumption by the	billed da							om states / attit	attes is as under.
	states	given as		nation	111 0110	1017	na c			
									Ct-t- / IIT	П. 4 -
			T	T _	1	I			State / UT CHANDIGARH	Upto Not Submitted
		Const	mption Consumption	Consumption	Consumption	Traction	Miscellaneous		DELHI	May-23
		Category→ by Do	mestic Commercial	Agricultural	by Industrial Loads	supply	/ Others		HARYANA	Ju1-23
			Loads	Loads	Louds	load			HP	Aug-23
		<month></month>							J&K and LADAKH	Not Submitted
									PUNJAB	Ju1-23
								0	RAJASTHAN	Ju1-23
								0	UP	Apr-23
								0	UTTARAKHAND	Mar-23
								T&1	K and Ladakh and	Chandigarh are requested
								1-		site data w.e.f. April
									_	led data information in
									e given format	
6	Information about	The varia	ble char	ges det	ail fo	r			1 states/UTs are	requested to
	variable charges of	different	generat	ing uni	ts are			su	bmit daily data c	on MERIT Order
	all generating units	available	-	-					rtal timely.	
	in the Region	Portal.								
7	Status of Automatic	The stati	ıs of ADM	S imple	ementat	ion	in NR.	Sta	atus:	
.	Demand Management	which is		_					DELHI	Fully implemented
	Sysytem in NR	IEGC by S							HARYANA	Scheme not implemented
	states/UT's	the follo			•			_	HP	Scheme not implemented
			Tollowing vanio.							
									PUNJAB	Scheme not implemented
						RAJASTHAN	Under implementation. Likely completion			
									schedule is 31.10.2023.	
								0	UP	Scheme implemented by NPCIL only
								0	UTTARAKHAND	Scheme not implemented

8	Reactive compensation at 220 kV/ 400 kV level at 15 substations							
	State / Utility	Substation	Reactor	Status				
i	POWERGRID	Kurukshetra	500 MVAr TCR	Anticipated commissioning: Oct'23				
ii	DTL	Peeragarhi	1x50 MVAr at 220 kV	1x50 MVAr Reactor at Peeragarhi has been commissioned on dated 18.09.2023				
iii	DTL	Harsh Vihar	2x50 MVAr at 220 kV	2x50 MVAR Reactor at Harsh Vihar has been commissioned on dated 31th March 2023.				
iv	DTL	Mundka	1x125 MVAr at 400 kV & 1x25 MVAr at 220 kV	Bay work completed on 25.03.2023. Reactor part tender is dropped and at present same is under revision.				
V	DTL	Bamnauli	2x25 MVAr at 220 kV	Bay work completed on 25.03.2023. Reactor part tender is dropped and at present same is under revision.				
vi	DTL	Indraprastha	2x25 MVAr at 220 kV	Bay work completed on 07.11.2023. Reactor part tender is dropped and at present same is under revision.				
vii	DTL	Electric Lane	1x50 MVAr at 220 kV	Under Re-tendering due to Single Bid				
viii	PUNJAB	Dhuri	1x125 MVAr at 400 kV & 1x25 MVAr at 220 kV	400kV Reactors - 1x125 MVAR Reactor at Dhuri has been commissioned on dated 30th March 2023. 220kV Reactors - 1x25 MVAR Reactor at Dhuri has been commissioned on dated 27th January 2023.				
ix	PUNJAB	Nakodar	1x25 MVAr at 220 kV	1x25 MVAR Reactor at Nakodar has been commissioned on dated 13th February 2023.				
Х	PTCUL	Kashipur	1x125 MVAR at 400 kV	Price bid has been opened and is under evaluation. Retendered in Jan'23				
хi	RAJASTHAN	Akal	1x25 MVAr	1x25 MVAR Reactor at Akal has been commissioned on dated 25th July' 2022.				

xi	RAJASTHAN	Bikaner	1x25 MVAr	1x25 MVAR Reactor at Bikaner has been commissioned on dated 24th June 2023.
xii	i RAJASTHAN	Suratgarh	1x25 MVAr	1x25 MVAR Reactor at Suratgarh has been commissioned on dated 25th November 2022.
xiv	RAJASTHAN	Barmer & others	13x25 MVAr	Agreement signed on dt. 22.06.2020. Grant of Ist Instalment received on dt.19.02.21 & work order placed on dt. 7.04.2022 to M/s Kanohar Electricals Ltd. Schedule time is 18 months.
XV	RAJASTHAN	Jodhpur	1x125 MVAr	Agreement signed on dt. 22.06.2020. Grant of Ist Instalment received on dt. 19.02.21 & work order placed on dt. 7.04.2022 to M/s Kanohar Electricals Ltd. Schedule time is 18 months.

