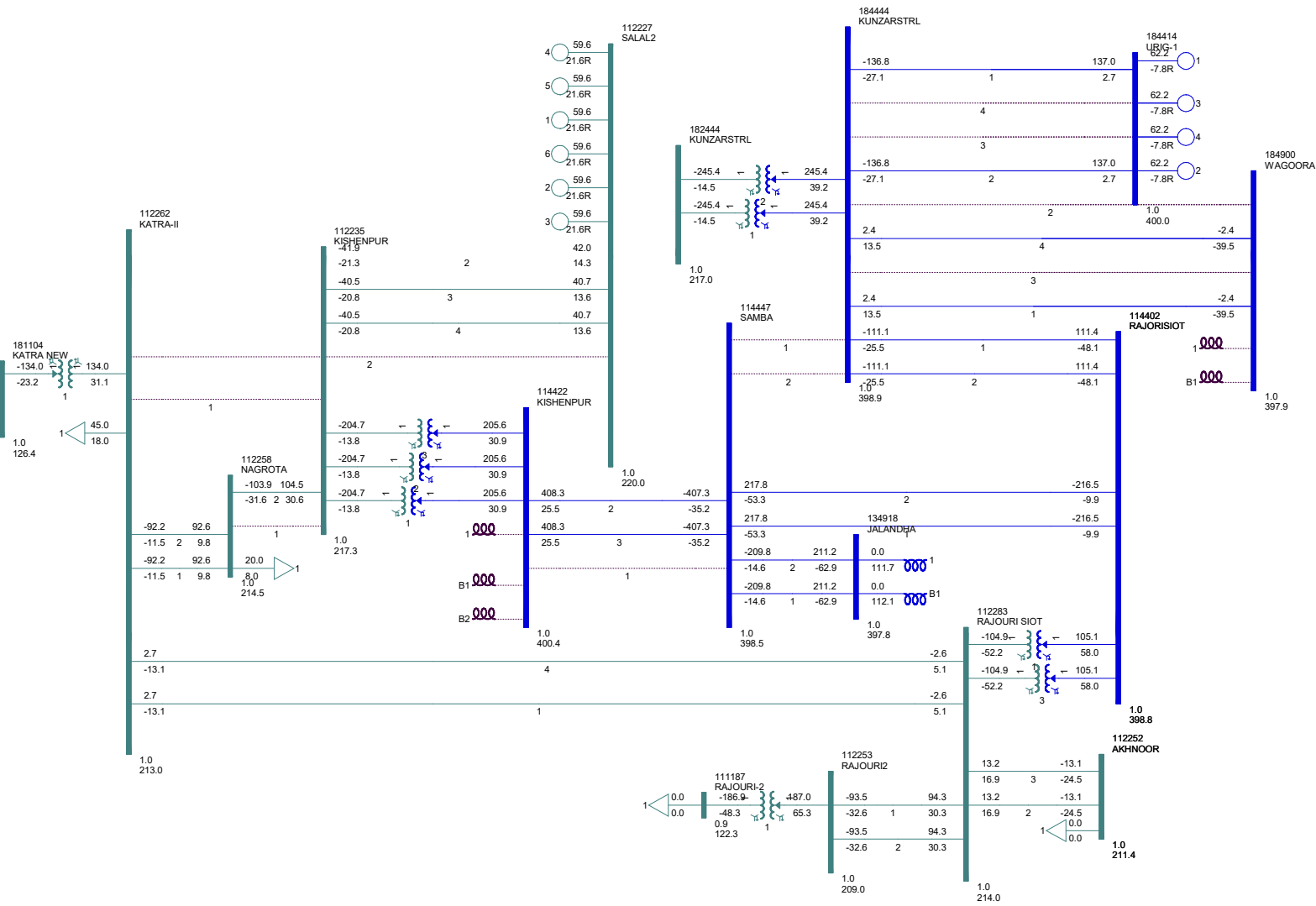


# ANNEXURE-I

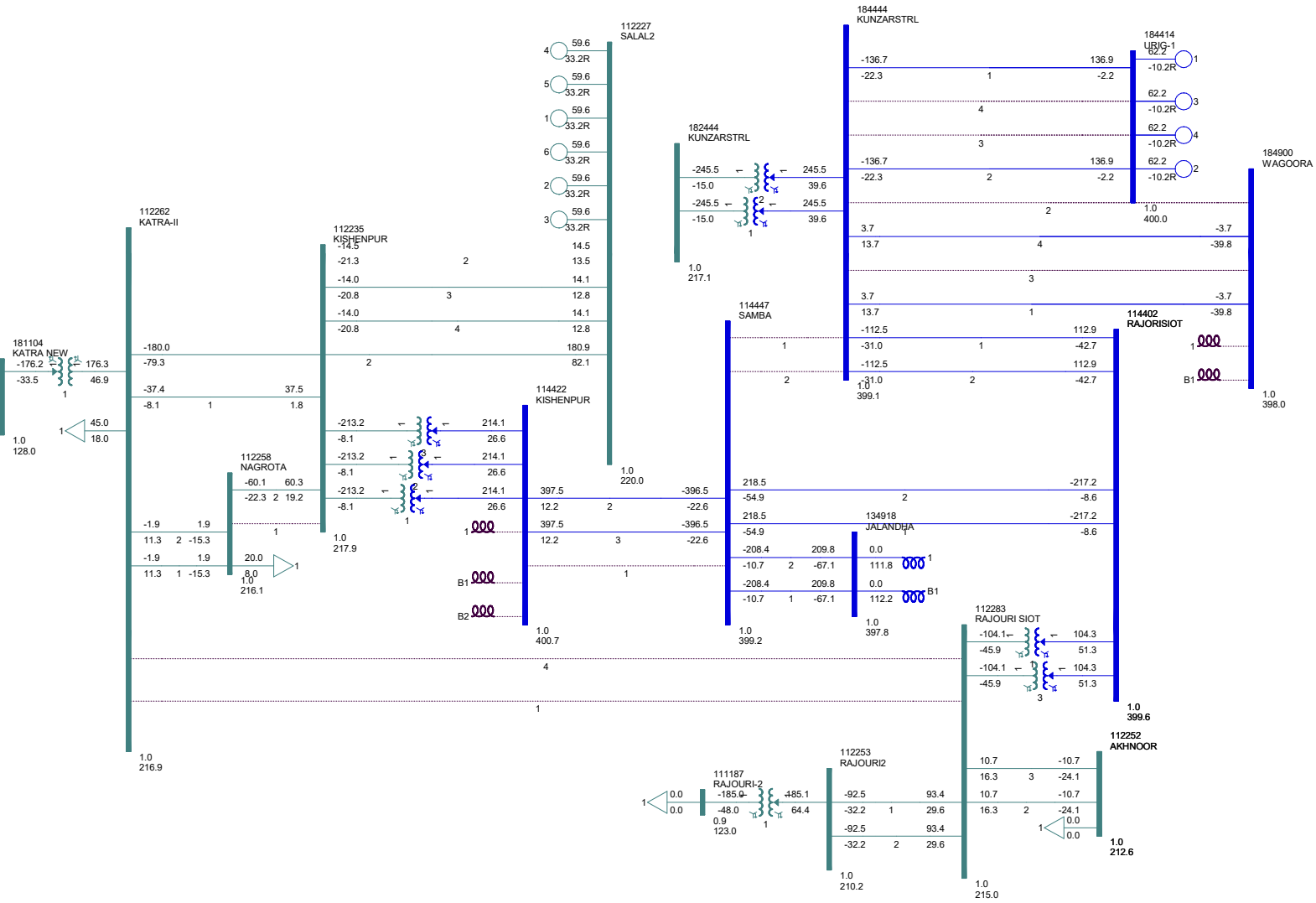
## Exhibit-I

### Rajori Studies- without LILO of Salal -Kishenpur at Katra-II



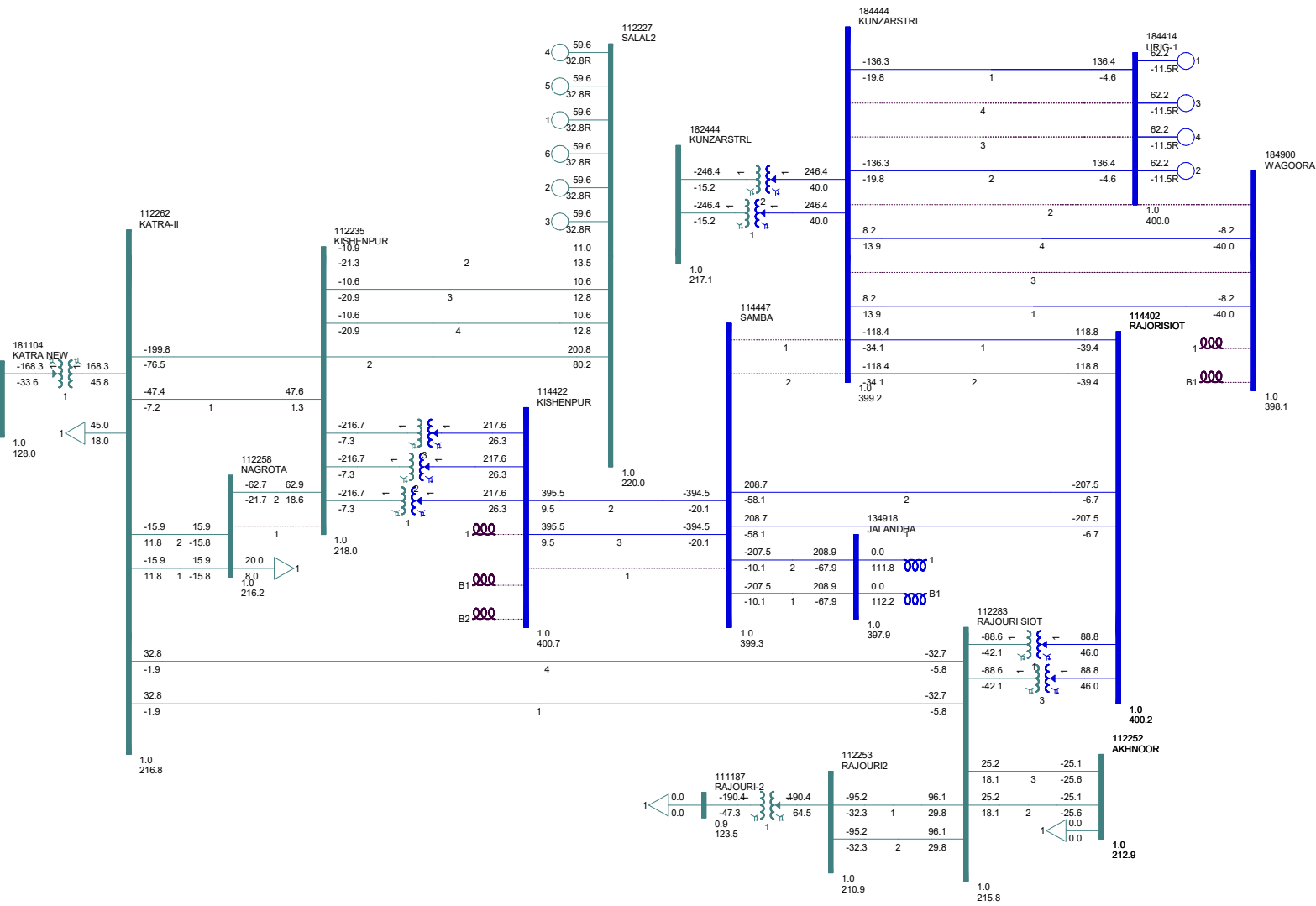
# Exhibit-II

without- Rajori-Katra-II interconnection



# Exhibit-III

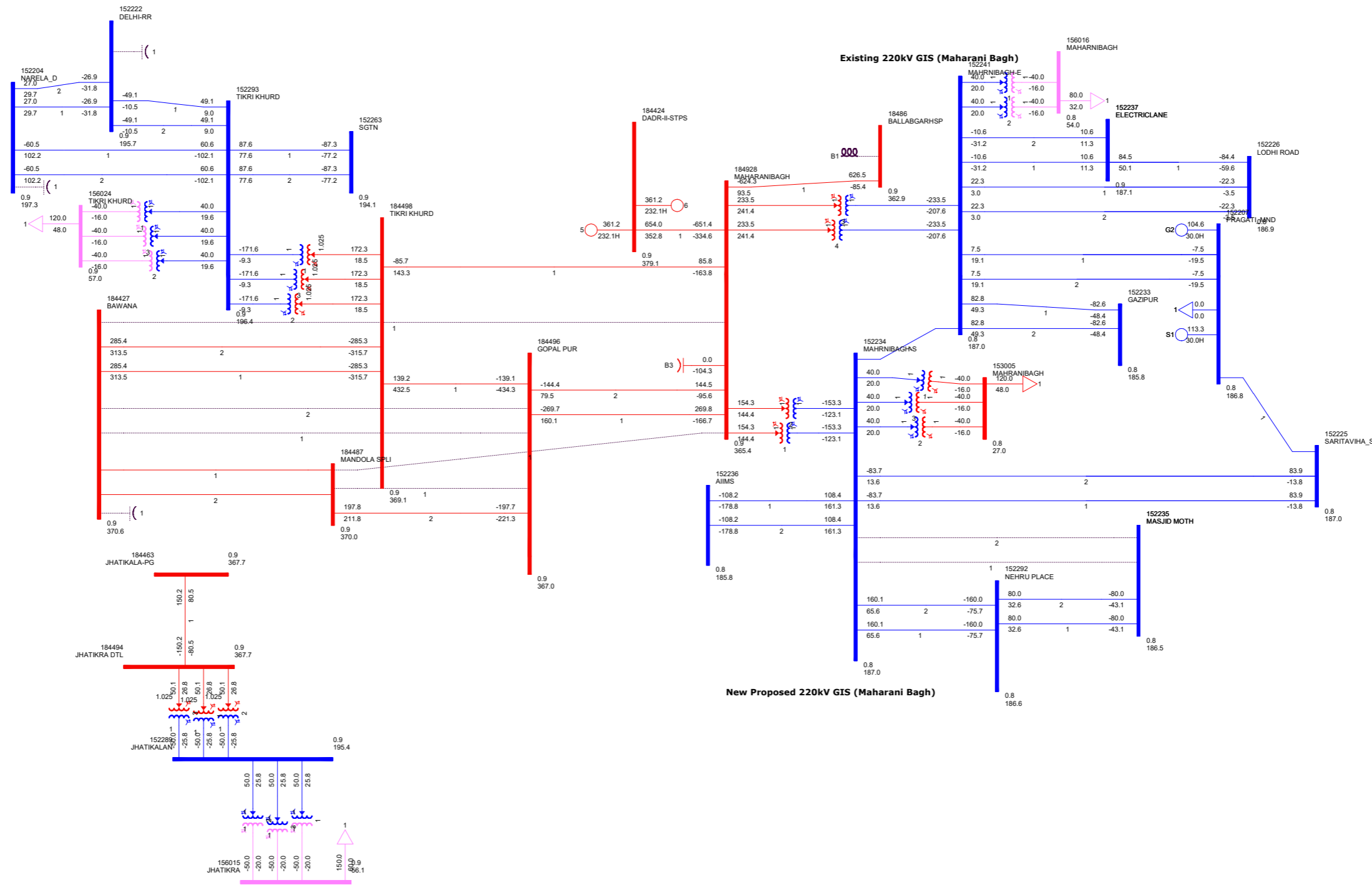
With LILO of Salal -Kishenpur at Katra-ii and Katra-II -Rajori D/c line



