



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/106/01/2022/2084-2125

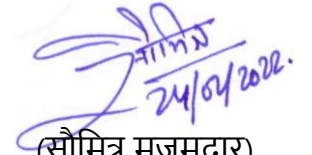
दिनांक: 24.02.2022

विषय: उत्तर क्षेत्रीय विद्युत समिति की प्रचालन समन्वय उप-समिति की 192^{वीं} बैठक के खण्ड-अ में लिए गए निर्णयों का सार।

Subject: Gist of decisions taken in the Part-A of 192st OCC meeting of NRPC.

उत्तर क्षेत्रीय विद्युत समिति की प्रचालन समन्वय उप-समिति की 192^{वीं} बैठक दिनांक 18.02.2022 को आयोजित की गयी। उक्त बैठक की खण्ड-अ में लिए गए निर्णयों का सार **अनुलग्नक - अ** के रूप में संलग्न है।

192nd meeting of the Operation Co-ordination Sub-Committee of NRPC was held on 18.02.2022. 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 192nd OCC Meeting

Agenda No. 1: Confirmation of Minutes

Minutes of 191st OCC meeting was issued on 08.02.2022. OCC confirmed the minutes.

Agenda No. 2.1: Supply Position (Provisional) for January 2022

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

- **Delhi**

The negative variation in Demand and Energy Consumption is mainly due to covid-third wave and subsequent restrictions.

- **Rajasthan**

The Energy consumption decreased by 9% w.r.t. anticipated Energy requirement due to scattered rain during the month & Peak Demand increased by 0.9% which is within permissible limit.

- **Punjab**

Actual maximum demand and actual energy requirement are less as compared to anticipated maximum demand and anticipated energy requirement respectively because of rainy spell in the state of Punjab during month of January 2022.

- **Haryana**

Variation in demand & consumption during January 2022 is due to covid restrictions and reduction in agricultural load due to heavy rainfall.

- **Uttarakhand**

Variation in demand & consumption during January 2022 is due to covid restrictions and snowfall.

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 January 2022 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 March 2022 was deliberated in the meeting on 17.02.2022.
- Following shutdown request was also approved/denied in the OCC meeting:

Element Name	Owner	Reason	Requested From	Requested To	Decision of OCC
500 MW RIHAND-I STPS - UNIT 2	NTPC	Boiler+FGD Gate installation+ Generator	16-Mar-2022 00:00 Hrs	19-Apr-2022 23:59 Hrs	Shutdown was rejected as UP denied consent. NTPC was asked to propose a reschedule outage plan to complete the work before 05 th April.
Singrauli#2 (200 MW)	NTPC	Capital Overhaul; Boiler+ Generator+ Turbine+ DDCMIS	23-Mar-2022	06-May-2022	Shutdown was rejected as it spills over in the Month of April and the outage plan deviates from the discussions held in the 25 th LGBR sub-committee meeting of NR.
Meja Unit-1	Meja UNPL	Unit-1 capital overhaul and HP rotor replacement	25-Mar-2022 00:00	23-May-2022 24:00	Shutdown was rejected as it spills over in the Month of April and May. Forum asked Meja to apply in September end; subject to grid conditions.
400 KV VISHNU PRAYAG-MUZAFFAR NAGAR LINE		FOUNDATION OF LINE AT LOCATION NO 20 GOT DAMAGED.ER ECTION/ COMMISSIONING OF NEW	01-Mar-2022	15-Mar-2022	Shutdown was approved subject to confirmation of date by Uttarakhand SLDC after revival of 132kV

Element Name	Owner	Reason	Requested From	Requested To	Decision of OCC
		TOWER AT NEWLY CONSTRUCTED FOUNDATION			Srinagar Rishikesh T/L.
400 KV ALAKNANDA- VISHNU PRAYAG LINE		FOUNDATION OF LINE AT LOCATION NO 20 GOT DAMAGED.ER ECTION/ COMMISSIONING OF NEW TOWER AT NEWLY CONSTRUCTED FOUNDATION	03-Mar-2022	15-Mar-2022	Shutdown was approved subject to confirmation of date by Uttarakhand SLDC after revival of 132kV Srinagar Rishikesh T/L.

