



सत्यमेव जयते

भारत सरकार

Government of India

विद्युत मंत्रालय

Ministry of Power

उत्तर क्षेत्रीय विद्युत समिति

Northern Regional Power Committee

सं.: उ.क्षे.वि.स./प्रचालन/106/01/2022/6606-6647

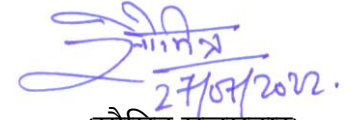
दिनांक: 27.07.2022

**विषय:** उत्तर क्षेत्रीय विद्युत समिति की प्रचालन समन्वय उप-समिति की 197<sup>वीं</sup> बैठक के खण्ड-अ में लिए गए निर्णयों का सार।

**Subject:** Gist of decisions taken in the Part-A of 197<sup>th</sup> OCC meeting of NRPC.

उत्तर क्षेत्रीय विद्युत समिति की प्रचालन समन्वय उप-समिति की 197<sup>वीं</sup> बैठक दिनांक 22.07.2022 को आयोजित की गयी। उक्त बैठक की खण्ड-अ में लिए गए निर्णयों का सार **अनुलग्नक - अ** के रूप में संलग्न है।

197<sup>th</sup> meeting of the Operation Co-ordination Sub-Committee of NRPC was held on 22.07.2022. The Gist of the decisions taken in Part-A of this meeting is enclosed as **Annexure-A**.

  
27/07/2022.  
(सौमित्र मजूमदार)  
अधीक्षण अभियंता (प्रचालन)

सेवा में,  
प्रचालन समन्वय उप-समिति के सभी सदस्य।

## Gist of decisions taken in the Part-A of 197<sup>th</sup> OCC Meeting

### **Agenda No. 1: Confirmation of Minutes**

Minutes of 196<sup>th</sup> OCC meeting was issued on 11.07.2022. OCC confirmed the minutes.

In regard to agenda No. 16, BBMB representative requested OCC forum that in accordance to the decision held in 196<sup>th</sup> OCC the statement

*“BBMB representative was asked to submit to letter to CERC stating that BBMB has not completed PFR testing citing the reasons for the same. BBMB representative agreed for the same.” shall be replaced with “BBMB representative was asked to submit to letter to CERC stating that BBMB has not completed PFR testing citing the reasons for the same.”*

### **Agenda No. 2.1: Supply Position (Provisional) for June 2022**

Reasons submitted by states for significant deviation of actual demand from anticipated figures during the month of June 2022 are as under:

- **Delhi**

The positive variation in Demand was due to humid and hot weather condition in last week of June-2022. The negative variation in energy consumption was due to light rain and drop in temperature in 2nd fortnight of June-2022.

- **Punjab**

It is intimated that actual maximum demand and actual energy requirement are less as compared to anticipated maximum demand and anticipated energy requirement respectively because of less demand of agricultural load and all other categories due to heavy rainfall in the state of Punjab during month of June 2022.

- **Himachal Pradesh**

The anticipation in Peak Demand in respect of Himachal Pradesh for the month of June 2022 came on the higher side due to consistent dry weather.

- **Uttarakhand**

The reasons for significant deviation of actual demand and anticipated figures during the month of June 2022 is mainly due to unprecedented changes in weather conditions in summer season, significant rise in temperature, delay in monsoon in comparison to the historical data as well as increase in demand of electricity due to economy bounce back after Covid pandemic.

- **Rajasthan**

The Energy consumption & Peak Demand increased by 3.8 % & 6.7 % respectively w.r.t. Anticipated Energy requirement & Anticipated Peak Demand for June '2022. As per Govt. policy, all agriculture load is to be fed in 2 blocks (day hours) in phase manner up to March'2023, therefore due to addition of some agriculture load in day hours block, actual peak increased w.r.t. Anticipated Peak.

## Agenda No. 2.2: Power Supply Position of NCR

The Sub-Committee was informed that the NCR Planning Board (NCRPB) is closely monitoring the power supply position of National Capital Region. Monthly power supply position for NCR till the month of June 2022 was enclosed in the agenda and same was discussed in the meeting.

## Agenda No. 4.1: Anticipated Power Supply Position in Northern Region for August 2022

- The updated anticipated Power Supply Position for August 2022 is as below:

State / UT	Availability / Requirement	Revised Energy (MU)	Revised Peak (MW)	Date of revision
CHANDIGARH	Availability	230	420	No Revision submitted
	Requirement	190	360	
	Surplus / Shortfall	40	60	
	% Surplus / Shortfall	21.1%	16.7%	
DELHI	Availability	4269	7050	21-Jun-22
	Requirement	3758	7050	
	Surplus / Shortfall	511	0	
	% Surplus / Shortfall	13.6%	0.0%	
HARYANA	Availability	5730	11650	No Revision submitted
	Requirement	6680	11990	
	Surplus / Shortfall	-950	-340	
	% Surplus / Shortfall	-14.2%	-2.8%	
HIMACHAL PRADESH	Availability	1151	1658	12-Jun-22
	Requirement	1072	1668	
	Surplus / Shortfall	79	-10	
	% Surplus / Shortfall	7.4%	-0.6%	
J&K and LADAKH	Availability	2180	3510	No Revision submitted
	Requirement	1330	2400	
	Surplus / Shortfall	850	1110	
	% Surplus / Shortfall	63.9%	46.3%	
PUNJAB	Availability	7480	13400	21-Jul-22
	Requirement	8670	14700	
	Surplus / Shortfall	-1190	-1300	
	% Surplus / Shortfall	-13.7%	-8.8%	
RAJASTHAN	Availability	8680	18610	22-Jul-22
	Requirement	7900	14500	
	Surplus / Shortfall	780	4110	
	% Surplus / Shortfall	9.9%	28.3%	
UTTAR PRADESH	Availability	15500	25500	12-Jul-22
	Requirement	15190	25500	
	Surplus / Shortfall	310	0	
	% Surplus / Shortfall	2.0%	0.0%	
UTTARAKHAND	Availability	1451	2235	08-Jul-22

State / UT	Availability / Requirement	Revised Energy (MU)	Revised Peak (MW)	Date of revision
	Requirement	1457	2300	
	Surplus / Shortfall	-6	-65	
	% Surplus / Shortfall	-0.4%	-2.8%	
NORTHERN REGION	Availability	46671	77900	
	Requirement	46247	74600	
	Surplus / Shortfall	424	3300	
	% Surplus / Shortfall	0.9%	4.4%	

#### Agenda No. 5: Submission of breakup of Energy Consumption by the states

- The updated status on the submission of energy consumption breakup is presented below:

State / UT	From	To
Delhi	Apr-2018	Mar-2022
Haryana	Apr-2018	May-2022
Himachal Pradesh	Apr-2018	Apr-2022
Punjab	Apr-2018	Mar-2022
Rajasthan	Apr-2018	May-2022
Uttar Pradesh	Apr-2018	Apr-2022
Uttarakhand	Apr-2018	Mar-2022

- OCC forum again expressed concern on non-submission of energy breakup data by UTs of J&K & Ladakh, and Chandigarh despite repeated reminders.