**Additional Transmission works proposed by JKPDD for Jammu Region**

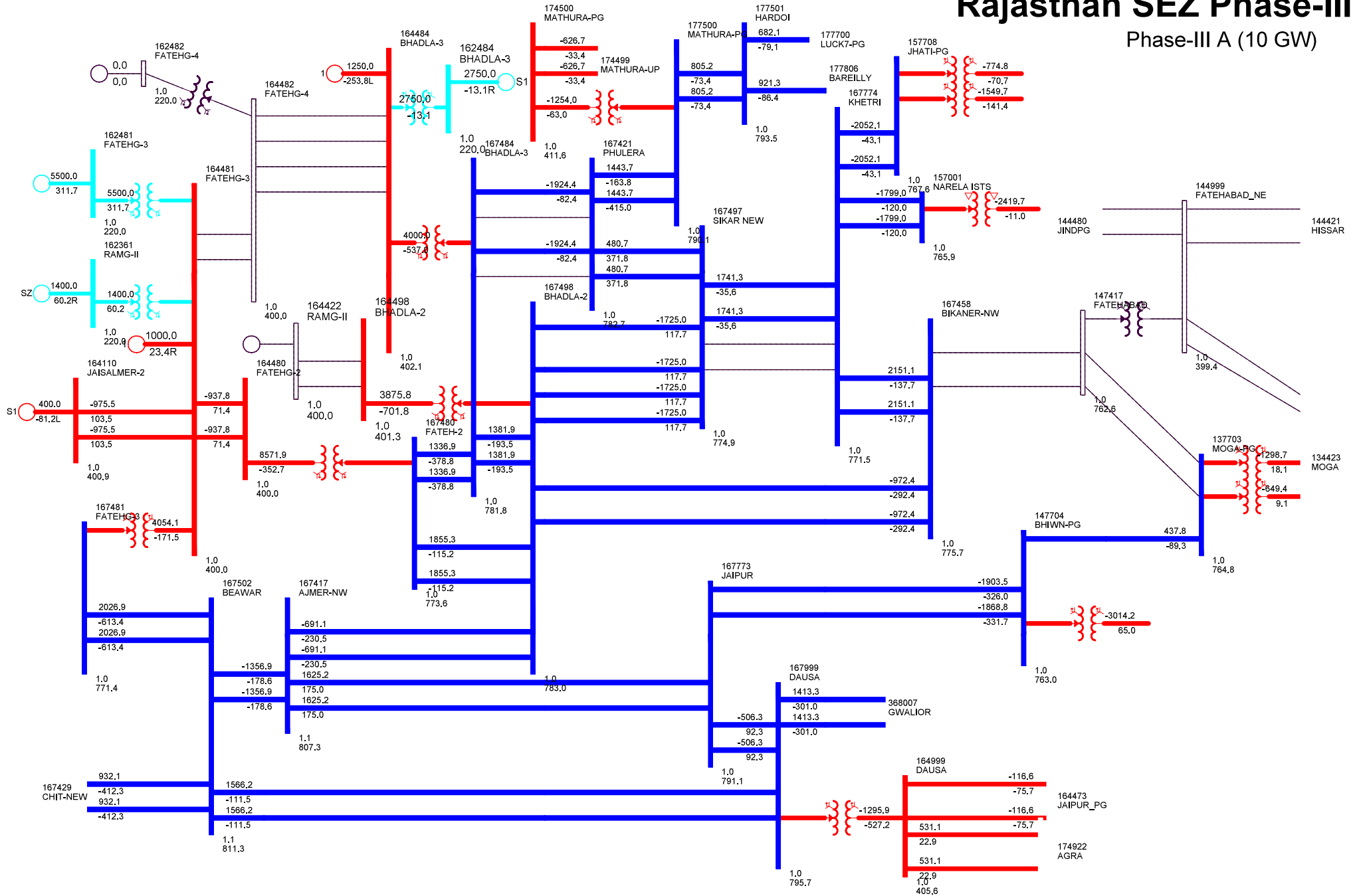
<b>S.No.</b>	<b>Transmission Element</b>
1.	LILO of 220kV Gladni –Udhampur S/c line (5km) at 220/33kV Grid station Nagrota along with 220kV bays at Nagrota
2.	Creation of new 1x50 MVA , 132/33kV Grid Station Basohli including LILO of one circuit of Sewa Mahanpur 132kV D/C line (for improved voltage regulations feeding to far flung rural areas such as Bani, Bhoond etc presently fed on very lengthy 33kV lines from Mahanpur Grid)
3.	Creation of new 20 MVA 132/33 kV Grid Station Paddar including 28km,132 kV line from 132 kV/33kV Grid Station Khellani Doda
4.	Installation of capacitor Banks at various Grid Stations of System and Operation Wing Jammu
5.	Replacement of old/deteriorated control cables of 33kV & 132kV bays at Grid station Miransahib and BB-I
6.	Replacement of old/deteriorated control cables of 33kV & 132kV bays at Grid station BB-II
7.	Renovation of control Room building at Grid station at Miran sahib & BB-I
8.	Provision for civil works at Grid station Batote as the area is sinking/slide prone and has caused damaged to protection walls and other civil works.

## POWER FLOW SLD FOR PROPOSAL OF ESTABLISHMENT OF NEW 400kV SUBSTATIONS AT TIKRI KHURD, JHATIKARA and creation of 66 & 33kV level with 220kV GIS extension at 400/220kV Maharani Bagh



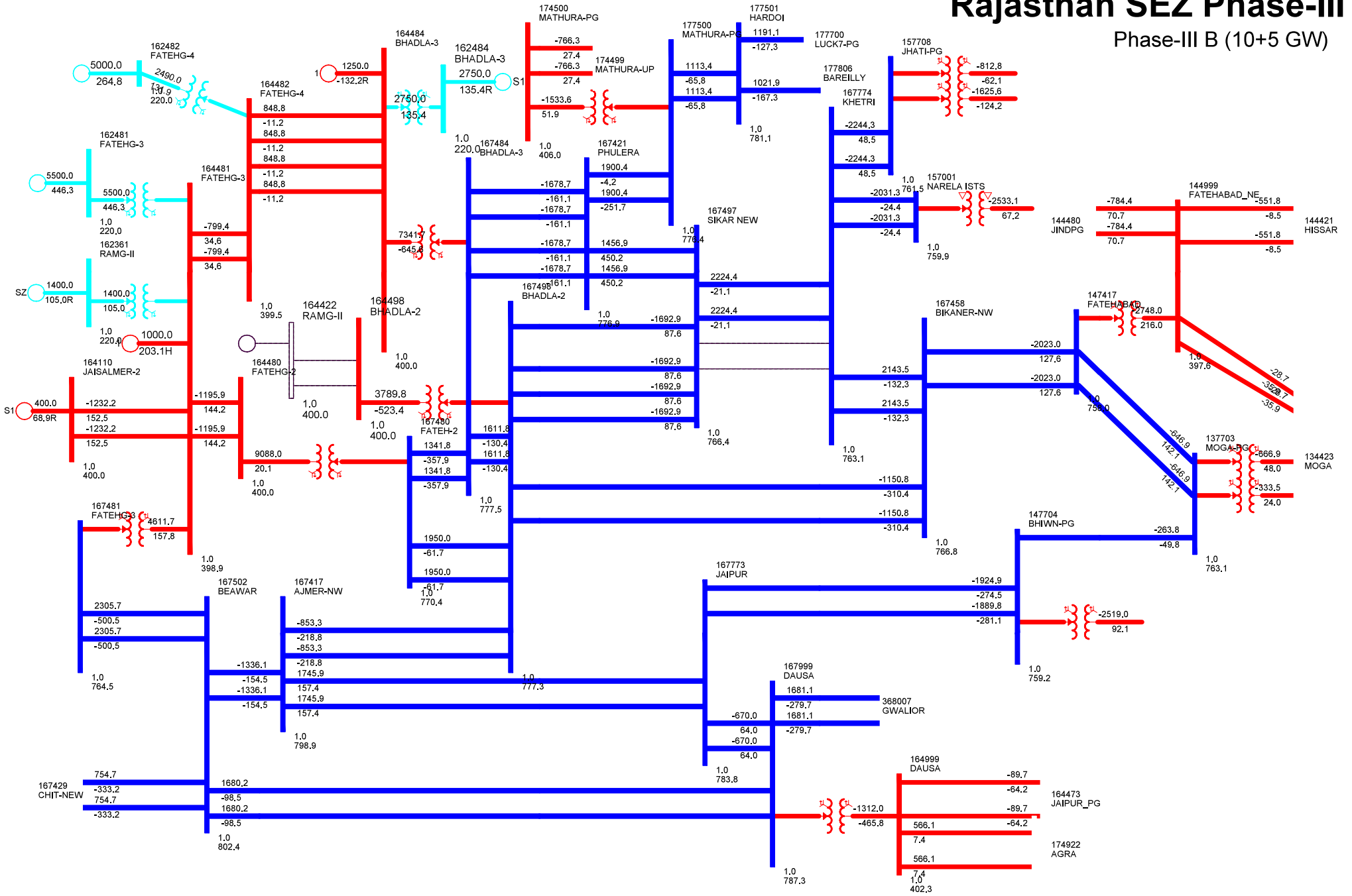
# Rajasthan SEZ Phase-III

## Phase-III A (10 GW)



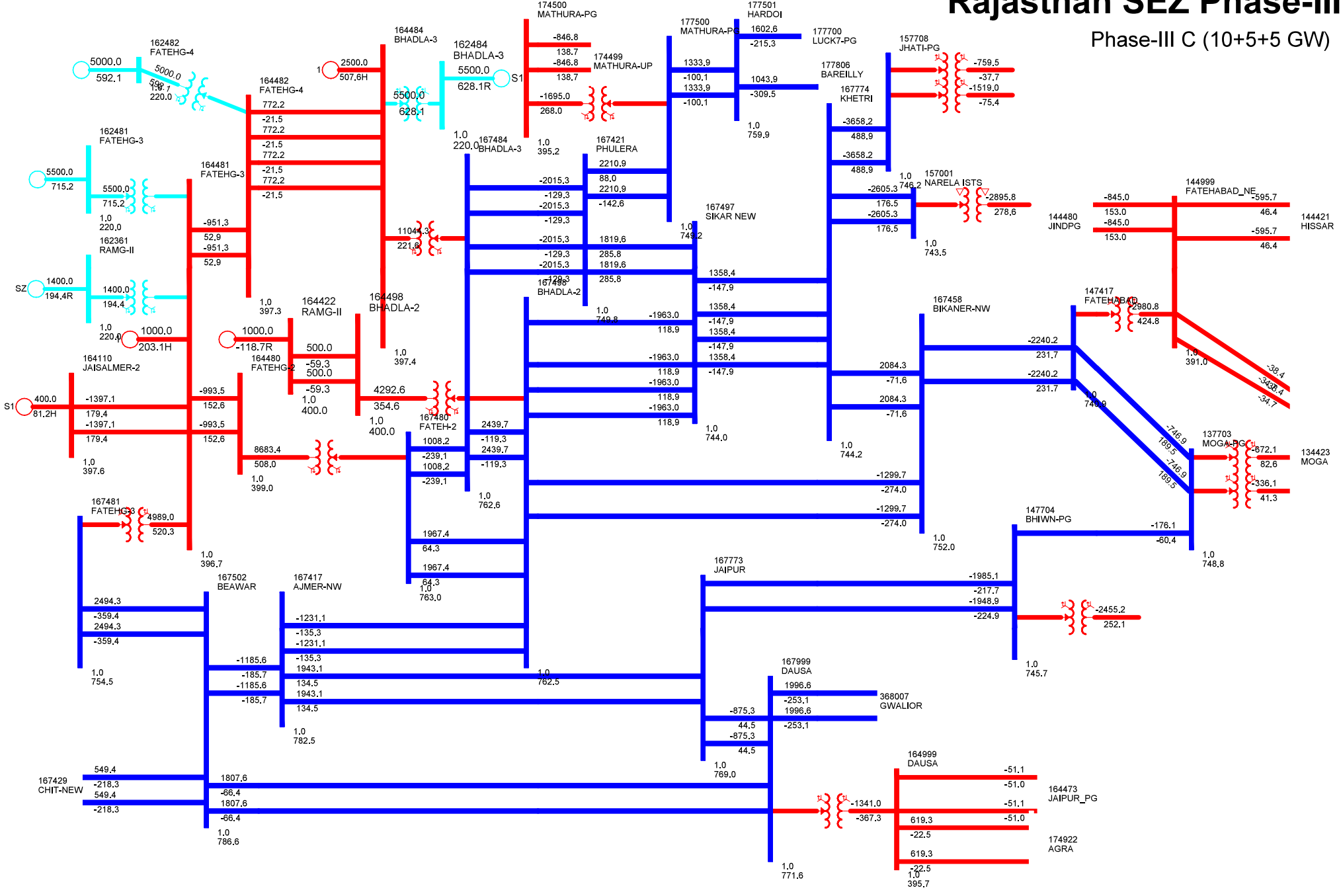
# Rajasthan SEZ Phase-III

## Phase-III B (10+5 GW)



# Rajasthan SEZ Phase-III

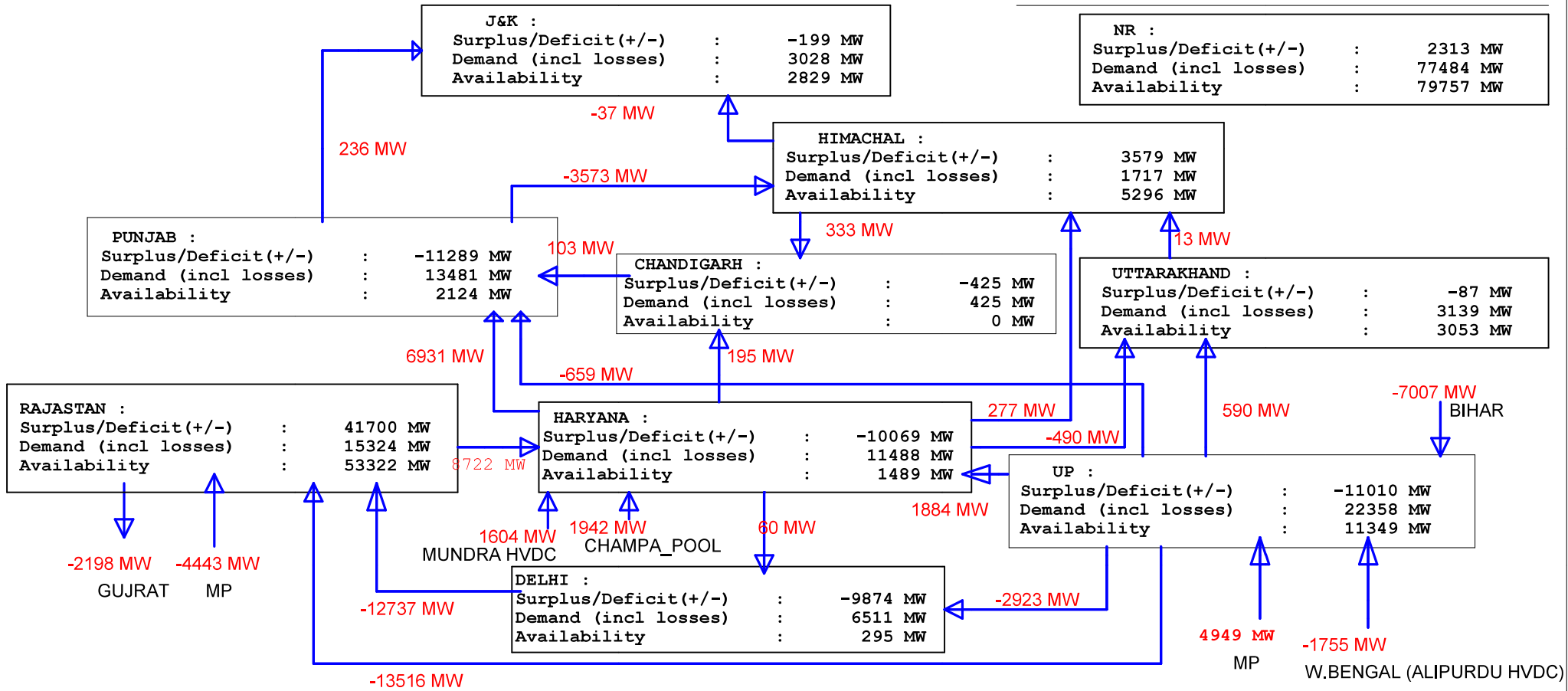
## Phase-III C (10+5+5 GW)





# Transmission system strengthening scheme for evacuation of power from Solar Energy Zones (20 GW) in Northern Region (Phase-III)