4.5	Streets noticely	hu State utilities from ISTS	Ctation			Annexure-A-I.I
1. L	own Stream network	by State utilities from ISTS	Station:			
SI. No.	Substation	Downstream network bays	Status of bays	Planned 220 kV system and Implementation status	Revised Target	Remarks
1	400/220kV, 3x315 M\/Δ Samba	Commissioned: 8 Total: 8	Utilized: 6 Unutilized: 2	Network to be planned for 2 bays.	-	02 No. of bays shall be utilized for LILO-II of 220kV Jatwal-Bishnah Transmission Line, the work of which is delayed due to severe ROW problem at Location No. 1 near Grid Substation Jatwal where the Land owner is not allowing erection of Tower. The Deputy Commissioner Samba has been approached for intervention and facilitating the erection of Tower. He is persuading the Land owner to get the work completed. Updated in 210th OCC by JKPTCL.
	400/220kV, 2x315	Commissioned: 6	Utilized: 2	• 220 kV New Wanpoh - Alusteng D/c Line	End of 2023	02 No. of bays are to be utilized for connecting 220kV New Wanpoh-Alusteng D/c Line. The work is in progress and expected to be commission by the end of 2023. Updated in 204th OCC by JKPTCL.
2	MVA New Wanneh	Total: 6	Unutilized: 4	• 220 kV New Wanpoh - Mattan D/c Line	End of 2024	02 No. of bays are to be utilized for connecting 220kV New Wanpoh-Mattan D/c Line. The funding source for the project is being identified and the project is expected to be completed by ending 2024. Updated in 204th OCC by JKPTCL.
3	400/220kV, 2x315 MV/A Amargarh	Commissioned: 6 Total: 6	Utilized: 4 Unutilized: 2	• 220kV D/C line from 400/220kV Kunzar - 220/33kV Sheeri	End of 2024	02 No. of bays are proposed to be utilized for connecting 220/132 kV GSS Loolipora. The funding source for the project is being identified and the project is expected to be completed by ending 2024. Updated in 204th OCC by JKPTCL.
4	MVA Kurukshetra	Commissioned: 8 Total: 8	Utilized: 6 Unutilized: 2	• 220kV Bhadson (Kurukshetra) – Ramana Ramani D/c line	Jul'24	Updated in 205th OCC by HVPNL
5	400/220 kV, 2x315 M\/A Debradup	Commissioned: 6	Utilized: 2	Network to be planned for 4 bays	-	PTCUL to update the status.
		Total: 6 Commissioned: 6	Unutilized: 4 Utilized: 5 Unutilized: 1	220 kV D/C Shahajahanpur (PG) - Gola line	30.09.2023	Updated in 211th OCC by UPPTCL
6		Implementation:1 Total: 7	(1 bays to be utilized shortly) Approved/Under Implementation:1	LILO of Sitapur – Shahjahanpur 220 kV SC line at Shahjahanpur (PG)	Commissioned	Energization date: 25.02.2022 updated by UPPTCL in 196th OCC
7	Hamirpur 400/220 kV Sub-station	Commissioned: 8	Utilized: 4 Unutilized: 4	• 220 kV Hamirpur-Dehan D/c line	Commissioned	Commisioned date: 09.06.2022. Updated in 198th OCC by HPPTCL
		Total: 8	(2 bays to be utilized shortly)	Network to be planned for 4 bays	-	HPPTCL to update the status.
				LILO of 220 kV Sikar (220 kV GSS)-Dhod S/c line at Sikar (PG)	Commissioned	LILO of 220 kV S/C Sikar-Dhod line at 400 kV GSS PGCIL, Sikar has been charged on dt. 31.03.2022
8	Sikar 400/220kV, 1x 315 MVA S/s Commissioned: 8 Total: 8	20KV, A S/s		Network to be planned for 2 bays.	-	Against the 3rd ICT at 400 kV GSS Sikar, only 2 bays were constructed and same has been utilized by RVPN by constructing LILO of 220 kV S/C Sikar – Dhod line as updated by RVPNL in 195th OCC
				• 220 kV D/C line Bhiwani (PG) – Bhiwani (HVPNL) line	Commissioned	Updated in 202nd OCC by HVPNL
9	Bhiwani 400/220kV	Commissioned: 6 Total: 6	Utilized: 2 Unutilized: 4	220 kV Bhiwani (PG) - Isherwal (HVPNL) D/c line.	Dec'23	Issue related to ROW as intimated in 208th OCC by HVPNL.
				• 220 kV Bhiwani (PG) - Dadhibana (HVPNL) D/c line.	Apr'24	Issue related to ROW as intimated in 192nd OCC by HVPNL.

SI. No.	Substation	Downstream network bays	Status of bays	Planned 220 kV system and Implementation status	Revised Target	Remarks	
10	Jind 400/220kV S/s	Commissioned: 4 Approved:4 Total: 8	Utilized: 4 Unutilized: 0	LILO of both circuits of 220 kV Jind HVPNL to PTPS D/C line at 400 kV substation PGCIL Khatkar (Jind) with 0.5 sq inch ACSR conductor	May'24	Tender is under process Updated in 205th OCC by HVPNL.	
11	400/220kV Tughlakabad	Commissioned: 6 Under Implementation: 4	Utilized: 6 Unutilized: 0	• RK Puram – Tughlakabad (UG Cable) 220kV D/c line – March 2023.	-	DTL to update the status.	
	GIS	Total: 10	Under Implementation:4	Masjid Mor – Tughlakabad 220kV D/c line.	-	DTL to update the status.	
	400/220kV	Commissioned: 6	Utilized: 0	HPPTCL has planned one no. of 220kV D/c line from Kala Amb 400/220kV S/s to 220/132kV Kala Amb S/s	Dec'23	Updated in 211th OCC by HPPTCL	
12	Kala Amb GIS (TBCB)	Total: 6	Unutilized: 6	HPPTCL has planned one no. of 220kV D/c line from Kala Amb 400/220kV S/s to 220/132kV Giri S/s	-	HPPTCL to update the status.	
				Network to be planned for 2 bays	-	HPPTCL to update the status.	
10	400/220kV Kadarpur	Commissioned: 8	Utilized: 0	LILO of both circuits of 220 KV Pali - Sector 56 D/C line at Kadarpur along with augmentation of existing conductor from 220 KV Sector-56 to LILO point with 0.4 sq inch AL-59 conductor.	Dec'23	Forest approval is pending for 220 KV Pali - Sector 56 D/C line. Updated in 205th OCC by HVPNL	
13	Sub-station	Total: 8 Un	Unutilized: 8	LILO of both circuits of 220KV Sector 65 - Pali D/C line at Kadarpur along with augmentation of balance 0.4 sq. inch ACSR conductor of 220 kV Kadarpur - Sector 65 D/C line with 0.4sq inch AL-59 conductor	Dec'23	Updated in 205th OCC by HVPNL	
					LILO of both circuits of 220kV D/c Sohna-Rangla Rajpur at Roj Ka Meo line at 400kV Sohna Road	Jan'24	Updated in 208th OCC by HVPNL
14	400/220kV Sohna Road Sub-station	Commissioned: 8 Total: 8	Utilized: 4 Unutilized: 4	• LILO of both circuits of 220kV D/c Badshahpur-Sec77 line at 400kV Sohna Road	-	The matter is subjudice in Hon'ble Punjab & Haryana High court, Chandigarh Updated in 205th OCC by HVPNL. Status:- Earlier 02 nos 220 kV line bays were to be utilized for the 220 kV GIS S/Stn. Sec-77, Gurugram but due to denotification of land of the 220 kV GIS S/Stn. Sec-77 the said substation is now going to be dismantled and a new substation is proposed at Sec-75A, Gurugram. Now, these 02 no. 220 kV line bays may be utilized at 220 kV GIS S/Stn Sec-75A, Gurugram.	
				220kV D/C line from Prithla to Harfali with LILO of one circuit at 220kV Meerpur Kurali	31.03.2024	Updated in 205th OCC by HVPNL	
	400/00013/ 5 ***	Commissioned: 8	Utilized: 4	• LILO of both ckt of 220kV D/c Ranga Rajpur – Palwal line	Commissioned	Commisioned date: 31.12.2021. Updated in 198th OCC by HVPNL	
15	Sub-station .	Aprroved: 2 Total: 10 Unutilized: 4 Under Implementation:2	Under	• 220kV D/C for Sector78, Faridabad	31.03.2024	Issue related to ROW and Pending crossing approval from Northern Railways and DFCCIL. as intimated in 205th OCC by HVPNL.	
				Prithla - Sector 89 Faridabad 220kV D/c line	31.03.2024	Updated in 205th OCC by HVPNL	
				LILO of both circuits of 220kV Samalkha - Mohana line at Sonepat	05.10.2023	Updated in 205th OCC by HVPNL	

