

Amendment No. 6 dated 02.09.2020

to

Request for Proposal (RfP) and Transmission Service Agreement (TSA) for selection of Transmission Service Provider through tariff based competitive bidding process to establish “Transmission System Strengthening Scheme for Evacuation of Power from Solar Energy Zones in Rajasthan (8.1 GW) under Phase-II Part-E”

S.No.	Existing Provision			Amended Provision				
Request for Proposal (RFP) / Transmission Service Agreement (TSA)								
1.	Request for Proposal Notification Sl. No. 2 & Transmission Element of Introduction in Clause 1.2 of the RFP Document and Detailed Scope of Work of Schedule-2 of TSA			Request for Proposal Notification Sl. No. 2 & Transmission Element of Introduction in Clause 1.2 of the RFP Document and Detailed Scope of Work of Schedule-2 of TSA				
	S. No	Name of the Transmission Element	Scheduled COD from Effective Date	Conductor Per Phase	S. No	Name of the Transmission Element	Scheduled COD from Effective Date	Conductor Per Phase
	1.	Bhadla-II PS – Sikar-II 765kV D/c line (2nd)	18 Months	Hexa Zebra ACSR The transmission lines shall consist of either Hexa Zebra ACSR or equivalent to AAAC conductor or equivalent AL59 conductor as specified under specific technical requirements in RfP.	1.	Bhadla-II PS – Sikar-II 765kV D/c line (2nd)	18 Months	Hexa Zebra ACSR The transmission lines shall consist of either Hexa Zebra ACSR or equivalent to AAAC conductor or equivalent AL59 conductor as specified under specific technical requirements in RfP.
	2.	2 no. of 765 kV line bays each at Bhadla- II and Sikar-II for Bhadla-II PS – Sikar-II 765kV D/c line		-	2.	2 no. of 765 kV line bays each at Bhadla- II and Sikar-II for Bhadla-II PS – Sikar-II 765kV D/c line		-
	3.	1x330 MVar switchable line reactor for each circuit at Sikar-II end of Bhadla-II PS – Sikar-II		-	3.	1x330 MVar switchable line reactor for each circuit at Sikar-II end of Bhadla-II PS – Sikar-II		-

S.No.	Existing Provision			Amended Provision		
4.	765kV D/c line			765kV D/c line 330 MVar, 765 kV reactor- 2 Switching equipment for 765 kV reactor - 2		
	1x240MVar switchable line reactor for each circuit at Bhadla-II end of Bhadla-II PS – Sikar-II 765kV D/c line			1x240MVar switchable line reactor for each circuit at Bhadla-II end of Bhadla-II PS – Sikar-II 765kV D/c line 240 MVar, 765 kV reactor- 2 Switching equipment for 765 kV reactor - 2		
<p>Note:</p> <p>(i) POWERGRID to provide space for 2 no of 765 kV bays and space for 2 no of line reactors at Bhadla-II substation</p> <p>(ii) Developer of Sikar-II PS to provide space for 2 no of 765 kV bays and space for 2 no of line reactors at Sikar-II PS</p> <p>(iii) The spare unit of 765kV, 1x110 MVAR Reactor being provided at Sikar-II PS under 'Transmission system strengthening for evacuation of power from solar energy zones in Rajasthan (8.1 GW) under Phase II – Part C' shall be utilized as common spare for 6x110 MVAR Switchable Line Reactors to be provided at Sikar-II PS each under 'Transmission system strengthening for evacuation of power from solar energy zones in Rajasthan (8.1 GW) under Phase II –Part D' and 'Transmission system strengthening for evacuation of power from solar energy zones in Rajasthan (8.1 GW) under Phase II –Part E'.</p>						
<p>Note:</p> <p>(i) POWERGRID to provide space for 2 no of 765 kV bays and space for 2 no of line reactors at Bhadla-II substation</p> <p>(ii) Developer of Sikar-II PS to provide space for 2 no of 765 kV bays and space for 2 no of line reactors at Sikar-II PS</p> <p>(iii) Supply and Installation of Spare 1x80 MVAR 1-ph reactor unit at Bhadla-II S/s is not envisaged under present scope. TSP shall install the 765kV Line Reactor banks at Bhadla II PS such that same is suitable for 1-ph switching whenever the separate spare 1-ph unit is provided in future. Further, all the associated equipment required for switching arrangement viz isolators, circuit breakers, Neutral bus, 765kV & 145kV auxiliary buses etc. at Bhadla II PS shall be provided by TSP for the 765kV Reactor banks under present scope. TSP shall provide the equipment/facilities at Bhadla II PS such that only supply & installation of 1x80 MVAR spare unit of Reactor, associated LA, 1-Ph Circuit Breaker and extension of 765kV & 145kV buses will be required for completion of switching arrangement in future.</p> <p>(iv) The spare unit of 765kV, 1x110 MVAR Reactor being provided at Sikar-II PS under 'Transmission system strengthening for evacuation of power</p>						