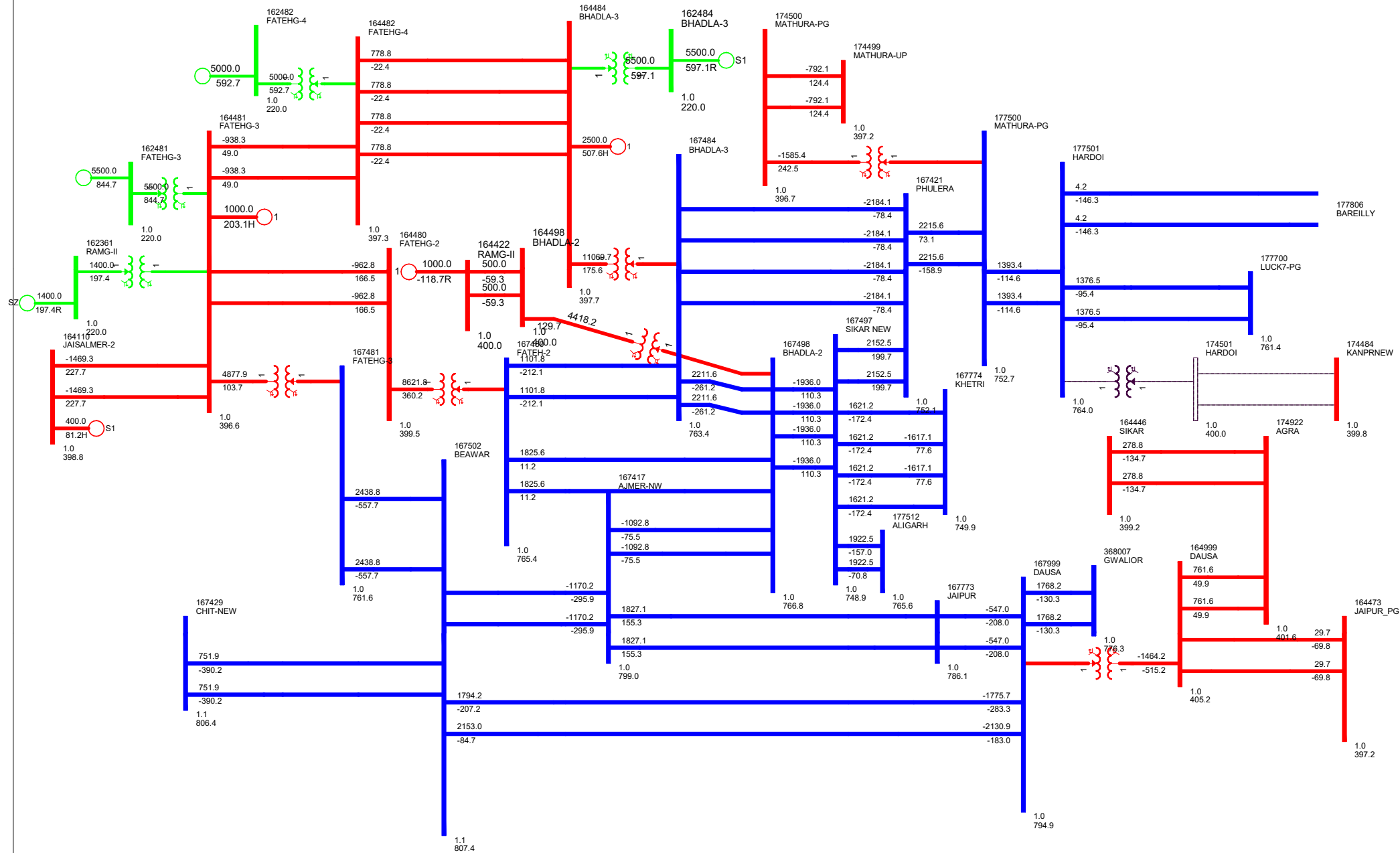
## POWER SCENARIO :NORTHERN REGION



# ALTERNATIVE-1 (HVAC)

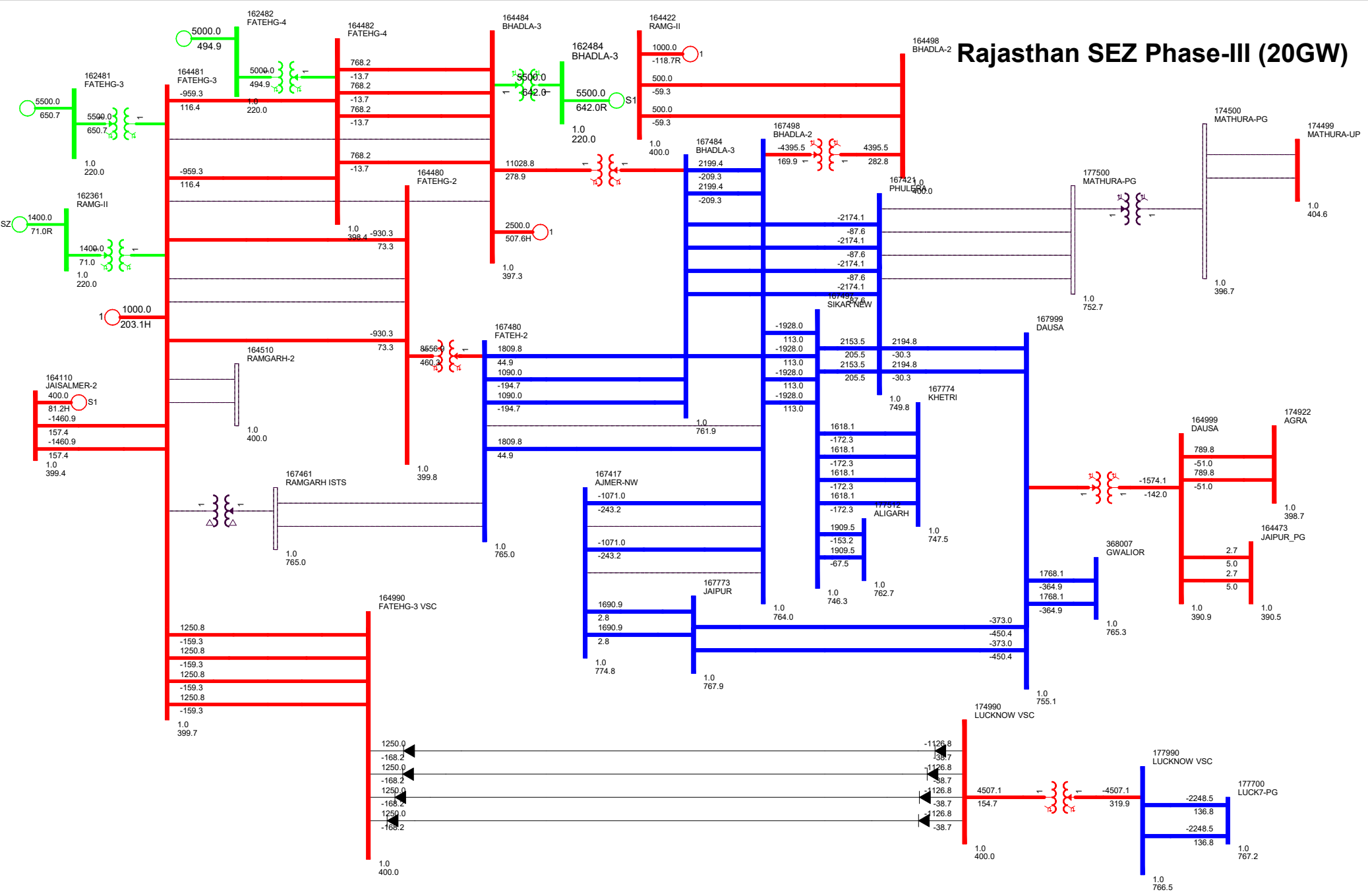
# ANNEXURE-IV

## Rajasthan SEZ Phase-III (20GW)



# ALTERNATIVE-2 (HVAC+HVDC)

## Rajasthan SEZ Phase-III (20GW)



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**ANNEXURE-V****Minutes of the meeting held on 19.02.2020 to discuss the transmission system for evacuation of power from Khurja STPP (2x660 MW) of THDCIL**

List of participants is enclosed as Annexure-I.

Chief Engineer, PSPA-I welcomed all the participants to the meeting. He stated that transmission system for evacuation of power from the proposed Khurja STPP (2x660 MW) of THDC was discussed in 40<sup>th</sup> NR Standing Committee meeting held on 22.06.2018, wherein THDC informed that UP has share of 60% of the total power from the project and remaining 40% power is for the other states of Northern Region. He added that, during the meeting, all the beneficiaries except UP opined that ISTS network should be planned for drawl of their allocated power from Khurja STPP and after deliberations following was agreed:

- (i) THDC to apply for connectivity and LTA (for quantum of allocated power to other States except UP) to CTU
- (ii) CEA / CTU to carry out the studies to plan the evacuation system for Khurja STPP.
- (iii) The connectivity lines (along with the bays) to the nearest ISTS point (to be decided after studies) may need to be implemented by THDC as per the regulations.
- (iv) UPPTCL to draw their share of power from Khurja STPP switchyard bus bar.

CTU stated that THDC vide letter dated 17.12.2019 has applied Connectivity for the Khurja thermal power plant (2x660 MW) of 528 MW (which is equivalent to allocated power other states in Northern Region except UP) and THDC has requested the connectivity with the grid at 765/400 kV Aligarh substation of POWERGRID.

On enquiry about the commissioning schedule of the Khurja STPP, THDC informed that the 1<sup>st</sup> unit (660 MW) would be commissioned by Aug 2023 and the requirement of startup power from ISTS is from May/June 2022.

UPPTCL stated that they have signed the PPA for 60% of the power from Khurja STPP (2x660 MW). UPPTCL further stated that they have proposed to draw their share of power from Khurja STPP switchyard bus bar at both 220 kV and 400 kV levels. Also, they have proposed LILO of one circuit of the under-construction Aligarh - Shamli 400kV D/C at Khurja STPP for evacuation of their share of power.

THDC stated that 6 nos. of 400 kV bays and 1x125 MVAR, 400 kV bus reactor at generation switchyard has been proposed for evacuation of power and works are already been awarded and as such, there is no provision of 220 kV level at generation switchyard. THDC added that, as financial closure of the project has been achieved so there is no possibility of creation of 220kV level at generation switchyard at this stage.

CEA stated that at this stage, no change can be done at Khurja STPP switchyard. CEA added that UPPTCL would require to draw their share of power at 400 kV level and UPPTCL may explore the possibility utilizing 4 nos. of 400kV line bays for drawing power from Khurja switchyard. UPPTCL agreeing for the same, stated that they would study suitable locations for drawing power from Khurja STPP reliably.

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On query from CTU regarding LTA, THDC stated that said that LTA would be applied as soon as the grant of Connectivity by CTU.

After further deliberations, following was agreed:

- (i) CTU to provide Connectivity for 528 MW of Khurja STPP (2x660 MW) at Aligarh 765/400 kV substation. The 400 kV Khurja STPP – Aligarh lines along with 2 nos. of 400 kV bays at both ends to be constructed by generation developer i.e. THDCIL.
- (ii) UPPTCL may establish LILO of one circuit of Aligarh – Shamli 400 kV D/C line at Khurja STPP as intra-state work for evacuation UP share power from Khurja STPP (2x660 MW).
- (iii) UPPTCL to explore the possibility of drawing additional 400kV lines (2 nos.) from Khurja switchyard.

Meeting ended with thanks to the chair.

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Annexure-IList of Participants of the meeting held on 19.02.2020 to discuss the transmission system for evacuation of power from Khurja STPP (2x660 MW) of THDCIL

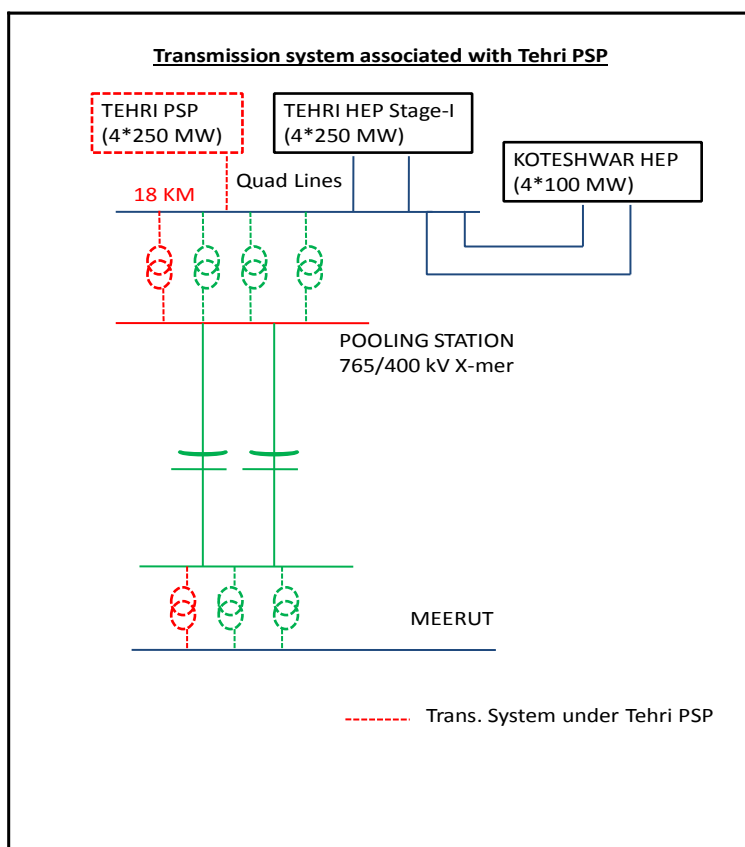
S.No.	Name (Ms/Smt/Shri)	Designation
	<b>CEA</b>	
1	Goutam Roy	Chief Engineer (PSPA-I)
2	Manjari Charturvedi	Director
3	Nitin Deswal	Assistant Director
4	Komal Dupare	Assistant Director
	<b>CTU</b>	
5	Mukesh Khanna	(GM)(CTU-plg)
	<b>POSOCO</b>	
6	HK Chawla	C.G.M
7	Gaurav Malviya	Deputy Manager
	<b>THDCIL</b>	
8	UC Kannaujia	GM
9	Manoj Sardana	AGM
10	Udayagiri Mallikarjun	Manager
	<b>UPPTCL</b>	
11	AK Shukla	SE
12	Satyendra Kumar	EE (TD&PSS)

**Minutes of the Meeting held on 28.07.2020 at 3 P.M. through VC to discuss the Up-gradation of Tehri Pooling Station–Meerut 765kV 2xS/c lines (operated at 400 kV) at its rated voltage**

List of participants is enclosed at Annexure-I.

CE (PSPA-I) welcomed the participants to the meeting and requested Director, PSPA-1 to take up the agenda. Director, PSPA-1 informed that the transmission system under Tehri PSP (1000 MW) includes 4x800 MVA, 765/400 kV ICTs and Tehri/Koteshwar Pooling station along with charging of Tehri-Meerut at 765 kV & modification of series capacitors for operation at 765 kV level were agreed. However, during the 39th SCM of NR, the issue of oscillations at Tehri complex (1400 MW existing) under n-1 contingency condition was discussed and it was agreed to de-link the upgradation of Tehri-Meerut 765 kV 2 x S/C lines (presently operated at 400 kV) along with reactive compensation with the commissioning of Tehri PSP generation project.

She further stated that in the 1<sup>st</sup> meeting of NRPCTP held on 24.01.2020, CTU mentioned that the power evacuation requirement from Tehri generation complex is only 1400 MW, therefore, 3x800 MVA ICTs & charging of Tehri-Meerut at 765 kV was proposed to be covered as part of system strengthening and 4<sup>th</sup> 800 MVA ICT along with other associated elements was proposed to be covered as part of transmission system associated with Tehri PSP. However, since commercial issue was involved in it, so the members NRPC (TP) decided to get the consent from THDC. Then she requested CTU to share their views.



CTU stated that with 1400 MW installed capacity at Tehri complex, three 800 MVA ICTs would be sufficient for meeting the n-1 criteria; therefore they have proposed the charging of 3x800 MVA ICTs. He added that at present all the three ICTs have been charged along with the charging of Tehri-Meerut line at 765 kV level.

THDC stated that they have no objection in this regard. However, they mentioned that their generation project has been delayed and is likely to be commissioned by June 2022.