#### Agenda No. 6: Automatic Demand Management System

- Forum was informed that as decided in the 175<sup>th</sup> OCC meeting, to conduct separate meeting with states, nominations are pending from PuVVNL, PVVNL, MVVNL, DVVNL, UPPTCL, UPCL, PTCUL, SLDC Uttarakhand, and J&K. They were requested on 01.03.2021 to submit nominations for the meeting.
- Meetings on ADMS implementation road map have been held with the officers of Haryana, Himachal Pradesh, Punjab and UP on 05.02.2021, 19.02.2021, 05.03.2021, and 14.07.2021 respectively. In these meetings, issues and apprehensions on ADMS were discussed along with vital aspects like addressing the commercial issues, basic architecture for scheme and funding possibilities for the scheme.
- As per the request of states for DPR of any state that has got PSDF support for ADMS, website link of PSDF Sectt. has been shared with Haryana, Himachal Pradesh, Punjab and Uttar Pradesh for accessing DPR. SLDCs were also requested to expedite the submission of pending nominations.
- In 186<sup>th</sup> OCC, In-charge, NRLDC stated that as per IEGC, implementation of ADMS is mandatory. It helps in reducing DSM charges also. States must take it seriously.
- MS, NRPC stated that non-implementation of ADMS by states is indistinguishably non-adherence to directions of CERC. He enquired from NRLDC whether POSOCO has made

any communication with CERC regarding non-adherence of its deadline i.e. 31.06.2016. NRLDC representative stated that he would look into and inform in next meeting.

- NRPC representative added that initial deadline for ADMS implementation was 1<sup>st</sup> January 2011 as per para 5.4.2 (d) of IEGC. Later, CERC has taken suo-motu cognizance of non-implementation of ADMS by states and given 31.06.2016 as deadline vide its order dtd. 31.12.2015 in petition no. 5/SM/2014. Implementation deadline given by the statutory and regulatory body need to be complied by concerned SLDC / SEB / distribution licensee as per regulation no. 5.4.2 (a) & (b) of IEGC. Moreover, hand holding process for project proposal preparation in respect of four NR states has already been done by NRPC.
- Forum decided that NRLDC may file a report to CERC based on compiled status of ADMS implementation in states of Northern Region.
- In the 187<sup>th</sup> OCC, NRLDC representative quoted the texts of CERC order dtd. 31.12.2015 in petition no. 5/SM/2014. He apprised the status of ADMS implementation till 2015. Further, he requested the states to update the status so that NRLDC may file petition in CERC on the basis of compiled status.
- In the 188<sup>th</sup> OCC, NRLDC informed that it has not received comments from states in this matter. Accordingly, all SLDC/DISCOMs are requested to furnish the latest status of ADMS implementation in their respective control areas latest by 31<sup>st</sup> October 2021 to NRLDC. Status as received till 31.10.2021 would be reported to CERC by NRLDC.
- In the 189<sup>th</sup> OCC, NRLDC informed that status of ADMS has been sent to CERC twice in the past (same is recorded in MoM of 127<sup>th</sup> OCC).
- NRLDC representative also informed that CERC will be apprised about the latest status of ADMS as per the updated information available with them.
- In the 190<sup>th</sup> OCC, NRLDC representative informed that vide letter dated 09.12.2021 (enclosed as Annexure-A.0 of minutes of 190<sup>th</sup> OCC), CERC has been apprised about the latest status of ADMS as per the updated information available with them.
- In the 192<sup>nd</sup> OCC, forum was intimated that no further update has been received on this matter. Rajasthan representative intimated that ADMS implementation schedule in their state has been extended till Dec'22 and this agenda may be continued in OCC meetings for monitoring the ADMS implementation schedule.
- In the 193<sup>rd</sup> OCC, Rajasthan representative informed that first trial is tentatively scheduled in May 2022.
- In the 194<sup>th</sup> OCC, Rajasthan representative reiterated its commitment for the 1<sup>st</sup> trials in May 2022. MS, NRPC asked representatives of other states to regularly update the status on ADMS implementation.
- In the 195<sup>th</sup> OCC, Rajasthan SLDC representative informed that in consultation with state STU, ADMS implementation schedule in their state has been extended till Dec'22.
- In the 196<sup>th</sup> OCC, Rajasthan SLDC representative informed that due to the power crisis, the scheduled trials could not be done. Likely completion schedule is 31.12.2022.

- In the meeting (197<sup>th</sup> OCC), forum was of the view that agenda of Automatic Demand Management System may be included in the follow-up issues from various OCC meetings instead of taking it as a separate agenda.

#### **Agenda No. 7: Follow-up of issues from various OCC Meetings - Status update**

- Updated status is enclosed as ***Annexure-A.I.***
- In 195<sup>th</sup> OCC, SLDCs were requested to again to coordinate with respective Transmission utilities of states/UT's and submit details about the updated status of Down Stream network by State utilities from ISTS Station (***enclosed as Annexure-A-II***) before every OCC meeting.

#### **Agenda No. 8. NR Islanding scheme**

- Based on the decisions taken in the meeting taken by Hon'ble Minister of State (IC) for Power and New & Renewable Energy on 28.12.2020, Islanding Schemes for NR have been continuously reviewed/discussed in various forums.
- In 187<sup>th</sup> OCC, it was decided that states shall submit MIS report before every OCC meeting so that same may be discussed. Format was circulated vide agenda of 187<sup>th</sup> OCC.
- It was also highlighted that MoP has agreed for PSDF funding for implementation of islanding schemes and states were requested to prepare and submit DPR for the same. Further, a sample DPR on implementation of Islanding scheme for PSDF funding has been already circulated vide email dated 07.10.2021 and requested to expedite the preparation of DPR.
- Utilities were requested to refer and submit SOP for every Islanding scheme in their control area.
- A meeting was also held by Honorable Cabinet Minister (Power, New & Renewable Energy) on 07.10.2021 wherein emphasis was given on PSDF funding for Islanding schemes and DPR submission for the same. MoM has been issued and copy of the same is enclosed as Annexure-A.II of 189<sup>th</sup> OCC agenda.
- In the 189<sup>th</sup> OCC, MS, NRPC expressed concern regarding apathy of states in implementation of Islanding Schemes. He stated that all SLDCs shall intimate the names of Islands for which system study from CPRI is required along with justification for the same by 30<sup>th</sup> Nov, 2021. He also set timeline of 30<sup>th</sup> Nov, 2021 for Delhi to submit SOP data. He stated that communication may be sent to RAPS for submission of SOP data at the earliest.
- In the 190<sup>th</sup> OCC, NRPC representative informed that SOP data in respect of Delhi and RAPS have been received.
- UPSLDC vide letter dated 01.12.2021 has submitted the names of islands for which system study from CPRI is required. UPSLDC has highlighted, inter-alia, that involvement of long length 765kV line and high number of buses necessitates them to go for system study by CPRI. It has mentioned that SLDC/STU has no expertise in such studies and before doing any investment on the project, proper study is must for successful implementation and operation of Islands.