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

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

State / UT	Availability / Requirement	Revised Energy (MU)	Revised Peak (MW)	Date of revision
CHANDIGARH	Availability	110	260	Revision not submitted
	Requirement	110	240	
	Surplus / Shortfall	0	20	
	% Surplus / Shortfall	0.0%	8.3%	
DELHI	Availability	3661	5411	17-Feb-22
	Requirement	2050	4200	
	Surplus / Shortfall	1611	1211	
	% Surplus / Shortfall	78.6%	28.8%	
HARYANA	Availability	4800	10580	10-Jan-22
	Requirement	4100	7300	
	Surplus / Shortfall	700	3280	
	% Surplus / Shortfall	17.1%	44.9%	
	Availability	936	1864	08-Feb-22

State / UT	Availability / Requirement	Revised Energy (MU)	Revised Peak (MW)	Date of revision
HIMACHAL PRADESH	Requirement	946	1850	
	Surplus / Shortfall	-9	14	
	% Surplus / Shortfall	-1.0%	0.8%	
J&K and LADAKH	Availability	1220	3920	Revision not submitted
	Requirement	1970	3460	
	Surplus / Shortfall	-750	460	
	% Surplus / Shortfall	-38.1%	13.3%	
PUNJAB	Availability	5185	8000	10-Jan-22
	Requirement	4172	7440	
	Surplus / Shortfall	1013	560	
	% Surplus / Shortfall	24.3%	7.5%	
RAJASTHAN	Availability	10289	19000	17-Feb-22
	Requirement	8060	15100	
	Surplus / Shortfall	2229	3900	
	% Surplus / Shortfall	27.7%	25.8%	
UTTAR PRADESH	Availability	10540	20000	11-Feb-22
	Requirement	10075	20000	
	Surplus / Shortfall	465	0	
	% Surplus / Shortfall	4.6%	0.0%	
UTTARAKHAND	Availability	1132	2080	10-Jan-22
	Requirement	1153	2100	
	Surplus / Shortfall	-22	-20	
	% Surplus / Shortfall	-1.9%	-1.0%	
NORTHERN REGION	Availability	37873	67000	
	Requirement	32636	58100	
	Surplus / Shortfall	5237	8900	
	% Surplus / Shortfall	16.0%	15.3%	

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	Sep-2021
Haryana	Apr-2018	Nov-2021
Himachal Pradesh	Apr-2018	Dec-2021
Punjab	Apr-2018	Dec-2021

State / UT	From	To
Rajasthan	Apr-2018	Dec-2021
Uttar Pradesh	Apr-2018	Oct-2021
Uttarakhand	Apr-2018	Sep-2021

- 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: 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 is 352MVar. The report has 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 has 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, forum decided that sub-group comprising of following officers 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 03.05.21. 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 other comments on the CPRI report, if remaining, from any of 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. at the earliest. 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 September 2020 report has been e-mailed to all sub-group members on 10.08.2021 requesting 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 188th OCC, it was apprised that CPRI vide e-mail dtd. 23.09.2021, requested to send comments at the earliest.
 - NRPC Sectt. vide e-mail dtd. 23.09.2021 apprised the CPRI that as per decisions of meeting dtd. 06.09.2021, tuning of base-case file is being done by NRLDC so that no new issue arises in future.
 - CPRI vide e-mail dtd. 24.09.2021 has requested that any change in loading & generation profile will be a new base case and this will be a fresh study for new base case. It will require an extensive time and efforts. CPRI has requested to ensure that load/generation profile in tuned PSSE should be same as was given to CPRI for PSSE base 11.7.2018 at 00.45.
 - In view of CPRI's request, NRLDC was requested vide e-mail dtd. 24.09.2021 to halt tuning of base-case till further discussion.
 - A meeting was held between NRPC Sectt. and NRLDC on 04.10.2021, wherein it was decided that without incorporating corrective comments of states, the report is not

acceptable w.r.t drawing any conclusion on requirement of capacitor. Later, NRLDC representative informed that tuned base-case will be submitted by 28.10.2021.

- Tuned base-case has been received from NRLDC vide mail dtd 10.11.2021.
- In 189th OCC, NRPC representative apprised that tuned base-case received from NRLDC is under examination in NRPC Sectt. After examination, the same will be sent to CPRI for correction in the report along with the comments submitted by states.
- In 190th OCC, NRPC representative informed that tuned base-case along with comments of states has been sent to CPRI vide mail dated 30.11.2021 for correction in the report.
- In 191st OCC, NRPC representative apprised the forum that a meeting was held between members of the sub-group, CPRI representatives, and officials from NRPC Sectt & NRLDC on 05.01.2022, wherein it was decided that CPRI shall tune the Q_{gen} value taking help of NRLDC. Tuning may be done for some machines of Punjab (such as Talwandi Sabo), Uttarakhand (such as Shrivanti), Himachal Pradesh, and Jammu. CPRI shall also tune Q_{gen} of Central Sector machines such as Salal, Rampur, Bhakra, Dehar etc. These Q_{gen} tunings shall be done in spirit to relieve machines from absorbing MVARs and to avoid over compensation in system due to recommended capacitors. CPRI has intimated 20th Jan'22 as target date for the activity.
- In the meeting (192nd OCC), NRPC representative apprised the forum that report has been received from CPRI vide mail dtd. 14.02.2022. However, some grammatical and typographical error were observed in the report and CPRI has been requested to resolve the same. After resolution of same, report shall be shared with sub-group members tentatively in next week. After final acceptance, payment to CPRI may be processed.