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CTU stated that Tehri PSP (1000MW) and Tehri HEP Stage-I (1000MW) & Koteshwar HEP(400 MW) have a common 400 kV busbar. After charging of Tehri-Meerut line at 765 kV along with 3x800 MVA ICT's as a part of the strengthening scheme, the 18km line from Tehri PSP to the Pooling station, the 4<sup>th</sup> ICT at Tehri Pooling station and the 3<sup>rd</sup> ICT at Meerut remains to be charged as part of transmission system associated with Tehri PSP. The LTA for Tehri was granted on 2015 with effective schedule of November, 2017. Since the generation as well as the transmission system was delayed, therefore, as per the regulations, LTA would be operationalized with the charging of the transformer and the completion of line. Whenever the transmission system gets completed, THDC will have to pay the transmission charges. He further stated that the 4<sup>th</sup> ICT is ready for commissioning and the 18 km transmission line is expected to be commissioned by December, 2020 and after their commissioning, approximately 17%(of the investment) annual transmission charges will be imposed on THDC.

On enquiry about the delay in commissioning of the generation project, THDC informed that there is some issue with the contractor regarding the cash flow and requested CTU to delay the commissioning of the transmission elements associated with the generation project.

CTU stated that already there is delay in the commissioning of the elements from the effective schedule of November, 2017 and the associated elements are at the verge of commissioning. It would be difficult to further delay these transmission elements. Therefore, THDC officials may apprise their management that THDC has to bear the annual transmission charges corresponding to the transmission elements associated with the generation till the commissioning of the generation project.

CEA suggested THDC to resolve the issue with the contractor at the generation site at the earliest and expedite the charging of units at Tehri PSP, in order to reduce the burden of the transmission charges.

POSOCO enquired THDC whether the subsequent delay in the generation were being timely communicated to CTU. THDC stated that the matter was frequently discussed in the NRPC Meetings. However, no direct communication has been done with CTU.

After deliberations, following was agreed:

1. 3x800 MVA ICTs at Tehri Pooling Station & charging of Tehri-Meerut line at 765 kV along with upgradation of series reactors to be considered with the strengthening scheme.
2. 18km line from Tehri PSP to the Pooling station, the 4<sup>th</sup> ICT at Tehri Pooling station and the 3<sup>rd</sup> ICT at Meerut to be considered associated with Tehri PSP
3. Whenever the transmission system gets completed, THDC will have to pay the transmission charges. After the commissioning of the 4<sup>th</sup> ICT and the 18 km transmission line by December, 2020, approximately 17%(of the investment) annual transmission charges will be imposed on THDC
4. THDC to expedite the commissioning of the Tehri PSP

Meeting ended with thanks to the chair.



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## Annexure-I

## List of Participants

<b>I</b>	<b>CEA</b> Goutam Roy Manjari Chaturvedi Nitin Deswal Komal Dupare	Chief Engineer Director Assistant Director Assistant Director
<b>II</b>	<b>CTU</b> Mukesh Khanna Rajesh Verma Ankita Singh	Chief GM Sr. DGM Manager
<b>III</b>	<b>POSOCO</b> Rajeev Porwal Kamaldeep Gaurav Malviya	GM Chief Manager Dy. Manager
<b>IV</b>	<b>THDC</b> L.P. Joshi	GM, Rishikesh

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**ANNEXURE-VII****6.0 Evacuation system for Singrauli STPP Stage III (2x800 MW)**

6.1. CEA stated that NTPC is implementing Singrauli STPP Stage III generation within the existing Singrauli TPS complex in UP and NTPC has commitment for purchase of 85% of power from UP. To discuss the evacuation system for Singrauli STPP-III (2x660 MW), a meeting was held in CEA on 7.05.2018, wherein, keeping in view the high short circuit level in Singrauli, Anpara generation complex, following was proposed in respect of transmission system for evacuation of power from Singrauli STPP –III:

- i) Singrauli St-III to be connected to Vindhyachal 765/400kV pooling station through Vindhyachal St-IV/V.
- ii) Singrauli-III–Rihand-III 400kV D/c line to provide additional evacuation path to both generations, Singrauli St-III and Rihand-III.

To examine availability of space at Vindhyachal St-V, Rihand St-III, Vindhyachal 765/400kV pooling station and feasibility of 400kV link with Rihand St-III, a site visit was carried out by CEA, CTU and NTPC during the period 01.06.2018 to 02.06.2018 wherein it was found that termination of a new D/C line may not be possible at Vindhyachal-IV due to extensive ROW constraints in the vicinity of the yard. Therefore, LILO of both circuits of Tie line (Vindhyachal Stage-IV to Vindhyachal Stage-V 400kV D/C Twin Moose line) at Singrauli Stage- III along with reconductoring of Singrauli Stage-III - Vindhyachal stage-IV 400 kV D/C TM line formed after LILO with HTLS conductor to meet n-1 criteria of power flow was proposed.

Matter was further discussed in 40<sup>th</sup> Standing Committee Meeting on Power System Planning for Northern Region held on 22.06.2018 wherein NTPC intimated that plant capacity of Singrauli STPP Stage III has been revised to 2x800 MW from 2x660 MW and it was decided that joint studies involving CEA, CTU and POSOCO for the increased capacity of Singrauli STPP-III generation from 2x660 MW to 2x800 MW. Now, NTPC vide its letter dated 21.06.2019 has intimated that tendering for the project is in advanced stage and has requested to finalize the evacuation system of Singrauli III project as 2x800 MW.

6.2. CEA further stated that a meeting was held in CEA on 4.10.2019, wherein, following was discussed:

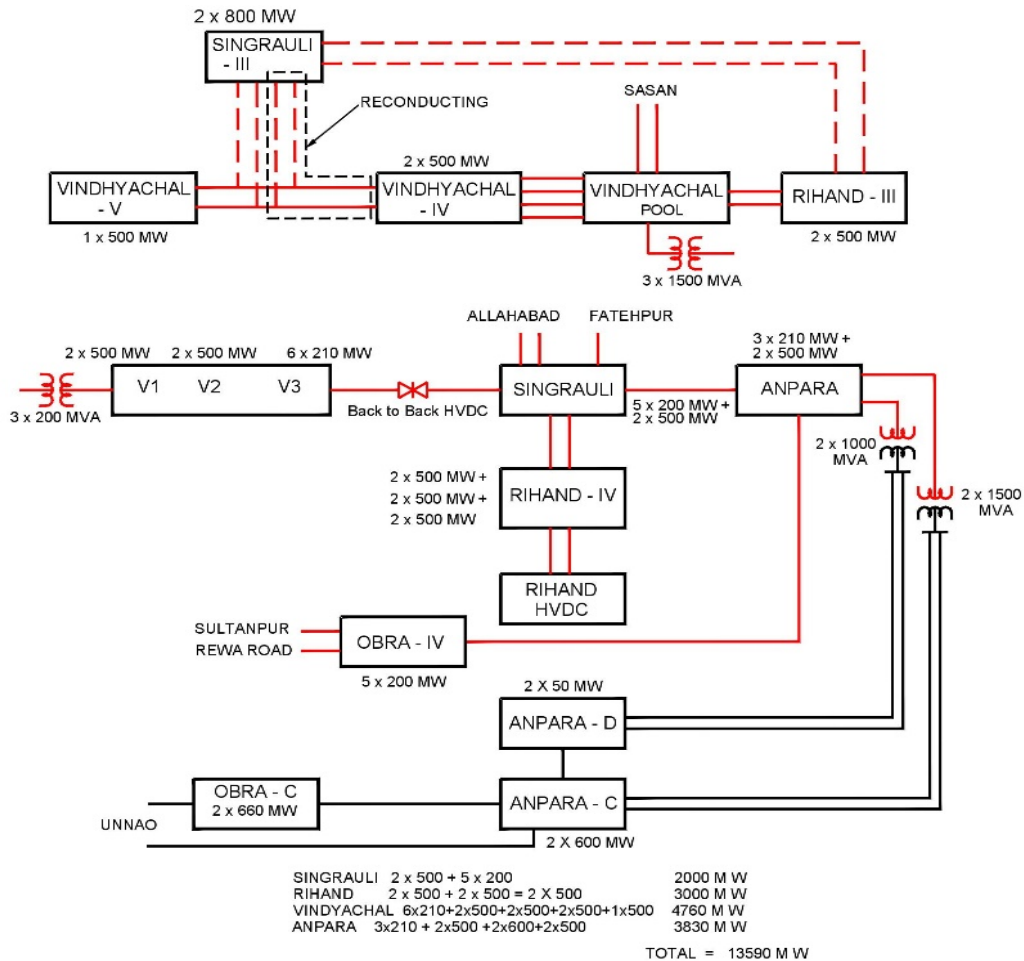
- (i) In the load flow studies carried out considering the evacuation system proposed in earlier meetings, no constraint have been observed in the transmission system due to revision in the plant capacity of Singrauli STPP Stage III from 2x660 MW to 2x800 MW except the high loading on 765/400kV transformers at Vindhyachal Pool. To cater the high loading, a 3<sup>rd</sup> 765/400kV transformer may be added at Vindhyachal Pool.
- (ii) Regarding the issue of high short circuit level in Singrauli, Anpara generation complex, it was suggested that 3 phase fault current reduces significantly with the opening of Singrauli-Anpara 400kV line and there would not be any issue in opening this line as very less power flows on Singrauli-Anpara 400kV line and it is floating

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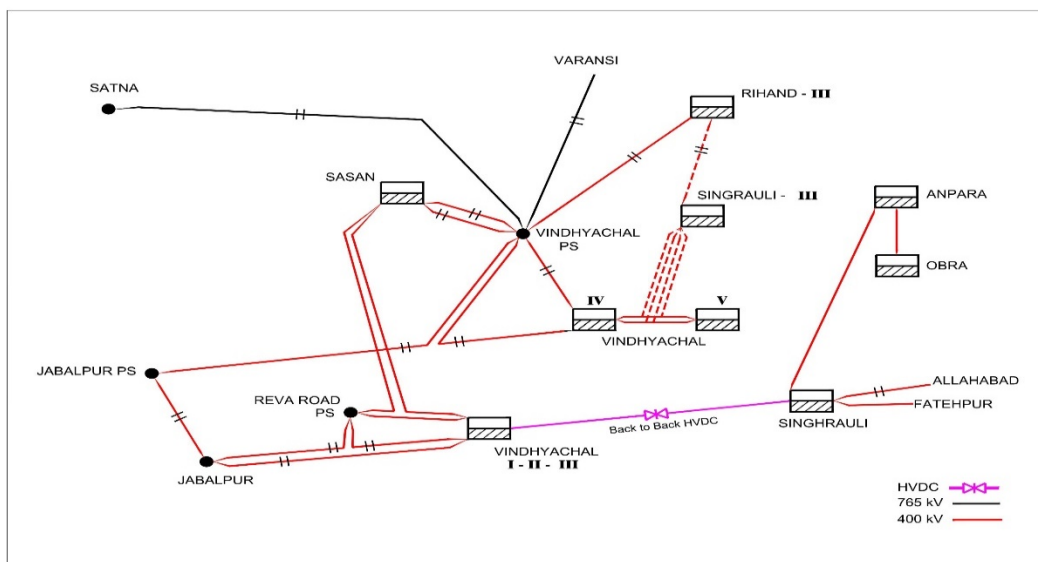
most of the time. In view of above following was agreed for evacuation of power from Singrauli Stage-III TPS (2x800 MW)

- (iii) LILO of both circuits of Tie line (Vindhyachal Stage-IV to Vindhyachal Stage-V 400kV D/C Twin Moose line) at Singrauli Stage-III.
- (iv) Reconductoring of Singrauli Stage-III - Vindhyachal stage-IV 400 kV D/C TM line (formed after above proposed LILO) with HTLS conductor.
- (v) Singrauli-III–Rihand-III 400kV D/c line

6.3. A schematic arrangement of the Anpara- Vindhyachal –Singrauli complex is enclosed herewith.



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- 6.4. CEA enquired about the commissioning schedule of Singraulli III. Accordingly, NTPC stated that they will be get the environmental clearance in the month of March this year and the expected commissioning schedule is by 2024 end.
- 6.5. CTU clarified that for connectivity, the LILO of both circuits of Tie line (Vindhyachal Stage-IV to Vindhyachal Stage-V 400kV D/C Twin Moose line) at Singrauli Stage-III as well as reconductoring of Singrauli Stage-III - Vindhyachal stage-IV 400 kV D/C TM line (formed after above proposed LILO) with HTLS would be in the scope of the developer and Singrauli-III-Rihand-III 400kV D/c line would be the part of LTA system and would be taken up for implementation under ISTS after grant of LTA to NTPC. CTU also stated that earlier the connectivity application for Singrauli STPP Stage III (2x660 MW) had some issues and the revised application for the capacity of 1600 MW has not been received yet.
- 6.6. NTPC stated that they would apply for the connectivity and LTA under ISTS as UPPTCL has confirmed to draw its share from ISTS point.
- 6.7. POSOCO stated that Vindhyachal Pool to Sasan is a twin moose line and is not meeting n-1 criteria. Also, if any problem arises with protection or maintenance in Singrauli III, then the system of Rihand III, Vindhyachal -IV and Vindhyachal-V may be affected. POSOCO stated that the impact of charging of Rihand III – Vindhyachal D/C line at 765kV from 400kV (presently) may be studied by CEA and CTU. This may also help to resolve issue of N-1 non-compliance of 400 kV Sasan – V'chal PS D/C.
- 6.8. POSOCO also enquired whether FGD is going to be installed at Vindhyachal -1 (1260MW) and Singrauli (200x5 MW) units.
- 6.9. NTPC stated that award has already been placed with FGD. Also, from Vindhyachal -IV quad line is present, so if any issue arises in Singrauli, then power evacuation from Vindhyachal -IV will not get affected. Also, Vindhyachal -V has only one unit of 500 MW and Rihand-III is directly connected to Vindhyachal PS. So, the system for Rihand-III and Vindhyachal IV will also not be affected.
- 6.10. Regarding the short circuit level, CTU informed that as per their studies, the 3-phase fault is 48.6 kA and LG fault level is around 51 kA. Such issue needs to be addressed for

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evaluating the LTA system.

- 6.11. CEA stated that the fault level reduces significantly with opening of Singrauli- Anpara 400 kV line.
- 6.12. CTU enquired about the time schedule of the proposal regarding opening of Singrauli-Anpara 400 kV line. In this regard, POSOCO stated that the line may be opened with the coming of Anpara D –Unnao line, which is expected by June 2020 as informed by UP; subject to the condition that with the opening of the line, the adjacent system is not affected. In the meeting, it was agreed that 400kV Singrauli-Anpara may be kept opened after commissioning of 765kV Anpara D-Unnao to restrict high short circuit level in Singrauli-Anpara complex, however, in case of any contingency the line may be required to be taken in service.
- 6.13. After deliberations, following was agreed:
- (i) The transmission system for evacuation of power from Singrauli III:
    - I. LILO of both circuits of Tie line (Vindhyachal Stage-IV to Vindhyachal Stage-V 400kV D/C Twin Moose line) at Singrauli Stage-III- under the scope of NTPC.
    - II. Reconductoring of Singrauli Stage-III - Vindhyachal stage-IV 400 kV D/C TM line (formed after above proposed LILO) with HTLS conductor - under the scope of NTPC
    - III. Singrauli-III–Rihand-III 400kV D/c line- under ISTS scope
    - IV. 2x125 MVAR Bus Reactor at Singrauli-III generation switchyard- under scope of NTPC
  - (ii) Singrauli- Anpara 400 kV line will be kept normally open (can be closed in emergency conditions) after commissioning of Anpara D –Unnao 765kV line to restrict high short circuit level in Singrauli-Anpara complex.
  - (iii) The short circuit level in Singrauli will again be studied by CEA and CTU and accordingly, would be discussed in the next NRPCTP meeting.

The above scheme may also be rectified in next NRPCTP meeting.

## **7.0 Transmission system for evacuation of power from Pakaldul (1000MW), Kiru (624 MW) and Kwar (540 MW) HEPs of CVPPL:**

7.1 CEA stated that CVPPL is implementing three major HEPs viz Pakaldul (1000MW), Kiru (624 MW) and Kwar (540 MW) HEP in J&K. Works on various components of PakalDul HEP are in progress. Works of Kiru and Kwar HEPs are in advanced stage of tendering. The power from these projects was planned to be pooled to Kishtwar S/s. In the 2<sup>nd</sup> meeting of NRSCT, following was agreed in regard of the connectivity of PakalDul HEP (1000 MW):

- i) 400 kV D/c (Triple HTLS Conductor) line from PakalDul HEP–Kishtwar Switching station along with associated bays at both ends – under scope of generation developer.

