



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/106/01/2021/ 9419-9460

दिनांक: 04.10.2021

विषय: उत्तर क्षेत्रीय विद्युत समिति की प्रचालन समन्वय उप-समिति की 187^{वीं} बैठक के खण्ड-अ में लिए गए निर्णयों का सार।

Subject: Gist of decisions taken in the Part-A of 187th OCC meeting of NRPC.

उत्तर क्षेत्रीय विद्युत समिति की प्रचालन समन्वय उप- समिति की 187^{वीं} बैठक दिनांक 21.09.2021 को आयोजित की गयी। उक्त बैठक की खण्ड-अ में लिए गए निर्णयों का सार **अनुलग्नक - अ** के रूप में संलग्न है।

187th meeting of the Operation Co-ordination Sub-Committee of NRPC was held on 21.09.2021. The Gist of the decisions taken in Part-A of this meeting is enclosed as **Annexure-A**.

(सौमित्र मजूमदार)

अधीक्षण अभियंता (प्रचालन)

सेवा में,

प्रचालन समन्वय उप- समिति के सभी सदस्य।

Gist of decisions taken in the Part-A of 187th OCC Meeting

Agenda No. 1: Confirmation of Minutes

Minutes of 186th OCC meeting was issued on 08.09.2021. OCC confirmed the minutes. NRLDC requested to add one paragraph in point no. 17 (Table Agenda No.1) of MoM. MS, NRPC asked NRLDC representative to submit their comment separately. NRLDC has submitted its comments vide email dated 22.09.2021. The comments have been examined, it is opined that a separate discussion with NRLDC is required before putting in minutes.

Agenda No. 2.1: Supply Position (Provisional) for August 2021

Reasons submitted by states for significant deviation of actual demand from anticipated figures during the month of August 2021 are as under:

• **Delhi**

The demand of Delhi has not picked up due to post lockdown effect in Delhi to control second wave of COVID-19.

• **Himachal Pradesh**

The anticipation in energy requirement and peak demand in respect of Himachal Pradesh for the month of August 2021 came on higher side due to dry weather & less monsoon than anticipation in the state.

• **Haryana**

Variation in Energy Consumption of Haryana was observed due to less monsoon in the month of August-2021 (i.e. from dated 10.08.21 to 20.08.21 & 25.08.21 to 31.08.21).

• **Rajasthan**

Actual energy consumption was higher due to weak monsoon and high temperature in the state.

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 August 2021 was enclosed in the agenda and same was discussed in the meeting.

No significant deviation in any of the states was observed.

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 2021 was deliberated in the meeting on 20.09.2021.
- Following shutdown requests were also discussed in the OCC meeting:

Element Name	Owner	Daily/ Cont.	Reason	Requested From	Requested To	Decision of OCC
210 MW UNCHAHAR TPS - UNIT 2	NTPC	C	Boiler+ Turbine COH+ Condenser tube replacement	25-Sep-2021 00:00	08-Nov-2021 00:00	UP has given consent. S/d is approved from 10.10.2021 for 45 days

Agenda No. 4.1: Anticipated Power Supply Position in Northern Region for October 2021

- The updated anticipated Power Supply Position for October 2021 is as below:

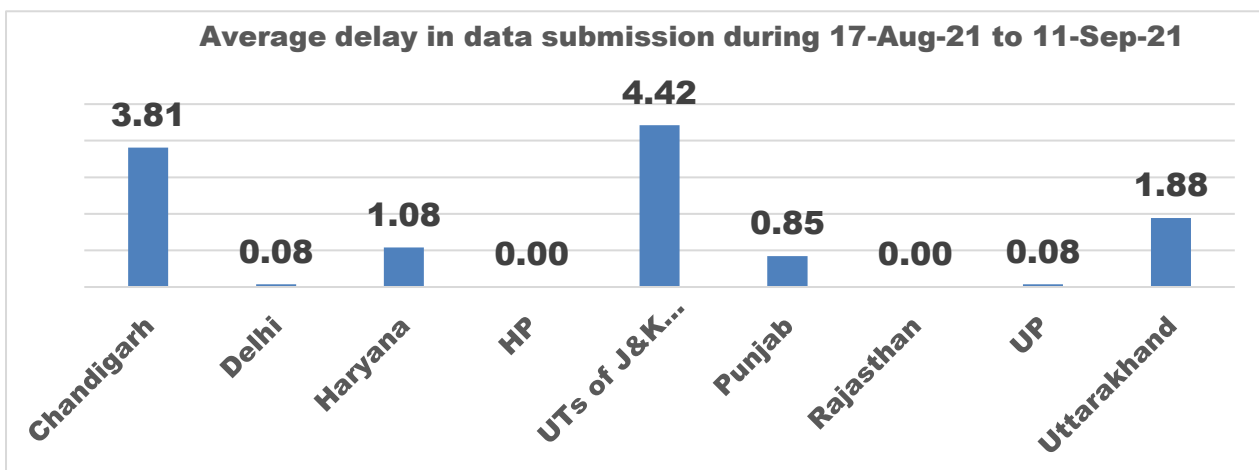
State / UT	Availability / Requirement	Energy (MU)	Peak (MW)	Date of revision
CHANDIGARH	Availability	120	330	No revision submitted
	Requirement	110	220	
	Surplus / Shortfall	10	110	
	% Surplus / Shortfall	9.1%	50.0%	
DELHI	Availability	3502	5225	24-Sep-21
	Requirement	2650	4925	
	Surplus / Shortfall	852	300	
	% Surplus / Shortfall	32.1%	6.1%	
HARYANA	Availability	4710	10260	20-Sep-21
	Requirement	4508	8470	
	Surplus / Shortfall	202	1790	
	% Surplus / Shortfall	4.5%	21.1%	
HIMACHAL PRADESH	Availability	902	1545	07-Sep-21
	Requirement	889	1551	
	Surplus / Shortfall	13	-6	
	% Surplus / Shortfall	1.5%	-0.4%	
J&K and LADAKH	Availability	1230	3320	No revision submitted
	Requirement	1490	2480	
	Surplus / Shortfall	-260	840	
	% Surplus / Shortfall	-17.4%	33.9%	
PUNJAB	Availability	4700	9210	21-Sep-21
	Requirement	4870	9210	
	Surplus / Shortfall	-170	0	
	% Surplus / Shortfall	-3.5%	0.0%	

State / UT	Availability / Requirement	Energy (MU)	Peak (MW)	Date of revision
RAJASTHAN	Availability	7590	16740	No revision submitted
	Requirement	8080	13610	
	Surplus / Shortfall	-490	3130	
	% Surplus / Shortfall	-6.1%	23.0%	
UTTAR PRADESH	Availability	11160	21500	14-Sep-21
	Requirement	11005	21500	
	Surplus / Shortfall	155	0	
	% Surplus / Shortfall	1.4%	0.0%	
UTTARAKHAND	Availability	970	2640	No revision submitted
	Requirement	1160	1960	
	Surplus / Shortfall	-190	680	
	% Surplus / Shortfall	-16.4%	34.7%	
NORTHERN REGION	Availability	34884	66400	
	Requirement	34762	60000	
	Surplus / Shortfall	122	6400	
	% Surplus / Shortfall	0.4%	10.7%	

- Representative from NRLDC highlighted that Rajasthan need to review its peak data.

Agenda No. 5: Information about variable charges of all generating units in the Region

- Members were informed about the average delay in submission of data of variable charges details on MERIT order portal during 17.08.2021 to 11.09.2021. The average delay is given below:



- Delay in case of Uttarakhand is improving but still noticeable.
- All SLDCs were requested for timely submission of information on MERIT Portal.

Agenda No. 6: 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	Jun-2021
Haryana	Apr-2018	Jul-2021
Himachal Pradesh	Apr-2018	Jun-2021
Punjab	Apr-2018	Jul-2021
Rajasthan	Apr-2018	Jul-2021
Uttar Pradesh	Apr-2018	Jul-2021