SI. No.	Substation	Downstream network bays	Status of bays	Planned 220 kV system and Implementation status	Revised Target	Remarks
16	400/220kV Sonepat Sub-station	Commissioned: 6 Under Implementation:2 Total: 8	Utilized: 2 Unutilized: 4 Under	• Sonepat - HSIISC Rai 220kV D/c line	-	Updated in 205th OCC by HVPNL. Status: Due to non-performance of work of 220KV GIS Rai S/Stn, the Contract has been terminated & blacklisted by O/o XEN/WB O/o CE/PD&C, HVPNL, Panchkula vide Ch-100/HDP-2418/REC- 254/Xen(WB) Dated 24.02.2023. Now pending work will be caried out by HVPNL/ Departmentely
		Total. o	• Sonepat - Kharkhoda Pocket / 220kV D/c line	Sonepat - Kharkhoda Pocket A 220kV D/c line	31.07.2024	Updated in 205th OCC by HVPNL. Status: The Possession of land for construction of 220KV S/Stn. Pocket-A i.e 6.33 Acres and for Pocket-B is 5.55 Acres has been taken over by HVPNL. Work order yet to be issued by O/o CE/PD&C, Panchkula for construction of 2 no. 220KV GIS S/Stn Pocket-A & Pocket-B.
17	400/220kV Neemrana Sub-station	Commissioned: 6 Total: 6	Utilized: 4 Unutilized: 2	LILO of Bhiwadi - Neemrana 220kV S/c line at Neemrana (PG)	-	Work order is finalized as updated in 201st OCC by RVPNL. 5 months from layout finalization.
18	400/220kV Kotputli Sub-station	Commissioned: 6 Total: 6	Utilized: 4 Unutilized: 2	Kotputli - Pathreda 220kV D/c line	-	Bid documents under approval as updated in 195th OCC by RVPNL.
19	400/220kV Jallandhar Sub-station	Commissioned: 10 Total: 10	Utilized: 8 Unutilized: 2	Network to be planned for 2 bays	May'24	LILO of 220 kV BBMB Jalandhar - Butari line at 400 kV PGCIL Jalandhar being planned. Work expected to be completed by May 2024. Updated in 198th OCC by PSTCL.
20	400/220kV Roorkee Sub-station	Commissioned: 6 Total: 6	Utilized: 4 Unutilized: 2	Roorkee (PG)-Pirankaliyar 220kV D/c line	Commissioned	Roorkee (PG)-Pirankaliyar 220kV D/c line comiisioned in 2020 as intimated by PTCUL in 197th OCC
21	400/220kV Lucknow Sub-station	Commissioned: 8 Total: 8	Utilized: 4 Unutilized: 4	Network to be planned for 2 bays		Lucknow -Kanduni, 220 kV D/C line work is completed, safety clearance from Powergrid is awaited updated by UPPTCL in 211th OCC. No planning for 2 no. of bays upated by UPPTCL in 196th OCC. The same has been
22	400/220kV Gorakhpur Sub- station	Commissioned: 6	Utilized: 4 Unutilized: 2	Network to be planned for 2 bays	22.08.2023	communicated to Powergrid. • Gorakhpur(PG)- Maharajganj, 220 kV D/C line expected energization date is 22.08.2023 updated by UPPTCL in 210th OCC
23	400/220kV Fatehpur Sub-station	Commissioned: 8 Under Implementation:2 Total: 10	Utilized: 6 Unutilized: 2 Under Implementation:2	Network to be planned for 2 bays	-	UPPTCL intimated that 02 no. of bays under finalization stage. In 201st OCC, UPPTCL intimated that it is finalized that Khaga s/s will be connected (tentative time 1.5 years). No planning for 2 no. of bays updated by UPPTCL in 196th OCC. The same has been
24	400/220kV Abdullapur Sub- station	Commissioned: 10 Under Implementation:2 Total: 12	Utilized: 10 Unutilized: 0 Under Implementation:2	• Abdullapur – Rajokheri 220kV D/c line	Dec'23	SCDA System & PLCC work pending at 220 KV S/stn. Rajokheri Updated in 209th OCC by HVPNL
		Commissioned: 8	piorioritation.2	• Panchkula – Pinjore 220kV D/c line	Dec'23	Updated in 211th OCC by HVPNL
		Under tender:2	Utilized: 2	Panchkula – Sector-32 220kV D/c line	Feb'24	Updated in 211th OCC by HVPNL
	400/220k\/ Dachkula	Total: 10	Utilized: 2	• Panchkula – Raiwali 220kV D/c line	Commissioned	Updated in 194th OCC by HVPNL

