



सत्यमेव जयते

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

संख्या: NRPC/OPR/106/01/2020/8931-72

दिनांक: 17.09.2020

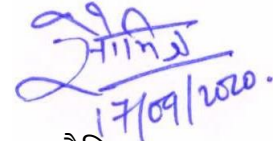
विषय: उत्तर क्षेत्रीय विद्युत समिति की प्रचालन समन्वय उप-समिति की 175^{वीं} बैठक की खण्ड-अ में लिए गए निर्णयों का सार |

Subject: Gist of decisions taken in the Part-A of 175th OCC meeting of NRPC.

उत्तर क्षेत्रीय विद्युत समिति की प्रचालन समन्वय उप-समिति की 175^{वीं} बैठक दिनांक 14.09.2020 एवं 15.09.2020 को आयोजित की गयी। उक्त बैठक की खण्ड-अ में लिए गए निर्णयों का सार **अनुलग्नक-1** में संलग्न है।

175th meeting of the Operation Co-ordination Sub-Committee of NRPC was held on 14.09.2020 and 15.09.2020. The Gist of the decisions taken in Part-A of this meeting are enclosed in **Annexure-I**.

संलग्नक: यथोपरि


17/09/2020.

(सौमित्र मजूमदार)
अधीक्षण अभियंता (प्रचालन)

सेवा में,
प्रचालन समन्वय उप-समिति के सभी सदस्य

Gist of decisions taken in the Part-A of 175th OCC Meeting dt. 14th & 15th Sep 2020

Agenda No. 2.1: Supply Position (Provisional) for August 2020

- **Haryana**

Actual Peak Requirement and availability in MW and MU decreased due to good monsoon observed during the period.

- **Rajasthan**

The Peak Demand increased w.r.t. Peak Demand due to less rains in the state.

- **Delhi**

Negative growth in demand was because of frequent rain and thunderstorm in August month in Delhi and adjoining areas.

Agenda No. 4.1: Anticipated Power Supply Position in Northern Region for October 2020

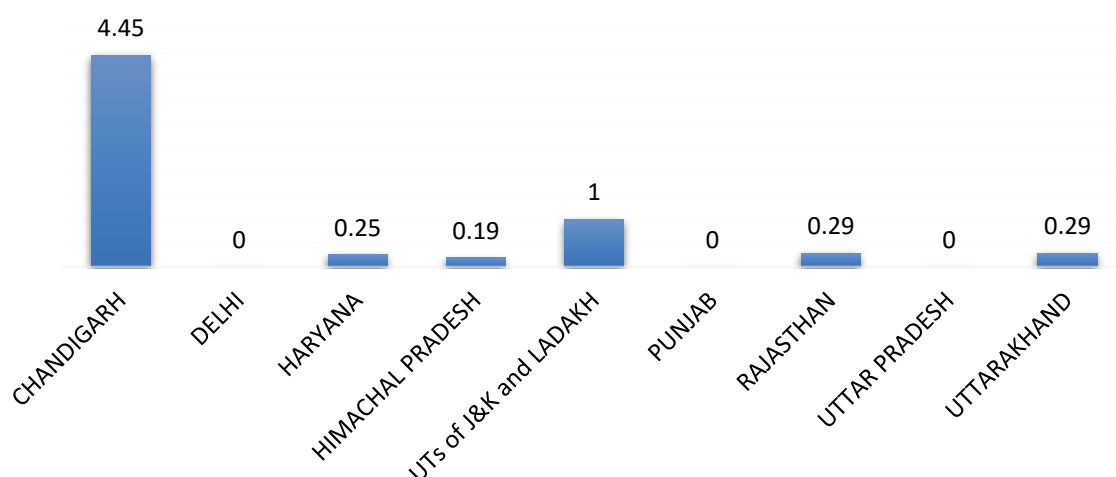
The updated anticipated Power Supply Position for October 2020 is as below:

| State / UT | Availability / Requirement | Revised Energy (MU) | Revised Peak (MW) | Date of revision |
|------------------|----------------------------|---------------------|-------------------|-----------------------|
| CHANDIGARH | Availability | 120 | 350 | No revision submitted |
| | Requirement | 110 | 220 | |
| | Surplus / Shortfall | 10 | 130 | |
| | % Surplus / Shortfall | 9.1% | 59.1% | |
| DELHI | Availability | 3688 | 5094 | 14-Sep-20 |
| | Requirement | 2500 | 4600 | |
| | Surplus / Shortfall | 1188 | 494 | |
| | % Surplus / Shortfall | 47.5% | 10.7% | |
| HARYANA | Availability | 5490 | 10010 | 11-Sep-20 |
| | Requirement | 4300 | 8000 | |
| | Surplus / Shortfall | 1190 | 2010 | |
| | % Surplus / Shortfall | 27.7% | 25.1% | |
| HIMACHAL PRADESH | Availability | 852 | 1483 | 8-Sep-20 |
| | Requirement | 845 | 1475 | |
| | Surplus / Shortfall | 7 | 8 | |
| | % Surplus / Shortfall | 0.8% | 0.5% | |
| J&K and LADAKH | Availability | 1140 | 2770 | No revision submitted |
| | Requirement | 1560 | 3180 | |
| | Surplus / Shortfall | -420 | -410 | |
| | % Surplus / Shortfall | -26.9% | -12.9% | |
| PUNJAB | Availability | 5780 | 11010 | 14-Sep-20 |

| State / UT | Availability / Requirement | Revised Energy (MU) | Revised Peak (MW) | Date of revision |
|-----------------|----------------------------|---------------------|-------------------|------------------|
| | Requirement | 4500 | 7900 | |
| | Surplus / Shortfall | 1280 | 3110 | |
| | % Surplus / Shortfall | 28.4% | 39.4% | |
| RAJASTHAN | Availability | 7550 | 16030 | 14-Sep-20 |
| | Requirement | 7533 | 10560 | |
| | Surplus / Shortfall | 17 | 5470 | |
| | % Surplus / Shortfall | 0.2% | 51.8% | |
| UTTAR PRADESH | Availability | 11470 | 19800 | 11-Sep-20 |
| | Requirement | 11315 | 19800 | |
| | Surplus / Shortfall | 155 | 0 | |
| | % Surplus / Shortfall | 1.4% | 0.0% | |
| UTTARAKHAND | Availability | 1001 | 1720 | 8-Sep-20 |
| | Requirement | 1008 | 1750 | |
| | Surplus / Shortfall | -6 | -30 | |
| | % Surplus / Shortfall | -0.6% | -1.7% | |
| NORTHERN REGION | Availability | 35933 | 65200 | |
| | Requirement | 33178 | 53100 | |
| | Surplus / Shortfall | 2756 | 12100 | |
| | % Surplus / Shortfall | 8.3% | 22.8% | |

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 15.08.2020 and 14.09.2020. The average delay is given below:



All SLDCs were requested to timely fill 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 | Apr-2020 |
| Haryana | Apr-2018 | Mar-2020 |
| Himachal Pradesh | Apr-2018 | Jul-2020 |
| Punjab | Apr-2018 | Jul-2020 |
| Rajasthan | Apr-2018 | Jul-2020 |
| Uttar Pradesh | Apr-2018 | Mar-2020 |

Uttarakhand, UTs of J&K, Ladakh and Chandigarh were again requested to positively submit the requisite data w.e.f. April 2018 as per the billed data information in the format specified in previous OCC meetings.

Agenda No. 7: Automatic Demand Management System

SE (O), NRPC briefed the members about the status of implementation of ADMS in various states of NR. Regarding the letter received from HPSLDC asking NRPC Secretariat about the “*criteria i.e. over-drawl and frequency for activation of ADMS particularly for HP state*”, SE(O), NRPC highlighted the provisions of regulation 5.4.2(b), 5.4.2(i) and 5.2(m) of the extant IEGC regulations and mentioned that concerned SLDCs are required to actively coordinate with DISCOMs / SEBs to compute the quantum of load relief for avoiding over-drawal during the frequency going below the IEGC band and accordingly get ADMS implemented.

MS, NRPC expressed concern regarding the stagnant situation of implementation of ADMS particularly at DISCOM level in NR. In view of the above, it was decided that a separate meeting would be held with representatives from SLDC, STU and concerned DISCOMs to understand the issues leading to such delay. It was decided that all SLDCs would intimate within one week the contact details of the officials of STU, DISCOM / SEB, who would be invited for the meeting. Thereafter, if required the issue would be taken up with CERC.