Agenda No. 7: 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 187th 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 188th 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 31st October 2021 to NRLDC. Status as received till 31.10.2021 would be reported to CERC by NRLDC.
- In the 189th OCC, NRLDC informed that status of ADMS has been sent to CERC twice in the past (same is recorded in MoM of 127th 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 190th OCC, NRLDC representative informed that vide letter dated 09.12.2021 (enclosed as Annexure-A.0 of minutes of 190th OCC), CERC has been apprised about the latest status of ADMS as per the updated information available with them.
- In the meeting (192nd 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.

Agenda No. 8: Follow-up of issues from various OCC Meetings - Status update

- Updated status is enclosed as **Annexure-A.I.**
- In 192nd OCC, Transmission utilities of all states/UT's were requested to submit the updated status of Down Stream network by State utilities from ISTS Station (**enclosed as Annexure-A-I.I**) before every OCC meeting.

Agenda No. 9. 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 187th 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 187th 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 189th OCC agenda.
- In the 189th 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 30th Nov, 2021. He also set timeline of 30th 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 190th 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 15th 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 191st 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 meeting (192nd 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.

Agenda No. 10. 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 09th February 2022).
- NRPC representative informed that vide mail dated 11.02.2022 forwarding therewith a letter from Ministry regarding “Coal transportation bottlenecks” respective SLDC's and Inter-state generating stations of NR region were requested that issues/problems being faced by the thermal power plants in your region with respect to transportation of coal shall be intimated. However, response in this regard is awaited, henceforth they are requested to submit their reply on urgent basis.

Agenda No. 11. Resource Adequacy and Peak Demand of Delhi

- NRPC representative apprised the forum that a Meeting was chaired by Secretary (Power), MoP on 25.01.2022 to review the Preparedness to meet the forecasted electricity peak demand for Delhi during 2022-23.
- Further, a meeting was taken by MS, NRPC on 15.02.2022 for reviewing preparedness of Delhi for Summer 2022-23. It was observed that Delhi needs to firm up its proposed STOA.

Agenda No. 12. Transmission constraints in Northern Region

- NRPC representative stated that above agenda was also taken up in 191th OCC meeting, wherein NRLDC representative mentioned that a format would be circulated amongst the concerned utilities of NR for whom the transmission constraint was discussed in the meeting and they were requested to update the same.
- NRPC representative stated that UPSLDC vide letter dated 02.02.2022 has submitted a list of overload 220kV transmission line and 400kV sub-stations with N-1 non-compliant ICTs.
- In the 192nd OCC, UPPTCL representative informed that vide mail dated 14.02.2022 they have also submitted the ongoing steps being taken to overcome these transmission constraints along with the target date.
- RRVPNL has vide mail dated 17.02.2022 has submitted the transmission constraints of Rajasthan as per the NRLDC format.
- Uttarakhand representative informed that they have submitted the transmission constraints details in their control area as per requisite format to NRLDC vide mail dated 20.01.2022.

Agenda No.13. Implementation of revised SPS scheme for evacuation of generation from Lalitpur TSS (Agenda by UP SLDC)

- NRPC representative apprised the forum that UPSLDC vide letter dated 25.01.2022 has informed that revised SPS scheme for evacuation of generation from Lalitpur TPS, approved in 189th OCC meeting, has been implemented on 22.01.2022.
- The above cited information was noted by the OCC forum.

Agenda No. 14. Forced Shifting of Tower no. 169 of 400kV D/C Roorkee-Kashipur I & II line on new Pile Foundation due to Change in Natural River course: Deemed availability of the Outage (Agenda by POWERGRID)

- This has reference to agenda placed by POWERGRID in the 191st OCC meeting for the deemed availability of the Outage.
- MS, NRPC asked POWERGRID to submit supporting documents which may ascertain that the change in the river course was so sudden that transmission licensee was not in a position to notice this aspect timely and take corrective action.

Agenda No. 15. High Bus voltage at Anta (Agenda by NTPC)

- NRLDC representative apprised forum that due to minimum load profile of Rajasthan during this duration, high bus voltage is observed at Anta end. Henceforth, NRLDC suggested Rajasthan for better load management during off-peak scenario.
- NTPC representative informed the forum that there is no bus reactor at Anta and there may be space constraint issue which would be communicated by NTPC to NRLDC.

Agenda No. 16. High Voltage issue in 220KV Bairasiul-Pong and 220KV Bairaisul-Jessore Transmission lines (Agenda by NHPC)

- NHPC representative presented the matter to the forum.
- CTUIL representative suggested that NHPC may plan for bus reactor in generating station switchyard to tackle this high voltage issue.
- Further, NRLDC representative also supported the view of CTUIL representative in this regard.
- MS, NRPC asked CUTIL to take up this matter as agenda for discussion in their next CMT meeting.