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SI. No.	Substation	Downstream network bays	Status of bays	Planned 220 kV system and Implementation status	Revised Target	Remarks
25	Sub-station	Out of these 10 nos. 220kV Line Bays, 2 bays would be used by the lines being constructed by POWERGRID (Chandigarh- 2) and balance 8 nos. bays would be used by HVPNL	Under Implementation:2	• Panchkula – Sadhaura 220kV D/c line: Sep'23	Jul'24	Updated in 205th OCC by HVPNL
	26 400/220kV Amritsar S/s Commissioned:7 Approved in 50th NRPC- 1 no. Total: 8	Commissioned:7	Utilized: 6	Amritsar – Patti 220kV S/c line	Nov'23	Route survey/tender under process. Updated in 211th OCC by PSTCL.
26		Unutilized: 1 Approved in 50th NRPC- 1 no.	Amritsar – Rashiana 220kV S/c line (2 bays shall be required for above lines. However, 1 unutilized bay shall be used for Patti and requirement of one additional bay approved for Rashiana by NRPC)	Nov'23	Route survey/tender under process Updated in 211th OCC by PSTCL.	
27	400/220kV Bagpat S/s	Commissioned: 8 Total: 8	Utilized:6 Unutilized: 2	Bagpat - Modipuram 220kV D/c line	Commissioned	Updated in 201st OCC by UPPTCL
	Commissioned: 4	Commissioned: 4	Utilized:2 Unutilized: 2	LILO of 220 kV Nunamajra- Daultabad S/c line at 400 kV Bahadurgarh PGCIL	31.03.2024	Updated in 205th OCC by HVPNL. Status: Tentative route stands submitted by TS wing and accordingly BOQ has been submitted by design wing to contracts wing for award of work.
28				Bahadurgarh - METL 220kV D/c line (Deposit work of M/s METL)		Updated in 205th OCC by HVPNL. Status: Tentative route stands submitted by TS wing and accordingly BOQ has been submitted by design wing to contracts wing for award of work.
				Bahadurgarh - Kharkhoda Pocket B 220kV D/c line	31.07.2024	
29	400/220kV Jaipur (South) S/s	Commissioned: 4 Total: 4	Utilized:2 Unutilized: 2	Network to be planned for 2 bays.	-	LILO case of 220 kV Dausa – Sawai Madhopur line at 400 kV GSS Jaipur South (PG) is under WTD approval as updated by RVPNL in 195th OCC
		Commissioned: 8 Total: 8	Utilized: 8	Sohawal - Barabanki 220kV D/c line	Commissioned	Energization date: 14.04.2018 updated by UPPTCL in 196th OCC
	400/220kV Sohawal S/s			Sohawal - New Tanda 220kV D/c line	Commissioned	Energization date: 28.05.2019 updated by UPPTCL in 196th OCC
30				Network to be planned for 2 bays	Commissioned	Sohawal - Gonda 220kV S/c line (Energization date: 27.04.2020) updated by UPPTCL in 196th OCC Sohawal - Bahraich 220kV S/c
						line (Energization date: 15.02.2021) updated by UPPTCL in 196th OCC
31	400/220kV, Kankroli	Commissioned: 6 Total: 6	Utilized: 4 Unutilized: 2	Network to be planned for 2 bays	-	RVPNL to update the status
32	400/220kV, Manesar	Commissioned: 8 Total: 8	Utilized: 4 Unutilized: 4	Network to be planned for 2 bays		Status:- 2nos bays are being utilised for 220 kV D/C Panchgaon (PGCIL)- Panchgaon Ckt-I & 220 kV D/C Panchagon (PGCIL)-Panchgaon Ckt-II, charged on dated 05.09.2022 & 20.10.2022 respectively. The 2nos bays may be utilised by HVPNL in future.
33	400/220kV, Saharanpur	Commissioned: 6 Under Implementation:2 Total: 8	Utilized: 6 Unutilized: 0 Under Implementation:2	Network to be planned for 2 bays	Commissioned	Saharanpur(PG)-Devband D/c line (Energization date: 20.04.2023) updated by UPPTCL in 207th OCC

SI. No.	Substation	Downstream network bays	Status of bays	Planned 220 kV system and Implementation status	Revised Target	Remarks
34	400/220kV, Wagoora	Commissioned: 10 Total: 10	Utilized: 6 Unutilized: 4	Network to be planned for 4 bays	-	PDD, J&K to update the status.
35	400/220k\/ Ludhiana	Commissioned: 9 Total: 9	Utilized: 8 Unutilized: 1	Network to be planned for 1 bay	Oct'23	Direct circuit from 220 kV Lalton Kalan to Dhandari Kalan to be diverted to 400 kV PGCIL Ludhiana. Work completed but pending for first time charging to be expected by first week of October. Updated in 211th OCC by PSTCL.
36	400/220kV, Chamba (Chamera Pool)	Commissioned: 3 Under tender:1 Total: 4	Utilized:3 Unutilized: 0 Under tender:1	Stringing of 2nd ckt of Chamera Pool – Karian 220kV D/c line	-	Stringing of 2nd Circuit of Chamera Pool-Karian Tansmission line has been completed & terminal bay at 400/220 kV chamera pooling substation (PGCIL) is not ready.Updated in 198th OCC by HPPTCL
37		Commissioned: 6 Under Implementation:2 Total: 8	Utilized: 6 Unutilized: 0 Under Implementation:2	Network to be planned for 2 bays	-	02 no. of bays under finalization stage updated by UPPTCL in 196th OCC. Mainpuri S/s planned. Land is not finalized, therefore timeline not available as intimated by UPPTCL in 201st OCC.
38	/////220k\/ Patiala	Commissioned: 8 Total: 8	Utilized: 6 Unutilized: 2	Network to be planned for 2 bays	May'24	2 Nos. bays for 400 kV PGCIL Patiala - 220 kV Bhadson (D/C) line being planned. Work expected to be completed by May 2024. Updated in 198th OCC by PSTCL.

FGD Status

Updated status of FGD related data submission

NTPC (27.02.2023) **MEJA Stage-I RIHAND STPS SINGRAULI STPS** TANDA Stage-I TANDA Stage-II **UNCHAHAR TPS UPRVUNL (18.07.2023) ANPARA TPS** HARDUAGANJ TPS **OBRA TPS** PARICHHA TPS

PSPCL (18.07.2023) GGSSTP, Ropar GH TPS (LEH.MOH.) **RRVUNL (09.07.2023)** CHHABRA SCPP CHHABRA TPP **KALISINDH TPS KOTA TPS SURATGARH SCTPS SURATGARH TPS**

Updated status of FGD related data submission

Lalitpur Power Gen. Co. Ltd.

(17.10.2022)

Lalitpur TPS

Lanco Anpara Power Ltd.

(18.06.2022)

ANPARA-C TPS

HGPCL (14.09.2022)

PANIPAT TPS

RAJIV GANDHI TPS

YAMUNA NAGAR TPS

Adani Power Ltd. (18.02.2022)

KAWAI TPS

Rosa Power Supply Company

(18.06.2022)

Rosa TPP Phase-I

Prayagraj Power Generation

Company Ltd. (17.10.2022)

Prayagraj TPP

APCPL (25.02.2022)

INDIRA GANDHI STPP

Pending submissions

GVK Power Ltd.

GOINDWAL SAHIB

NTPC

DADRI (NCTPP)

Talwandi Sabo Power Ltd.