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

Updated status attached at **Annexure-A.I.**

Agenda No. 9: Certification of availability of Transmission Licensees governed under Section 63 of CERC Tariff regulations 2019-24

MS, NRPC highlighted the relevant provisions of various CERC regulations (Terms & Conditions of tariff regulations and IEGC) for availability certification of transmission elements, orders of Central Commission pertaining to approval of tariff for transmission projects under Section 63 and the Standard TSA for TBCB projects. He expressed that while NRPC Secretariat has been certifying the availability of Transmission elements whose tariff were determined under TBCB and adopted by

CERC; however, the agency for availability certification of such projects and the computational procedure needs to be strictly in line with the regulations.

As the Transmission licensees of the projects covered under Section 63 of CERC Tariff Regulations were not adequately present in the forum, the OCC decided that the issue may be comprehensively studied and deliberated again in the next OCC meeting. Meanwhile, it was decided that transmission licensees whose assets are part of section 63 projects shall submit the copies of TSA and relevant CERC order(s) within this week to NRPC Sectt. Also, those transmission licensees who don't have any asset in section 63 projects and all assets pertain to section 62 projects shall submit confirmation with assets details. Thereafter, availability computation may be taken up as per the applicable regulations.

Agenda No. 10: Issues related to scheduling of NTPC Dadri by UPPCL (agenda by NTPC)

NTPC representative highlighted the issues being faced by NTPC Dadri in terms of scheduling by UPPCL wherein after giving the schedule NTPC brought the units on bar, but was asked to shut down all 5 units in a span of 2 hours due to demand crash.

UPPCL representative stated that all the scheduling was done as per the ramp rate submitted by NTPC for Dadri. Further, it was also informed that on the request of NTPC and considering that the units were placed under RSD, adequate time of 1 day was given for bringing the units on bar.

OCC forum was of the view that if any generator is facing issues in order to bring its machine on bar and requires more time given some additional precautions imposed due to COVID-19, the same shall be clearly brought out in the AS-3 format. All the generators may be allowed to revise their AS-3 form and beneficiary shall stick to the same while scheduling. It was also brought out that AS-3 form may indicate complete time including activities involved before light up till synchronisation so that beneficiaries and grid operator are aware in advance about the total time required for bringing machine on bar in cold start. Generator may also inform time interval required between simultaneous synchronisation of two machine. If the generator is not able to stick to the time mentioned in AS-3 form, the same would be treated as outage.

Agenda No. 11: Requirement of Schedule for PG Test of 660 MW Tanda U#5 (St-2 U#1) & main boiler PG Test (agenda by NTPC)

OCC forum decided that all beneficiaries shall endeavour to provide schedule as required by NTPC for the mandatory PG Test of 660 MW Tanda U#5 (St-2 U#1). However, it was also mentioned during the discussion that PG test should have been completed before CoD and thus, if any commercial issue arises due to scheduling of power for 'Testing', by beneficiaries, then the same shall be resolved bilaterally by NTPC and the concerned beneficiary.

Agenda No. 12: Agenda cum Report on failure of 400/220/33kV 150 MVA, TELK make Transformer T-5 (Y-phase of ICT-2 bank) at BBMB Panipat (agenda by POWERGRID)

On the request of POWERGRID to condone the outage of ICT, it was informed that any decision on the same could only be taken after ascertaining the reason of fault and fixing its accountability.

As the ICT is located in the premises of BBMB Panipat, BBMB shall submit in writing the cause of fault initiation. Only after the receipt of proper facts, any decision in regard to condoning the outage of ICT could be considered.

Agenda No. 13: Issues related to Koldam-Nalagarh PLCC carrier signal & battery power backup issue in SEM (agenda by NTPC)

POWERGRID representative informed that both the channels of Koldam - Nalagarh PLCC is healthy. However, in order to contain any future issue, one channel is to be replaced with Digital tele-protection Coupler (DTPC)

Regarding the battery power backup in SEM meters of lines (Banala, Nalagarh, Ludhiana - 1 & 2), POWERGRID stated that OEM would be reached out and if possible the battery shall be got replaced. In case it is not possible to replace the battery, SEM meters will be replaced to resolve the problem.

Table Agenda-I: PPGCL concern on scheduling by UP-SLDC (Table agenda by PPGCL)

PPGCL representative stated that their 3X660MW supercritical units at Bara are facing problems due to number of revisions in schedule generation within short span of time from UPSLDC. Though revisions are inevitable for maintaining grid stability and managing state demand in real time operation.