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

Agenda No. 7: System Study for Capacitor requirement in NR for the year 2019-20

- OCC forum was intimated that NRPC in its 48th meeting decided that the study report for 2019-20 along with the guidelines for finding the capacitor requirement at 11/33 kV level in NR would be submitted by CPRI. Accordingly, CPRI have submitted the system study report on 24.02.2021 and thereafter same was shared with the constituent states. The recommended capacitor compensation, additionally required as per the report was 352MVar. The report brought out the additional requirement of 137MVar and 215MVar compensation for Punjab and J&K respectively. Moreover, empirical relationship for capacitor requirement against voltage profile at 11 kV, based on two configurations was been worked out in the report.
- In the 45th TCC / 48th NRPC meeting, it was decided after the submission of report for 2019-20 and the guidelines, the same would be studied by the same sub-group who had earlier recommended for guidelines and foreclosure of the contract. Based on Committee's recommendations, NRPC Sectt. can process the pending bills of Rs. 14 lakhs (Rs. 2 + 12 Lakhs), excluding taxes along with foreclosure of the contract. Accordingly, submitted report needs to be examined by the Committee.
- In 181st OCC meeting, the forum decided that sub-group would study the report and submit the recommendation report within two weeks.
- NRPC Sectt. asked comments/observations on the CPRI report from all the states via e-mail. Comment from Delhi was received. Rajasthan, HP, Punjab, Haryana had submitted NIL comment. Comment from rest of the members was not received.
- In the 182nd OCC meeting, forum decided that a video-conferencing meeting may be held by members of sub-group to finalize the comments latest by 30th April, 2021 and compiled comments may be sent to CPRI for necessary correction in the report.
- The meeting of sub-group was held on 03.05.2021. In the meeting, sub-group members decided to get PSSE file from CPRI for better understanding, which was later shared with them.

- In 183rd OCC meeting, NRPC representative requested for any additional comment on the CPRI report, if remaining, from the members. Sub-group committee member from Rajasthan stated that since the CPRI report is for the year 2019-20, old data needs to be collected and then values in the CPRI report would be checked. It was further intimated that around 2-3 days' time would be required for this task. Rajasthan representative was requested to send their observation/comments via e-mail to NRPC Sectt. Forum decided that after receiving observations/comments from Rajasthan, the compiled observations/comments may be sent to CPRI so that necessary corrections may be done in the draft report.
- In 184th OCC, forum was apprised that compiled comments were mailed to CPRI vide email dated 28th May'21 with a request to submit the corrected report within two weeks' time.
- CPRI vide email dated 31st May'21 communicated that majority of comments are on the modeling of base case PSSE file. Since the file is given by NRPC and CPRI has not modeled it so they are not in position to make any comment on the accuracy & modeling of file.
- In 185th OCC, NRPC representative stated that CPRI has submitted on 28th June 2021 its point-wise reply on the observations of sub-group along with updated report. OCC forum decided that a video-conferencing meeting may be held within sub-group members and CPRI for further discussion on reply of CPRI.
- In 186th OCC, NRPC representative apprised the forum that in line with decisions of 185th OCC, a meeting was held on 06.08.2021 under the chairmanship of MS, NRPC through Video Conferencing. It was attended by members of the sub-group, CPRI representatives, and officials from NRPC Sectt & NRLDC.
- It was also stated that in the meeting dt. 06.08.2021, comments of the sub-group on the latest version of CPRI report were deliberated in detail. After weighing the merits of the original & revisions of the report, following were decided:
 - First Report submitted by CPRI in September, 2020 shall be considered as the reference report. CPRI confirmed that the base-case of 11.07.2018 at 00:45 hrs. received from NRPC Sectt has been used for preparing September, 2020 report.
 - Comments from all utilities and NRLDC on September 2020 report must be submitted to NRPC Sectt, latest by 24.08.2021.
 - NRPC Sectt, after examination, shall share with CPRI the compiled comments of the utilities and NRLDC, latest by 31.08.2021.
 - Thereafter, CPRI shall submit its reply on the compiled comments sent by NRPC Sectt, latest by 15.09.2021.
- It was further intimated that base case file (11.07.2018 00:45 hrs) and CPRI's Sep'2020 report were e-mailed to all sub-group members on 10.08.2021 along with the request to submit comments/observations thereon, latest by 24.08.2021.
- In the meeting (187th OCC), forum was apprised that although last date for submission of comments was 24.08.2021, NRPC Sectt. received comments from Himachal Pradesh, Punjab, Rajasthan, Delhi, and NRLDC vide mails dtd. 24.08.2021, 25.08.2021, 26.08.2021, 31.08.2021, and 03.09.2021 respectively. As the received comments were also on the base-case data, a meeting was held on 06.09.2021 among officers of NRPC

Sectt, NRLDC and above four states for discussing comments before sending to CPRI. After detailed discussions, following were decided:

A. Himachal Pradesh:

- a) It was apprised by NRLDC that generation data of micro IPPs has not been modelled by them in base-case due to their small quantity. Further, Capacitor at Baddi needs to be removed from base-case.
- b) HP was requested to submit within 3 days data regarding (11.07.2018 00:45 HRS):
 - i. Generation break-up along with details of micro IPPs.
 - ii. Capacitors at 132 kV level
 - iii. Nodes of major voltage profile mismatch
 - iv. Load factor of state (current scenario if data of past is not available)
- c) It was decided that after getting above data from HP, base-case will be tuned by NRLDC before sending to CPRI.

