

Additional Agenda for deliberations in 14th NCT meeting to be held on 09.06.2023

A 1. Transmission scheme for evacuation of power from Neemuch/Mandsaur 2 GW WEZ

1.1 SECI vide letter dated 23.06.2022 has informed that in order to provide round the clock (RTC) Power (with wind, solar and storage components), they have identified certain locations with high solar and wind potential where work on RE evacuation system may be taken up immediately. 2 GW Wind Potential at Neemuch/Mandsaur is one such prioritized RE Zone.

1.2 Accordingly, scheme was evolved to cater to evacuation of power from Neemuch/Mandsaur 2 GW WEZ and discussed in the 12th NCT meeting held on 24.03.2023. During the meeting, the establishment of 765 kV Mandsaur Pooling Station [Under Transmission system for Rajasthan REZ Phase-IV Part-2 (5.5GW)] was agreed to be reviewed and it was decided that the proposal of creation of 400 kV and 220 kV levels at Mandsaur PS (under subject scheme), would also be reviewed along with 765 the kV Pooling Station at Mandsaur.

1.3 The details of the scheme in prescribed format (as discussed in 12th NCT meeting) are given below:

Transmission scheme for evacuation of power from Neemuch 2GW WEZ:

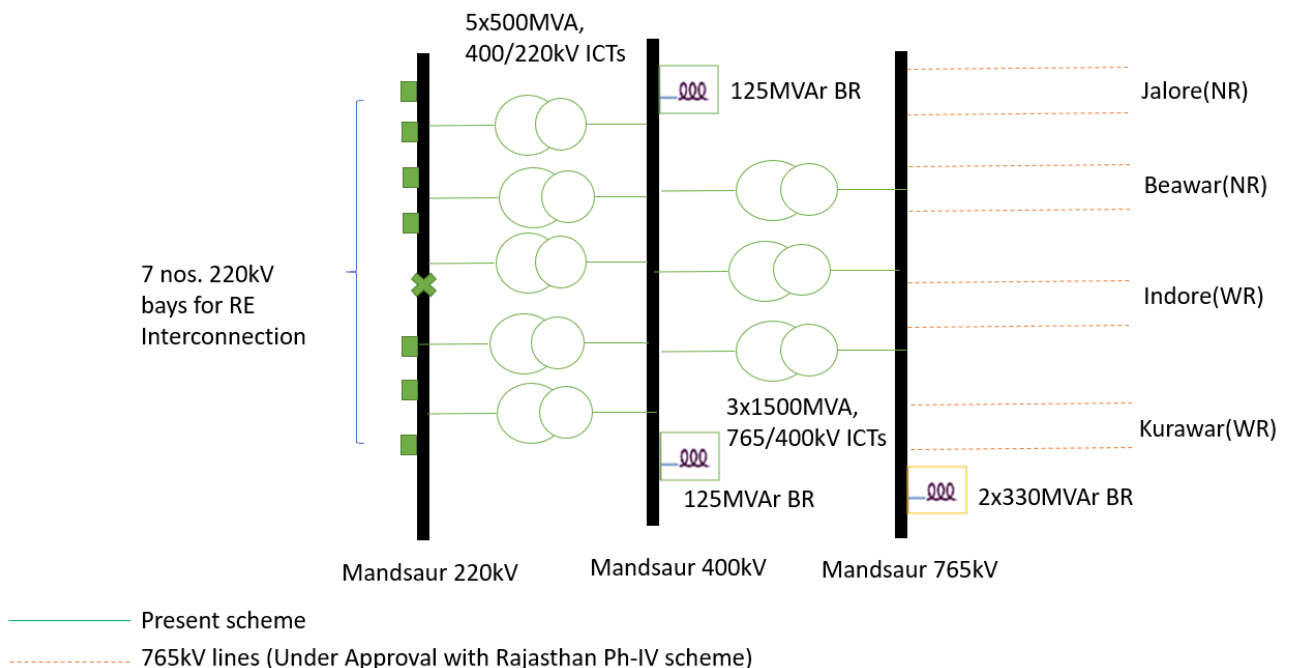
S. No.	Items	Details		
1.	Name of Scheme	Transmission scheme for evacuation of power from Neemuch 2GW WEZ		
2.	Scope of the scheme	Sl. No.	Scope of the Transmission Scheme	Capacity/km
		1.	Creation of 400kV & 220 kV levels at Mandsaur PS through installation of 3x1500MVA, 765/400kV and 5x500MVA, 400/220kV ICTs^	765/400kV, 1500MVA ICT – 3 500 MVA, 765/400 kV Spare ICT-1 400/220 kV, 500 MVA ICT – 5 (3 nos. on 220kV bus section-1 & 2 nos. on 220kV bus section-2) 765 kV ICT bays – 3 400 kV ICT bays – 8 125 MVAR 420 kV bus reactor-2 400 kV reactor bay- 2 220kV ICT bays - 5

