### INTERNATIONAL COMPETITIVE BIDDING (ICB) (VOLUME I)



Greenko RJ01 IREP Private Limited
Registered Office: 1<sup>st</sup> floor, Khasara No. 63, Near Shahabad Bus Stand, Baran,
Rajasthan, India-325217.

ICB/TENDER Ref No.: RJ01 - PSP/SHAHPUR/CIVIL AND HYDRO-MECHANICAL PACKAGE/002 dated 06<sup>th</sup> March 2024

### INTERNATIONAL COMPETITIVE BIDDING (TWO PART BID)

### BID DOCUMENTS FOR "CIVIL AND HYDRO-MECHANICAL WORKS" for PUMPED STORAGE PROJECT (PSP)

M/s. Greenko RJ01 IREP Private Limited (GRJ01) invites sealed bids from eligible Bidders / Contractors.

Brief Scope of Work under this package is detailed hereunder.

Execution of Civil and Hydro-Mechanical Works on EPC - Item Rate Basis (Re-measurable) for the Scope of work defined herein, which includes Upper Approach channel, Intake pool, Upper intake structures, Upper Reservoir, Buried Penstocks/pressure shafts, vertical and horizontal Pressure Shafts along with Steel Liner, Surface Powerhouse for accommodating 5 units of 300 MW and 2 units of 150MW along with required service bay and unloading bay, Pothead yard, Tail Race Tunnels, Tailrace outlet (Lower Intake), Tail race pool, Tail Race Channel (Lower approach channel ), Lower Reservoir, PAT to service bay, Adits to pressure shafts , Hydro-Mechanical Works (including Gates, Stoplogs, hoisting arrangements, Trash Racks & valves etc. for both upper and lower intake), all other Appurtenant Works required for Commissioning of project works including Infrastructure works, Fabrication, Erection, Testing, Commissioning and conducting Performance Guarantee Testing complete and handing over in all respects of "Civil and Hydro-Mechanical Works" on "EPC - Item Rate Basis", remedying of the defects if any till end of Defects Liability Period at its responsibility, and other activities incidental to the completion of Works. The scope also includes interfaces with the contractor for Electro-Mechanical Works and other contractors.

Design and Engineering: By Greenko RJ01 IREP Private Limited

Project: 1800 MW Pumped Storage Project (PSP) [Hydro Electric Project]

Location: Shahpur (Village), Shahabad (Tehsil/Mandal), Baran(District), Rajasthan-325217

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## Greenko RJ01 IREP Private Limited Registered Office: 1<sup>st</sup> floor, Khasara No. 63, Near Shahabad Bus Stand, Baran, Rajasthan, India, 325217

# VOLUME - I: PART - I NOTICE INVITING TENDER NO. RJ01 - PSP/SHAHPUR/ELECTRO-MECHANICAL PACKAGE/002 (TWO PART BID)

1.	Name of the Project	1800 MW Pumped Storage (PSP) [Hydro Electric Project]
2.	Company Name	GREENKO RJ01 IREP PRIVATE LIMITED
3.	Tender Inviting Authority	Vice President - C&P (Projects)
4.	Tender Notice No.	RJ01 - PSP/SHAHPUR/ CIVIL AND HYDRO-MECHANICAL PACKAGE /002
	International	Competitive Bidding (ICB)
5.	Scope of Work	General Scope of Work for this Bid Invitation  Execution of Civil and Hydro-Mechanical Works on EPC-Item Rate Basis Scope of work will include all components of project i.e. Upper Approach channel, Intake pool, Upper embankment dam, bottom outlet at upper reservoir, Intake Structure, Buried Penstocks/pressure shafts, vertical an horizontal Pressure Shafts along with Steel Liner, Surface Powerhouse for accommodating 5 units of 300 MW and 2 units of 150MW along with required service bay and unloading bay, Civil works for GIS, Pothead yar civil works, Tail Race Tunnel, TRT Outlet structure (Lower Intake), Tail race pool Tail Race Channel, Powerhouse Adit Tunnel (PAT) to service bay, Adit to pressure shafts, Hydro-Mechanical Works (including Gates, Stoploginoisting arrangements, Trash Racks & valves etc), all other Appurtenar Works required for completion of project, Infrastructure works along wit review & interface of Electro-Mechanical Works, Fabrication, Erection Testing, Commissioning and conducting Performance Guarantee Testin complete and handing over in all respects of "Civil and Hydro-Mechanica Works" on "EPC BASIS", remedying of the defects if any, and other activities incidental to the completion of Works  **Detailed Scope of Work**  The scope is detailed here under. The Bidders are advised to quote it accordance with the below scope.

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#### Design Engineering:

Design & engineering under the Scope of Work by the Contractor under this Tender (hereinafter referred to as "Contractor's Design") shall mean the scope of work limited to constructability review and value engineering (if any) at planning stage of the detailed design and engineering for Civil and Hydro-Mechanical Works (hereinafter referred to as "Project Design") provided by third party consultant appointed by the Employer under separate contract.

The Employer shall appoint such detailed Design and Engineering Consultant (DDC) for simultaneously working on the design works for the Project.