## ANNEXURE-VIII

Transmission elements	Schedule
<b>Phase-II ATS of 400/220kV Bikaner-II S/s</b>	
<ul style="list-style-type: none"> <li>i) Establishment of 400/220kV, 6x500MVA pooling station at suitable location near Bikaner (Bikaner-II PS) with 2x125 MVAR bus reactor at 400kV level and with suitable bus sectionalisation at 400 kV level and 220 kV level.</li> <li>ii) Bikaner-II PS – Khetri 400kV 2xD/c line (Twin HTLS line on M/c tower)</li> <li>iii) Removal of LILO of one circuit of Bhadla-Bikaner (RVPN) 400kV D/c (Quad) line at Bikaner (PG). Extension of above LILO section from Bikaner(PG) upto Bikaner-II PS to form Bikaner-II PS – Bikaner (PG) 400kV D/c(Quad) line)</li> <li>iv) 1x80 MVAR Switchable line reactor for each circuit at each end of Bikaner-II – Khetri 400kV 2xD/c line</li> <li>v) Khetri - Bhiwadi 400kV D/c line (Twin HTLS)</li> <li>vi) Power reversal on <math>\pm 500</math>kV, 2500MW Balia – Bhiwadi HVDC line upto 2000MW from Bhiwadi to Balia in high solar generation scenario</li> <li>vii) Establishment of 765/400 kV, 3X1500 MVA GIS substation at Narela with 765 kV (2x330 MVAR) bus reactor and 400kV (1x125 MVAR) bus reactor</li> <li>viii) Khetri – Narela 765 kV D/c line</li> <li>ix) 1x330 MVAR Switchable line reactor for each circuit at Narela end of Khetri – Narela 765kV D/c line</li> <li>x) LILO of 765 kV Meerut- Bhiwani S/c line at Narela</li> <li>xi) Removal of LILO of Bawana – Mandola 400kV D/c(Quad) line at Maharani Bagh/ Gopalpur S/s. Extension of above LILO section from Maharani Bagh/Gopalpur upto Narela S/s so as to form Maharani Bagh – Narela 400kV D/c(Quad) and Maharani Bagh -Gopalpur-Narela 400kV D/c(HTLS) lines on M/c Tower.</li> <li>xii) <math>\pm 300</math> MVAR, 2x125 MVAR MSC , 1x125 MVAR MSR STATCOM at Bikaner – II S/s</li> <li>xiii) 220kV line bays for interconnection of solar projects at Bikaner-II PS (10 nos.)</li> </ul>	June'22
<b>Phase-II ATS of 400/220kV Bhadla-II S/s</b>	
<ul style="list-style-type: none"> <li>i) 3 no. 220kV line bays for interconnection of solar projects at Bhadla-II PS</li> </ul>	Dec'21
<ul style="list-style-type: none"> <li>ii) Establishment of 765/400kV, 2x1500 MVA S/s at suitable location near Sikar (Sikar-II Substation) with 1x125 MVAR at 400kV level &amp; 2x330 MVAR bus reactors at 765kV level at Sikar -II</li> <li>iii) Sikar-II – Aligarh 765kV D/c line</li> <li>iv) Bhadla-II PS – Sikar-II 765kV 2xD/c line</li> <li>v) Sikar-II – Neemrana 400kV D/c line (Twin HTLS)</li> <li>vi) 1x330 MVAR Switchable line reactor for each circuit at Sikar II end of Bhadla-II – Sikar-II 765kV 2xD/c line</li> <li>vii) 1x240 MVAR Switchable line reactor for each circuit at Bhadla-II end of Bhadla-II – Sikar-II 765kV 2xD/c line</li> <li>viii) 1x330MVAR Switchable line reactor for each circuit at each end of Sikar-II –Aligarh 765kV D/c line</li> <li>ix) Augmentation with 765/400kV, 1x1500MVA transformer (4th) at Bhadla-</li> </ul>	Mar'22

<p>II PS.</p> <p>x) Augmentation with 400/220kV, 3x500MVA transformer (6th to 8th) at Bhadla-II PS with suitable bus sectionalisation at 400 kV &amp; 220 kV</p> <p>xi) 2 no. of <math>\pm</math> 300 MVar, 2x125 MVAR MSC , 1x125 MVar MSR STATCOM at Bhadla-II S/s</p> <p>xii) 1 no. 220kV line bays for interconnection of solar projects at Bhadla-II PS</p>	
<b>Phase-II ATS of 400/220kV Fatehgarh-II S/s</b>	
i) 3 no. 220kV line bays for interconnection of solar projects at Fatehgarh-II PS	Dec'21
ii) 4 no. 220kV line bays for interconnection of solar projects at Fatehgarh-II PS	Jan'22
<p>iii) Augmentation with 765/400kV, 2x1500MVA transformer (5th &amp; 6th) at Fatehgarh-II PS</p> <p>iv) Fatehgarh-II PS – Bhadla-II PS 765kV D/c line (2nd)</p> <p>v) 1x240 MVar Switchable line reactor for each circuit at each end of Fatehgarh-II – Bhadla-II 765kV D/c line</p> <p>vi) Augmentation with 400/220kV, 4x500MVA transformer (6th &amp; 9th) at Fatehgarh-II PS with suitable bus sectionalisation at 400 kV &amp; 220 kV</p> <p>vii) 2no. of <math>\pm</math> 300 MVar, 2x125 MVAR MSC , 1x125 MVar MSR STATCOMs at Fatehgarh – II S/s</p>	Mar'22
<b>Phase-II ATS of 400/220kV Fatehgarh-III S/s(erstwhile Ramgarh-II S/s)</b>	
<p>i) Establishment of 400/220kV, 4x500 MVA Fatehgarh-III PS(erstwhile Ramgarh-II S/s) with 2x125 MVar bus reactor at 400kV level.</p> <p>ii) Fatehgarh-III PS –Fatehgarh-II PS 400 kV D/c Line (Twin HTLS)</p> <p>iii) Fatehgarh -III PS – Jaisalmer-II (RVPN) 400 kV D/c Line (Twin HTLS)</p> <p>iv) 220kV line bays for interconnection of solar projects at Fatehgarh-III PS (7 nos.)</p>	Mar'22

## Annexure-IX

Applications granted as per previous Connectivity and LTA meetings of NR

The details of Connectivity/LTA applications granted/agreed for grant in 31<sup>st</sup> – 36<sup>th</sup> Connectivity and LTA meetings of NR is given below:

### Stage-I Connectivity:

Sl. No.	Application No.	Applicant	Location	Date of Application	Connectivity Sought (MW)	Nature of Applicant	Proposed location for Connectivity	Dedicated Tr. System
1	1200002381	Azure Power India Private Limited	Jodhpur, Rajasthan	03/12/19	500	Solar	Bhadla-II PS (Sought at 400kV)	Azure Power India Private Limited Solar Power Plant (Azure Manufacturing Bhadla-II Tr-I) – Bhadla-II PS 400 kV S/c line (For Application at Sl. No.1 & 4 is considered together and Stage-I Connectivity was agreed to be granted through 400 kV S/c line suitable to carry 1000 MW at nominal voltage)
2	1200002382	Azure Power India Private Limited	Jaisalmer, Rajasthan	03/12/19	500	Solar	Fatehgarh-II PS (Sought at 400kV)	Azure Power India Private Limited Solar Power Plant (Azure Manufacturing Fatehgarh-II Tr-I) – Fatehgarh-II 400 kV S/c line (suitable to carry 900 MW at nominal voltage)
3	1200002383	Azure Power India Private Limited	Jaisalmer, Rajasthan	03/12/19	500	Solar	Ramgarh PS (Sought at 400kV)	Azure Power India Private Limited Solar Power Plant (Azure Manufacturing Ramgarh) – Ramgarh P.S 400 kV S/c line (suitable to carry 900 MW at nominal voltage)
4	1200002384	Azure Power India Private Limited	Jodhpur, Rajasthan	03/12/19	500	Solar	Bhadla-II PS (Sought at 400kV)	Azure Power India Private Limited Solar Power Plant (Azure Manufacturing Bhadla-II Tr-II) – Bhadla-II PS 400 kV S/c line (Ffor Application at Sl. No.1 & 4 is considered together and Stage-I Connectivity was agreed to be granted through 400 kV S/c line



								suitable to carry 1000 MW at nominal voltage)
5	1200002405	Rosepetal Solar Energy Private Limited	Jaisalmer, Rajasthan	17/12/19	<b>700</b>	Hybrid (Solar 650MW, Wind 650MW)	Fatehgarh-II PS	Rosepetal Solar Energy Private Limited Solar Power Plant – Fatehgarh-II 220 kV D/c line (High Capacity) (suitable to carry 700 MW at nominal voltage)
6	1200002421	NTPC Ltd.	Bikaner, Rajasthan	31/12/19	<b>300</b>	<b>Solar</b>	Bhadla-II PS (Sought at 400kV)	NTPC 300 MW Solar Project at Seora – Bhadla-II PS 400 kV S/c line (suitable to carry 900 MW at nominal voltage)
7	1200002380	Avaada Energy Private Limited	Bikaner, Rajasthan	03/12/19	<b>300</b>	<b>Solar</b>	Bikaner (PG) (Sought at 400kV)	Avaada Sustainable RJ Project Pvt. Ltd. Solar Power Plant - Bikaner PG 400 kV S/c line (suitable to carry 900 MW at nominal voltage)
8	1200002337	NTPC Ltd.	Bikaner, Rajasthan	<b>07/11/2019</b>	<b>250</b>	<b>Solar</b>	Bhadla-II PS (Sought at 400kV)	NTPC 250 MW solar Project at Kolayat – Bhadla-II PS 400 kV S/c line. (suitable to carry 900 MW at nominal voltage)
9	1200002427	Adani Green Energy Four Limited	Jodhpur, Rajasthan	08/01/20	2500	Solar	Bhadla-II	Adani Green Energy Four Limited Solar Power Project – Bhadla-II PS 400 kV D/c (high capacity) line  (suitable to carry 1250 MW at each circuit at nominal voltage)
10	1200002429	Adani Green Energy Four Limited	Jaisalmer, Rajasthan	08/01/20	2500	Solar	Fatehgarh-II	Adani Green Energy Four Limited Solar Power Project – Fatehgarh-II PS 400 kV D/c (high capacity) line  (suitable to carry 1250 MW at each circuit at nominal voltage)
11	1200002431	Adani Green Energy Four Limited	Jaisalmer, Rajasthan	08/01/20	2500	Solar	Ramgarh	Adani Green Energy Four Limited Solar Power Project – Ramgarh PS 400 kV D/c (high capacity) line  (suitable to carry 1250 MW at each circuit at nominal voltage)
12	1200002447	Amp Energy Green	Jaisalmer,	22/01/20	300	Solar	Fatehgarh-II	Amp Energy Green Three Solar Power Project – Fatehgarh-II PS

		Private Limited	Rajasthan					220 kV S/c line
13	1200002446	Amp Energy Green Private Limited	Bikaner, Rajasthan	22/01/20	300	Solar	Bikaner	Amp Energy Green Two Solar Power Project – Bikaner-II PS 220 kV S/c line
14	1200002444	Amp Energy Green Private Limited	Jaisalmer, Rajasthan	22/01/20	300	Solar	Ramgarh	Amp Energy Green One Solar Power Project – Ramgarh PS 220 kV S/c line
15	1200002461	Amp Energy Green Private Limited	Jodhpur, Rajasthan	31/01/20	300	Solar	Bhadla-II	Amp Energy Green Four Solar Power Project – Bhadla-II PS 220 kV S/c line
16	1200002457	Enel Green Power India Private Limited	Bikaner, Rajasthan	31/01/20	300	Solar	Bikaner	Enel Green Power India Private Limited Solar Power Project – Bikaner-II PS 220 kV S/c line
17	1200002464	PradeepChauhan(EkialdeSolar Private Limited)	Jodhpur, Rajasthan	13/02/20	500	Solar	Bhadla-II	Ekialde Solar Private Limited Solar Power Project – Bhadla-II PS 220 kV D/c line
18	1200002496	NTPC Ltd.	Jaisalmer, Rajasthan	29/02/20	90	Solar	Fatehgarh-II	NTPC 90MW Solar Project at Devikoot – Fatehgarh-II PS 220 kV S/c line (through the same line already granted Stage-II Connectivity for 150MW Solar Project–application no. 1200002308)
19	1200002498	NTPC Ltd.	Jaisalmer, Rajasthan	29/02/20	296	Solar	Fatehgarh-II	NTPC 296MW Solar Project at Fatehgarh– Fatehgarh-II PS 220 kV S/c line
20	1200002500	NTPC Ltd.	Bikaner, Rajasthan	29/02/20	300	Solar	Bhadla-II	NTPC 300MW Solar Project at Nokhra– Bhadla-II PS 220 kV S/c

								line
21	1200002526	Eden Renewable Alma Private Limited	Jodhpur, Rajasthan	06-04-2020	300	Solar	Bhadla-II PS	Eden Renewable Alma Pvt. Ltd. Solar Power Project – Bhadla-II PS 220 kV S/c line
22	1200002555	SBE Renewables Fifteen Private Limited	Jodhpur, Rajasthan	13-04-2020	600	Solar	Bhadla-II PS	SBE Renewables fifteen Pvt. Ltd. Solar Power Project– Bhadla-II PS 220 kV D/c line
23	1200002573	ALTRA XERGI Power Pvt. Ltd.	Jaisalmer, Rajasthan	24-04-2020	380	Solar	Fatehgarh-III PS/Fatehgarh-II PS	Altra Xergi Power Pvt. Ltd. Solar Project - Fatehgarh-III PS 220 kV D/c line
24	1200002565	ReNew Surya Vihaan Private Limited	Jaisalmer, Rajasthan	28-04-2020	300	Solar	Fatehgarh-III PS	Renew Surya Vihaan Pvt. Ltd. Solar Project – Fatehgarh-III PS 220 kV S/c line
25	1200002581	Avaada Energy Private Limited	Jaisalmer, Rajasthan	29-04-2020	600	Solar	Fatehgarh-II PS/ Fatehgarh-III PS	Avaada Energy Pvt. Ltd. Solar Project – Fatehgarh-III PS 220 kV D/c line
26	1200002592	ABC Renewable Energy Pvt. Ltd.	Jaisalmer, Rajasthan	06-05-2020	400	Solar	Fatehgarh-II PS/Fatehgarh-III PS	ABC Renewable Energy Pvt. Ltd. 400 MW Solar Power Project – Fatehgarh-III PS 220 kV S/c (High capacity line suitable to carry 400 MW at nominal voltage)
27	1200002602	Eden Renewable Passy Private Ltd.	Barmer, Rajasthan	08-05-2020	300	Solar	Fatehgarh-III PS	Eden Passy NHPC Solar Power Project– Fatehgarh-III PS 220 kV S/c line

28	1200002612	SBE Renewables Seventeen Pvt. Ltd.	Jaisalmer, Rajasthan	24-05-2020	600	Solar	Fatehgarh-III PS	SBE Renewables Seventeen Private Limited Solar Power Project - Fatehgarh-III PS 220 kV D/c line (suitable to carry 300 MW per circuit at nominal voltage)
29	1200002613	Avaada Energy Private Limited	Jodhpur, Rajasthan	28-05-2020	600	Solar	Bhadla-II PS	Avaada Energy Solar Power Project – Bhadla-II PS 220 kV D/c line (suitable to carry 300 MW per circuit at nominal voltage)
30	1200002616	O2 POWER SG PTE. LTD.	Jaisalmer, Rajasthan	31-05-2020	380	Solar	Fatehgarh-II PS/ Fatehgarh-III PS	O2 POWER Solar Project – Fatehgarh-II PS 220 kV S/c line (High capacity line suitable to carry 380 MW at nominal voltage)
31	1200002576	NLC India Limited	Bikaner, Rajasthan	05-05-2020	250	Solar	Bikaner PS	NLC Barsingsar Solar power Project-Bikaner PS 220 kV S/c line (suitable to carry 300 MW at nominal voltage)
32	1200002627	Renew Surya Roshni Pvt. Ltd.	Jaisalmer, Rajasthan	05-06-2020	500	Hybrid	Fatehgarh-II PS / Fatehgarh-III PS	Renew Surya Roshni Pvt. Ltd. Solar Power Project – Fatehgarh-III PS 220 kV D/c line
33	1200002630	Avikiran Surya India Pvt. Ltd.	Bikaner, Rajasthan	08-05-2020	300	Solar	Bikaner PS	Avikiran Surya India Pvt. Ltd. Solar Power Project– Bikaner PS 220 kV S/c line
34	1200002654	TEQ Green Power Pvt. Ltd.	Jaisalmer, Rajasthan	28-06-2020	400	Solar	Fatehgarh-III PS	TEQ Green Power Pvt. Ltd. Solar Power Project - Fatehgarh-III PS 220 kV S/c (High Capacity) line