- HPSLDC vide letter dtd. 18.12.2021 has intimated that a meeting was held on 26.11.2021 between HPSLDC and HPSEBL wherein a team of officers from HPSLDC and HPSEBL has been formed to carry out transient study of all islands within a month.
- UPSLDC representative informed that CPRI has asked for some additional details and technical commercial offer would be provided to them by CPRI by 15<sup>th</sup> Jan 22.
- NRLDC representative informed that report received from Rajasthan regarding the Jodhpur-Barmer-Rajwest islanding scheme is in order and Rajasthan SLDC can proceed ahead. Further, NRLDC submitted that they use PSSE software for system study but Rajasthan has submitted details of Islands in MI Power Software, therefore, they are not able to access the file.
- Rajasthan SLDC representative informed that they have given the details in the hard copy of the load and generation to be considered for islanding scheme, and based on that have requested NRLDC to simulate it in PSSE software for validation. NRLDC representative agreed to the request of the Rajasthan SLDC.
- Uttarakhand SLDC representative informed that hydro stations near Dehradun are peaking stations and the proposed Dehradun islanding scheme appears to be infeasible. NRPC representative informed that some schemes in NR have been proposed by considering Hydro stations and Dehradun islanding scheme was proposed by the state SLDC itself in view of all factors. Thus, Uttarakhand SLDC shall immediately conduct study on the proposed Islanding Scheme having Khodri & Chibro units and provide status on the feasibility of scheme with supporting data so that same may be communicated to the Ministry.
- In 191<sup>st</sup> OCC, HPSLDC representative informed that they need further two weeks to submit the outcome of transient study of all islands.
- Uttarakhand representative informed that major hydro stations e.g. Chibro, Khodri etc at Dehradun Region in Yamuna valley are non-must run and peaking stations. Therefore, it is technically not feasible to implement Dehradun as an islanding scheme. However, nominations of nodal officers from various utilities (PTCUL, UJVN Ltd & UPCL) are being sought for the formation of internal committee for accessing the possibility of Dehradun as Islanding scheme and the report shall be submitted to NRPC Secretariat subsequently.
- NRPC representative asked Uttarakhand to expedite the submission regarding the status on feasibility of the proposed Islanding scheme.
- MS, NRPC stated that all constituents that have given their information about the planning of islanding scheme shall take up the work on top priority and submit the progress in time bound manner by submitting the updated MIS format every month.
- NRLDC representative informed that Rajasthan SLDC is modelling data on PSSE software and it is expected to be completed within one week. Thereafter, NRLDC will submit its comments on the same. Rajasthan representative consented for the same.
- UP and Punjab were asked to update the status of their study being done by CPRI. Both informed that there is no progress since last OCC and they are waiting for response from CPRI.



- In the 192<sup>nd</sup> OCC, UPSLDC informed that they have received techno-commercial offer from CPRI for both the islanding schemes of UP and accessing the inputs from CPRI they will be conveying a meeting in last week of February 2022.
- NRLDC representative informed modeling data on PSSE software received from Rajasthan has not been modeled for islanding scheme. Further, NRLDC representative asked Rajasthan SLDC to send their team next week for modeling the data on PSSE software.
- MS, NRPC asked Uttarakhand SLDC to expedite the study they are conducting to access the feasibility of Dehradun islanding scheme.
- NRPC representative informed that a meeting was convened by HPSLDC with officials of NRPC Sectt., NRLDC, HPSEBL, & HPPTCL on 11.02.2022. It was observed that system study work has been pending due to pre-occupation of the concerned resource. Therefore, it was decided that HPSLDC shall write letters to MDs of HPSEBL & HPPTCL. It was decided to review the status in another meeting in the first week of March 22. HPSLDC has written letter dt. 14.02.2022.
- Punjab SLDC also informed that they will be conveying a meeting with STU within a week to track the progress.
- In the 193<sup>rd</sup> OCC, NRPC representative informed forum that HPSLDC convened a meeting on 4<sup>th</sup> March 2022 wherein they presented the results of static and dynamic study conducted by them. NRLDC suggested that dynamic data used by HPSLDC is common data and it was decided that they will use data of particular generators and then apprise about the same.
- UPSLDC also convened a meeting on 7<sup>th</sup> March 2022 wherein they informed that CPRI has submitted the offer with a completion target of 5 months. It was also discussed that as there are two islanding schemes in UP control area hence it was suggested that CPRI may be asked to do it in 2 parts preferably 2.5 months each for both the islanding scheme.
- UPSLDC representative informed that CPRI would not be able to bifurcate the time separately for both the islanding scheme and acceptance is under consideration by the management.
- HPSLDC representative informed that they have communicated to all generators for providing dynamic data, and only reply from Karcham Wangtoo has been received from till date.
- Rajasthan representative informed that next week they will send their team to NRLDC for modelling the data on PSSE software.
- J&K representative informed that load has been identified and no further update. MS, NRPC asked J&K representative expedite the study work.
- Further, MS NRPC suggested that states shall coordinate with NRPC and NRLDC officials for carrying out the study.
- In the 194<sup>th</sup> OCC, Punjab representative informed that CPRI has asked for PSSE file for dynamic study which is being coordinated with NRLDC. STU has given timeline of 6 months for implementation after CPRI study.



- MS, NRPC along with NRLDC have desired that all states of northern region where islanding scheme is to be implemented shall convene meeting with the officials of NRPC and NRLDC wherein the study requirements can be discussed.
- OCC forum was of opinion that all generating units (especially 660MW units) shall make an effort to ensure successful household operations. UP representative was requested to expedite the implementation work of Unchahar-Lucknow Islanding scheme after analyzing load-generation balance and conducting steady state study.
- Further, OCC forum was of view that states shall go for implementation of islanding scheme after steady state study along with load generation balancing and dynamic study, if desired, may be carried out in later stage.
- In the 195th OCC, NRLDC representative intimated that steady state study for Rajasthan islanding scheme has been completed. It was decided that Rajasthan may go ahead for implementing the scheme.
- NRPC representative informed that a sub-group will be formulated shortly that would review all proposed islanding schemes of NR and assess the reason for delay.
- In the 196th OCC, MS NRPC desired UP representative to take up the matter with CPRI for Agra islanding scheme and ask them to complete the work in one month time from the date of acceptance of offer by CPRI.
- UP representative informed that steady state study along with load generation balancing is complete for Unchahar-Lucknow Islanding scheme and the same would be submitted to NRLDC in one week time.
- Rajasthan representative informed that for Jodhpur-Barmer-Rajwest and Suratgarh islanding scheme work of DPR preparation is under progress and same would be submitted to NLDC to avail PSDF funding before next OCC meeting.
- MS, NRPC asked Uttarakhand representative to expedite the submission regarding the status on feasibility of the proposed Islanding scheme.
- MS NRPC asked Himachal Pradesh representative to coordinate with NRLDC officials to converge the study carried out by them.
- Further, MS NRPC also asked Punjab representative to coordinate with NRLDC officials to converge the steady state study carried out by them.
- In the meeting (197<sup>th</sup> OCC), NRPC representative informed that UPSLDC has submitted the updated status of Unchahar Islanding scheme as per the deliberation held in the review meeting held on 07.07.2020. Moreover, order for system study of Agra-Lalitpur IS has been placed on CPRI.
- In regard to Delhi Islanding scheme, NRPC representative informed that as per the deliberation held in the review meeting held on 13.07.2020, response from Delhi Discoms is awaited regarding whether trippings through ADMS system can be facilitated for Delhi Islanding scheme.
- MS, NRPC expressed apathy over no significant progress in implementation of Delhi Islanding Scheme since last 18 months. He suggested that in view of allocation of Dadri-II to Haryana and non-scheduling of Jhajjar and Dadri-II due to high cost, the proposed islanding may not survive. Therefore, it would be better to have two small islands - one