He further informed that change in their schedule gets effective from very next block counted from which the information passed and many time information is received < 5Min.

UP representative informed that in a meeting held with all the intra generators of the state it has been decided that the schedule change could be made applicable from the next time block and it has been acceptable to PPGCL also.

On the basis of deliberation, OCC forum advised that UPSLDC shall stick to the approved and notified 'Grid Code' while scheduling the generators. Further, frequent revisions, to the extent possible, may be avoided by UPSLDC; and PPGCL shall stick to its declared ramp up/ramp down rate whenever schedule is altered by UPSLDC during intraday operation.

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. | <p>Data upto following months, received from various states / UTs:</p> <table border="1" data-bbox="963 813 1431 1227"> <tr><td>⊙</td><td>CHANDIGARH</td><td>Sep-2019</td></tr> <tr><td>⊙</td><td>DELHI</td><td>Sep-2019</td></tr> <tr><td>⊙</td><td>HARYANA</td><td>Jul-2020</td></tr> <tr><td>⊙</td><td>HP</td><td>Jul-2020</td></tr> <tr><td>⊙</td><td>J&K and LADAKH</td><td>Not Available</td></tr> <tr><td>⊙</td><td>PUNJAB</td><td>Not Available</td></tr> <tr><td>⊙</td><td>RAJASTHAN</td><td>Jul-2020</td></tr> <tr><td>⊙</td><td>UP</td><td>Aug-2020</td></tr> <tr><td>⊙</td><td>UTTARAKHAND</td><td>Aug-2020</td></tr> </table> <p>All States/UTs are requested to furnish updated status on monthly basis.</p> | ⊙ | CHANDIGARH | Sep-2019 | ⊙ | DELHI | Sep-2019 | ⊙ | HARYANA | Jul-2020 | ⊙ | HP | Jul-2020 | ⊙ | J&K and LADAKH | Not Available | ⊙ | PUNJAB | Not Available | ⊙ | RAJASTHAN | Jul-2020 | ⊙ | UP | Aug-2020 | ⊙ | UTTARAKHAND | Aug-2020 | | | |
| ⊙ | CHANDIGARH | Sep-2019 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ⊙ | DELHI | Sep-2019 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ⊙ | HARYANA | Jul-2020 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ⊙ | HP | Jul-2020 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ⊙ | J&K and LADAKH | Not Available | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ⊙ | PUNJAB | Not Available | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ⊙ | RAJASTHAN | Jul-2020 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ⊙ | UP | Aug-2020 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ⊙ | UTTARAKHAND | Aug-2020 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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="963 1525 1431 1977"> <tr><td>⊙</td><td>CHANDIGARH</td><td>Not Available</td></tr> <tr><td>⊙</td><td>DELHI</td><td>Jun-2020</td></tr> <tr><td>⊙</td><td>HARYANA</td><td>Dec-2019</td></tr> <tr><td>⊙</td><td>HP</td><td>Jul-2020</td></tr> <tr><td>⊙</td><td>J&K and LADAKH</td><td>Not Available</td></tr> <tr><td>⊙</td><td>PUNJAB</td><td>Dec-2019</td></tr> <tr><td>⊙</td><td>RAJASTHAN</td><td>Jun-2020</td></tr> <tr><td>⊙</td><td>UP</td><td>Jun-2019</td></tr> <tr><td>⊙</td><td>UTTARAKHAND</td><td>Jun-2020</td></tr> <tr><td>⊙</td><td>BBMB</td><td>Jun-2020</td></tr> </table> | ⊙ | CHANDIGARH | Not Available | ⊙ | DELHI | Jun-2020 | ⊙ | HARYANA | Dec-2019 | ⊙ | HP | Jul-2020 | ⊙ | J&K and LADAKH | Not Available | ⊙ | PUNJAB | Dec-2019 | ⊙ | RAJASTHAN | Jun-2020 | ⊙ | UP | Jun-2019 | ⊙ | UTTARAKHAND | Jun-2020 | ⊙ | BBMB | Jun-2020 |
| ⊙ | CHANDIGARH | Not Available | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ⊙ | DELHI | Jun-2020 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ⊙ | HARYANA | Dec-2019 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ⊙ | HP | Jul-2020 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ⊙ | J&K and LADAKH | Not Available | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ⊙ | PUNJAB | Dec-2019 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ⊙ | RAJASTHAN | Jun-2020 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ⊙ | UP | Jun-2019 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ⊙ | UTTARAKHAND | Jun-2020 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ⊙ | BBMB | Jun-2020 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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|-----|--|---|---|---|---------------|
| | | | | All States/UTs are requested to furnish updated status on monthly basis. | |
| 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: | | |
| | | | ☉ | HARYANA | Not Available |
| | | | ☉ | PUNJAB | Aug-2020 |
| | | | ☉ | RAJASTHAN | Jul-2020 |
| | | | ☉ | UP | Aug-2020 |
| | | | ☉ | NTPC | Aug-2020 |
| | | | All States/utilities are requested to furnish updated status of FGD installation progress on monthly basis. | | |
| 5 | Reactive compensation at 220 kV/ 400 kV level at 15 substations | | | | |
| | State / Utility | Substation | Reactor | Status | |
| i | POWERGRID | Kurukshetra | 500 MVAR TCR | Anticipated commissioning: Jan-Mar'2021 | |
| ii | DTL | Peeragarhi | 1x50 MVAR at 220 kV | Purchase Order will be awarded after the issuance of minutes of DTL Board of Directors. | |
| iii | DTL | Harsh Vihar | 2x50 MVAR at 220 kV | Purchase Order will be awarded after the issuance of minutes of DTL Board of Directors. | |
| iv | DTL | Mundka | 1x125 MVAR at 400 kV & 1x25 MVAR at 220 kV | Only one bid received on 31.08.2020. Date of opening is extended and is due to be opened on 21.09.2020. | |
| v | DTL | Bamnauli | 2x25 MVAR at 220 kV | Only one bid received on 31.08.2020. Date of opening is extended and is due to be opened on 21.09.2020. | |
| vi | DTL | Indraprastha | 2x25 MVAR at 220 kV | Only one bid received on 31.08.2020. Date of opening is extended and is due to be opened on 21.09.2020. | |
| vii | DTL | Electric Lane | 1x50 MVAR at 220 kV | Only one bid received on 31.08.2020. Date of opening is extended and is due to be opened on 21.09.2020. | |