Agenda No. 17. Follow up of decisions of 10th NPC meeting (Table Agenda 1)

- NRPC representative apprised the forum that Uttarakhand has confirmed vide mail raise in the AUFLS settings by 0.2 Hz as agreed in in 47th TCC/49th NRPC meetings.
- In the meeting (192nd OCC), states were requested to update vide mail the confirmation regarding implementation of decision of 47th TCC/49th NRPC to increase the AUFLS setting by 0.2Hz.

Agenda No. 18. Issuance of Availability certificate of Fatehgarh Bhadla Transmission Limited (FBTL) (Table Agenda 2)

- NRPC representative presented the matter to the forum.
- MS, NRPC asked POWERGRID to submit the requisite details regarding the switching details of the bifurcated network as desired by NRLDC so that NRLDC can complete the work of outage verification. After the outage verification by NRLDC, the matter may be taken up by NRPC Sectt. for issuance of availability certificate.

Agenda No. 19. Deemed availability of HVDC Vindhyachal Block-2 during proposed outage of Filter banks (B2Z11 & B2Z21) for retro-fitment work under ADD-CAP (Table Agenda 3)

- NLDC representatives were not present in the meeting during discussion of this agenda item, and hence this issue could not be deliberated. It was decided that this agenda will be taken up in the next OCC.

Agenda No. 20. Shifting of 33 kV Earth Electrode Mohindergarh - Kaithal Transmission line of M/s. Adani Transmission Limited (ATL) (Table Agenda 4)

- ATIL representative presented the matter before forum. ATIL vide its letter dated 17.02.2022 (*copy of letter enclosed as Annexure-A.II*) raised following issues:
 - i. Pending charges of Rs. 38 Lakh from NHAI
 - ii. Certification of deemed generation by NRPC
 - iii. Stopping of vehicular traffic for one day by NHAI
- NRLDC representative informed that TTC/ATC of Haryana during this duration would be 8500/7900 MW during this duration and TTC/ATC curtailment would be 1000-1200 MW due to outage of this line.
- Haryana representative stated that its grid import during this duration would be around 4500MW.
- MS, NRPC stated that as there will be no transmission constraint due to the outage of this line from 15.03.2022 for 5 days; hence, deemed availability can be certified by NRPC Sectt.
- On the above cited issues following decisions were taken in the OCC forum:
 - i. Shutdown of HVDC was allowed from 15.03.2022 for 5 days
 - ii. Deemed availability would be certified by NRPC Sectt.
 - iii. NHAI would clear all pending payments of ATIL before availing shutdown
 - iv. NHAI would provide full security to ATIL, with help of local DM so that ATIL can complete diversion of its 33kV electrode line.

Agenda No. 21. Lowering of Dul reservoir level for Permeation Curtain Grouting works at TRT Coffe Dyke as requested by Pakal Dul HEP (Table Agenda 5).

- NHPC representative presented the matter before the forum. He mentioned that Pakal Dul Hydro Electric Project (1000 MW) is under construction on river Marusudar, a tributary of Chenab river, located at Kishtwar district of Union Territory of Jammu & Kashmir. The tail race /outlet of Pakal Dul Project opens in reservoir of Dulhasti Power Station. To carry out construction of outlet structure works, Pakal Dul had requested for lowering the Dul reservoir level to EL +-1239m i.e. upto MDDL of Dulhasti for execution of Permeation Curtain Grouting work at coffer dyke. Accordingly, Dulhasti Power Station has lowered the Dul reservoir level to EL+-1239 m from 07-Feb-2022.
- NHPC representative also stated that maximum generation with present inflow that can be achieved is 80-90 MW at MDDL. In view of less inflow, the annual maintenance of units taking one unit at a time is also scheduled during this period.
- Further, he mentioned that in view of above, two units of Dulhasti Power Station shall be available for generation and against DC of two units, maximum generation achievable by the power station would be 80-90 MW round the clock and 100MW during Peak period. The construction of outlet structure works of Pakal Dul HE Projects is likely to be completed by 1st Week of March'22.
- The above cited information was noted by the OCC forum.