35	1200002652	Energizent Power Pvt. Ltd.	Jaisalmer, Rajasthan	29-06-2020	390	Solar	Fatehgarh-III PS	Energizent Power Pvt. Ltd. Solar Power Project – Fatehgarh-III PS 220 kV S/c (High Capacity) line
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### Stage-II Connectivity:

Sl. No.	Application No.	Applicant	Location	Date of Application	Nature of Applicant	Stage-II Connectivity (MW)/date	Quantum won / Land & Auditor Basis	Dedicated Tr. System (Under the scope of the applicant/ISTS)
1.	1200002423	Mahoba Solar (UP) Private Limited	Jodhpur, Rajasthan	31/12/19	Solar	50/ 01/03/2020	Enh St-II  L&A	Mahoba Solar (UP) Private Limited – Bhadla 220kV S/c line  (220 kV line & 1 No. 220 kV bay already granted)
2.	1200002385	Avaada Energy Private Limited	Bikaner, Rajasthan	05/12/19	Solar	300/ 20/08/2021	(SECI ISTS-VI)	Avaada Energy Private Limited – Bikaner 400kV S/c line  (400 kV line & 1 No. 400 kV bay already granted)
3.	1200002390	Tata Power Renewable Energy Limited	Jaisalmer, Rajasthan	12/12/19	Solar	150 (01/06/2021)	Enh St-II  (Tata Power Ltd)	Tata Power Renewable Energy Limited – Bhadla 220kV S/c line  (220 kV line & 1 No. 220 kV bay already granted)
4.	1200002411	Rosepetal Solar Energy Private Limited	Jaisalmer, Rajasthan	31/12/19	Hybrid  (Solar-650MW, Wind-650MW)	700  (31/01/2022)	(Adani Electricity Mumbai Ltd LoA)	Rosepetal Solar Energy Private Limited – Fatehgarh-II 220kV D/c line (High Capacity)  (suitable to carry 700 MW at nominal voltage)  (220 kV bays at Fatehgarh-II P.S under ISTS)
5.	1200002410	Adani Renewable Energy Park Rajasthan	Jaisalmer, Rajasthan	31/12/19	Solar	500  (31/01/2022)	L&A	Adani Renewable Energy Park Rajasthan Limited - Fatehgarh-II P.S 220kV D/c line

Sl. No.	Application No.	Applicant	Location	Date of Application	Nature of Applicant	Stage-II Connectivity (MW)/date	Quantum won / Land & Auditor Basis	Dedicated Tr. System (Under the scope of the applicant/ISTS)
		Limited						(suitable to carry 600 MW at nominal voltage)  (220 kV bays at Fatehgarh-II P.S under ISTS)
6.	1200002340	NTPC Ltd.	Bikaner, Rajasthan	08/11/19	Solar	250 (29/11/2021)	SECI (Tranche-I under CPSU phase-II scheme)	NTPC Limited – Bhadla-II 400kV S/c line  (400 kV bay at Bhadla-II P.S under ISTS)
7.	1200002428	Adani Green Energy Four Limited	Jodhpur, Rajasthan	08/01/20	Solar	500/ 31/01/2022	(SECI LOA-Manufacturing)	Adani Green Energy Four Ltd. Power Plant- Bhadla-II P.S 400 kV S/c line (suitable to carry minimum capacity of 900 MW under nominal voltage) – to be implemented by applicant along with bay at generation switchyard.  400 kV Bay at Bhadla-II PS shall be under the scope of ISTS.
8.	1200002432	Adani Green Energy Four Limited	Jaisalmer, Rajasthan	08/01/20	Solar	500/ 30/09/2022	(SECI LOA-Manufacturing)	Adani Green Energy Four Ltd. Power Plant- Ramgarh P.S 400 kV S/c line (suitable to carry minimum capacity of 900 MW under nominal voltage) – to be implemented by applicant along with bay at generation switchyard  400 kV Bay at Ramgarh PS shall be under the scope of ISTS.
9.	1200002450	SBE Renewables Sixteen Private Limited	Jaisalmer, Rajasthan	23/01/20	Solar	180/ 11/08/2021	(SECI ISTS-V)	SBE Renewables Sixteen Private Limited Power Plant- Fatehgarh-II P.S 220 kV S/c line (suitable to carry 300 MW under nominal voltage) – to be implemented by applicant along with bay at generation switchyard  220 kV Bay at Fatehgarh-II PS shall be under the scope of ISTS.

Sl. No.	Application No.	Applicant	Location	Date of Application	Nature of Applicant	Stage-II Connectivity (MW)/date	Quantum won / Land & Auditor Basis	Dedicated Tr. System (Under the scope of the applicant/ISTS)
10.	1200002401	Azure Power India Private Limited	Jodhpur, Rajasthan	18/12/19	Solar	500 (07/04/2022)	(SECI Manufacturing)	Azure Power India Pvt. Ltd. Power Plant- Bhadla-II P.S 400 kV S/c line <sup>s</sup> (suitable to carry 1000 MW under nominal voltage) – to be implemented by applicant along with bay at generation switchyard  400 kV Bay at Bhadla-II PS shall be under the scope of ISTS.
11.	1200002402	Azure Power India Private Limited	Jaisalmer, Rajasthan	18/12/19	Solar	500 (31/10/2025)	(SECI Manufacturing)	Azure Power India Pvt. Ltd. Power Plant- Ramgarh-II P.S 400 kV S/c line (suitable to carry 900 MW under nominal voltage) – to be implemented by applicant along with bay at generation switchyard.  400 kV Bay at Ramgarh PS shall be under the scope of ISTS.
12.	1200002403	Azure Power India Private Limited	Jodhpur, Rajasthan	18/12/19	Solar	500 (07/04/2023)	(SECI Manufacturing)	Azure Power India Pvt. Ltd. Power Plant- Bhadla-II P.S 400 kV S/c line (suitable to carry 1000 MW under nominal voltage) – to be implemented by applicant along with bay at generation switchyard  400 kV Bay at Bhadla-II PS shall be under the scope of ISTS.
13.	1200002465	Enel Green Power India Private Limited	Bikaner, Rajasthan	08/02/20	Solar	300/ 01/09/2021	L&A	Enel Green Power India Pvt. Ltd power plant – Bikaner (PG) P.S 220 kV S/c line (suitable to carry 300 MW under nominal voltage) – to be implemented by applicant along with bay at generation switchyard.  (220 kV Bay at Bikaner (PG) PS shall be under the scope of ISTS)
14.	1200002471	ACME Solar Holdings Limited	Jodhpur, Rajasthan	18/02/20	Solar	300/ 21/06/2021	MSEDCL-LOA	ACME Solar Holdings Ltd. Power plant – Bhadla-II P.S 220 kV S/c line (suitable to carry 300 MW under nominal voltage) – to be implemented by applicant along with bay at generation switchyard.

Sl. No.	Application No.	Applicant	Location	Date of Application	Nature of Applicant	Stage-II Connectivity (MW)/date	Quantum won / Land & Auditor Basis	Dedicated Tr. System (Under the scope of the applicant/ISTS)
								(220 kV Bay at Bhadla-II PS shall be under the scope of ISTS)
15.	1200002483	NTPC LTD.	Bikaner, Rajasthan	26/02/20	Solar	300/ 25/10/2021  Revised Date(As per NTPC request Let dated 05/04/20): 01/09/2021	SECI CPSU Tr.-II	NTPC Ltd. Power plant – Common pooling station of NTPC's 250MW& 300 MW Solar Project located at Kolayat & Seora 220 kV S/c line & Common Plg station – Bhadla-II PS 400 kV S/c line (already granted for 250 MW plant)(suitable to carry 900 MW under nominal voltage) – to be implemented by applicant along with bay at generation switchyard.  (400 kV Bay already granted for 250 MW plant at Bhadla-II PS is under the scope of ISTS)
16.	1200002497	NTPC LTD.	Jaisalmer, Rajasthan	29/02/20	Solar	90/ 25/10/2021	SECI CPSU Tr.- II	Common Pooling Station of NTPC's 150 MW& 90 MW Solar Project at Devikoot – Fatehgarh-II PS 220 kV S/c line (already granted for 150 MW plant)(suitable to carry 300 MW under nominal voltage) – to be implemented by applicant along with bay at generation switchyard.  (220 kV Bay already granted for 150 MW plant at Fatehgarh-II PS is under the scope of NTPC)
17.	1200002501	NTPC LTD.	Bikaner, Rajasthan	29/02/20	Solar	300/ 01/09/2021	SECI CPSU Tr.- I & II	NTPC Ltd. Power plant – Bhadla-II P.S 220 kV S/c line (suitable to carry 300 MW under nominal voltage) – to be implemented by applicant along with bay at generation switchyard.  (220 kV Bay at Bhadla-II PS shall be under the scope of ISTS)
18.	1200002400	Azure Power India Private Limited	Jaisalmer, Rajasthan	18/12/19	Solar	500 (31/10/2023)  Revised Date- 07/04/2024	(SECI Manufacturing)	Azure Power India Pvt. Ltd. Power plant – Fatehgarh-II P.S 400 kV S/c line (suitable to carry 900 MW under nominal voltage) – to be implemented by applicant along with bay at generation switchyard.  (400 kV Bay at Fatehgarh-II PS shall be under the scope of ISTS)



Sl. No.	Application No.	Applicant	Location	Date of Application	Nature of Applicant	Stage-II Connectivity (MW)/date	Quantum won / Land & Auditor Basis	Dedicated Tr. System (Under the scope of the applicant/ISTS)
19.	1200002430	Adani Green Energy Four Limited	Jaisalmer, Rajasthan	08/01/20	Solar	500 (01/07/2021)	(SECI Manufacturing)	Adani Green Energy Four Ltd. Power plant – Fatehgarh-II P.S 220 kV D/c line (suitable to carry 300 MW per circuit under nominal voltage) – to be implemented by applicant along with bay at generation switchyard.  (220 kV Bays at Fatehgarh-II PS shall be under the scope of ISTS)
20.	1200002554	Eden Renewable Alma Private Limited	Jodhpur, Rajasthan	07/04/2020	Solar	1200002526 / 300	(SECI ISTS VIII)	Eden Alma-ISTS solar power plant - Bhadla-II PS 220 kV S/c line – to be implemented by applicant along with bay at generation switchyard.  220 kV Bay at Bhadla-II PS shall be under the scope of ISTS.
21.	1200002556	SBE Renewables Fifteen Private Limited	Jodhpur, Rajasthan	13/04/2020	Solar	1200002555 / 600	(SECI ISTS VIII)	SBE Renewable fifteen Pvt. Ltd. solar power plant - Bhadla-II PS 220 kV D/c line (suitable to carry 300 MW per circuit under nominal voltage) – to be implemented by applicant along with bay at generation switchyard.  220 kV Bays at Bhadla-II PS shall be under the scope of ISTS.
22.	1200002559	AMP ENERGY GREEN PRIVATE LIMITED	Jodhpur, Rajasthan	13/04/2020	Solar	1200002461 / 300	(SECI ISTS VIII)	Amp Energy Green Four solar power plant - Bhadla-II PS 220 kV S/c line (suitable to carry 300 MW under nominal voltage) – to be implemented by applicant along with bay at generation switchyard.  220 kV Bay at Bhadla-II PS shall be under the scope of ISTS.
23.	1200002590	ReNew Surya Vihaan Private	Jaisalmer, Rajasthan	06/05/2020	Solar	200/	SECI	ReNew Surya Vihaan Private Ltd. solar power plant – Fatehgarh-III PS 220 kV S/c line on D/C tower (suitable to carry 300 MW under nominal voltage) – to be

Sl. No.	Application No.	Applicant	Location	Date of Application	Nature of Applicant	Stage-II Connectivity (MW)/date	Quantum won / Land & Auditor Basis	Dedicated Tr. System (Under the scope of the applicant/ISTS)
		Limited				Revised: 31/03/2022		implemented by applicant along with bay at generation switchyard  220 kV Bay at Fatehgarh-III PS to be implemented under ISTS
24.	1200002614	Avaada Energy Private Limited	Jodhpur, Rajasthan	28/05/2020	Solar	240/ 31/12/2021	SECI	Avaada Energy Private Limited Solar power plant - Bhadla-II PS 220 kV S/c line (suitable to carry 300 MW under nominal voltage) – to be implemented by applicant along with bay at generation switchyard  220 kV Bay at Bhadla-II PS to be implemented under ISTS
25.	1200002628	Renew Surya Roshni Pvt. Ltd.	Jaisalmer, Rajasthan	05/06/2020	Hybrid (Solar+Wind )	400/ 31/08/2022	(SECI Round the Clock Tender)	Renew Surya Roshni Pvt. Ltd. hybrid power plant – Fatehgarh-III PS 220 kV S/c high capacity line on D/c tower (suitable to carry 400 MW under nominal voltage) – to be implemented by applicant along with bay at generation switchyard.  220 kV Bay at Fatehgarh-III PS to be implemented under ISTS
26.	1200002637	Altra Xergi Power Pvt. Ltd.	Jaisalmer, Rajasthan	11/06/2020	Solar	380/ 15/02/2022	NHPC LOA	Altra Xergi Power Pvt. Ltd. solar power plant – Fatehgarh-III PS 220 kV S/c high capacity line on D/c tower (suitable to carry 380 MW under nominal voltage) – to be implemented by applicant along with bay at generation switchyard  220 kV Bay at Fatehgarh-III PS to be implemented under ISTS
27.	1200002636	Avaada Energy Pvt. Ltd.	Jodhpur, Rajasthan	11/06/2020		320/ 28/02/2022		Avaada Energy Pvt. Ltd. solar power plant – Bhadla-II PS 220 kV S/c line (suitable to carry 320 MW under nominal voltage) – to be implemented by applicant along with bay at

Sl. No.	Application No.	Applicant	Location	Date of Application	Nature of Applicant	Stage-II Connectivity (MW)/date	Quantum won / Land & Auditor Basis	Dedicated Tr. System (Under the scope of the applicant/ISTS)
					Solar		NHPC LOA	generation switchyard. 220 kV Bay at Bhadla-II PS to be implemented under ISTS
28.	1200002635	SBE Renewables Seventeen Private Limited	Jaisalmer, Rajasthan	13/05/2020	Solar	600/ 01/03/2022	NHPC LOA	SBE Renewables Seventeen Private Limited solar power plant – Fatehgarh-III PS 220 kV D/c line (suitable to carry 300 MW per circuit under nominal voltage) – to be implemented by applicant along with bay at generation switchyard. 220 kV Bays at Fatehgarh-III PS to be implemented under ISTS
29.	1200002629	Eden Renewable Passy Private Limited	Barmer, Rajasthan	11/06/2020	Solar	300/ 31/03/2022 (Revised)	NHPC LOA	Eden Renewable Passy Private Limited solar power plant – Fatehgarh-III PS 220 kV S/c line on D/c tower (suitable to carry 300 MW under nominal voltage) – to be implemented by applicant along with bay at generation switchyard. 220 kV Bay at Fatehgarh-III PS to be implemented under ISTS
30.	1200002642	Avikiran Surya India Pvt. Ltd.	Bikaner, Rajasthan	16/06/2020	Solar	300/ 01/09/2021	SECI-IX/LOA	Avikiran Surya India Pvt. Ltd. solar power plant – Bikaner PS 220 kV S/c line on D/c tower (suitable to carry 300 MW under nominal voltage) – to be implemented by applicant along with bay at generation switchyard. 220 kV Bay at Bikaner PS to be implemented under ISTS

#### Conventional Connectivity:

Sl. No.	Application ID	Name of the Applicant	Submission Date	Project Location	Connectivity location (requested)	Quantum (MW)	Proposal/Remarks
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Sl. No.	Application ID	Name of the Applicant	Submission Date	Project Location	Connectivity location (requested)	Quantum (MW)	Proposal/Remarks
1.	1200002404	THDC India Limited (Khurja STPP)	17/12/19	Khurja, Bulandshahar, UP	Aligarh (PG) S/s	528	Applicant has requested the connectivity with the ISTS grid at 765/400 kV Aligarh substation of POWERGRID.
2	1200002143	NPCIL	19/06/2019	Gorakhpur, Haryana	Fatehabad & Patran	2800	GHAVP - Fatehabad (PG) 400 kV (Quad) D/c line – to be implemented by applicant GHAVP – Patran (TBCB) 400 kV (Quad) D/c line – to be implemented by applicant 2x125 MVAR Bus Reactor at Generation switchyard of NPCIL (under scope of NPCIL)
3	1200002527	NTPC Ltd.	18/06/2020	Within NTPC- Rihand Premises	Within NTPC-Rihand Premises	20	Connectivity shall be granted for 20 MW Solar PV Project at NTPC Rihand & Auraiya at respective generation switchyard
4	1200002528	NTPC Ltd.	18/06/2020	Within NTPC- Auraiya Premises	Within NTPC-Auraiya Premises	20	Connectivity shall be granted for 20 MW Solar PV Project at NTPC Rihand & Auraiya at respective generation switchyard
5	1200002649	CHENAB VALLEY POWER	25/06/2020	Kishtwar, J&K	Kishenpur S/s	624	➤ 400 kV D/c (Triple HTLS Conductor –Equivalent to about 2400MW-considering

Sl. No.	Application ID	Name of the Applicant	Submission Date	Project Location	Connectivity location (requested)	Quantum (MW)	Proposal/Remarks
		PROJECTS [P] LIMITED  (Kiru HEP)					<p>1% overload) line from Kiru HEP – Pakaldul generation switchyard</p> <p>➤ Switchyard Capacity etc. must be able to handle about 2400MW power generated by the generation projects located in downstream of the Kiru HEP. It is proposed that the GIS switchyard equipment and XLPE cables provided may be designed for carrying 4000 Amps current.</p> <p>➤ 400 kV, 125 MVAR Bus Reactor at Kiru generation switchyard</p>

**LTA:**

Sl. No	Application No./Date (Online)	Applicant	Connectivity/ Injection Point	Drawl Point	LTA (MW)/ Start & End Date (Sought)	Deliberations
1.	1200002368	ReNew Solar Urja Private	Fatehgarh-II P.S	SR (Target)	300 (Start : 23/08/2021 End : 22/08/2046)	Connectivity (1200002370-300 MW, Stage-II) has been agreed for grant in the 30 <sup>th</sup> Constituent meeting of NR. The same has been considered for present LTA.

