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.			ing Provision		Amended Provision						
Request for Proposal (RFP) / Transmission Service Agreement (TSA)											
1.		st for Proposal Notificatio			Request for Proposal Notification Sl. No. 2 & Transmission Element of						
		uction in Clause 1.2 of the	RFP Docume	nt and Detailed Scope of		Introduction in Clause 1.2 of the RFP Document and Detailed Scope of Work of Schedule-2 of TSA					
	Work	of Schedule-2 of TSA			of Sch						
	S.	Name of the	Scheduled	Conductor Per Phase	S.	Name of the Transmission	Scheduled	Conductor Per Phase			
	No	Transmission Element	COD from		No	Element	COD from				
			Effective				Effective				
			Date				Date				
		Bhadla-II PS – Sikar-II		Hexa Zebra ACSR		Bhadla-II PS – Sikar-II		Hexa Zebra ACSR			
		765kV D/c line (2nd)		The transmission lines		765kV D/c line (2nd)		The transmission lines			
				shall consist of either				shall consist of either			
				Hexa Zebra ACSR or				Hexa Zebra ACSR or			
	1.			equivalent to AAAC	1.			equivalent to AAAC			
				conductor or				conductor or equivalent			
				equivalent AL59				AL59 conductor as			
				conductor as specified				specified under specific			
				under specific technical			10 Manada	technical requirements			
			18 Months	requirements in RfP.			18 Months	in RfP.			
		2 no. of 765 kV line				2 no. of 765 kV line bays					
		bays each at Bhadla- II			2.	each at Bhadla- II and					
	2.	and Sikar-II for Bhadla-		-		Sikar-II for Bhadla-II PS –		-			
		II PS – Sikar-II 765kV				Sikar-II 765kV D/c line					
		D/c line									
						1x330 MVAr switchable					
		1x330 MVAr switchable			3.	line reactor for each		-			
	3.	line reactor for each		•		circuit at Sikar-II end of					
		circuit at Sikar-II end of				Bhadla-II PS – Sikar-II					
		Bhadla-II PS – Sikar-II									

о.	Existing Provision				Amended Provision			
0.	4.	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			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 4. 765kV D/c line			
	 (i) POWERGRID to provide space for 2 no of 765 kV bays and space for 2 no of line reactors at Bhadla-II substation (ii) Developer of Sikar-II PS to provide space for 2 no of 765 kV bays and 				240 MVAr, 765 kV reactor- 2			
	space for 2 no of line reactors at Sikar-II PS (iii) The spare unit of 765kV, 1x110 MVAR Reactor being provided at Sikar-II PS under 'Transmission system strengthening for evacuation of				Switching equipment for 765 kV reactor - 2			
	ро	wer from solar energy zone	es in Rajasthan (8.1 GW) under Phase II – mmon spare for 6x110 MVAR Switchable	No	Note:			

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'.

- (i) POWERGRID to provide space for 2 no of 765 kV bays and space for 2 no of line reactors at Bhadla-II substation
- (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
- (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.
- (iv) The spare unit of 765kV, 1x110 MVAR Reactor being provided at Sikar-II PS under 'Transmission system strengthening for evacuation of power

S.No.		Exist	ing Provisio	n			Am	ended Prov	ision		
							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				
						Re	eactors to be provided at S	Sikar-II PS e	ach under 'T	ransmission system	
						st	rengthening for evacuatio	on of powe	er from sola	r energy zones in	
						Ro	ajasthan (8.1 GW) under F	Phase II – Po	ırt D' and 'Ti	ransmission system	
						st	rengthening for evacuatio	on of powe	er from sola	r energy zones in	
						Ro	ajasthan (8.1 GW) under Ph	ase II –Part	Ε΄.		
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	Schedul ed COD in months from Effective Date	Percenta ge of Quoted Transmiss ion Charges recovera ble on Schedule d COD of the Element	Element(s) which are pre- required for declaring the commercial operation (COD) of the respective Element	Sr. No	Name of the Transmission Element	Schedul ed COD in months from Effective Date	Percenta ge of Quoted Transmiss ion Charges recovera ble on Schedule d COD of the Element of the	Element(s) which are pre-required for declaring the commercial operation (COD) of the respective Element	
				of the Project					of the Project		
	1.	Bhadla-II PS – Sikar-II 765kV D/c line (2nd)		•	marked at SI. No. 1 to 3 are required to be commission ed	1.	Bhadla-II PS – Sikar-II 765kV D/c line (2nd)			Elements marked at SI. No. 1 to 3 are required to be	
	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	18 Months	100 %		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	18 Months	100 %	commissioned simultaneously as their utilization is dependent on commissioning of	
	3.	1x330 MVAr switchable line reactor for each circuit at Sikar-II end of			simultaneou sly as their utilization is dependent		2,0 mic				

S.No.	Existing Provision			Amended Provision					
S.No.	4. 1x240MVAr switchable line reactor for each circuit at Bhadla-II end of Bhadla-II PS – Sikar-II 765kV D/c line Note:	Bhadla-II PS — Sikar-II 765kV D/c line on commissioni ng of each other. 1x240MVAr switchable line reactor for each circuit at Bhadla-II end of Bhadla-II PS — Sikar-II			Amended Provision 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 4. 1x240MVAr switchable				
	 (i) POWERGRID to provide space for 2 no no of line reactors at Bhadla-II substation (ii) Developer of Sikar-II PS to provide space space for 2 no of line reactors at Sikar-II (iii) (iii) The spare unit of 765kV, 1x110 M Sikar-II PS under 'Transmission system spower from solar energy zones in Rajast Part C' shall be utilized as common space Line Reactors to be provided at Sikar-system strengthening for evacuation of in Rajasthan (8.1 GW) under Phase 	ce for 2 no of 765 kV bays and PS VAR Reactor being provided at strengthening for evacuation of 5than (8.1 GW) under Phase II – are for 6x110 MVAR Switchable II PS each under 'Transmission power from solar energy zones II –Part D' and 'Transmission		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					
		system strengthening for evacuation of power from solar energy zones in Rajasthan (8.1 GW) under Phase II –Part E'.			Note: (i) POWERGRID to provide space for 2 no of 765 kV bays and space for 2 no line reactors at Bhadla-II substation (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 (iii) Supply and Installation of Spare 1x80 MVAR 1-ph reactor unit at Bhad II S/s is not envisaged under present scope. TSP shall install the 765 Line Reactor banks at Bhadla II PS such that same is suitable for 1-switching whenever the separate spare 1-ph unit is provided in futur Further, all the associated equipment required for switching arrangement viz isolators, circuit breakers, Neutral bus, 765kV & 145 auxiliary buses etc. at Bhadla II PS shall be provided by TSP for the 765 Reactor banks under present scope. TSP shall provide to equipment/facilities at Bhadla II PS such that only supply & installation.				

S.No.	Existing Provision	Amended Provision
3.110.		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. (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'.
3.	Amendment No. 3, Annex-1, Revised Specific Technical Requirements for Transmission Line	Amendment No. 3, Annex-1, Revised Specific Technical Requirements for Transmission Line
	Point No. 13	Point No. 13
	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.	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.
4.	Annexure-23	Annexure-23
	Tariff Illustration Sheet	Tariff Illustration Sheet
		The MS Excel Sheet is attached at Annexure-III for reference only