Follow up issues from previous OCC meetings

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 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.	<p>Data upto following months, received from various states / UTs:</p> <table border="1" data-bbox="935 730 1406 987"> <tr><td>⊙ CHANDIGARH</td><td>Sep-2019</td></tr> <tr><td>⊙ DELHI</td><td>Dec-2021</td></tr> <tr><td>⊙ HARYANA</td><td>Aug-2021</td></tr> <tr><td>⊙ HP</td><td>Jan-2022</td></tr> <tr><td>⊙ J&K and LADAKH</td><td>Not Available</td></tr> <tr><td>⊙ PUNJAB</td><td>Aug-2021</td></tr> <tr><td>⊙ RAJASTHAN</td><td>Jan-2022</td></tr> <tr><td>⊙ UP</td><td>Nov-2021</td></tr> <tr><td>⊙ UTTARAKHAND</td><td>Jan-2022</td></tr> </table> <p>All States/UTs are requested to update status on monthly basis.</p>	⊙ CHANDIGARH	Sep-2019	⊙ DELHI	Dec-2021	⊙ HARYANA	Aug-2021	⊙ HP	Jan-2022	⊙ J&K and LADAKH	Not Available	⊙ PUNJAB	Aug-2021	⊙ RAJASTHAN	Jan-2022	⊙ UP	Nov-2021	⊙ UTTARAKHAND	Jan-2022		
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⊙ UTTARAKHAND	Jan-2022																						
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".	<p>Data upto following months, received from various states / UTs:</p> <table border="1" data-bbox="935 1155 1406 1447"> <tr><td>⊙ CHANDIGARH</td><td>Not Available</td></tr> <tr><td>⊙ DELHI</td><td>Dec-2021</td></tr> <tr><td>⊙ HARYANA</td><td>Dec-2021</td></tr> <tr><td>⊙ HP</td><td>Jan-2022</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>Dec-2021</td></tr> <tr><td>⊙ UP</td><td>Dec-2021</td></tr> <tr><td>⊙ UTTARAKHAND</td><td>Dec-2021</td></tr> <tr><td>⊙ BBMB</td><td>Dec-2021</td></tr> </table> <p>All States/UTs are requested to update status on monthly basis.</p>	⊙ CHANDIGARH	Not Available	⊙ DELHI	Dec-2021	⊙ HARYANA	Dec-2021	⊙ HP	Jan-2022	⊙ J&K and LADAKH	Not Available	⊙ PUNJAB	Mar-2021	⊙ RAJASTHAN	Dec-2021	⊙ UP	Dec-2021	⊙ UTTARAKHAND	Dec-2021	⊙ BBMB	Dec-2021
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⊙ BBMB	Dec-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.	<p>Status of the information submission (month) from states / utilities is as under:</p> <table border="1" data-bbox="935 1626 1406 1771"> <tr><td>⊙ HARYANA</td><td>Feb-2021</td></tr> <tr><td>⊙ PUNJAB</td><td>Nov-2021</td></tr> <tr><td>⊙ RAJASTHAN</td><td>Dec-2021</td></tr> <tr><td>⊙ UP</td><td>Nov-2021</td></tr> <tr><td>⊙ NTPC</td><td>Sep-2021</td></tr> </table> <p>FGD status details are enclosed as Annexure-A. I. II. All States/utilities are requested to update status of FGD installation progress on monthly basis.</p>	⊙ HARYANA	Feb-2021	⊙ PUNJAB	Nov-2021	⊙ RAJASTHAN	Dec-2021	⊙ UP	Nov-2021	⊙ NTPC	Sep-2021										
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⊙ UP	Nov-2021																						
⊙ NTPC	Sep-2021																						
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	Tender has been invited in first week of Jan'22.
xi	RAJASTHAN	Akal	1x25 MVAR	LOA placed on dt. 4.1.2021. Agreement signed on dt. 8.02.2021. Case for 2nd installment forwarded to NLDC, POSOCO on dt. 29.04.2021. Targeted to be completed by March 2022.
xii	RAJASTHAN	Bikaner	1x25 MVAR	LOA placed on dt. 4.1.2021. Agreement signed on dt. 8.02.2021. Case for 2nd installment forwarded to NLDC, POSOCO on dt. 29.04.2021. Targeted to be completed by March' 2022.

xiii	RAJASTHAN	Suratgarh	1x25 MVar	LOA placed on dt. 4.1.2021. Agreement signed on dt. 8.02.2021. Case for 2nd installment forwarded to NLDC, POSOCO on dt. 29.04.2021. Targeted to be completed by March 2022.
xiv	RAJASTHAN	Barmer & others	13x25 MVar	Agreement signed on dt. 22.06.2020. Grant of Ist Installment received on dt.19.02.21. Technical bid opened on dt.22.10.2021 & Price bid opened on 10.01.22. Order likely to be placed in Feb' 2022.
xv	RAJASTHAN	Jodhpur	1x125 MVar	Agreement signed on dt. 22.06.2020. Grant of Ist Installment received on dt.19.02.21. Technical bid opened on dt.22.10.2021 & Price bid opened on 10.01.22. Order likely to be placed in Feb' 2022.