				<p>220 kV line bays – 7 (4 nos. on bus section-1 and 3 nos. on bus section-2) 220kV Bus Sectionalizer – 1 set 220kV TBC bay – 2 no. 220kV BC bay – 2 no.</p>
		<p>^Considering 1x500MVA ICT for N-1 contingency</p> <p>Note:</p> <p>❖ TSP of Mandsaur PS shall provide space for establishment of above scope</p>		
3.	Depiction of the scheme on Transmission Grid Map	Given below		
4.	Upstream/downstream system associated with the scheme	Mandsaur PS needs to be established, which is being implemented as part of Common Transmission System for Fatehgarh-IV (4GW) and Barmer-I (3.5GW) in Western Region		
5.	Objective / Justification	<p>In order to achieve the commitment made in terms of Nationally Determined Contributions (NDCs), as one of the significant steps, India has pledged to increase the non-fossil fuel energy capacity to 500 GW by 2030. This is a national mission as a part of the country's energy transition goal.</p> <p>Further, out of 181.5GW REZ, SECI vide letter dated 23.06.2022 has informed that as a first step to provide RTC Power (with wind, solar & storage components), they have identified certain locations with high solar & wind potential where work on RE evacuation system may be taken up immediately. 2GW Wind Potential at Neemuch is one such prioritized RE Zone.</p> <p>The present scheme shall cater to evacuation of power from Neemuch 2GW WEZ.</p>		
6.	Estimated Cost	Rs. 667 Crore		
7.	Impact on the total Annual Transmission charges in % along with the existing ATC	<p>A. ATC (considering Levelized Tariff @15% of estimated cost): INR 100.05 Crore</p> <p>B. Present ATC: INR 45,374.29 Crore*</p> <p>C. A/B (%): About 0.22%</p>		
8.	Need of phasing, if any	Not Applicable		
9.	Implementation timeframe	24 months from date of allocation to implementing agency and matching with Mandsaur PS which is being implemented as part of Common Transmission System for		

		Fatehgarh-IV (4GW) and Barmer-I (3.5GW) in Western Region
10.	Inclusion of any wild life/protected area along the transmission line route	Not Applicable
11.	Deliberations with RPC along with their comments	The scheme was discussed in the 46 th WRPC meeting held on 03.02.2023 and the same was found to be in order.
12.	System Study for evolution of the proposal	The scheme was discussed and agreed in 13 th Consultation Meeting for Evolving Transmission Schemes in Western Region (CMETS-WR) held on 08.12.2022. The revised study for Transmission system for Rajasthan REZ Phase-IV Part-2 (5.5GW) also includes injection of 2GW power at Mandaur PS.

**Total YTC allowed for as per notification of transmission charges payable by DICs for billing month of February, 2023 dated 25.01.2023 published on NLDC website (available at <https://posoco.in/transmission-pricing/notification-of-transmission-charges-for-the-dics/>.)*

Transmission scheme for evacuation of power from Neemuch 2GW WEZ



Members may deliberate.

A 2. Change in implementation timeline of STATCOM and HVDC

2.1 Siemens & TATA Power have requested to increase the timeline of commissioning of STATCOMs from 24 months to 30 months. E.g. for $\pm 2 \times 300$ MVA STATCOM, time frame for implementation of STATCOMs to be provided as below, in place of already agreed 24 months:

- ± 300 MVA (1st): 24 months

- 1x300 MVA (2nd): 30 months

2.2 Similarly, Hitachi has requested to increase the timeline of commissioning of Bhadla-Fatehpur HVDC from 42 months to 49 months for Bipole I and 54 months for Bipole II.

Members may deliberate.