B. Punjab:

- a) All switched reactors/capacitors to be converted into fixed & net shunt capacitor value in the base-case to be corrected as per Punjab's comment.
- b) Punjab was requested to submit low voltage nodes (11.07.2018 00:45 HRS) within 3 days.
- c) Based on data from Punjab, initial tuning to be done by NRLDC for Q values of generators. CPRI may be required to do further tuning.

C. Rajasthan:

- a) Except low voltage points, power factor needs to be upgraded in the base-case.
- b) Rajasthan representative confirmed that most of the capacitors were off during the time for which modelling is done, so lumped capacitor at 132kV needs to be deleted.
- c) Rajasthan was requested to submit
 - i. List of bus-wise capacitors and their status (OFF/ON condition) on 11.07.2018 00:45 HRS.
 - ii. Voltage profile of generator buses.

D. Delhi:

- a) Delhi was requested to submit voltage profile of generator buses.
- It was decided that after receiving data from above four states, NRLDC will tune the base-case initially and will also ensure that regional generators shall not absorb reactive power in the base-case and then base case will be sent to CPRI along with compiled comments.
 - In the meeting, UP representative stated that they will send reply on mail of NRPC Sectt. dtd. 10.08.2021 for submission of their comments.
 - It was decided that data received at NRPC Sectt. may be sent to NRLDC for tuning of base-case.

- NRLDC representative stated that base-case tuning may be completed by 30.09.2021.

Agenda No. 8: Automatic Demand Management System

- Forum was informed that as decided in the 175th 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 186th 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 1st 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 meeting (187th), 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.

Agenda No. 9: Follow-up of issues from various OCC Meetings - Status update

- Updated status is attached as ***Annexure-A.I.***
- MS, NRPC stated that it may be apprised to PSPM Division, CEA that if DTL is unable to commission the reactors, the task may be handed over to POWERGRID.

Agenda No. 10. Deemed availability of outage of Transmission lines due to tripped caused by kite thread / flying (Agenda by POWERLINKS Transmission Limited)

- POWERLINKS Transmission Limited representative stated that they are facing problem of line tripping due to kite thread / kite flying and they have requested for deemed availability of the same. They have faced 3 tripping in July'21 month. They also highlighted that the incident is more at the time of Makar Sankranti every year.
- Representatives from NR-3/POWERGRID stated that they have faced 9 tripping in May'21 - Aug'21. Other representatives from POWERGRID also highlighted that they are facing generally 10-12 tripping in a year. NR-1 representative stated that 18 hours outage in a month has also been observed.
- Representative from INDIGRID mentioned that they are also facing same issue specifically during festive months.
- ADANI representative stated that they have faced no such issue as they have less presence in Northern Region.
- NRLDC representative stated that deemed availability is permitted for incidents caused by act of god or natural calamity etc. Tripping due to kite thread may not be considered for deemed availability as there will be lack of witness and issues in verification of facts.
- MS, NRPC stated that in past under CERC performance regulations, those incidents which were beyond the control of licensee have been considered. On similar lines, he suggested that deemed availability may be given for 2 hours each for 2 trippings per month for 4 months in a year, subject to proper documentation and verification. NRLDC representative suggested that time stamping on photographs may be ensured for documentary evidence. The forum agreed with the aforementioned suggestions.

Agenda No.11. Regarding Installation of Proposed SPS Scheme at 400kV S/S Lucknow (PG) & Sohawal (PG) (Agenda by UP SLDC)

- NRPC representative apprised that commissioning of SPS (System Protection Scheme) at 400kV Lucknow (PG) and Sohawal (PG) was discussed in the 184th OCC meeting and it was decided that proposal for SPS at 400kV s/s Lucknow (PG) & Sohawal (PG) shall be submitted by UP SLDC. UP SLDC has submitted the SPS logic details.
- NRLDC representative stated that the logic seems to be in order.
- POWERGRID representative stated that PLC based logic shall be adopted for this work. SAS is goose based logic and is not reliable for protection. He also desired to know the cost-bearing party in implementation.
- MS, NRPC opined that since SPS is already implemented at Nakodhar and SPS implementation cost was minimal there. So, POWERGRID shall deliberate the logic with counterparts at Punjab. Further, he suggested that connected load at downstream system is of UP completely, so cost may be borne by UP.