Annexure-A-I.I						
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: 3 Unutilized: 3 (2 bays to be utilized shortly) Approved/Under Implementation:1	• 220 kV D/C Shahjahanpur (PG) - Gola line	-	UPPTCL to update the status.
				• LILO of Sitapur – Shahjahanpur 220 kV SC line at Shahjahanpur (PG) – under commissioning	21.02.2022	Updated in 192nd OCC by UPPTCL
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)	Mar'22	Forest Clearance issue has been resolved as Updated in 192nd OCC by RRVPNL
				• Network to be planned for 2 bays.	-	RRVPNL to update the status.
9	Bhiwani 400/220kV S/s	Commissioned: 6 Total: 6	Utilized: 0 Unutilized: 6	• 220 kV D/C line Bhiwani (PG) – Bhiwani (HVPNL) line	-	Issue related to ROW as intimated in 192nd OCC.HVPNL to update the status.
				• 220 kV Bhiwani (PG) - Isherwal (HVPNL) D/c line.	-	Issue related to ROW as intimated in 192nd OCC.HVPNL to update the status.
				• 220 kV Bhiwani (PG) - Dadhibana (HVPNL) D/c line.	-	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	-	HVPNL to update the status.
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 Sub-station	Commissioned: 8 Total: 8	Utilized: 0 Unutilized: 8	• 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.	-	HVPNL to update the status.
				• 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	-	HVPNL to update the status.

Sl. No.	Substation	Downstream network bays	Status of bays	Planned 220 kV system and Implementation status	Revised Target	Remarks
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	-	HVPNL to update the status.
		Total: 8	Unutilized: 8	• LILO of both circuits of 220kV D/c Badshahpur-Sec77 line at 400kV Sohna Road	-	HVPNL to update the status.
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 Sonapat Sub-station	Commissioned: 6	Utilized: 2	• LILO of both circuits of 220kV Samalkha - Mohana line at Sonapat		HVPNL to update the status.
		Under Implementation:2	Unutilized: 2	• Sonapat - HSIISC Rai 220kV D/c line	Jul'22	Updated in 192nd OCC
17	400/220kV Neemrana Sub-station	Commissioned: 6	Utilized: 4	• 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	Utilized: 4	• Kotputli - Pathreda 220kV D/c line	-	RVPNL to update the status.
19	400/220kV Jalandhar Sub-station	Commissioned: 10	Utilized: 8	• Network to be planned for 2 bays	-	PSTCL to update the status.
20	400/220kV Roorkee Sub-station	Commissioned: 6	Utilized: 4	• Roorkee (PG)-Pirankaliyar 220kV D/c line	-	PTCUL to update the status.
21	400/220kV Lucknow Sub-station	Commissioned: 8	Utilized: 4	• Network to be planned for 4 bays	-	UPPTCL to update the status.
22	400/220kV Gorakhpur Sub-station	Commissioned: 6	Utilized: 4	• Network to be planned for 2 bays	-	UPPTCL to update the status.
23	400/220kV Fatehpur Sub-station	Commissioned: 8	Utilized: 6	• Network to be planned for 4 bays	-	UPPTCL to update the status.
24	400/220kV Abdullapur Sub-station	Commissioned: 10	Utilized: 10	• Abdullapur – Rajokheri 220kV D/c line	Mar'22	Updated in 192nd OCC by HVPNL
25	400/220kV Pachkula Sub-station	Commissioned: 8	Utilized: 6	• Panchkula – Pinjore 220kV D/c line	-	HVPNL to update the status.
		Under tender:2	Unutilized: 2	• Panchkula – Sector-32 220kV D/c line	-	HVPNL to update the status.
		Total: 10	Under Implementation:2	• Panchkula – Raiwali 220kV D/c line	-	HVPNL to update the status.
		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	• Panchkula – Sadhaura 220kV D/c line: Sep'23	-	HVPNL to update the status.
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.	Unutilized: 1	• 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	Utilized:6	• Bagpat - Modipuram 220kV D/c line	-	UPPTCL to update the status.
28	400/220kV Bahardurgarh S/s	Commissioned: 4	Utilized:2	• Network to be planned for 2 bays.		HVPNL to update the status.

Sl. No.	Substation	Downstream network bays	Status of bays	Planned 220 kV system and Implementation status	Revised Target	Remarks
29	400/220kV Jaipur (South) S/s	Commissioned: 4 Total: 4	Utilized:6 Unutilized: 2	• Network to be planned for 2 bays.	-	RVPNL to update the status.
30	400/220kV Sohawal S/s	Commissioned: 8 Total: 8	Utilized: 2 Unutilized: 6	• Sohawal - Barabanki 220kV D/c line	-	UPPTCL to update the status.
				• Sohawal - New Tanda 220kV D/c line	-	UPPTCL to update the status.
				• Network to be planned for 2 bays	-	UPPTCL to update the status.
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	-	UPPTCL to update the status
34	400/220kV, Wagoor	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	-	UPPTCL to update the status
38	400/220kV, Patiala	Commissioned: 8 Total: 8	Utilized: 6 Unutilized: 2	• Network to be planned for 2 bays	-	PSTCL to update the status

2. Establishment of new 400/220kV substations in Northern Region:

Sl. No.	Name of Substation	MVA Capacity	Expected Schedule	Downstream connectivity by States
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"> • 220kV Almora-Jauljibi line • 220kV Brammah-Jauljibi line PTCUL to update the status of lines.