TALWANDI SABO TPP

L&T Power Development Ltd.

Nabha TPP (Rajpura TPP)

Target Dates for FGD Commissioning (Utility-wise)

Adani Power Ltd.	KAWAI TPS U#1 (Target: 31-12-2024), KAWAI TPS U#2 (Target: 31-12-2024)
APCPL	INDIRA GANDHI STPP U#1 (Target: 31-01-2022), INDIRA GANDHI STPP U#2 (Target: 30-09-2023), INDIRA GANDHI STPP U#3 (Target: 30-06-2023)
GVK Power Ltd.	GOINDWAL SAHIB U#1 (Target: 30-04-2020), GOINDWAL SAHIB U#2 (Target: 29-02-2020)
HGPCL	PANIPAT TPS U#6 (Target: 31-12-2022), PANIPAT TPS U#7 (Target: 31-12-2022), PANIPAT TPS U#8 (Target: 31-12-2022), RAJIV GANDHI TPS U#1 (Target: 31-12-2024), RAJIV GANDHI TPS U#2 (Target: 31-12-2024), YAMUNA NAGAR TPS U#1 (Target: 31-12-2024), YAMUNA NAGAR TPS U#2 (Target: 31-12-2024)

NTPC

DADRI (NCTPP) U#1 (Target: 31-12-2020), DADRI (NCTPP) U#2 (Target: 31-10-2020), DADRI (NCTPP) U#3 (Target: 31-08-2020), DADRI (NCTPP) U#4 (Target: 30-06-2020), DADRI (NCTPP) U#5 (Target: 30-06-2022), DADRI (NCTPP) U#6 (Target: 31-03-2023), RIHAND STPS U#1 (Target: 31-10-2025), RIHAND STPS U#2 (Target: 30-06-2026), RIHAND STPS U#3 (Target: 31-12-2024), RIHAND STPS U#4 (Target: 31-03-2025), RIHAND STPS U#5 (Target: 30-06-2025), RIHAND STPS U#6 (Target: 31-10-2025), SINGRAULI STPS U#1 (Target: 31-12-2024), SINGRAULI STPS U#2 (Target: 31-12-2024), SINGRAULI STPS U#3 (Target: 31-12-2024), SINGRAULI STPS U#4 (Target: 31-12-2024), SINGRAULI STPS U#5 (Target: 31-03-2025), SINGRAULI STPS U#6 (Target: 31-06-2024), SINGRAULI STPS U#7 (Target: 31-03-2024), UNCHAHAR TPS U#1 (Target: 31-12-2023), UNCHAHAR TPS U#2 (Target: 31-12-2023), UNCHAHAR TPS U#3 (Target: 30-09-2023), UNCHAHAR TPS U#4 (Target: 30-09-2023), UNCHAHAR TPS U#5 (Target: 30-09-2023), UNCHAHAR TPS U#6 (Target: 31-08-2022), MEJA Stage-I U#1 (Target: 31-10-2023), MEJA Stage-I U#2 (Target: 30-06-2023), TANDA Stage-I U#3 (Target:), TANDA Stage-I U#4 (Target:), TANDA Stage-II U#3 (Target: 31-03-2023), TANDA Stage-II U#4 (Target: 30-09-2023)

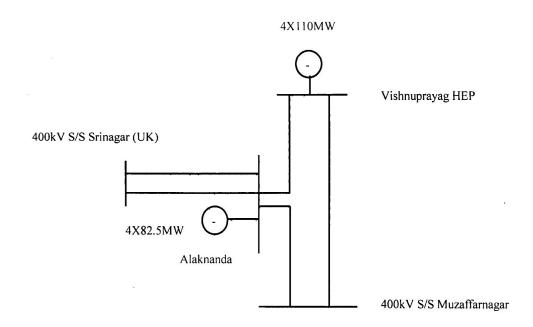
L&T Power Development Ltd (Nabha)	Nabha TPP (Rajpura TPP) U#1 (Target: 30-04-2021), Nabha TPP (Rajpura TPP) U#2 (Target: 28-02-2021)
Lalitpur Power Gen. Company Ltd.	LALITPUR TPS U#1 (Target: 31-12-2026), LALITPUR TPS U#2 (Target: 30-09-2026), LALITPUR TPS U#3 (Target: 30-06-2026)
Lanco Anpara Power Ltd.	ANPARA C TPS U#1 (Target: 31-12-2023), ANPARA C TPS U#2 (Target: 31-12-2023)
Prayagraj Power Generation Company Ltd.	PRAYAGRAJ TPP U#1 (Target: 31-12-2024), PRAYAGRAJ TPP U#2 (Target: 31-12-2024), PRAYAGRAJ TPP U#3 (Target: 31-12-2024)
PSPCL	GH TPS (LEH.MOH.) U#1 (Target: 31-12-2026), GH TPS (LEH.MOH.) U#2 (Target: 31-12-2026), GH TPS (LEH.MOH.) U#3 (Target: 31-12-2026), GH TPS (LEH.MOH.) U#4 (Target: 31-12-2026), GGSSTP, Ropar U#3 (Target: 31-12-2026), GGSSTP, Ropar U#5 (Target: 31-12-2026), GGSSTP, Ropar U#6 (Target: 30-12-2026)