with GTs and the other with Bawana. Mostly, these plants operate and therefore survival chances for islands would be more. Moreover, these islands could be controlled through UFRs at 220kV level by STU and not at 33kV by Discoms as envisaged in proposed scheme. It was suggested that DTL may bring out proposal for further discussion at NRPC Sectt and NRLDC level.

- NRPC representative informed that HPSLDC has been requested to provide load wise details for the islanding scheme finalized by them.

#### **Agenda No. 9. 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 10<sup>th</sup> July 2022).
- Average coal stock position of generating stations in northern region, having critical stock, during first ten days of July 2022 is as follows:

<b>Station</b>	<b>Capacity (MW)</b>	<b>PLF % (prev. months)</b>	<b>Normative Stock Req'd. (Days)</b>	<b>Actual Stock (Days)</b>
ANPARA C TPS	1200	72.01	14	1.9
GOINDWAL SAHIB TPP	540	46.30	22	2.7
HARDUAGANJ TPS	1265	76.35	22	1.2
KHAMBARKHERA TPS	90	42.85	22	3.2
KUNDARKI TPS	90	46.99	22	3.4
LALITPUR TPS	1980	73.25	22	1.6
OBRA TPS	1094	56.09	22	4.0
PARICHA TPS	1140	62.13	22	0.6
ROSA TPP Ph-I	1200	76.37	22	0.7
CHHABRA-I PH-1 TPP	500	86.85	22	0.9

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

#### **Agenda No. 10. Declaration of high demand season and low demand season**

- In the meeting, NRPC representative apprised the forum that CERC has notified regulatory framework of differential tariff, applicable to thermal generating station, during peak and off-peak hours, during high demand season of three months and low demand season of remaining nine months in Tariff Regulations, 2019. The concerned RLDC has to declare high demand season and low demand season in region after consultation with stakeholders six months before any financial year
- Further, forum was informed that based on the deliberations in 176<sup>th</sup> OCC meeting, it was decided that peak season be decided after considering average NR consumption data of all months for previous five years.
- Forum was apprised that in the same manner, energy demand data has been compiled from CEA website and is as under:

Year	May	June	July	August	September
2018	35206	37624	38331	38567	33405
2019	37338	41624	41377	39153	38422
2020	30905	37782	41309	39527	40958
2021	32109	39393	45180	44175	36878
2022	43463	46083	47240	46450	46040
<b>Average</b>	<b>35804</b>	<b>40501</b>	<b>42687</b>	<b>41574</b>	<b>39141</b>

- Forum decided that June-July-August shall be considered as high demand season for NR for FY 2022-23.

**Agenda No. 11. Deemed Availability of relocation/height raising of 400 kV Jharli-Mundka Transmission line at Silani Chowk (Km. 396+400) in Jhajjar Distt. (Agenda by NHAI)**

- NHAI representative informed that the outage schedule would be finalized by next OCC scheduled in August.
- MS, NRPC was of the view that the matter regarding the generation outage of 500 MW unit of APCL may be deliberated in next OCC after the finalization of outage schedule by NHAI. APCL representative was also asked to start with the preparatory work and be ready in case generator outage of 500 MW is approved in the next OCC.
- Further, MS NRPC opined that RPC Sectt. has the mandate to provide deemed availability certificate only for the shutdown period of transmission line and not for generator outage.

**Agenda No.12. Adequacy of Transmission Lines emanating from Bhakra Power House Complex post uprating of Bhakra Left Bank Power House - approval for replacement of ACSR conductor of five no. Bhakra-Ganguwal circuits with HTLS conductor (Agenda by BBMB)**

- BBMB representative intimated forum that result of study were submitted to NRLDC and NRLDC validated the load flow studies as carried out by HPPTCL.
- OCC forum agreed to BBMB proposal to replace the existing ACSR conductors with relevant HTLS conductors at all the five circuits emanating from Bhakra Complex to Ganguwal i.e. Bhakra-Ganguwal circuit No. 1 to 5, so as to get the constraints removed along with making it N-1 complaint.

**Agenda No.13. Proposed SPS for 400/220 kV ICTs at RVPN's 400kV GSS Jodhpur/ Bhadla/ Ratangarh (Agenda by RVPN)**

- NRPC representative apprised the forum with the proposed SPS for 400/220 kV ICTs at RVPN's 400kV GSS the Jodhpur/ Bhadla/ Ratangarh.
- NRLDC representative suggested RVPN to ensure no load loss and no cascaded tripping for the proposed SPS. It was also suggested to consider the percentage ICT loadings for

the proposed SPS of Jodhpur. The proposed SPS for Jodhpur and Ratangarh were in-principally agreed.

- NRLDC representative requested RVPN to share the studies/simulation study of the proposed SPS for 400/220 kV ICTs at RVPN's 400kV GSS Bhadla for further analysis. Further, NRPC representative suggested RVPN to consider the interchanging of the proposed tripping for ICT-1 and ICT-2 at RVPN's 400kV GSS Bhadla.

**Agenda No.14. Modification in SPS (SPS/NR/GEN/01) for reliable evacuation of power of NJHPS, Rampur, Baspa KWHEP, and Sawra-Kuddu required for evacuation of power from 60 MW Naitwar-Mori HEP (Agenda by HPPTCL)**

- HPPTCL representative presented the proposed SPS scheme to the forum.
- NRLDC representative stated that proposed SPS scheme is in order. Further, he asked HPPTCL to share mock testing report after implementing proposed SPS logic as it would be required before stating injection of Naitwar-Mori HEP.
- NRLDC representative mentioned that for case-7 only contingency for current (any phase) on 220kV Sawra-Kuddu-Hatkoti is needed.