#### Civil and Hydro-Mechanical Works

To carry out the main Civil and Hydro-Mechanical Works which includes but not limited to construction of the following structures and testing and commissioning of such structures.

- 125 m wide trapezoidal, lined channel with FSD of 7.0 m along with Intake Pool (Transition portion).
- Upper Dam consists of Geomembrane Face Rockfill embankment Dam (5.421 km) with maximum 30m (average height 24.5m) height for creation of upper reservoir with 1.21 TMC gross storage capacity.
- Diffuser type Intake Structure comprising of trash rack structure & gate shafts along with 6nos of service gates and 1 no of stoplog gates along with hoisting arrangements and trash rack panels.
- 6 nos. each of about 983m long and 7.5 m dia. circular steel lined Penstock / Pressure Shaft (251 m embedded surface headrace pipe from Intake to vertical pressure shaft 1 (VPS -1), 71 m deep vertical pressure shaft 1, 436 m horizontal pressure tunnel, 85 m deep vertical pressure shaft 2 and 140 m long horizontal pressure tunnel tentatively).
- One pressure tunnel shaft(6<sup>th</sup>) bifurcates into two-units pressure shafts. The unit pressure shaft is 5.3 m diameter and about 40 m length.
- A Pit Type Surface Powerhouse for accommodating seven nos. reversible Francis turbine, 5 no. of 300 MW capacity and 2 no. of 150 MW capacity (All units are fixed speed turbines) operating under a rated net head of 154.73 m for 300 MW unit and 154.41

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		m for 150 MW unit in generating mode & 162.56 m for 330 MW unit and 163.21 m for 165 MW unit in pumping mode along with service bay, unloading bay, civil works of GIS and Pothead Yard.  > Seven numbers of tail race tunnels (5 no. of 8.5 m diameter and 2 no. of 6.2 m diameter) concrete lined 179 m long tail race tunnel connecting the tail race outlet structure and the draft tube of the powerhouse.  > Tailrace Outlet structure (Diffuser type Intake) comprising of trash rack structure & gate shafts along with 7 nos of service gates and 2 nos of stoplog gates along with hoisting arrangements and trash rack panels.	
		> 140 m wide trapezoidal, lined channel with FSD of 6.8 m.	
	4	Lower Dam consists of Geomembrane Face Rockfill embankment Dam (2.937 km) with maximum 38m (average height 26.5m) height for creation of upper reservoir with 1.06 TMC gross storage capacity.	
		This Tender is on EPC - Item Unit Rate basis for complete Scope as defined above and Item Unit Rate(s) shall be <b>FIRM &amp; FIXED</b> throughout the Performance of the Contract without any Price Escalation whatsoever be the reasons on any ground.	
	700	1800 MW OFF STREAM CLOSED LOOP PUMPED STORAGE PROJECT (PSP) on EPC - Item Unit Rate basis for complete Civil and Hydro-Mechanical Works at	
6.	Capacity and Location of the work	Village: Shahpur, Tehsil/Mandal: Shahabad, District: Baran, State: Rajasthan,	
7.	Tender Type	PIN: 325217  Tenders through "International Competitive Bidding"	
		Two Part type: Part - I: Pre-Qualification & Technical Bid  Part - II: Price Bid and Commercial Terms & Conditions	
8.	Tender Category	EPC-Item Unit Rate basis and on FIRM & FIXED Price basis throughout the Contract Completion Period (Tender through International Competitive Bidding)	
9.	Cost of Document	Nil	

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10.	Period of Completion (from	20 (Twenty) months for readiness of 1 <sup>st</sup> Unit for Civil and Hydro-Mechanical Works from Effective date.
10.	the date of LOA/NTP)	30 (Thirty) months for completion of entire scope of works including E&M interfaces from Effective Date
11.	Bid Security (EMD)	Rs.1.00 Crores [Rupees One Crore only]
		The EMD can be paid in the form of a Bank Guarantee from any Nationalized/ International banks through confirmation by Indian Nationalized Banks and Original Bank Guarantee shall be submitted along with Tender.
12.	Bid Security Payable to	a) The Bank Guarantee shall be obtained in favor of M/s GREENKO RJ01 IREP PRIVATE LIMITED from any Nationalized/ International banks through confirmation by Indian Nationalized Banks in the prescribed format (refer to the Annexures). The EMD B.G. shall have the validity up to 180 Days from the date of Bid submission date.
		b) Addressed to Vice President - C&P (Projects)
13.	Contract Performance Bank Guarantee (CPBG)	Contract Performance Bank Guarantee (CPBG) towards Contract Performance Security for 10% value of the Contract, which is to be submitted upon award of the Contract.
		The successful Bidder shall furnish a Contract Performance Bank Guarantee (CPBG) for 10% of Contract value within one month from the date of Letter of Award/same day on Signing of the Contract whichever is earlier, towards the "Performance of the Contract" in the prescribed proforma (enclosed in the Tender Document). This Guarantee shall remain valid till the completion of the COD + Defect Liability Period (24 months) of all the Civil and Hydro-Mechanical Works, with a claim period of 90 days over and above the period.
		The Contract Performance Guarantee shall be released on successful completion of Defects Liability Period (DLP) including extensions thereof, if any or issuance of Acceptance Certificate, after completion of Defect Liability Period whichever is later.
14.	Schedule Available Date	06 <sup>th</sup> March 2024, onwards
15.	Pre-Bid meeting Date	Prospective Bidders are advised to mail their queries, To: manish.a@greenkogroup.com CC: mohiddin.sk@greenkogroup.com     madhava.b@greenkogroup.com all the queries shall be discussed and addressed with respective Bidder
16.	Bid Submission closing Date	Latest by 05 <sup>th</sup> April 2024