ROSA TPP Ph-I U#1 (Target: 31-12-2026), ROSA TPP Ph-I U#2 (Target: 31-12-2026), ROSA TPP Ph-I
U#3 (Target: 31-12-2026), ROSA TPP Ph-I U#4 (Target: 31-12-2026)
KOTA TPS U#5 (Target: 31-08-2024), KOTA TPS U#6 (Target: 31-08-2024), KOTA TPS U#7 (Target: 31-08-2024), SURATGARH TPS U#1 (Target: 31-12-2026), SURATGARH TPS U#2 (Target: 31-12-2026), SURATGARH TPS U#3 (Target: 31-12-2026), SURATGARH TPS U#4 (Target: 31-12-2026), SURATGARH TPS U#5 (Target: 31-12-2026), SURATGARH TPS U#6 (Target: 31-12-2026), SURATGARH SCTPS U#7 (Target: 28-02-2025), SURATGARH SCTPS U#8 (Target: 28-02-2025), CHHABRA TPP U#1 (Target: 31-12-2026), CHHABRA TPP U#2 (Target: 31-12-2026), CHHABRA TPP U#3 (Target: 31-12-2026), CHHABRA TPP U#4 (Target: 31-12-2026), CHHABRA SCPP U#5 (Target: 28-02-2025), KALISINDH TPS U#1 (Target: 28-02-2025), KALISINDH TPS U#2 (Target: 28-02-2025)
TALWANDI SABO TPP U#1 (Target: 28-02-2021), TALWANDI SABO TPP U#2 (Target: 31-12-2020),
TALWANDI SABO TPP U#3 (Target: 31-10-2020)
ANPARA TPS U#1 (Target: 31-12-2023), ANPARA TPS U#2 (Target: 31-12-2023), ANPARA TPS U#3 (Target: 31-12-2023), ANPARA TPS U#4 (Target: 31-12-2023), ANPARA TPS U#5 (Target: 31-12-2023), ANPARA TPS U#6 (Target: 31-12-2023), ANPARA TPS U#7 (Target: 31-12-2023), HARDUAGANJ TPS U#8 (Target: 31-12-2024), HARDUAGANJ TPS U#9 (Target: 31-12-2024), OBRA TPS U#9 (Target: 31-12-2024), OBRA TPS U#10 (Target: 31-12-2024), OBRA TPS U#11 (Target: 31-12-2024), OBRA TPS U#13 (Target: 31-12-2024), PARICHHA TPS U#3 (Target: 30-04-2022), PARICHHA TPS U#4 (Target: 31-12-2024), PARICHHA TPS U#5 (Target: 31-12-2024), PARICHHA TPS U#6 (Target: 31-12-2024)

Table Agenda for 211th OCC Meeting

SPS scheme for safe evacuation of Power from Alaknanda-Vishnuprayag HEP complex.

Network Connectivity



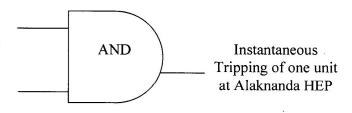
Reason for SPS requirement

At Vishnuprayag HEP, overcurrent protection is enabled at 120% on 400kV Vishnuprayag-Muzaffarnagar line. At normal operating condition, current on this line remains well below over current setting. However, in case of tripping of 400kV Alaknanda-Muzaffarnagr line and high injection of power from Uttrakhand through 400kV Srinagar-Alaknanda DC line, overcurrent protection at 400kV Vishnuprayag operates, tripping 400kV Vishnuprayg-Muzaffarnagar line. Therefore, due to loss of evacuation path, generation loss occurs at Alaknanda & Vishnuprayag HEP.

Logic for SPS

Flow on 400 kV Alaknanda-Vishnuprayag>=450Amp from Alaknanda to Vishnuprayag

> Tripping of 400kV Alaknanda-Muzaffarnagar line



Note:- There should be definite time delay in overcurrent protection at Vishnuprayag to ensure that SPS operation occur before the operation of overcurrent protection at Vishnuprayag.

And Nara.

(Amit Narain)
Superintending Engineer (R&A)



HPPTCL-PLG-008/1/2023-Planning Cell-HPPTCL-Part(T1) HIMACHAL PRADESH POWER Annexure-A.III

TRANSMISSION CORPORATION LTD.

(A State Govt. Undertaking)

Regd. Office: HimfedBhawan, New ISBT Road, Panjari, Shimla-171005

Ph.: 0177-2831283, 2831284 FAX: 0177-2831284 (CIN): U40101HP2008SGC030950

Web: - www.hpptcl.com

(CIN):U40101HP2008SGC0309: (GSTIN):02AACCH1548M1ZP

Dated: 31-08-2023.

To

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

Sub: Agenda for 69th meeting of Northern Regional Power Committee

Sir,

This is with reference to HPPTCL proposal for Construction of 220/132 kV, 80/100 MVA Sub Station at Tahliwal (Distt. Una in Himachal Pradesh) by S/C LILO of 220 kV D/C Bhakra to Jamalpur D/c line of BBMB. The proposal has been approved by BBMB constituents in 148th meeting of Power Sub Committee of BBMB. HPPTCL agenda for upcoming 69th NRPC meeting on subject cited above is enclosed alongwith for your information and perusal please.

Yours truly

Er. Rajneesh Kumar

GM (C&D)

HPPTCL. Himfed Bhawan

Panjari, Shimla -05

gmcd.tcl@hpmail.in

Copy to-

- 1. Chief Operating Officer, CTUIL for information please.
- 2. Chief Engineer PSPA-I for information please.
- 3. Spl. Secretary BBMB Chandigarh for information please.

/237545/2023

Subject: Construction of 220/132 kV, 80/100 MVA Sub Station at Tahliwal (Distt. Una in Himachal Pradesh) by S/C LILO of 220 kV D/C Bhakra to Jamalpur D/c line of BBMB with provision of SPS to restrict drawl at 50 MVA and to ensure no drawl of Power from Jamalpur side in case of outage of Bhakhra - Tahliwal circuit.

Background-

This is in context of the Construction of 132/220~kV, 80/100~MVA Sub Station at Tahliwal (Distt. Una in Himachal Pradesh) by S/C LILO of 220~kV Bhakra - Jamalpur D/c line of BBMB. The details are as under-

HPPTCL had placed the agenda for BBMB constituent's approval in 119th **Power Subcommittee Meeting** held on 29.04.2013, wherein it was agreed that H.P. may LILO 220 kV Bhakra-Jamalpur (Punjab) D/C line of BBMB, which is passing through H.P. and establish 220/132 kV Substation at Tahliwal in Himachal Pradesh. It was further desired by BBMB that the proposal be got concurred by Northern Region Constituents in the meeting of Standing Committee.

The matter was discussed in 33rd meeting of Northern Region Standing Committee held on 13.07.2015 held on 23.12.2013 and 36th meeting of Northern Region Standing Committee held on 13.07.2015 wherein it was decided that in case HPSEBL desires to draw 80 MW power at Tahliwal, LILO of 220kV Bhakra (Right) – Jamalpur D/C line at Tahliwal and reconductoring of the portion of the line between Bhakra(R) –LILO point with HTLS conductor be carried out by HPSEB at their own cost. HPSEB should restrict the loading on the LILO portion to 80 MW by installing SPS. The proposal was subsequently approved in 123rd Power Subcommittee of BBMB held on 27.07.2015.