FGD Status

Updated status of FGD related data submission

NTPC (30.09.2021)

MEJA Stage-I
RIHAND STPS
SINGRAULI STPS
TANDA Stage-I
TANDA Stage-II
UNCHAHAR TPS

UPRVUNL (15.02.2022)

ANPARA TPS
HARDUAGANJ TPS
OBRA TPS
PARICHHA TPS

PSPCL (20.12.2021)

GGSTP, Ropar
GH TPS (LEH.MOH.)

RRVUNL (09.02.2022)

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

Updated status of FGD related data submission

Lalitpur Power Gen. Co. Ltd.
(15.02.2022)

Lalitpur TPS

Lanco Anpara Power Ltd.
(15.02.2022)

ANPARA-C TPS

HGPCL (17.12.2021)

PANIPAT TPS

RAJIV GANDHI TPS

YAMUNA NAGAR TPS

Adani Power Ltd. (28.10.2021)

KAWAI TPS

Rosa Power Supply Company
(15.02.2022)

Rosa TPP Phase-I

Prayagraj Power Generation
Company Ltd. (15.02.2022)

Prayagraj TPP

APCPL (30.09.2021)

INDIRA GANDHI STPP

Pending submissions

GVK Power Ltd.

GOINDWAL SAHIB

NTPC

DADRI (NCTPP)

Talwandi Sabo Power Ltd.

TALWANDI SABO TPP

L&T Power Development Ltd.

Nabha TPP (Rajpura TPP)

Target Dates for FGD Commissioning (Utility-wise)

Adani Power Ltd.	KAWAI TPS U#1 (Target: 31-08-2020), 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)
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)

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: 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: 31-03-2023), SINGRAULI STPS U#2 (Target: 31-03-2023), SINGRAULI STPS U#3 (Target: 31-03-2023), SINGRAULI STPS U#4 (Target: 31-03-2023), SINGRAULI STPS U#5 (Target: 31-03-2023), SINGRAULI STPS U#6 (Target: 31-01-2023), SINGRAULI STPS U#7 (Target: 31-01-2023), UNCHAHAHAR TPS U#1 (Target: 30-09-2023), UNCHAHAHAR TPS U#2 (Target: 30-09-2023), UNCHAHAHAR TPS U#3 (Target: 31-12-2023), UNCHAHAHAR TPS U#4 (Target: 31-12-2023), UNCHAHAHAR TPS U#5 (Target: 31-12-2023), UNCHAHAHAR TPS U#6 (Target: 30-09-2022), MEJA Stage-I U#1 (Target: 31-12-2022), MEJA Stage-I U#2 (Target: 31-12-2022), 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)
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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)
Lalitpur Power Gen. Company Ltd.	LALITPUR TPS U#1 (Target: 31-12-2024), LALITPUR TPS U#2 (Target: 30-09-2024), LALITPUR TPS U#3 (Target: 30-06-2024)
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: 31-10-2024), PRAYAGRAJ TPP U#2 (Target: 31-10-2024), 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: 31-12-2024), ROSA TPP Ph-I U#4 (Target: 31-12-2024)
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)
UPRVUNL	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)

Ref: - ATIL/HVDC/M-K/21-22/30

Date: 17.02.2022

Shri Ghanshyam Prasad
Joint Secretary (Transmission),
Ministry of Power,
Shram Shakti Bhawan,
New Delhi-110001

Subject: 4 laning of Ambala-Kaithal section of NH-65 from km 50.860 (Pehowa) to km 95.360(Kaithal) in the state of Haryana under NHDP Phase-III on EPC basis PKG-2. Reg.-Shifting of 33KV Earth Electrode Mahindragarh to Kaithal Transmission Line (T No 463-464) in construction of four laning of NH65 Ambala Kaithal Section.

Ref:

1. NHA I DO No. NHA I/EPC/A-K/PKG-2/11012/2014/HR dated 11.02.2022
2. Our letter ATIL/HVDC/M-K/21-22/20 dated 18.08.2021
3. Our letter ATIL/HVDC/M-K/21-22/20 dated 21.07.2021
4. Our letter ATIL/HVDC/M-K/21-22/07 dated 14.06.2021.
5. Our letter ATIL/HVDC/M-K/21-22/04 dated 23.04.2021
6. Our letter ATIL/HVDC/M-K/20-21/680 dated 20.02.2021.
7. NHA I letter 22054/NHA I/AMB/4364 dated 16.02.2021.
8. Our Letter ATIL ATIL/HVDC/M-K/20-21/66 dated 08.02.2021.
9. Our letter no. ATIL/HVDC/M-K/41 dated 31.07.2020
10. Our letter no. ATIL/EL/HVDC/20-21/47 dated 13.07.2020
11. Our letter no. ATIL/EL/HVDC/40 dated 01.02.2020
12. Our letter no. ATIL/HVDC/M-K/23 dated 26.11.2019
13. Our letter no. ATIL/EL/HVDC/31 dated 20.11.2019
14. Our letter no. ATIL/EL/HVDC/27 dated 14.11.2019
15. Our letter no. ATIL/EL/HVDC/02 dated 14.12.2018
16. NHA I letter no. 22054/NHA I/AMB/2285 dated 01.09.2018