| | | | | |
|------|-----------|-----------|--|--|
| viii | PUNJAB | Dhuri | 1x125 MVAR at 400 kV & 1x25 MVAR at 220 kV | Bids opening date extended due to less participation. In 169th OCC, bids opening date mentioned as 26.03.2020. |
| ix | PUNJAB | Nakodar | 1x25 MVAR at 220 kV | Bids opening date extended due to less participation. In 169th OCC, bids opening date mentioned as 26.03.2020. |
| x | PTCUL | Kashipur | 1x125 MVAR at 400 kV | Already submitted to PSDF. On hold due to policy decision |
| xi | RAJASTHAN | Akal | 1x25 MVAR | Technical Bid opened on 29.07.2020 |
| xii | RAJASTHAN | Bikaner | 1x25 MVAR | Technical Bid opened on 29.07.2020 |
| xiii | RAJASTHAN | Suratgarh | 1x25 MVAR | Technical Bid opened on 29.07.2020 |
| xiv | RAJASTHAN | Barmer | 1x25 MVAR | Agreement signed on 22.06.2020 between Govt. of Rajasthan, POSOCO and RVPN |
| xv | RAJASTHAN | Jodhpur | 1x125 MVAR | Agreement signed on 22.06.2020 between Govt. of Rajasthan, POSOCO and RVPN |