Considering that the **decisions were taken in 2015** and significant time has passed, HPPTCL before taking up the construction in year **2020** took matter with BBMB, wherein it was desired that to ascertain the present situation and any changes required in the decisions taken in **36th Standing Committee** and 123rd Power Subcommittee, the proposal shall be again placed before BBMB constituents for approval. The matter was discussed in **144th**, **145th & 146th meeting of Power Subcommittee wherein in 146th meeting of Power Subcommittee Haryana and Rajasthan intimated no objection to HP proposal** but PSTCL informed that they have some reservations and are not in agreement with the proposal of HP, it was concluded that the HPPTCL shall discuss the matter with PSTCL to explore the possibility of consensus for further progress in the matter.

Subsequently the matter was again discussed with PSTCL by HPPTCL, wherein after deliberations PSTCL consented for drawl of 50 MVA instead of earlier committed 80 MVA by S/C LILO of 220 KV Bhakra Jamalpur line of BBMB (without HTLS reconductoring) with provision of SPS to restrict drawl at 50 MVA and to ensure no drawl of Power from Jamalpur side in case of outage of Bhakhra - Tahliwal



/237545/2023

circuit (Copy of letter attached as Annexure-I). Accordingly, the scheme has been revised as Construction of 220/132 KV,80/100 MVA Sub-Station at Tahliwal (Dist. Una in Himachal Pradesh) by S/C LILO of 220 KV D/C Bhakra Jamalpur line of BBMB. Accordingly, the revised plan was placed for discussion in the 148th meeting of Power Subcommittee of BBMB held on 25.08.2023 and was approved by BBMB constituents (Copy of MoM attached as Annexure-II).

Proposal -

The substation is required on urgent basis to provide construction power to Bulk Drug Pharma Park proposed in Haroli Distt-Una of Himachal Pardesh (A Project of National Importance). The foundation stone laying ceremony of which has been done by Hon'ble Prime Minister in October 2022. Since the overall requirement of BDP (Bulk Drug Park) is to the tune of 120 MVA, HPPTCL has already submitted proposal to CEA for approval of following elements as long term plan i.e. Construction of 220/132 kV, 200 MVA Substation nearby Una and 220 kV (Twin Zebra) D/C line from 220/132 kV Nehrian Substation to proposed 220/132 kV, 200 MVA Substation near Una. This proposal shall require time frame of 3 years for construction after approval. The area is already facing acute power supply shortage irrespective of upcoming BDP (Bulk Drug Pharma Park). It is requested that the Construction of 220/132 kV, 80/100 MVA Sub Station at Tahliwal (Distt. Una in Himachal Pradesh) by S/C LILO of 220 kV D/ C Bhakra Jamalpur D/c line of BBMB with provision of SPS to restrict drawl at 50 MVA and to ensure no drawl of Power from Jamalpur side in case of outage of Bhakhra - Tahliwal circuit be approved in line with approval of Power Subcommittee and BBMB constituents.





PUNJAB STATE TRANSMISSION CORPORATION LIMITED

Regd. Office: - PSEB Head Office, The Mall, Patiala - 147001, Punjab, India

O/o SE/Planning, PSTCL, Patiala.

Fax/Ph: - 0175-2205502, Email: - se-planning@pstcl.org

CIN - U40109PB2010SGC033814

To,

Director (P&C),
HPPTCL,
Himfed Bhavan, near ISBT,
Shimla – 171005
Email: directorpc.tcl@hpmail.in

Memo No 386

/P-1/57

Dated: 04/08/2023

Subject:

Regarding construction of 220/132 kV, 2X80/100 MVA, substation at Tahliwal, Distt.

Una, Himachal Pradesh by LILO of 220 kV Bhakra – Jamalpur D/C line of BBMB.

This is with reference to the DO letter (D.O. No. HPPTCL/Plg/EHV Works Vol-II/2023 Shimla-2, the 5th March, 2023-19019 dated 05.03.23) to Sh. A Venu Prasad, IAS (CMD/PSTCL) received in this office wherein Sh. Prabodh Saxena, IAS (Chief Secretary to the Govt. of Himachal Pradesh) had requested the intervention of CMD/PSTCL to allow construction of 220/132 kV substation at Tahliwal by single circuit LILO of 220 kV Bhakra – Jamalpur D/C line of BBMB with the caping of drawl of 50 MVA.

In this regard, it is informed that the matter was taken up with the higher authorities of PSTCL and the state of Punjab. In view of Himachal Pradesh's need of 50 MVA power by December 2024 for its Drug Pharma Park, PSTCL conveys its concurrence to LILO of single circuit of 220 kV Bhakra – Jamalpur double circuit line at 220 kV substation Tahliwal subject to installation of suitable SPS by HPPTCL for restricting drawl of power to 50 MVA by HP and to prevent any drawl from Jamalpur in case of outage of Bhakra – Tahliwal section.

This issues with the approval of the competent authority.

Chief Engineer/TS,

CC: 04/08/0083

1. Sh. Prabodh Saxena, IAS, Chief Secretary to the Govt. of Himachal Pradesh.

2. OSD/Power Reforms, Department of Power (Power Reforms Wing), Government of Punjab, Chandigarh.

3. Addl. SE/Tech. to Director/Tech., PSTCL, Patiala.



भाखडा ब्यास प्रबन्ध बोर्ड मध्य मार्ग, सैक्टर 19-बी, चंडीगढ़-160019 दरभाष: 0172-5011761

E-Mail: spsecy@bbmb.nic.in



प्रेषक

विशेष सचिव

SPEED POST

सेवा में.

- 1. निदेशक/उत्पादन, पंजाब स्टेट पावर कारपोरेशन लिमिटेड, पटियाला -147001
- 2. निदेशक /तकनीकी. पंजाब स्टेट ट्रांसमिशन कारपोरेशन लिमिटेड, द मॉल, पटियाला - 147001
- निदेशक/तकनीकी, 3. हिमाचल प्रदेश राज्य विद्युत बोर्ड, विद्युत भवन, शिमला-171004
- निदेशक/तकनीकी, 4. हरियाणा विद्युत प्रसारण निगम लिमिटेड, शक्ति भवन, सैक्टर-६, पंचकुला - 134109
- निदेशक/तकनीकी, 5. राजस्थान राज्य विद्युत प्रसारण निगम लिमिटेड, विद्युत भवन, ज्योति नगर, जनपथ, जयपुर - 302005

क्रमांक: २५५७। - २५५८। /बी-1684/पावर सब कमेटी/4पी/148वीं

दिनांक: 29-08-2023

विषय:

भाखड़ा न्यास प्रबन्ध बोर्ड (विद्युत खण्ड) की विदयुत उप समिति (पावर सब कमेटी) की 148वीं बैठक के कार्यवृत ।

उपर्युक्त विषय पर, दिनांक 25.08.2023 को हुई पावर सब कमेटी की 148वीं बैठक के कार्यवृत की एक प्रति सूचना एवं आवश्यक कार्रवाई हेत् प्रेषित की जाती है जी।

संलग्न/कार्यवृत

प्रतिलिपि:

- 1. प्रमुख अभियन्ता/प्रणाली परिचालन, भा.ब्या.प्र.बोर्ड, चण्डीगढ़ ।
- 2. मुख्य अभियन्ता/पारेषण प्रणाली, भा.ब्या.प्र.बोर्ड, चण्डीगढ़ ।
- 3. मुख्य अभियन्ता/उत्पादन, भा.ब्या.प्र.बोर्ड, नंगल ।
- अध्यक्ष महोदय के निजी सचिव, भा.ब्या.प्र.बोर्ड, चंण्डीगढ।
- 5. सदस्य/विद्युत के निजी सचिव, भा.ब्या.प्र.बोर्ड, चण्डीगढ़।
- विशेष सचिव के निजि सचिव भा.ब्या.प्र.बोर्ड, चण्डीगढ़।

दिनांक 25.08.2023 को चंडीगढ़ में आयोजित बीबीएमबी की विद्युत उप समिति (पीएससी) की 148 वीं बैठक का कार्यवृत्त।

निम्नलिखित अधिकारी उपस्थित थे:-

- 1. ई. अमरजीत सिंह, सदस्य विद्युत, बीबीएमबी। (समिति के अध्यक्ष)
- 2. ई. विपन ग्प्ता, मुख्य अभियंता/पारेषण प्रणाली, बीबीएमबी ।
- 3. ई. अजय कुमार शर्मा, विशेष सचिव, बीबीएमबी, चडीगढ़। (सदस्य सचिव)
- 4. ई. राजीव सूद/ निदेशक (पी एण्ड सी), एचपीएसईबीएल, शिमला हि.प्र.।
- 5. **ई.हरिमोहन गुप्ता,मुख्य अभियन्ता (एनपीपी एवं आर ए) आरआरवीपीएनएल,** जयपुर। (वी.सी. के माध्यम से)
- 6. ई. योगेन्द्र माथूर, अधीक्षणअभियन्ता(आईएसपी) आरआरवीपीएनएल, जयपुर।(वी.सी. के माध्यम से)
- 7. ई. ए.पी.सिंह, म्ख्य अभियन्ता/टीएस,पीएसटीसीएल, पटियाला।
- 8. ई. संजीव सूद, मुख्य अभियन्ता/टीएस,पीएसटीसीएल, पटियाला।(वी.सी. के माध्यम से)
- 9. ई. विवेक कुमार खन्ना, अधीक्षण अभियन्ता/योजना,पीएसटीसीएल, पटियाला।
- 10. ई. अनिल कुमार यादव, मुख्य अभियन्ता/एसओ एवं कॉमर्शिलय एचवीपीएनएल हरियाणा। (वी.सी. के माध्यम से)
- 11. ई. संजय अरोड़ा, मुख्य अभियन्ता/पलानिंग,एचवीपीएनएल हरियाणा। (वी.सी. के माध्यम से)
- 12. ई. स्वि शर्मा, निदेशक/पीआर, बीबीएमबी चण्डीगढ़।
- 13. ई. बुजेश कुमार यादव, अधीक्षण अभियन्ता, बीबीएमबी, पानीपत ।
- 14. ई. आर. के. थमन, संयुक्त सचिव विदयुत एवं सामान्य, चंडीगढ़।

Member (P) welcomed all the Members of Power Sub Committee and other officers present in the meeting and invited the concerned to present their respective Agendas:

Item-I:

Construction of 220/132 KV, 80/100 MVA Sub-Station at Tahliwal (Distt. Una in Himachal Pradesh) by S/C LILO of 220 KV Bhakra-Jamalpur line of BBMB.

Director, HPPTCL presented the agenda to Power Sub Committee members along with brief background of the case.



Further it was intimated that in deference to the decision taken in 146th Power Sub Committee meeting of BBMB, HPPTCL has taken up the matter with PŞTCL and PSTCL has given their consent for drawl of 50 MVA instead of 80 MVA Load.

Member/ Power, BBMB observed that LILO of 220 KV Bhakra-Jamalpur circuit should be done only after replacement of existing conductor and also enquired whether PSTCL has given their consent to HPPTCL for LILO of Bhakra-Jamalpur Circuit without replacement of existing conductor with new conductor.

CE/PSTCL replied that they have no objection in drawl of 50 MVA Load by HPPTCL for proposed 220kV Tahliwal Sub-Station without re-conductoring.

Rajasthan and Haryana gave their consent to the proposal.

Agenda was approved with approval of all Power Sub Committee members.

Item-2:

Memorandum for creation of 220KV GIS sub-station & its associated transmission lines for India International Horticulture Market at Ganaur (Distt. Sonipat) to be carried out by HVPNL as deposit work of Haryana International Horticulture Marketing Cooperation Ltd (HIHMCL).

Agenda was received from the HVPNL, Haryana on dated18.08.2023 through e mail but notice for the meeting of 148th PSC meeting was issued on 09.08.2023. Due to late receipt, agenda was not circulated to the Power Sub Committee members for deliberation in the meeting.

But due to urgency of work and on request of Haryana, this agenda was deliberated in the meeting as table agenda.

CE/Planning, HVPNL explained the agenda in detail and requested for LILO of 220KV, BBMB Panipat-Narela Circuit at Gannaur.

All Power Sub Committee members desired HVPNL to share the detailed load flow studies to enable them to take decision in this regard.



Rajasthan, observed that agenda in Power Sub Committee of BBMB should be placed only after obtaining the approval of CEA and NRPC. Haryana assured to put up the agenda in NRPC at the earliest.

SE/Planning, PSTCL also cited Goraya LILO case in which approval of NRPC was desired by Power Sub Committee.

Power Sub Committee decided that agenda should be placed in the next Power Sub Committee of BBMB after sharing the system studies with all members and approval of NRPC/CEA.

Meeting ended with vote of thanks to chair.

Special Secretary