Agenda No.12. Tower failure report of 400 KV Kaithal – Bagpat D/C Line in Northern Region (Agenda by NR-II, POWERGRID)

- MS, NRPC stated that report of POWERGRID's internal committee may not be considered for deemed availability and such issues are dealt in the tower failure report of CEA's standing committee.
- Forum decided that tower failure report of CEA's committee may be considered. POWERGRID was requested to approach CEA in this regard.

Agenda No. 13. Report on SPS operation during grid event at 500kV HVDC Rihand-Dadri at 04:15 hrs on 21st August, 2021

- NRLDC representative stated that they will do a mock test every month for the SPS already commissioned and any shortcoming shall immediately be intimated and corrective response should come from transmission licensee in this regard.

Agenda No. 14. Frequent outages of Wind/Solar generation in Northern Region

- MS, NRPC stated that a committee already exist for RE generation comprising of representatives from CEA, NRPC and NRLDC. The committee was formed in November 2019. CTU representative may also be included in this committee. A meeting may be called soon to take up the issue.

Agenda No. 15. Coal Supply Position of Thermal Plants in Northern Region

- SE(O), NRPC apprised the forum about the coal stock position of generating stations in northern region during current month (till 10th September 2021).

Agenda No. 16. Operational challenges in despatch of Gas based stations under RRAS

- NRLDC representative highlighted that adequate fuel stock shall be maintained by NTPC since it is already counted under working capital in Tariff Regulations.
- NTPC representative stated that they are getting schedule for gas plants after 3 years. Therefore, they are unable to manage the supply of fuel. He also mentioned that NTPC require one-month advance intimation for arranging fuel for gas plants.
- NTPC stated that they will submit data regarding ambient temperature-installed capacity curve of GTs.
- MS, NRPC stated that NRLDC may provide a format for gas-based plants that may have every detail w.r.t. plant operation. The format may be discussed and finalized bilaterally between NTPC and NRLDC. Once finalized, NTPC is requested to send details of plant in the same format every day to NRLDC.

Agenda No. 17. Streamlining of RLDC FTC Procedure and Software Modification (Agenda by POWERGRID)

- In-charge, NRLDC stated that FTC formalities have been developed for streamlined and uniform procedure across all regions. Documents over e-mail or any other medium may not be accepted as there is already a well-established system.
- POWERGRID requested that documents uploaded by them shall have time tagging for reference. NRLDC consented for the same.

Agenda No. 18. Abnormal humming in GTs at APRL, Kawai and nearby stations

- Adani representative stated the they have been able to mitigate the effects of abnormal humming in GTs at APRL, Kawai and nearby stations, but the root cause of the observed behavior is not being able to be identified. OEM has been called for inspection at transformer end and they have found no issue.
- NRLDC stated that lines mentioned by ADANI is still in service, therefore there seems no connection of the issue with these lines.

Agenda No. 19. NR Islanding Schemes (Additional Agenda)

- SE(O), NRPC stated that format of MIS has been attached with agenda. States were requested to submit MIS report before OCC meeting, every month so that same may be discussed in each OCC. MIS data received from states would be forwarded to CEA/MoP every month.
- MS, NRPC stated that MoP has agreed for PSDF funding for implementation of islanding schemes and states are required to prepare and submit DFR for the same.