**Agenda No.15. Calibration and testing of Interface Energy Meters installed at Generating stations (Agenda by NHPC)**

- POWERGRID representative informed that it would take four to five months to finalize the agency for carrying out the testing of Interface Energy Meters installed at Generating stations in Northern region and thereafter the work would be carried out.

**Agenda No.16. Outage regularization of 765 kV Bus-I at Kanpur (GIS) for root cause analysis of unbalance current in tie bays (Agenda by NR-III Powergrid)**

- MS, NRPC mentioned that outage regularization related agenda shall not be taken up in OCC meetings.

**Agenda No.17. Confirmation requested from beneficiary states for allowing deemed availability to POWERGRID due to outages for NHAI diversion cases in month of June-2022 (Agenda by NRPC Sectt.)**

- NRPC representative informed that outages taken by POWERGRID for diversion cases related to NHAI for June'22 has been circulated to beneficiaries and no comment/objection from any beneficiary state for these outages is received.
- Even in the meeting, beneficiary state did not raise any concern for being affected by the said line shutdowns.
- The forum was of the view that NRPC Sectt. can go ahead with the certification of these outages as provisionally deemed available as per the direction of Ministry of Power.

**Agenda No.18. Issues with NTPC NR NCT Stations (Agenda by NTPC)**

- NTPC presented the matter to the forum.
- NRLDC representative suggested that if UP agrees then it may enter into a bilateral agreement with NTPC for the remaining quantum of power needed to run the machine at technical minimum.

**Agenda No.19. Revised Islanding Schemes for the Rajasthan Atomic Power Station (RAPS-A & B) (Agenda by RRVPNL)**

- NRPC and RVPN representatives apprised the forum about the revised Islanding Schemes for the Rajasthan Atomic Power Station (RAPS-A & B).
- It was intimated that RVPN has revised the condition for the low load (point no. 6 of the revised scheme).
- RAPS-B representative apprised the forum about the impact of past grid disturbance event of 2012 and related issues in the then islanding scheme of RAPS-A and RAPS-B.
- The proposed islanding scheme was deliberated by the forum and recommended for the approval of NRPC. It was also suggested to RVPN to prepare the documented procedure for changing the island load in various scenario and share the same with NRPC and NRLDC.
- RAPS-B representative suggested RVPN to replace the phrase “switched off” (in point no. 5 & 6) with “manually taken out due to poisoning of the Reactor”.

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## Follow up issues from previous OCC meetings

Annexure-A. I

1	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.	List of downstream networks is enclosed in <b>Annexure-A. I. I.</b>																																				
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.	<p>Data upto following months, received from various states / UTs:</p> <table border="1" data-bbox="935 846 1557 1160"> <tr><td>⊙ CHANDIGARH</td><td>Sep-2019</td></tr> <tr><td>⊙ DELHI</td><td>Jun-2022</td></tr> <tr><td>⊙ HARYANA</td><td>Mar-2022</td></tr> <tr><td>⊙ HP</td><td>Jan-2022</td></tr> <tr><td>⊙ J&amp;K and LADAKH</td><td>Not Available</td></tr> <tr><td>⊙ PUNJAB</td><td>Aug-2021</td></tr> <tr><td>⊙ RAJASTHAN</td><td>May-2022</td></tr> <tr><td>⊙ UP</td><td>Jun-2022</td></tr> <tr><td>⊙ UTTARAKHAND</td><td>Jun-2022</td></tr> </table> <p>All States/UTs are requested to update status on monthly basis.</p>	⊙ CHANDIGARH	Sep-2019	⊙ DELHI	Jun-2022	⊙ HARYANA	Mar-2022	⊙ HP	Jan-2022	⊙ J&K and LADAKH	Not Available	⊙ PUNJAB	Aug-2021	⊙ RAJASTHAN	May-2022	⊙ UP	Jun-2022	⊙ UTTARAKHAND	Jun-2022																		
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3	Healthiness of defence mechanism: Self-certification	<p>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” .</p> <p>In compliance of NPC decision, NR states/constituents agreed to raise the AUFR settings by 0.2 Hz in 47th TCC/49th NRPC meetings.</p>	<p>Data upto following months, received from various states / UTs:</p> <table border="1" data-bbox="935 1361 1557 1709"> <tr><td>⊙ CHANDIGARH</td><td>Not Available</td></tr> <tr><td>⊙ DELHI</td><td>Mar-2022</td></tr> <tr><td>⊙ HARYANA</td><td>Jun-2022</td></tr> <tr><td>⊙ HP</td><td>Jun-2022</td></tr> <tr><td>⊙ J&amp;K and LADAKH</td><td>Not Available</td></tr> <tr><td>⊙ PUNJAB</td><td>Mar-2022</td></tr> <tr><td>⊙ RAJASTHAN</td><td>Mar-2022</td></tr> <tr><td>⊙ UP</td><td>Jun-2022</td></tr> <tr><td>⊙ UTTARAKHAND</td><td>Jun-2022</td></tr> <tr><td>⊙ BBMB</td><td>Jun-2022</td></tr> </table> <p>All States/UTs are requested to update status for healthiness of UFRs on monthly basis for islanding schemes and on quartely basis for the rest .</p> <p>Status:</p> <table border="1" data-bbox="935 1944 1557 2213"> <tr><td>⊙ CHANDIGARH</td><td>Not Available</td></tr> <tr><td>⊙ DELHI</td><td>Increased</td></tr> <tr><td>⊙ HARYANA</td><td>Increased</td></tr> <tr><td>⊙ HP</td><td>Increased</td></tr> <tr><td>⊙ J&amp;K and LADAKH</td><td>Not increased</td></tr> <tr><td>⊙ PUNJAB</td><td>Increased</td></tr> <tr><td>⊙ RAJASTHAN</td><td>Increased</td></tr> <tr><td>⊙ UP</td><td>Increased</td></tr> </table>	⊙ CHANDIGARH	Not Available	⊙ DELHI	Mar-2022	⊙ HARYANA	Jun-2022	⊙ HP	Jun-2022	⊙ J&K and LADAKH	Not Available	⊙ PUNJAB	Mar-2022	⊙ RAJASTHAN	Mar-2022	⊙ UP	Jun-2022	⊙ UTTARAKHAND	Jun-2022	⊙ BBMB	Jun-2022	⊙ CHANDIGARH	Not Available	⊙ DELHI	Increased	⊙ HARYANA	Increased	⊙ HP	Increased	⊙ J&K and LADAKH	Not increased	⊙ PUNJAB	Increased	⊙ RAJASTHAN	Increased	⊙ UP	Increased
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©	UTTARAKHAND	Increased																
©	BBMB	Increased																
4	Status of FGD installation vis-à-vis installation plan at identified TPS	<p>List of FGDs to be installed in NR was finalized in the 36th TCC (special) meeting dt. 14.09.2017. All SLDCs were regularly requested since 144th OCC meeting to take up with the concerned generators where FGD was required to be installed.</p> <p>Further, progress of FGD installation work on monthly basis is monitored in OCC meetings.</p>	<p>Status of the information submission (month) from states / utilities is as under:</p> <table border="1"> <tr> <td>©</td> <td>HARYANA</td> <td>Mar-2022</td> </tr> <tr> <td>©</td> <td>PUNJAB</td> <td>Jun-2022</td> </tr> <tr> <td>©</td> <td>RAJASTHAN</td> <td>Jun-2022</td> </tr> <tr> <td>©</td> <td>UP</td> <td>Jun-2022</td> </tr> <tr> <td>©</td> <td>NTPC</td> <td>Feb-2022</td> </tr> </table> <p>FGD status details are enclosed as <b>Annexure-A. I. II.</b></p> <p>All States/utilities are requested to update status of FGD installation progress on monthly basis.</p>	©	HARYANA	Mar-2022	©	PUNJAB	Jun-2022	©	RAJASTHAN	Jun-2022	©	UP	Jun-2022	©	NTPC	Feb-2022
©	HARYANA	Mar-2022																
©	PUNJAB	Jun-2022																
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©	UP	Jun-2022																
©	NTPC	Feb-2022																
5	Information about variable charges of all generating units in the Region	The variable charges detail for different generating units are available on the MERIT Order Portal.	All states/UTs are requested to submit daily data on MERIT Order Portal timely.															