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						from solar energy zones in Rajasthan (8.1 GW) under Phase II –Part C’ shall be utilized as common spare for 6x110 MVAR Switchable Line Reactors to be provided at Sikar-II PS each under ‘Transmission system strengthening for evacuation of power from solar energy zones in Rajasthan (8.1 GW) under Phase II –Part D’ and ‘Transmission system strengthening for evacuation of power from solar energy zones in Rajasthan (8.1 GW) under Phase II –Part E’.				
2.	Project Schedule in Clause No. 2.6.1 & Bidders undertaking in Annexure-8 of the RFP Document and Schedule - 3 of TSA					Project Schedule in Clause No. 2.6.1 & Bidders undertaking in Annexure-8 of the RFP Document and Schedule - 3 of TSA				
	Sr. No	Name of the Transmission Element	Scheduled COD in months from Effective Date	Percentage of Quoted Transmission Charges recoverable on Scheduled COD of the Element of the Project	Element(s) which are pre-required for declaring the commercial operation (COD) of the respective Element	Sr. No	Name of the Transmission Element	Scheduled COD in months from Effective Date	Percentage of Quoted Transmission Charges recoverable on Scheduled COD of the Element of the Project	Element(s) which are pre-required for declaring the commercial operation (COD) of the respective Element
	1.	Bhadla-II PS – Sikar-II 765kV D/c line (2nd)	18 Months	100 %	Elements marked at Sl. No. 1 to 3 are required to be commissioned simultaneously as their utilization is dependent	1.	Bhadla-II PS – Sikar-II 765kV D/c line (2nd)	18 Months	100 %	Elements marked at Sl. No. 1 to 3 are required to be commissioned simultaneously as their utilization is dependent on commissioning of
	2.	2 no. of 765 kV line bays each at Bhadla- II and Sikar-II for Bhadla-II PS – Sikar-II 765kV D/c line				2.	2 no. of 765 kV line bays each at Bhadla- II and Sikar-II for Bhadla-II PS – Sikar-II 765kV D/c line			
	3.	1x330 MVAR switchable line reactor for each circuit at Sikar-II end of								

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		Bhadla-II PS – Sikar-II 765kV D/c line			on commissioning of each other.	3.	1x330 MVAR switchable line reactor for each circuit at Sikar-II end of Bhadla-II PS – Sikar-II 765kV D/c line 330 MVAR, 765 kV reactor- 2 Switching equipment for 765 kV reactor - 2			each other.
	4.	1x240MVAR switchable line reactor for each circuit at Bhadla-II end of Bhadla-II PS – Sikar-II 765kV D/c line				4.	1x240MVAR switchable line reactor for each circuit at Bhadla-II end of Bhadla-II PS – Sikar-II 765kV D/c line 240 MVAR, 765 kV reactor- 2 Switching equipment for 765 kV reactor - 2			
	<p>Note:</p> <p>(i) POWERGRID to provide space for 2 no of 765 kV bays and space for 2 no of line reactors at Bhadla-II substation</p> <p>(ii) Developer of Sikar-II PS to provide space for 2 no of 765 kV bays and space for 2 no of line reactors at Sikar-II PS</p> <p>(iii) (iii) The spare unit of 765kV, 1x110 MVAR Reactor being provided at Sikar-II PS under 'Transmission system strengthening for evacuation of power from solar energy zones in Rajasthan (8.1 GW) under Phase II – Part C' shall be utilized as common spare for 6x110 MVAR Switchable Line Reactors to be provided at Sikar-II PS each under 'Transmission system strengthening for evacuation of power from solar energy zones in Rajasthan (8.1 GW) under Phase II –Part D' and 'Transmission system strengthening for evacuation of power from solar energy zones in Rajasthan (8.1 GW) under Phase II –Part E'.</p>					<p>Note:</p> <p>(i) POWERGRID to provide space for 2 no of 765 kV bays and space for 2 no of line reactors at Bhadla-II substation</p> <p>(ii) Developer of Sikar-II PS to provide space for 2 no of 765 kV bays and space for 2 no of line reactors at Sikar-II PS</p> <p>(iii) Supply and Installation of Spare 1x80 MVAR 1-ph reactor unit at Bhadla-II S/s is not envisaged under present scope. TSP shall install the 765kV Line Reactor banks at Bhadla II PS such that same is suitable for 1-ph switching whenever the separate spare 1-ph unit is provided in future. Further, all the associated equipment required for switching arrangement viz isolators, circuit breakers, Neutral bus, 765kV & 145kV auxiliary buses etc. at Bhadla II PS shall be provided by TSP for the 765kV Reactor banks under present scope. TSP shall provide the equipment/facilities at Bhadla II PS such that only supply & installation</p>				

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		<p><i>of 1x80 MVAR spare unit of Reactor, associated LA, 1-Ph Circuit Breaker and extension of 765kV & 145kV buses will be required for completion of switching arrangement in future.</i></p> <p>(iv) (iv) The spare unit of 765kV, 1x110 MVAR Reactor being provided at Sikar-II PS under 'Transmission system strengthening for evacuation of power from solar energy zones in Rajasthan (8.1 GW) under Phase II –Part C' shall be utilized as common spare for 6x110 MVAR Switchable Line Reactors to be provided at Sikar-II PS each under 'Transmission system strengthening for evacuation of power from solar energy zones in Rajasthan (8.1 GW) under Phase II –Part D' and 'Transmission system strengthening for evacuation of power from solar energy zones in Rajasthan (8.1 GW) under Phase II –Part E'.</p>
3.	<p>Amendment No. 3, Annex-1, Revised Specific Technical Requirements for Transmission Line</p> <p>Point No. 13</p> <p>Pile foundation shall be used for towers located in the river bed, or on river banks or in areas where river flow or river course is anticipated to change based on previous years' hydrology data.</p>	<p>Amendment No. 3, Annex-1, Revised Specific Technical Requirements for Transmission Line</p> <p>Point No. 13</p> <p><i>Pile type foundation shall be used for towers located in river or creek bed or on bank of river having scourable strata or in areas where river flow or change in river course is anticipated, based on detailed soil investigation and previous years' maximum flood discharge of the river, maximum velocity of water, highest flood level, scour depth & anticipated change in course of river based on river morphology data of at least past 20 years to ensure availability and reliability of the transmission line.</i></p>
4.	<p>Annexure-23</p> <p>Tariff Illustration Sheet</p>	<p>Annexure-23</p> <p>Tariff Illustration Sheet</p> <p>The MS Excel Sheet is attached at Annexure-III for reference only</p>