Dear Sir,

With reference to the NHA I letter referred above at 1 in regard to 33 kV earth electrode Mohindergarh-Kaithal line, we would like to apprise you that the pendency of work is due to the reasons attributable to NHA I, Ambala. The brief of project status and its pending issues are as under:

1. Vide letter referred above at 16, NHA I Ambala requested for the shifting of 33kV earth electrode Mohindergarh to Kaithal Transmission Line towers to accommodate

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the four laning of Ambala-Kaithal Section of NH-65 in the state of Haryana and requested to submit the estimate for the said works. Accordingly, vide letter dated 14.12.2018 (ref 15), Adani Transmission (India) Ltd (ATIL) had submitted an estimate of about Rs 2.36 Crore for the said works against which NHAI, Ambala has deposited amount Rs. 2.13 Crore till date. ATIL has been intimating NHAI Ambala regarding the pendency of the balance amount of Rs 22.62 Lakhs (Rs 19.17 Lakhs+ GST @18%) repeatedly (ref 8 to 13). However, we have not received any response from NHAI, Ambala in this regard.

2. We wish to clarify that we have not made any additional demand @5% towards supervision charges . Our estimate of Rs 2.36 crore included Supervision charges @15% in line with the CEA circular File No. CEA-PS-11-24(16)/1/2018-PSPA-I Division. However, NHAI Ambala has considered supervision charges @4% while making the payment of Rs 2.13 Crore, thereby, withholding the balance amount (11%) of Rs 22.62 Lakhs (including GST) towards supervision charges. Further, the shut down charges of Rs 6.39 Crore referred in the DO letter is a claim towards tentative transmission loss amount in lieu of the transmission availability loss due to outage work. The claim towards loss of availability of transmission system is legitimate which may be waived off, if, NRPC grants deemed availability of the transmission system for the period of shut down.
3. Further, it may be noted that issues relating to ROW on the earlier approved route could not be resolved by NHAI (ROW resolution is in the scope of NHAI). Consequently, NHAI directed ATIL to assess feasibility of realignment of the route by permitting for installation of tower in NHAI land vide letter no. 22054/NHAI/AMB/2776 dated 27.10.2020. Vide letter no 22054/NHAI/AMB/3460 dated 14.12.2020, NHAI sought detailed estimate of the additional quantity which will be required for the new route. Accordingly, ATIL carried out the survey and the estimate of about Rs 15.47 Lakhs towards additional procurement and services required for the revised approved route was submitted to NHAI vide letter no. ATIL/HVDC/M-K/20-21/66 dated 08.02.2021. ATIL is still awaiting the payment of such additional material and services from NHAI Ambala despite several reminders.
4. Please note that outage shall be planned only after completion of non-outage work. The clarity regarding payment of Transmission charges or grant of deemed availability is to be arranged by NHAI before taking outage of the line from NRPC/NRLDC. The same is also awaited from NHAI, Ambala. Similar matter related to deemed availability was resolved by NHAI, Bhiwani with NRPC and accordingly the work was taken up.

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5. Further, tower no 454 and 464 fall near to the Highway. In this regard, ATIL has sought protection measure from vehicular movement thrust from NHAI. However, the same has not been provided by NHAI despite repeated reminders since 20-11-2019.

Moreover, while the transmission line diversion work is still incomplete, NHAI has allowed vehicular movement on the Highway. ATIL has brought to the notice of NHAI Ambala that the shifting of tower line is very much essential as movement on highway is not safe for the highway commuters as well as for our transmission line asset. In this regard, it may be noted that the vehicular movement needs to be allowed only if the code of practice for design, installation, and maintenance of overhead power lines for transmission line crossing national highways as mentioned in IS 5613 (Part 3/Sec 2): 1989 is followed. Due to non-completion of diversion work, the following conditions prescribed in IS 5613 (Part 3/Sec 2): 1989 are not satisfied on the ground:

1. The ground clearance of the conductor from the road surface shall not be less than 8.84 meters.
2. At all National highways tension towers shall be used.
3. The crossing span shall not exceed 250 meters in any case.

It is submitted that ATIL is keen to complete the work on top priority. ATIL has completed all the civil foundation work in the project and site is ready for the erection & stringing work. However, due to non-resolution of above issues by NHAI Ambala, we are unable to proceed further. ATIL shall not be responsible for any non-compliance and/or any mishap on ground due to non-completion of work as all pending actions are attributable to NHAI.

In view of the above, it is requested that NHAI may be directed to resolve the issues pending at their end for early completion of the work. Pendency of the above work may lead to additional cost implication in future.

Thanking You

For Adani Transmission (I) Ltd,



Authorized Signatory

Sameer Ganju

sameer.ganju@adani.com

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