6	Reactive compensation at 220 kV/ 400 kV level at 15 substations			
	State / Utility	Substation	Reactor	Status
i	POWERGRID	Kurukshetra	500 MVar TCR	Anticipated commissioning: July 2022 (90% supplies received from GE and rest is expected by Feb' 22)
ii	DTL	Peeragarhi	1x50 MVar at 220 kV	PO awarded to M/s Kanohar Electricals Ltd. Drawings approved and under stage inspection (delay due to pending supply of reactor bushings). GIS Bay is already available.
iii	DTL	Harsh Vihar	2x50 MVar at 220 kV	PO awarded to M/s Kanohar Electricals Ltd. Drawings approved and under stage inspection (delay due to pending supply of reactor bushings). GIS Bay is already available.
iv	DTL	Mundka	1x125 MVar at 400 kV & 1x25 MVar at 220 kV	Bay work awarded to M/s. Ethos. Bay work is expected to be completed by Dec.21. Reactor part tender is dropped and at present same is under revision.
v	DTL	Bamnauli	2x25 MVar at 220 kV	Bay work awarded to M/s. Ethos. Bay work is expected to be completed by Dec.21. Reactor part tender is dropped and at present same is under revision.
vi	DTL	Indraprastha	2x25 MVar at 220 kV	Bay work awarded to M/s. Ethos. Bay work is expected to be completed by Dec.21. 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 - LOA issued on dated. 17.08.2021 and date of completion of project is 18 months from the date of LOA. 220kV Reactors - LOA issued on dated 19.07.2021 and date of completion of project is 18 months from the date of LOA.
ix	PUNJAB	Nakodar	1x25 MVar at 220 kV	220kV Reactors - LOA issued on dated 19.07.2021 and date of completion of project is 18 months from the date of LOA.
x	PTCUL	Kashipur	1x125 MVar at 400 kV	Price bid has been opened and is under evaluation

xi	RAJASTHAN	Akal	1x25 MVar	LOA placed on dt. 4.1.2021. Agreement signed on dt. 8.02.2021. 2nd instalment has been received on dt. 30.07.2021. The erection work of 3 Reactors is under progress and shall be commissioned by 31.08.2022
xii	RAJASTHAN	Bikaner	1x25 MVar	LOA placed on dt. 4.1.2021. Agreement signed on dt. 8.02.2021. 2nd instalment has been received on dt. 30.07.2021. The erection work of 3 Reactors is under progress and shall be commissioned by 31.08.2022
xiii	RAJASTHAN	Suratgarh	1x25 MVar	LOA placed on dt. 4.1.2021. Agreement signed on dt. 8.02.2021. 2nd instalment has been received on dt. 30.07.2021. The erection work of 3 Reactors is under progress and shall be commissioned by 31.08.2022
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.
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.

## 1. Down Stream network by State utilities from ISTS Station:

Sl. No.	Substation	Downstream network bays	Status of bays	Planned 220 kV system and Implementation status	Revised Target	Remarks
1	400/220kV, 3x315 MVA Samba	Commissioned: 8 Total: 8	Utilized: 6 Unutilized: 2	• Network to be planned for 2 bays.	-	PDD, J&K to update the status.
2	400/220kV, 2x315 MVA New Wanpoh	Commissioned: 6 Total: 6	Utilized: 2 Unutilized: 4	• 220 kV New Wanpoh - Alusteng D/c Line	-	PDD, J&K to update the status.
				• 220 kV New Wanpoh - Mattan D/c Line	-	PDD, J&K to update the status.
3	400/220kV, 2x315 MVA Amargarh	Commissioned: 6 Total: 6	Utilized: 6 Unutilized: 2	• 220kV D/C line from 400/220kV Kunzar - 220/33kV Sheeri	-	PDD, J&K to update the status.
4	400/220kV, 2x500 MVA Kurukshetra (GIS)	Commissioned: 8 Total: 8	Utilized: 6 Unutilized: 2	• 220kV Bhadson (Kurukshetra) – Ramana Ramani D/c line	-	HVPNL to update the status.
5	400/220 kV, 2x315 MVA Dehradun	Commissioned: 6 Total: 6	Utilized: 2 Unutilized: 4	• Network to be planned for 4 bays	-	PTCUL to update the status.
6	Shahjahanpur, 2x315 MVA 400/220 kV	Commissioned: 6 Approved/Under Implementation:1 Total: 7	Utilized: 5 Unutilized: 1 (1 bays to be utilized shortly) Approved/Under Implementation:1	• 220 kV D/C Shahjahanpur (PG) - Gola line	Oct'22	Updated in 196th OCC by UPPTCL
				• 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 Total: 8	Utilized: 4 Unutilized: 4 (2 bays to be utilized shortly)	• 220 kV Hamirpur-Dehan D/c line	Mar'22	Updated in 192nd OCC by HPPTCL
				• Network to be planned for 4 bays	-	HPPTCL to update the status.
8	Sikar 400/220kV, 1x 315 MVA S/s	Commissioned: 8 Total: 8	Utilized: 4 Unutilized: 4	• 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
				• 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
9	Bhiwani 400/220kV S/s	Commissioned: 6 Total: 6	Utilized: 0 Unutilized: 6	• 220 kV D/C line Bhiwani (PG) – Bhiwani (HVPNL) line	Dec'22	Updated in 197th OCC by HVPNL
				• 220 kV Bhiwani (PG) - Isherwal (HVPNL) D/c line.	Dec'22	Issue related to ROW as intimated in 192nd OCC.HVPNL to update the status.
				• 220 kV Bhiwani (PG) - Dadhibana (HVPNL) D/c line.	Apr'24	Issue related to ROW as intimated in 192nd OCC.HVPNL to update the status.
10	Jind 400/220kV S/s	Commissioned: 4 Approved:4 Total: 8	Utilized: 4 Unutilized: 0 Approved:4	• 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	Updated in 197th OCC by HVPNL
11	400/220kV Tughlakabad GIS	Commissioned: 6 Under Implementation: 4 Total: 10	Utilized: 6 Unutilized: 0 Under Implementation:4	• RK Puram – Tughlakabad (UG Cable) 220kV D/c line – March 2023.	-	DTL to update the status.
				• Masjid Mor – Tughlakabad 220kV D/c line.	-	DTL to update the status.
12	400/220kV Kala Amb GIS (TBCB)	Commissioned: 6 Total: 6	Utilized: 0 Unutilized: 6	• HPPTCL has planned one no. of 220kV D/c line from Kala Amb 400/220kV S/s to 220/132kV Kala Amb S/s	Jan'23	Updated in 192nd OCC by HPPTCL
				• Network to be planned for 4 bays	-	HPPTCL to update the status.
13	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.	Mar'23	Updated in 197th OCC by HVPNL