Follow up issues from previous OCC meetings

1	Sub-stations likely to be commissioned by next two years.	All the concerned states had been requested in past OCC meetings to submit the details of the downstream network associated specially with POWERGRID substations along with the action plan of their proposed / approved networks.	Status details of downstream networks mentioned in Annexure-A.I.I.																				
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: <table border="1"> <tr><td>⊙ CHANDIGARH</td><td>Sep-2019</td></tr> <tr><td>⊙ DELHI</td><td>Aug-2021</td></tr> <tr><td>⊙ HARYANA</td><td>Apr-2021</td></tr> <tr><td>⊙ HP</td><td>Mar-2021</td></tr> <tr><td>⊙ J&K and LADAKH</td><td>Not Available</td></tr> <tr><td>⊙ PUNJAB</td><td>Mar-2021</td></tr> <tr><td>⊙ RAJASTHAN</td><td>Aug-2021</td></tr> <tr><td>⊙ UP</td><td>Jul-2021</td></tr> <tr><td>⊙ UTTARAKHAND</td><td>Jun-2021</td></tr> </table> All States/UTs are requested to furnish updated status on monthly basis.	⊙ CHANDIGARH	Sep-2019	⊙ DELHI	Aug-2021	⊙ HARYANA	Apr-2021	⊙ HP	Mar-2021	⊙ J&K and LADAKH	Not Available	⊙ PUNJAB	Mar-2021	⊙ RAJASTHAN	Aug-2021	⊙ UP	Jul-2021	⊙ UTTARAKHAND	Jun-2021		
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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".	Data upto following months, received from various states / UTs: <table border="1"> <tr><td>⊙ CHANDIGARH</td><td>Not Available</td></tr> <tr><td>⊙ DELHI</td><td>Mar-2021</td></tr> <tr><td>⊙ HARYANA</td><td>Jun-2021</td></tr> <tr><td>⊙ HP</td><td>Aug-2021</td></tr> <tr><td>⊙ J&K and LADAKH</td><td>Not Available</td></tr> <tr><td>⊙ PUNJAB</td><td>Mar-2021</td></tr> <tr><td>⊙ RAJASTHAN</td><td>Jun-2021</td></tr> <tr><td>⊙ UP</td><td>Jun-2021</td></tr> <tr><td>⊙ UTTARAKHAND</td><td>Mar-2021</td></tr> <tr><td>⊙ BBMB</td><td>Jun-2021</td></tr> </table> All States/UTs are requested to furnish updated status on monthly basis.	⊙ CHANDIGARH	Not Available	⊙ DELHI	Mar-2021	⊙ HARYANA	Jun-2021	⊙ HP	Aug-2021	⊙ J&K and LADAKH	Not Available	⊙ PUNJAB	Mar-2021	⊙ RAJASTHAN	Jun-2021	⊙ UP	Jun-2021	⊙ UTTARAKHAND	Mar-2021	⊙ BBMB	Jun-2021
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⊙ UTTARAKHAND	Mar-2021																						
⊙ BBMB	Jun-2021																						
4	Status of FGD installation vis-à-vis installation plan at identified TPS	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. Further, progress of FGD installation work on monthly basis is monitored in OCC meetings.	Status of the information submission (month) from states / utilities is as under: <table border="1"> <tr><td>⊙ HARYANA</td><td>Feb-2021</td></tr> <tr><td>⊙ PUNJAB</td><td>Sep-2021</td></tr> <tr><td>⊙ RAJASTHAN</td><td>Sep-2021</td></tr> <tr><td>⊙ UP</td><td>Sep-2021</td></tr> <tr><td>⊙ NTPC</td><td>Jun-2021</td></tr> </table> FGD status details are enclosed as Annexure-A.I.II. All States/utilities are requested to furnish updated status of FGD installation progress on monthly basis.	⊙ HARYANA	Feb-2021	⊙ PUNJAB	Sep-2021	⊙ RAJASTHAN	Sep-2021	⊙ UP	Sep-2021	⊙ NTPC	Jun-2021										
⊙ HARYANA	Feb-2021																						
⊙ PUNJAB	Sep-2021																						
⊙ RAJASTHAN	Sep-2021																						
⊙ UP	Sep-2021																						
⊙ NTPC	Jun-2021																						