ANNEXURE-A.I.I

| Sl. No. | Substation | Downstream network bays | Commissioning status of ICTs / Bays | Planned 220 kV system | Revised Target | Remarks |
|---------|--|--|--|--|----------------|---|
| 1 | 400/220kV, 3x315 MVA Samba | 2 nos. bays utilized under ISTS. Balance 4 nos. to be utilized | <u>Commissioning of ICT</u> 1st & 2nd - Mar'13 3rd - Oct'16 | LILO of 220 kV Bishnha – Hiranagar D/c line. Original schedule - Nov'2019 | Not Available | Information not submitted |
| | | | <u>Commissioning of Bays</u> Mar'13 | 220 kV D/c Samba (PG) – Samba (JKPDD) approved in 1st NRSCT. | Not Available | Information not submitted |
| 2 | 400/220kV, 2x315 MVA New Wanpoh | 6 Nos. of 220 kV bays to be utilized | <u>Commissioning of ICT</u> Jul'14 | 220 kV New Wanpoh - Mirbazar D/c line | Not Available | Information not submitted |
| | | | <u>Commissioning of Bays</u> Jul'14 | 220 kV Alusteng - New Wanpoh Line | Not Available | Information not submitted |
| 3 | 400/220kV, 2x500 MVA Kurukshetra (GIS) | 4 nos. of 220 kV bays to be utilized | <u>Commissioning of ICT</u> | LILO of one circuit of Kaul-Pehowa 220 kV D/c line at Bhadson (Kurukshetra) - commissioned on 07/03/2019 | Not Available | 220 kV D/c Bhadson (Kurukshetra)- Salempur with HTLS conductor: 1 ckt commissioned on 20.07.2020. 2nd circuit commissioned on 15.08.2020. All bays have been utilised. |
| | | | <u>Commissioning of Bays</u> Mar'17 | LILO of one circuit of Kaul-Bastara 220 kV D/c line at Bhadson (Kurukshetra)- commissioned on 27/06/2019 | Not Available | |
| 4 | 400/220 kV, 2x315 MVA Dehradun | 4 bays to be utilised. | <u>Commissioning of ICT</u> <u>Commissioning of Bays</u> Jan'17 | 220 kV Dehradun-Jhajra line | Nov'21 | No further update. |
| 5 | Shahjahanpur, 2x315 MVA 400/220 kV | 4 Nos. of 220 kV bays to be utilized | <u>Commissioning of ICT</u> | Shahjahanpur-Azimpur D/C line | Dec'20 | No further update. |
| | | | <u>Commissioning of Bays</u> Jun/Sep'14 | 220 kV D/C Shahjahanpur-Gola line | Dec'20 | No further update. |
| 6 | 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 | 220 kV D/C Hamirpur-Dehan line. Original schedule: Dec' 2020 | Dec'20 | No further update. |

| Sl. No. | Substation | Downstream network bays | Commissioning status of ICTs / Bays | Planned 220 kV system | Revised Target | Remarks |
|---------|--|--------------------------|--------------------------------------|---|------------------|---|
| | | | 2 bays - Mar'19 | | | |
| 7 | Kaithal 400/220 kV 1x 315 MVA S/s | Not available | Commissioned (date not available) | 220 kV Kaithal (PG)-Neemrana D/C line | | 220 kV Kaithal (PG)-Neemrana D/C line commissioned on 04.08.2020. All bays have been utilised. |
| 8 | Sikar 400/220kV, 1x 315 MVA S/s | 2 Nos. of 220 kV bays | Commissioned (date not available) | Not available | Dec'20 | LILLO of S/C Sikar (Raj) - Daud line at Sikar (PG). Work order for utilization of 2 No. of bays placed on 13.04.2020. Survey completed. Observation raised in Survey profile & conveyed to agency reply is still awaited. Work would start thereafter. |
| 9 | Bhiwani 400/220kV S/s | 6 nos. of 220kV bays | Commissioned (date not available) | 220kV Bhiwani (PG) - Isherwal (HVPNL) D/c line | Nov'20 | No further update. |
| 10 | Jind 400/220kV S/s | 6 nos. of 220kV bays | Commissioned (date not available) | LILLO of both circuits of 220kV D/c Narwana – Mund line at Jind (PG) | Nov'20 | Work Completed. |
| 11 | 400/220kV Tughlakabad GIS | 10Nos. of 220kV bays | Commissioned (date not available) | RK Puram – Tughlakabad (UG Cable) 220kv D/c line | Mar'23 | Under Tendering |
| | | | | Okhla – Tughlakabad 220kv D/c line | Not Available | Commissioned. |
| | | | | Mehrauli – Tughlakabad 220kv D/c line | Not Available | Commissioned. |
| | | | | BTPS – Tughlakabad | Not Available | Commissioned. |

| Sl. No. | Substation | Downstream network bays | Commissioning status of ICTs / Bays | Planned 220 kV system | Revised Target | Remarks |
|---------|-------------------------------|-------------------------|-------------------------------------|--|----------------|---|
| | | | | 220kv D/c line | | |
| | | | | BTPS – Tughlakabad 220kv D/c line | Not Available | Commissioned. |
| | | | | Masjid Mor – Tughlakabad 220kv D/c line | Dec'21 | Under Tendering |
| 12 | 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 |