Sl. No.	Substation	Downstream network bays	Status of bays	Planned 220 kV system and Implementation status	Revised Target	Remarks
13	Sub-station	Total: 8	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	May'23	Updated in 197th OCC by HVPNL
14	400/220kV Sohna Road Sub-station	Commissioned: 8	Utilized: 0	• LILO of both circuits of 220kV D/c Sector-69 - Roj Ka Meo line at 400kV Sohna Road	Jun'23	Updated in 197th OCC by HVPNL
		Total: 8	Unutilized: 8	• LILO of both circuits of 220kV D/c Badshahpur-Sec77 line at 400kV Sohna Road	Jun'23	Updated in 197th OCC by HVPNL
15	400/220kV Prithla Sub-station	Commissioned: 8	Utilized: 0	• LILO of both ckt of 220kV D/c Ranga Rajpur – Palwal line	-	HVPNL to update the status.
		Total: 8	Unutilized: 8	• 220kV D/C for Sector78, Faridabad	-	HVPNL to update the status.
16	400/220kV Sonepat Sub-station	Commissioned: 6	Utilized: 2	• LILO of both circuits of 220kV Samalkha - Mohana line at Sonepat		HVPNL to update the status.
		Under Implementation:2 Total: 8	Unutilized: 2 Under Implementation:2	• Sonepat - HSIISC Rai 220kV D/c line	Nov'22	Updated in 196th OCC by HVPNL
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)	Oct'22	In Tendering stage as updated in 192nd OCC by RVPNL.
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	-	PSTCL to update the status.
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 commissioned 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 4 bays	Oct'22	• Lucknow -Kaurasa (Sitapur), 220 kV D/C line expected energization date Oct'22 updated by UPPTCL in 196th OCC • No planning for 2 no. of bays updated by UPPTCL in 196th OCC
22	400/220kV Gorakhpur Sub-station	Commissioned: 6 Total: 6	Utilized: 4 Unutilized: 2	• Network to be planned for 2 bays	Dec'22	• Gorakhpur(PG)- Maharajganj, 220 kV D/C line expected energization date Dec'22 updated by UPPCL in 196th 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 4 bays	-	• UPPTCL intimated that 02 no. of bays under finalization stage • No planning for 2 no. of bays updated by UPPTCL in 196th OCC
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	Aug'22	Updated in 196th OCC by HVPNL
25	400/220kV Pachkula Sub-station	Commissioned: 8 Under tender:2 Total: 10	Utilized: 2	• Panchkula – Pinjore 220kV D/c line	31.12.2022	Updated in 194th OCC by HVPNL
				• Panchkula – Sector-32 220kV D/c line	31.12.2022	Updated in 194th OCC by HVPNL
				• Panchkula – Raiwali 220kV D/c line	Commissioned	Updated in 194th OCC by HVPNL
		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	Unutilized: 4 Under Implementation:2	• Panchkula – Sadhaura 220kV D/c line: Sep'23	Sept'23	Updated in 194th OCC by HVPNL

Sl. No.	Substation	Downstream network bays	Status of bays	Planned 220 kV system and Implementation status	Revised Target	Remarks
26	400/220kV Amritsar S/s	Commissioned:7	Utilized: 6	• Amritsar – Patti 220kV S/c line	-	PSTCL to update the status.
		Approved in 50th NRPC- 1 no. Total: 8	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)	-	PSTCL to update the status.
27	400/220kV Bagpat S/s	Commissioned: 8 Total: 8	Utilized:6 Unutilized: 2	• Bagpat - Modipuram 220kV D/c line	Aug'22	Updated in 196th OCC by UPPTCL
28	400/220kV Bahardurgarh S/s	Commissioned: 4 Total: 4	Utilized:2 Unutilized: 2	• Network to be planned for 2 bays.		HVPNL to update the status.
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
30	400/220kV Sohawal S/s	Commissioned: 8 Total: 8	Utilized: 8	• Sohawal - Barabanki 220kV D/c line	Commissioned	Energization date: 14.04.2018 updated by UPPTCL in 196th OCC
				• Sohawal - New Tanda 220kV D/c line	Commissioned	Energization date: 28.05.2019 updated by UPPTCL in 196th OCC
				• 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 4 bays	-	HVPNL to update the status
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	Sept'22	Saharanpur(PG)-Devband D/c line expected energization date Sept'22 updated by UPPTCL in 196th OCC
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	400/220kV, Ludhiana	Commissioned: 9 Total: 9	Utilized: 8 Unutilized: 1	• Network to be planned for 1 bay	-	PSTCL to update the status
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	-	HPPTCL to update the status
37	400/220kV, Mainpuri	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
38	400/220kV, Patiala	Commissioned: 8 Total: 8	Utilized: 6 Unutilized: 2	• Network to be planned for 2 bays	-	PSTCL to update the status
<b>2. Establishment of new 400/220kV substations in Northern Region:</b>						
Sl. No.	Name of Substation		MVA Capacity	Expected Schedule		Downstream connectivity by States

Sl. No.	Substation	Downstream network bays	Status of bays	Planned 220 kV system and Implementation status	Revised Target	Remarks
1	400/220kV Dwarka-I GIS (8 nos. of 220kV bays)		4x 500	Mar'22		DTL to update the status
2	220/66kV Chandigarh GIS (8 nos. of 66kV bays)		2x 160	Apr'22		Chandigarh to update the status.
3	400/220kV Jauljivi GIS Out of these 8 nos. 220kV Line Bays, 4 nos. (Pithoragath-2, & Dhauliganga-2) would be used by the lines being constructed by POWERGRID and balance 4 nos. bays would be used by the lines being constructed by PTCUL.		2x315	Feb'22		<ul style="list-style-type: none"> <li>• 220kV Almora-Jauljibi line</li> <li>• 220kV Brammah-Jauljibi line</li> </ul> PTCUL to update the status of lines.