5	Reactive compensation at 220 kV/ 400 kV level at 15 substations			
	State / Utility	Substation	Reactor	Status
i	POWERGRID	Kurukshehra	500 MVar TCR	Anticipated commissioning: Dec' 2021 (delay due to pending supplies by GE)
ii	DTL	Peeragarhi	1x50 MVar at 220 kV	PO awarded to M/s Kanohar Electricals Ltd. Drawings approved and under stage inspection. GIS Bay is already available. Work expected to be completed by Dec.21
iii	DTL	Harsh Vihar	2x50 MVar at 220 kV	PO awarded to M/s Kanohar Electricals Ltd. Drawings approved and under stage inspection. GIS Bay is already available. Work expected to be completed by Dec.21
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	Retendering to be done for 400kV reactors. LOA placed for 220kV reactors.
ix	PUNJAB	Nakodar	1x25 MVar at 220 kV	Technical bids opened on 14.01.2021.
x	PTCUL	Kashipur	1x125 MVAR at 400 kV	Already submitted to PSDF. On hold due to policy decision
xi	RAJASTHAN	Akal	1x25 MVar	LOA placed on dt. 4.1.2021. Agreement signed on dt. 8.02.2021. Case for 2nd installment would be forwarded to NLDC, POSOCO. The target date is Nov' 2021.
xii	RAJASTHAN	Bikaner	1x25 MVar	LOA placed on dt. 4.1.2021. Agreement signed on dt. 8.02.2021. Case for 2nd installment would be forwarded to NLDC, POSOCO. The target date is Nov' 2021.
xiii	RAJASTHAN	Suratgarh	1x25 MVar	LOA placed on dt. 4.1.2021. Agreement signed on dt. 8.02.2021. Case for 2nd installment would be forwarded to NLDC, POSOCO. The target date is Nov' 2021.
xiv	RAJASTHAN	Barmer & others	13x25 MVar	Agreement signed on dt. 22.06.2020. Grant of Ist Installment received on dt.19.02.21. Bidding document is under approval.
xv	RAJASTHAN	Jodhpur	1x125 MVar	Agreement signed on dt. 22.06.2020. Grant of Ist Installment received on dt.19.02.21. Bidding document is under approval.

Annexure-A.I.I

Sl. No.	Substation	Downstream network bays	Commissioning status of ICTs / Bays	Planned 220 kV system	Revised Target	Remarks
1	Shahjahanpur, 2x315 MVA 400/220 kV	4 Nos. of 220 kV bays to be utilized	<u>Commissioning of ICT</u> <u>Commissioning of Bays</u> Jun/Sep'14	Shahjahanpur-Azimpur D/C line		Connected to load on 28.07.2021
				LILO of 220kV Shahjahanpur - Sitapur at Shahjahanpur PG	Oct'21	Updated in 187th OCC
2	Hamirpur 400/220 kV 2x 315 MVA S/s (Augmentation by 3x105 MVA ICT)	2 nos. bays utilized under ISTS. Balance 6 nos to be utilized	<u>Commissioning of ICT</u> 1st -Dec'13 2nd - Mar'14 3rd - Mar'19 <u>Commissioning of Bays</u> 4 bays - Dec'13 2 bays - Mar'14 2 bays - Mar'19	220 kV D/C Hamirpur-Dehan line. Original schedule: Dec' 2020	Oct'21	Updated in 186th OCC
3	Sikar 400/220kV, 1x 315 MVA S/s	2 Nos. of 220 kV bays	Commissioned (date not available)	Not available	Sep'21	Work order was placed on dt. 13.04.2020 to M/s A to Z Ltd. Works start on dt. 4.12.2020. S/S-32/32, T/E-31/32 (T/E at 27 no. location is pending due to Rajasthan High Court stay), T/S-2.09/8.122 km completed. Targeted to be completed by June'2021.
4	Bhiwani 400/220kV S/s	6 nos. of 220kV bays	Commissioned (date not available)	220kV Bhiwani (PG) - Isherwal (HVPNL) D/c line	Dec'21	Delayed due to RoW issue
5	400/220kV Tughlakabad GIS	10Nos. of 220kV bays	Commissioned (date not available)	RK Puram – Tughlakabad (UG Cable) 220kv D/c line	Jul'22	PO for supply and ETC of D/C UG cable awarded.
				Masjid Mor – Tughlakabad 220kv D/c line	Mar'22	PO for supply and ETC of D/C UG cable awarded.
6	400/220kV Kala Amb GIS (TBCB)	6 Nos. of 220kV bays	Commissioned in Jul'2017	220kV D/c line from Kala Amb 400/220kV S/s to 220/132kV Kala Amb S/s	Dec'21	Details for utilizing remaining 4 bays is not available

FGD Status

Updated status of FGD related data submission

NTPC (16.06.2021)

MEJA Stage-I
RIHAND STPS
SINGRAULI STPS
TANDA Stage-I
TANDA Stage-II
UNCHA HAR TPS

UPRVUNL (18.09.2021)

ANPARA TPS
HARDUAGANJ TPS
OBRA TPS
PARICHA TPS

PSPCL (20.09.2021)

GGSTP, Ropar
GH TPS (LEH.MOH.)