Sl. No	Application No./Date (Online)	Applicant	Connectivity/ Injection Point	Drawl Point	LTA (MW)/ Start & End Date (Sought)	Deliberations
	(23/12/19)	Limited				<p>Transmission system for Solar energy zones (8.9 GW) in Rajasthan was technically agreed in 2<sup>nd</sup> Meeting of Northern Region Standing Committee on Transmission held on 13/11/18 along with the system studies. The required power transfer of 300 MW from Fatehgarh-II P.S was envisaged under the said system.</p> <p>Accordingly, it was agreed to grant LTA to M/s ReNew Solar Urja Private Limited for 300 MW from Fatehgarh-II P.S to SR (Target) from 23/08/2021 to 22/08/2046 subject to commissioning of ISTS system mentioned at <b>Appendix-I</b>.</p>
2.	1200002422 (31/12/19)	SBE Renewables Ten Private Limited	Fatehgarh-II P.S	NR (Target): 50MW WR(Target): 400MW	450 (Start : 07/05/2021 End : 06/05/2046)	<p>Connectivity (1200002321-450 MW, Stage-II) has been granted vide intimation letter dated 24/12/19. The same has been considered for present LTA.</p> <p>Transmission system for Solar energy zones (8.9 GW) in Rajasthan was technically agreed in 2<sup>nd</sup> Meeting of Northern Region Standing Committee on Transmission held on 13/11/18 along with the system studies. The required power transfer of 450 MW from Fatehgarh-II P.S was envisaged under the said system.</p> <p>Accordingly, it was agreed to grant LTA to M/s SBE Renewables Ten Private Limited for 450 MW from Fatehgarh-II P.S to NR (Target): 50MW and WR(Target): 400MW from 07/05/2021 to 06/05/2046 subject to commissioning of ISTS system mentioned at <b>Appendix-I</b>.</p>
3.	1200002391 (09/12/19)	Avaada Energy Private Limited	Bikaner PS	SR (Target)	300 (Start : 23/08/2021 End : 23/08/2046)	<p>Connectivity (1200002385-300 MW, Stage-II) has been agreed for grant in the present meeting. The same has been considered for present LTA.</p> <p>Transmission system for Solar energy zones (8.9 GW) in Rajasthan was technically agreed in 2<sup>nd</sup> Meeting of Northern Region Standing Committee on Transmission held on 13/11/18 along with the system studies. It was informed while evolving aforesaid transmission system, generation potential of 1.85 GW was envisaged at Bikaner PS, out of which 1.8 GW has already been granted. However, simulation studies indicate that loading on transmission system is in order with 2.1 GW(1.8+0.3)injectionat BikanerPS.</p>

Sl. No	Application No./Date (Online)	Applicant	Connectivity/ Injection Point	Drawl Point	LTA (MW)/ Start & End Date (Sought)	Deliberations
						Accordingly, it was agreed to grant LTA to M/s Avaada Energy Private Limited for 300 MW from Bikaner P.S to SR (Target) from 23/08/2021 to 23/08/2046 subject to commissioning of ISTS system mentioned at <b>Appendix-II</b> .
4	1200002442 (21/01/2020)	Adani Green Energy Seven Ltd.	Fatehgarh-II P.S	NR (Target)	300 (Start : 02/08/2021 End : 01/08/2046)	It was informed that Connectivity (1200002225-300 MW, Stage-II) has been granted at 220 kV level vide intimation letter dated 07/10/19 and the same has been considered for present LTA, which was confirmed by applicant. Transmission system for Solar energy zones (8.9 GW) in Rajasthan was technically agreed in 2 <sup>nd</sup> Meeting of Northern Region Standing Committee on Transmission held on 13/11/18 along with the system studies. The required power transfer of 300 MW from Fatehgarh-II P.S was envisaged under the said system. Accordingly, it was agreed to grant LTA to M/s Adani Green Energy Seven Ltd. for 300 MW from Fatehgarh-II P.S to NR (Target): 300 MW from 02/08/2021 to 01/08/2046 subject to commissioning of ISTS system mentioned at <b>Appendix-I</b> .
5	1200002443 (21/01/2020)	Adani Green Energy Nine Ltd.	Fatehgarh-II P.S	NR (Target): 200MW ER(Target): 100MW	300 (Start : 02/08/2021 End : 01/08/2046)	It was informed that Connectivity (1200002226-300 MW, Stage-II) has been granted at 220 kV level vide intimation letter dated 29/10/19 and the same has been considered for present LTA, which was confirmed by applicant.  Transmission system for Solar energy zones (8.9 GW) in Rajasthan was technically agreed in 2 <sup>nd</sup> Meeting of Northern Region Standing Committee on Transmission held on 13/11/18 along with the system studies. The required power transfer of 300 MW from Fatehgarh-II P.S was envisaged under the said system.  Accordingly, it was agreed to grant LTA to M/s Adani Green Energy Nine Ltd. for 300 MW from Fatehgarh-II P.S to NR & ER(Target): 200 MW and 100 MW respectively from 02/08/2021 to 01/08/2046 subject to commissioning of ISTS system mentioned at <b>Appendix-I</b> .
6	1200002438	SJVN Ltd.	Hamirpur (PG)	NR (Target)	66 (Start : 30/11/24 End : 29/11/49)	It was informed that Connectivity has been granted vide letter dated 16/10/2017 at 400/220 kV Hamirpur (PG) substation and the same has been considered for present LTA. Transmission system

Sl. No	Application No./Date (Online)	Applicant	Connectivity/ Injection Point	Drawl Point	LTA (MW)/ Start & End Date (Sought)	Deliberations
	(22/01/2020)	(Dhulasidh HEP)				<p>granted for Connectivity (66 MW plus 10% overload) is from Dhulasidh HEP to Hamirpur (PG) 400/220 kV substation through 220 kV D/c line.</p> <p>For transfer of 66 MW to NR (Target), it is observed that loadings on the existing ISTS system beyond Hamirpur (PG) is in order. Accordingly, it was agreed to grant LTA to SJVN Ltd. for 66 MW from Dhulasidh HEP to NR (Target) from 30/11/2024 to 29/11/2049 through ISTS transmission system beyond Hamirpur (PG) substation.</p>
7	1200002147/ 19/06/2019	NPCIL Ltd.	Fatehabad & Patran	NR (Target)	2800 (Start : 31/03/26 End : 31/10/49)	1x500 MVA ICT at Patran 400/220 kV (TBCB) substation – to be implemented under ISTS
8	1200002486  (inadvertently mentioned as 1200002479 in agenda)  (26/02/2020)	NTPC Ltd.	NTPC Auraiya Gas Power Station Switchyard	UP (Firm)	20 (Start : 20/03/2020 End : 19/03/2045)	<p>It was informed that Connectivity (1200001879-20 MW) was granted vide intimation letter dated 25/04/19 and the same has been considered for present LTA, which was confirmed by the applicant.</p> <p>NTPC vide letter dated 26.02.2020 had requested to grant LTA from 20.03.2020 for 10MW, another 5MW from 15.04.2020 and remaining 5MW from 15.05.2020. As start date for 10MW i.e. 20.03.2020 has passed and next date for 5MW was approaching soon, NTPC was requested to respond. On this, NTPC informed that due to Lockdown situation in the Country on account of COVID-19, they may not be able give any firm date for Start of LTA now and requested to inform the same at a later date. It was discussed that NTPC would be required to sign the LTA agreement also within 30days of grant, accordingly, suitable dates for LTA grant should be provided by NTPC considering this aspect as with the proposed dates by NTPC, LTA would also be operationalized subject to signing of LTA Agreement. CTU informed that NTPC may formally submit the revised dates within 7 days, based on the same grant of LTA shall be considered . Also, NTPC would be required to submit the required documents for waiver of transmission charges.</p> <p>Further, it was also informed that NOC submitted by NTPC is valid</p>



Sl. No	Application No./Date (Online)	Applicant	Connectivity/ Injection Point	Drawl Point	LTA (MW)/ Start & End Date (Sought)	Deliberations
						<p>from 15.03.2020 to 14.03.2045, however, LTA has been sought from 20.03.2020 to 19.03.2045. Accordingly, period of LTA shall be considered upto 14.03.2045.</p> <p>Accordingly, it was agreed to grant NTPC LTA with start date to be informed by them subject to signing of LTA Agreement through existing ISTS system upto 14.03.2045.</p>
9	1200002476 (19/02/2020)	Azure Power India Pvt. Ltd.	Bhadla	BRPL, Delhi (Firm)	100 (Start : 15/10/2020 End : 15/10/2046)	<p>It was deliberated that M/s Azure vide letter dated 19.02.2020 informed that they were granted 300MW LTA (1200001562) on Target Region (ER) basis vide intimation dated 24.10.2018. Further, in order to align their LTAs with PSAs executed by SECI with buying utilities, they have filed fresh application for change of 100 MW Target Region(ER) by firming up of beneficiaries in NR.</p> <p>It was noted that 300MW LTA (1200001562) has already been granted on Target Region (ER) basis to M/s Azure w.e.f. 15.10.2020 with 1x500MVA, 400/220kV (5<sup>th</sup>) ICT at Bhadla and the present application is only for change in target region by firming up of beneficiaries with same start date i.e. 15.10.2020. Based on query from M/s Azure, it was deliberated that in the instant case, the relinquishment charges may not be applicable as the applicant has not changed the start date of LTA in line with CERC order in petition no. 92/MP/2015. M/s Azure was suggested to submit formal relinquishment letter for change in region within 7 days for which they agreed. Subsequently, M/s Azure has submitted their relinquishment request vide letter dated 27/04/2020.</p> <p>Accordingly, it was agreed to grant LTA to M/s Azure for 100 MW from Bhadla (PG) to BRPL, Delhi (NR) from 15/10/2020 to 15/10/2045 subject to commissioning of 1x500MVA, 400/220kV (5<sup>th</sup>) ICT at Bhadla. Further, 100MW LTA is required to be relinquished from ER and remaining 200MW LTA shall be on Target Region (ER) basis till firming up of beneficiaries.</p>
10	1200002477 (19/02/2020)	Azure Power India Pvt. Ltd.	Bhadla	MPPCL, WR (Firm)	200 (Start : 15/10/2020 End : 15/10/2046)	<p>It was deliberated that M/s Azure vide letter dated 19.02.2020 informed that they were granted 200MW LTA (1200001565) on Target Region (NR) basis vide intimation dated 24.10.2018. Further, in order to align their LTAs with PSAs executed by SECI</p>

Sl. No	Application No./Date (Online)	Applicant	Connectivity/ Injection Point	Drawl Point	LTA (MW)/ Start & End Date (Sought)	Deliberations
						<p>with buying utilities, they have filed fresh application for change of 200MW Target Region (NR) by firming up of beneficiaries. It was noted that 200MW LTA (1200001565) has already been granted on Target Region (NR) basis to M/s Azure w.e.f. 15.10.2020 with 1x500MVA, 400/220kV (5<sup>th</sup>) ICT at Bhadla and the present application is for change in target region by firming up of beneficiaries with same start date i.e. 15.10.2020. Based on query from M/s Azure, it was deliberated that in the instant case, the relinquishment charges may not be applicable as the applicant has not changed the start date of LTA in line with CERC order in petition no. 92/MP/2015. M/s Azure was suggested to submit formal relinquishment letter for change in region within 7 days for which they agreed. Subsequently, M/s Azure has submitted their relinquishment request vide letter dated 27/04/2020.</p> <p>Accordingly, it was agreed to grant LTA to M/s Azure for 200 MW from Bhadla (PG) to MPPCL, WR from 15/10/2020 to 15/10/2045 subject to commissioning of 1x500MVA, 400/220kV (5<sup>th</sup>) ICT at Bhadla. However, 200MW LTA is required to be relinquished from NR.</p>
11	1200002454 / 30/01/2020	TPREL	Bhadla	Target (WR)	150 (Start : 01/07/2021 End : 30/06/2046)	<p>For evacuation of power beyond Bhadla (PG), Transmission System for Solar Energy Zones in Rajasthan (8.9GW) under Phase-I shall be required which is under implementation with commissioning schedule as Dec'20. Transmission scheme for controlling high loading and high short circuit level at Moga substation shall also be required. Details of the scheme is attached at <b>Appendix-III</b>.</p>
12	1200002567/ 30/04/2020	ReNew Surya Vihaan Private Limited	Fatehgarh-III PS, Rajasthan	SR (Target)	200 (Revised Start:31/03/2022 End:04/01/2047)	<p>Connectivity (1200002590-200 MW, Stage-II) agreed for grant in the present meeting. The same has been considered for LTA.</p> <p>CTU informed that new Fatehgarh-III PS (changed location of Ramgarh-II PS) with 1x500 MVA, 400/220kV ICT along with Fatehgarh-III PS – Fatehgarh-II PS 400 kV (Twin HTLS) D/c</p>

Sl. No	Application No./Date (Online)	Applicant	Connectivity/ Injection Point	Drawl Point	LTA (MW)/ Start & End Date (Sought)	Deliberations
						<p>line,Jaisalmer (RVPN) S/s - Fatehgarh-III PS (Twin HTLS) 400 kV D/c line and 1X1500MVA, 765/400kV ICT (5<sup>th</sup>) at Fatehgarh-II PS (part of Transmission system associated with SEZ in Rajasthan under 8.1 GW Phase-II scheme) shall be required for the present 200 MW LTA. The above transmission system is presently under TBCB bidding process with March'22 completion schedule.</p> <p>In addition to above, Commontransmission system associated with SEZ in Rajasthan under 8.9 GW Phase-I scheme shall also be part of LTA system.The system studies for Phase-I &amp; II transmission system have already been agreed in 2<sup>nd</sup> and 5<sup>th</sup> NRSCT meetings held on 13/11/2018 &amp; 13/09/2019, respectively.</p> <p>Applicant requested that due to change in generation project schedule (as also mentioned in the discussions of Stage-II Connectivity application), start date of LTA may be changed to 31/03/2022 instead of 05/01/2022.</p> <p>After deliberations, it was agreed to grant LTA to M/s ReNew Surya Vihaan Private Limited for transfer of 200 MW from Fatehgarh-III PS to SR on target region basis from 31/03/2022 to 04/01/2047 with commissioning of ISTS system broadly mentioned above (details at <b>Appendix-IV</b>).</p>
13	1200002608 /19/05/2020	SJVN Limited (Luhri Stage-I HEP)	Nanje PS, Himachal Pradesh	NR (Target)	210 (Start:31/08/2025 End:30/08/2060)  Revised Date:	<p>It was informed that Connectivity to 210 MW Luhri HEP (St-I) was granted vide CTU intimation dated 20/03/2019 at 400/220 kV Nange GIS Pooling Station (new) proposed under ISTS through 220 kV D/c line and the same has been considered for present LTA.</p> <p>Transmission system agreed for grant of Connectivity is as</p>