# FGD Status



# Updated status of FGD related data submission

## **NTPC (25.02.2022)**

MEJA Stage-I (Updated by UP on 18.06.2022)

RIHAND STPS

SINGRAULI STPS

TANDA Stage-I

TANDA Stage-II

UNCHAHAHAR TPS

## **UPRVUNL (18.06.2022)**

ANPARA TPS

HARDUAGANJ TPS

OBRA TPS

PARICHHA TPS

## **PSPCL (21.07.2022)**

GGSSSTP, Ropar

GH TPS (LEH.MOH.)

## **RRVUNL (10.06.2022)**

CHHABRA SCPP

CHHABRA TPP

KALISINDH TPS

KOTA TPS

SURATGARH SCTPS

SURATGARH TPS

# Updated status of FGD related data submission

**Lalitpur Power Gen. Co. Ltd.  
(18.06.2022)**

Lalitpur TPS

**Lanco Anpara Power Ltd.  
(18.06.2022)**

ANPARA-C TPS

**HGPCL (21.03.2022)**

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. (18.06.2022)**

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)

<b>Adani Power Ltd.</b>	KAWAI TPS U#1 (Target: 31-12-2024), KAWAI TPS U#2 (Target: 31-12-2024)
<b>APCPL</b>	INDIRA GANDHI STPP U#1 (Target: 30-09-2022), INDIRA GANDHI STPP U#2 (Target: 30-09-2022), INDIRA GANDHI STPP U#3 (Target: 30-09-2022)
<b>GVK Power Ltd.</b>	GOINDWAL SAHIB U#1 (Target: 30-04-2020), GOINDWAL SAHIB U#2 (Target: 29-02-2020)
<b>HGPCL</b>	PANIPAT TPS U#6 (Target: 30-04-2021), PANIPAT TPS U#7 (Target: 28-02-2021), PANIPAT TPS U#8 (Target: 31-12-2020), RAJIV GANDHI TPS U#1 (Target: 30-04-2022), RAJIV GANDHI TPS U#2 (Target: 28-02-2022), YAMUNA NAGAR TPS U#1 (Target: 31-12-2021), YAMUNA NAGAR TPS U#2 (Target: 31-10-2021)

**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: 30-06-2022), RIHAND STPS U#1 (Target: 30-06-2024), RIHAND STPS U#2 (Target: 30-06-2024), RIHAND STPS U#3 (Target: 31-12-2023), RIHAND STPS U#4 (Target: 31-12-2023), RIHAND STPS U#5 (Target: 30-06-2023), RIHAND STPS U#6 (Target: 30-06-2023), SINGRAULI STPS U#1 (Target: 30-06-2024), SINGRAULI STPS U#2 (Target: 30-06-2024), SINGRAULI STPS U#3 (Target: 30-06-2024), SINGRAULI STPS U#4 (Target: 30-06-2024), SINGRAULI STPS U#5 (Target: 30-06-2024), SINGRAULI STPS U#6 (Target: 31-03-2023), SINGRAULI STPS U#7 (Target: 31-03-2023), UNCHAHAR TPS U#1 (Target: 31-12-2023), UNCHAHAR TPS U#2 (Target: 31-12-2023), UNCHAHAR TPS U#3 (Target: 30-06-2024), UNCHAHAR TPS U#4 (Target: 30-06-2024), UNCHAHAR TPS U#5 (Target: 30-06-2024), UNCHAHAR TPS U#6 (Target: 30-06-2022), MEJA Stage-I U#1 (Target: 31-12-2022), MEJA Stage-I U#2 (Target: 31-03-2023), TANDA Stage-I U#3 (Target: ), TANDA Stage-I U#4 (Target: ), TANDA Stage-II U#3 (Target: 31-12-2022), TANDA Stage-II U#4 (Target: 31-12-2022)

<b>L&amp;T Power Development Ltd (Nabha)</b>	Nabha TPP (Rajpura TPP) U#1 (Target: 30-04-2021), Nabha TPP (Rajpura TPP) U#2 (Target: 28-02-2021)
<b>Lalitpur Power Gen. Company Ltd.</b>	LALITPUR TPS U#1 (Target: 31-12-2024), LALITPUR TPS U#2 (Target: 30-09-2024), LALITPUR TPS U#3 (Target: 30-06-2024)
<b>Lanco Anpara Power Ltd.</b>	ANPARA C TPS U#1 (Target: 31-12-2023), ANPARA C TPS U#2 (Target: 31-12-2023)
<b>Prayagraj Power Generation Company Ltd.</b>	PRAYAGRAJ TPP U#1 (Target: 31-12-2024), PRAYAGRAJ TPP U#2 (Target: 31-12-2024), PRAYAGRAJ TPP U#3 (Target: 31-12-2024)
<b>PSPCL</b>	GH TPS (LEH.MOH.) U#1 (Target: 31-12-2024), GH TPS (LEH.MOH.) U#2 (Target: 31-12-2024), GH TPS (LEH.MOH.) U#3 (Target: 31-12-2024), GH TPS (LEH.MOH.) U#4 (Target: 31-12-2024), GGSSTP, Ropar U#3 (Target: 31-03-2022), GGSSTP, Ropar U#4 (Target: 31-05-2022), GGSSTP, Ropar U#5 (Target: 31-07-2022), GGSSTP, Ropar U#6 (Target: 30-09-2022)

<b>Rosa Power Supply Company</b>	ROSA TPP Ph-I U#1 (Target: 31-12-2024), ROSA TPP Ph-I U#2 (Target: 31-12-2024), ROSA TPP Ph-I U#3 (Target: 31-12-2024), ROSA TPP Ph-I U#4 (Target: 31-12-2024)
<b>RRVUNL</b>	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: 31-12-2024), SURATGARH TPS U#2 (Target: 31-12-2024), SURATGARH TPS U#3 (Target: 31-12-2024), SURATGARH TPS U#4 (Target: 31-12-2024), SURATGARH TPS U#5 (Target: 31-12-2024), SURATGARH TPS U#6 (Target: 31-12-2024), SURATGARH SCTPS U#7 (Target: 31-12-2024), SURATGARH SCTPS U#8 (Target: 31-12-2024), CHHABRA TPP U#1 (Target: 31-12-2024), CHHABRA TPP U#2 (Target: 31-12-2024), CHHABRA TPP U#3 (Target: 31-12-2024), CHHABRA TPP U#4 (Target: 31-12-2024), CHHABRA SCPP U#5 (Target: 31-12-2024), CHHABRA SCPP U#6 (Target: 31-12-2024), KALISINDH TPS U#1 (Target: 31-12-2024), KALISINDH TPS U#2 (Target: 31-12-2024)
<b>Talwandi Sabo Power Ltd.</b>	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)
<b>UPRVUNL</b>	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#12 (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)