RRVUNL (17.09.2021)

CHHABRA SCPP
CHHABRA TPP
KALISINDH TPS
KOTA TPS
SURATGARH SCTPS
SURATGARH TPS

Updated status of FGD related data submission

Lalitpur Power Gen. Co. Ltd. (24.07.2021)	Lalitpur TPS
Lanco Anpara Power Ltd. (24.07.2021)	ANPARA-C TPS

Rosa Power Supply Company (24.07.2021)	Rosa TPP Phase-I
Prayagraj Power Generation Company Ltd. (24.07.2021)	Prayagraj TPP
APCPL (17.08.2021)	INDIRA GANDHI STPP

Pending submissions

Adani Power Ltd.	KAWAI TPS
GVK Power Ltd.	GOINDWAL SAHIB
HGPCL	PANIPAT TPS
	RAJIV GANDHI TPS
	YAMUNA NAGAR TPS

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: 31-08-2020), KAWAI TPS U#2 (Target: 30-06-2020)
APCPL	INDIRA GANDHI STPP U#1 (Target: 31-12-2021), INDIRA GANDHI STPP U#2 (Target: 31-03-2022), INDIRA GANDHI STPP U#3 (Target: 30-06-2022)
GVK Power Ltd.	GOINDWAL SAHIB U#1 (Target: 30-04-2020), GOINDWAL SAHIB U#2 (Target: 29-02-2020) – initial target
HGPCL	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) – initial target

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: 30-04-2020), DADRI (NCTPP) U#6 (Target: 29-02-2020), RIHAND STPS U#1 (Target: 28-02-2022), RIHAND STPS U#2 (Target: 31-12-2021), 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: 31-08-2022), SINGRAULI STPS U#2 (Target: 31-08-2022), SINGRAULI STPS U#3 (Target: 31-08-2022), SINGRAULI STPS U#4 (Target: 31-08-2022), SINGRAULI STPS U#5 (Target: 31-08-2022), SINGRAULI STPS U#6 (Target: 31-08-2022), SINGRAULI STPS U#7 (Target: 31-08-2022), UNCHAHAR TPS U#1 (Target: 30-09-2023), UNCHAHAR TPS U#2 (Target: 30-09-2023), 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: 31-03-2023), MEJA Stage-I U#1 (Target: 31-03-2022), MEJA Stage-I U#2 (Target: 31-03-2022), TANDA Stage-I U#1 (Target:), TANDA Stage-I U#2 (Target:), TANDA Stage-II U#3 (Target: 31-12-2022), TANDA Stage-II U#4 (Target: 31-12-2022)
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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) – initial target
Lalitpur Power Gen. Company Ltd.	LALITPUR TPS U#1 (Target: 01-01-2024), LALITPUR TPS U#2 (Target: 01-01-2024), LALITPUR TPS U#3 (Target: 01-01-2024)
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: 31-05-2024), PRAYAGRAJ TPP U#2 (Target: 30-09-2024), PRAYAGRAJ TPP U#3 (Target: 31-12-2024)
PSPCL	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)

Rosa Power Supply Company	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: 31-10-2024), ROSA TPP Ph-I U#4 (Target: 31-10-2024)
RRVUNL	KOTA TPS U#5 (Target: 31-12-2022), KOTA TPS U#6 (Target: 31-12-2022), KOTA TPS U#7 (Target: 31-12-2022), 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)
Talwandi Sabo Power Ltd.	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) – initial target
UPRVUNL	ANPARA TPS U#1 (Target: 31-10-2022), ANPARA TPS U#2 (Target: 31-08-2022), ANPARA TPS U#3 (Target: 30-06-2022), ANPARA TPS U#4 (Target: 30-04-2022), ANPARA TPS U#5 (Target: 28-02-2022), ANPARA TPS U#6 (Target: 30-06-2021), ANPARA TPS U#7 (Target: 30-04-2021), HARDUAGANJ TPS U#8 (Target: 31-12-2021), HARDUAGANJ TPS U#9 (Target: 31-12-2021), OBRA TPS U#9 (Target: 31-08-2022), OBRA TPS U#10 (Target: 31-10-2022), OBRA TPS U#11 (Target: 31-12-2022), OBRA TPS U#12 (Target: 30-06-2022), OBRA TPS U#13 (Target: 30-04-2022), PARICHHA TPS U#3 (Target: 30-04-2022), PARICHHA TPS U#4 (Target: 30-04-2022), PARICHHA TPS U#5 (Target: 28-02-2022), PARICHHA TPS U#6 (Target: 31-12-2021)