Sl. No	Application No./Date (Online)	Applicant	Connectivity/ Injection Point	Drawl Point	LTA (MW)/ Start & End Date (Sought)	Deliberations
					(Start Date:30/11/2025 End:29/11/2065)	<p>follows:</p> <p>Under the scope of Generator:</p> <ul style="list-style-type: none"> <li>• Luhri Stage-I – 400/220kV Nange GIS Pooling Station 220kV D/c line along with associated bays at both ends.</li> </ul> <p>Under the scope of ISTS:</p> <ul style="list-style-type: none"> <li>• Establishment of 400/220kV Nange GIS Pooling Station(Tentatively Identified near Luhri Stage-II HEP)</li> <li>• Nange GIS Pooling Station –Koldam (NTPC generation switchyard) 400kV D/c line along with associated bays atboth ends (GIS bays at both ends)</li> </ul> <p>It was informed that system studies were carried out for transfer of 210 MW to NR (Target basis) and it has been seen that loadings on the existing ISTS system beyond Koldam is in order.</p> <p>During the meeting, Applicant requested to change their start &amp; end date of LTA, for which CTU informed to submit the dates through formal communication. It was agreed to incorporate the dates to be informed by the applicant. Thereafter, applicant vide email dated 14/07/2020 informed that the start and end date of LTA may be considered as 30/11/2025 and 29/11/2065, respectively.</p> <p>In view of the above, it was agreed to grant LTA to SJVN Ltd.</p>

Sl. No	Application No./Date (Online)	Applicant	Connectivity/ Injection Point	Drawl Point	LTA (MW)/ Start & End Date (Sought)	Deliberations
						for transfer of 210 MW from Luhri-Stage-I HEP to NR on target region basis from 30/11/2025 to 29/11/2065 through existing ISTS transmission system beyond Koldam HEP.
14	1200002634/ 09-06-2020	Renew Surya Roshni Private Limited	Fatehgarh-III PS, Rajasthan	WR (Target)- 200MW NR (Target)- 200MW	400 (Start:01/08/2022 End:31/07/2047)	<p>Connectivity (1200002628-400 MW, Stage-II) was taken up for discussion in the subject meeting and the same was considered for present LTA.</p> <p>CTU informed that New Fatehgarh-III PS (changed location of Ramgarh-II PS) is part of Transmission system associated with SEZ in Rajasthan under 8.1 GW Phase-II scheme which shall be required for evacuation of present 400 MW LTA. This Transmission system is presently under TBCB bidding process with March'22 completion schedule.</p> <p>In addition to above, Common transmission system associated with SEZ in Rajasthan under 8.9 GW Phase-I scheme shall also be part of LTA system. The system studies for Phase-I &amp; II transmission system have already been agreed in 2<sup>nd</sup> and 5<sup>th</sup> NRSCT meetings held on 13/11/2018 &amp; 13/09/2019, respectively. The required power transfer of 400 MW from Fatehgarh-III P.S was envisaged under the said system.</p> <p>After deliberations, it was agreed to grant LTA to M/s ReNew Surya Roshni Private Limited for 400 MW from Fatehgarh-III P.S to WR &amp; NR (Target) from 01/08/2022 to 31/07/2047 subject to commissioning of ISTS system mentioned at <b>Appendix-IV.</b></p>
15	1200002639/ 09-06-2020	Altra Xergi Power Private Limited	Fatehgarh-III PS, Rajasthan	(As per application) WR	380 (Start:01/03/2022)	Connectivity (1200002637-380 MW, Stage-II) was taken up for discussion in the subject meeting and the same was considered for present LTA.

Sl. No	Application No./Date (Online)	Applicant	Connectivity/ Injection Point	Drawl Point	LTA (MW)/ Start & End Date (Sought)	Deliberations
				(Target)- 330MW  NR (Target)- 50MW  Revised:  WR (Target)- 380MW	End: 28/02/2047)	<p>CTU informed that New Fatehgarh-III PS (changed location of Ramgarh-II PS) is part of Transmission system associated with SEZ in Rajasthan under 8.1 GW Phase-II scheme which shall be required for evacuation of present 380 MW LTA. This Transmission system is presently under TBCB bidding process with March'22 completion schedule.</p> <p>In addition to above, Common transmission system associated with SEZ in Rajasthan under 8.9 GW Phase-I scheme shall also be part of LTA system. The system studies for Phase-I &amp; II transmission system have already been agreed in 2<sup>nd</sup> and 5<sup>th</sup> NRSCT meetings held on 13/11/2018 &amp; 13/09/2019, respectively. The required power transfer of 380 MW from Fatehgarh-III P.S was envisaged under the said system.</p> <p>Further, applicant requested vide letter dated 20/07/2020 that they intend to change their target region from NR to WR for 50 MW capacity. The same was noted and agreed.</p> <p>Accordingly, after deliberations, it was agreed to grant LTA to M/s Altra Xergi Power Private Limited for 380 MW from Fatehgarh-III P.S to WR (Target) from 01/03/2022 to 28/02/2047 subject to commissioning of ISTS system mentioned at <b>Appendix-IV</b>.</p>
16	1200002656/ 30-06-2020	SBE Renewables Sixteen Private Limited	Fatehgarh-II PS, Rajasthan	Bihar, ER (firm)	180  (Start:03/11/2021  End:03/11/2046)	<p>Connectivity (1200002450-180 MW, Stage-II) was granted at Fatehgarh-II PS and the same is considered for present LTA.</p> <p>CTU informed that Common transmission system associated with SEZ in Rajasthan under 8.9 GW Phase-I scheme shall be required for power evacuation.</p> <p>In addition to above, Transmission system associated with</p>

Sl. No	Application No./Date (Online)	Applicant	Connectivity/ Injection Point	Drawl Point	LTA (MW)/ Start & End Date (Sought)	Deliberations
						<p>SEZ in Rajasthan under 8.1 GW Phase-II scheme shall also be required for evacuation of present 400 MW LTA. This Transmission system is presently under TBCB bidding process with March'22 completion schedule.</p> <p>The system studies for Phase-I &amp; II Transmission system have already been agreed in 2<sup>nd</sup> and 5<sup>th</sup> NRSC meetings held on 13/11/2018 &amp; 13/09/2019, respectively. The required power transfer of 180 MW from Fatehgarh-II P.S was envisaged under the said system.</p> <p>After deliberations, it was agreed to grant LTA to M/s SBE Renewables Sixteen Private Limited for 180 MW from Fatehgarh-II PS to Bihar, ER 03/11/2021 to 03/11/2046 subject to commissioning of ISTS system mentioned at <b>Appendix-IV.</b></p>

**Transmission system for LTA applications at Fatehgarh-II S/s**

- 1) Establishment of 765/400kV, 3X1500MVA ICT (2<sup>nd</sup>, 3<sup>rd</sup>& 4<sup>th</sup>), pooling station at suitable location near Fatehgarh (Fatehgarh-II PS)
- 2) Establishment of 400/220kV, 3X500MVA (3<sup>rd</sup>& 4<sup>th</sup>), ICT at Fatehgarh-II Pooling station
- 3) Establishment of 765/400kV, 2x1500MVA pooling station at suitable location near Phalodi/ Bhadla in Jodhpur (Bhadla-II PS)
- 4) Establishment of 765/400kV, 2x1500 MVA S/s at suitable location near Khetri
- 5) Charging of Fatehgarh-II PS–Bhadla section at 765kV level
- 6) LILO of both ckts of 765kV Ajmer – Bikaner D/c line at Bhadla-II PS
- 7) Fatehgarh-II PS – Bhadla -II PS 765kV D/c line
- 8) Bhadla-II PS – Bhadla (PG) 400kV D/c Line (Twin HTLS)
- 9) Bikaner(PG) – Khetri S/s 765kV D/c line
- 10) Khetri – Jhatikara 765kV D/c line
- 11) Khetri – Sikar (PG) 400kV D/c line (twin AL59)
- 12) Augmentation with 1x1000MVA,765/400kV transformer (3<sup>rd</sup>) at Bhiwani (PG)
- 13) Ajmer (PG)– Phagi 765kV D/c line
- 14) 1x125 MVA (420kV), 2x240 MVA (765kV) Bus Reactor each at Fatehgarh-II PS, Bhadla-II PS &Khetri Substation
- 15) 1x240 MVAR Switchable Line reactors for each circuit at Jhatikara end of Khetri – Jhatikara 765kV D/c line
- 16) 1x240 MVA Switchable line reactor for each circuit at each end of Bikaner – Khetri 765kV D/c line
- 17) 1x330 MVA Switchable line reactor for each circuit at Bhadla-II PS end for Ajmer - Bhadla-II PS 765kV line (after LILO)
- 18) 1x240 MVA Switchable line reactor for each circuit at Bhadla-II PS end for Bikaner-Bhadla-II PS 765kV line (after LILO)
- 19) Suitable bus splitting arrangement at 765/400/220 kV Moga S/s

**In addition, following Transmission System for Connectivity shall also be required:**

- 1) Establishment of 1x1500MVA, 765/400kV, Fatehgarh-II Pooling station at suitable location near Fatehgarh.
- 2) Establishment of 1x500 MVA, 400/220kV ICT at Fatehgarh-II Pooling station
- 3) LILO of Fatehgarh (TBCB) – Bhadla (PG) 765kV D/c line (to be operated at 400kV) at Fatehgarh-II so as to establish Fatehgarh (TBCB) – Fatehgarh-II 400kV D/c line (765kV line operated at 400 kV) and Fatehgarh-II - Bhadla 765kV D/c line or Fatehgarh-II – Bhadla-II 765 kV D/c line



**Tr. System for LTA applications at Bikaner (PG)**

- 1) Establishment of 765/400kV, 2x1500 MVA S/s at suitable location near Khetri
- 2) Bikaner(PG) – Khetri 765kV D/c line
- 3) Khetri – Jhatikara 765kV D/c line
- 4) Khetri – Sikar (PG) 400kV D/c line (Twin AL59)
- 5) Ajmer (PG) – Phagi 765kV D/c line
- 6) Augmentation with 765/400kV, 1x1000MVA transformer (3<sup>rd</sup>) at Bhiwani (PG)
- 7) Suitable bus splitting arrangement at 765/400/220 kV Moga S/s
- 8) Associated suitable Reactive Compensation

**Transmission system for LTA application at Bhadla**

- 1) Establishment of 765/400kV, 1X1500MVA ICT (3<sup>rd</sup>), pooling station at suitable location near Phalodi/ Bhadla in Jodhpur (Bhadla-II PS)
- 2) Establishment of 765/400kV, 2x1500 MVA S/s at suitable location near Khetri
- 3) LILO of both ckts of 765kV Ajmer – Bikaner D/c line at Bhadla-II PS
- 4) Bhadla-II PS – Bhadla (PG) 400kV D/c Line (Twin HTLS)
- 5) Bikaner(PG) – Khetri S/s 765kV D/c line
- 6) Khetri – Jhatikara 765kV D/c line
- 7) Khetri – Sikar (PG) 400kV D/c line (Twin AL59)
- 8) Augmentation with 1x1000MVA,765/400kV transformer (3<sup>rd</sup>) at Bhiwani (PG)
- 9) Ajmer (PG)– Phagi 765kV D/c line
- 10) 1x125 MVA (420kV), 2x240 MVA (765kV) Bus Reactor each at Bhadla-II PS &Khetri Substation
- 11) 1x240 MVAR Switchable Line reactors for each circuit at Jhatikara end of Khetri – Jhatikara 765kV D/c line
- 12) 1x240 MVAR Switchable line reactor for each circuit at each end of Bikaner – Khetri 765kV D/c line
- 13) 1x330 MVAR Switchable line reactor for each circuit at Bhadla-II PS end for Ajmer - Bhadla-II PS 765kV line (after LILO)
- 14) 1x240 MVAR Switchable line reactor for each circuit at Bhadla-II PS end for Bikaner-Bhadla-II PS 765kV line (after LILO)
- 15) Transmission scheme for controlling high loading and high short circuit level at Moga substation (Suitable bus splitting arrangement at 765/400/220 kV Moga S/s)

**Transmission system for 200 MW LTA to ReNew Surya Vihaan Private Limited for transfer of power from Fatehgarh-III PS to SR**

**A. Transmission system for present LTA (Part of Transmission system associated with SEZ in Rajasthan under 8.1 GW Phase-II scheme)**

- 1) Establishment of 1x500 MVA (1<sup>st</sup>) 400/220kV ICT at Fatehgarh-III Pooling station
- 2) Fatehgarh-II PS – Fatehgarh-III PS 400 kV (Twin HTLS) 400 kV D/c line
- 3) Jaisalmer (RVPN) S/s - Fatehgarh-III PS (Twin HTLS) 400 kV D/c line
- 4) 1X1500MVA, 765/400 kV ICT (5<sup>th</sup>) at Fatehgarh-II PS

**B. Common transmission system (Part of Transmission system associated with SEZ in Rajasthan under 8.9 GW Phase-I scheme)**

- 1) Establishment of 765/400kV, 4X1500MVA ICT (1<sup>st</sup> to 4<sup>th</sup>) pooling station at suitable location near Fatehgarh (Fatehgarh-II PS)
- 2) Establishment of 765/400kV, 3x1500MVA pooling station at suitable location near Phalodi/ Bhadla in Jodhpur (Bhadla-II PS)
- 3) Establishment of 765/400kV, 2x1500 MVA S/s at suitable location near Khetri
- 4) Charging of Fatehgarh-II PS–Bhadla section at 765 kV level
- 5) LILO of both ckts of 765kV Ajmer – Bikaner D/c line at Bhadla-II PS
- 6) Fatehgarh-II PS – Bhadla -II PS 765kV D/c line
- 7) Bhadla-II PS – Bhadla (PG) 400kV D/c Line (Twin HTLS)
- 8) Bikaner (PG) – Khetri S/s 765kV D/c line
- 9) Khetri – Jhatikara 765kV D/c line
- 10) Khetri – Sikar (PG) 400kV D/c line (twin AL59)
- 11) Augmentation with 1x1000MVA,765/400kV Transformer (3<sup>rd</sup>) at Bhiwani (PG)
- 12) Ajmer (PG)– Phagi 765kV D/c line
- 13) 1x125 MVA<sub>r</sub> (420kV), 2x240 MVA<sub>r</sub> (765kV) Bus Reactor each at Bhadla-II PS & Khetri Substation
- 14) 1x240 MVA<sub>r</sub> (765kV) bus reactor at Phagi (RVPN)
- 15) 1x240 MVAR Switchable Line reactors for each circuit at Jhatikara end of Khetri – Jhatikara 765kV D/c line

- 16) 1x240 MVar Switchable line reactor for each circuit at each end of Bikaner – Khetri 765kV D/c line
- 17) 1x330 MVar Switchable line reactor for each circuit at Bhadla-II PS end for Ajmer - Bhadla-II PS 765kV line (after LILO)
- 18) 1x240 MVar Switchable line reactor for each circuit at Bhadla-II PS end for Bikaner-Bhadla-II PS 765kV line (after LILO)
- 19) Transmission scheme for controlling high loading and high short circuit level at Moga substation (Suitable bus splitting arrangement at 765/400/220 kV Moga S/s)

**Annexure-X****List of MTOAs received during Jan'20 to Jul'20 & granted**

SI. No.	Application number	Date of grant	Name of Organization	Quantum	Injection point	Drawl Point	Period	
				(MW)			From	To
1	1200002487	10/04/20	Jindal India Thermal Power Limited	59.24	Angul S/s (ER)	West Central Railway, Rajasthan	01/08/20	19/01/21