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17.	Bid Submission	Part 1: Technical Bids shall also be submitted thru Electronic Transfer (Sign & Scanned copies) and Hard Copies by Courier/in-person. Part 2: Commercial Offers including Price Bid shall be submitted in Sealed Envelope
		(in-person) only.
18.	Bid Validity	180 days from the date of Bid submission date
19.	Eligibility Criteria (PQ: Pre- Qualification)	Eligibility Criteria (TECHNICAL): Minimum Eligibility Criteria: The Bidder should satisfy ALL the following.
		A) TECHNICAL CRITERIA:
		1. The Bidder should have satisfactorily completed/ substantially completed (i.e. more than 75% work) similar works of value not less than <b>Rs. 1,400 crores</b> as a prime Bidder or Lead Partner in joint venture/Consortium in the same name and style during any one year in last Five Financial Years and upto bid due date. The similar works means, Civil and Hydro-Mechanical Works for RCC/Concrete Dams / Barrages, Earth dams, Rock fill dams, Water Conductor Systems, Gates, Hoists, Penstocks, Powerhouse for Hydro Projects / Barrages/Lift Irrigation Projects.
		2. The Bidder should have satisfactorily completed/substantially completed (i.e. more than 75% work) one similar Project of value not less than <b>Rs. 700 crores</b> as a prime Bidder or Lead Partner in joint venture in the same name and style during any one year in last Five Financial Years and upto bid due date. The similar works means, Civil and Hydro-Mechanical works for RCC/Concrete Dams / Barrages, Earth dams, Rock fill dams, Water Conductor Systems, Gates, Hoists, Penstocks, Powerhouse for Hydro Projects / Barrages/Lift Irrigation Projects
		3. The Bidder should have executed the following minimum quantities in one year during last Five Financial Years
		a) Excavation Works (Soil/Rock) - 24 Lakh Cum b) Concrete Works - 1.2 Lakh Cum c) Steel Liner Works - 6,000 MT (including MS Pipe Works or Structural works) d) Gates, Hoist and other structures - 1,000 MT
		Note: This is to clarify that the Lead Bidder shall propose HM agencies as JV Partner / Sub-Contractor

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4. As individual / firm / Lead Member in case of J.V, shall have completed/ Substantially completed (i.e. more than 90% work) at least one work of concrete dam / rock fill dam/ earth dam / Earth cum rock fill dam having a minimum height not less than 30 m during last Seven Financial Years and upto bid due date as a prime Bidder or as a Lead Member in the JV in the same name and style.

#### **Financial Criteria**:

- 1. The Bidder should have annual financial turnover in all Civil and Hydro-Mechanical works of not less than **Rs. 2,500 Crores** in consecutive two financial years during last 3(Three) Financial Years.
- 2. In case of Joint Venture (JV), Lead Member should have minimum annual financial turnover in all Civil and Hydro-Mechanical works not less than **Rs. 1,250 Crores** in consecutive two years during last 3(Three) Financial Years
- 3. In case of Joint Venture (JV) each member of joint venture (other than Lead Member) should have minimum annual financial turnover in all Civil and Hydro-Mechanical works not less than Rs. 625 Crores in consecutive two years during last Five Financial Years
- 4. The Bidder or Lead member of the JV should be **Net Profit** making in at least 3 (Three) financial years during last 5 (Five) financial years.
- 5. The Bidders/or any of the JV members who have applied for CDR (Corporate Debt Restructuring) or NCLT during the past five financial years and as on the date of submission of the Bid are not eligible to participate in this bid.
- 6. The Bidder should have adequate financial capacity to meet the financial obligations (as mentioned elsewhere) pursuant to the scope of the works. The Bidders should submit their Audited Financial Statements for the last five years.
- 7. Bidder should have Liquid assets and /or Line of Credit facilities in their name for present work of an amount not less than **Rs 150 Crores** to be obtained from nationalized / scheduled Banks.
- 8. The Bidder should have adequate Equipment, Machinery, Plant and Tools & Tackles available to perform the works properly and

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		expeditiously within the time period specified in the Bid document with necessary supporting documents for evidence.
		9. The Bidder should have established quality assurance systems and organization designed to achieve high levels of equipment reliability during execution and Construction of Civil and Hydro-Mechanical Works
		10. The Bidder has to furnish details of their technical capability along with their Bid as set out in Bid document with necessary supporting documents for evidence.
		11. The above stated requirements are minimum, and the Employer (Greenko RJ01 IREP Private Limited) reserves the right to call for any additional information and data besides reserving the right to reject the proposal of any Bidder if in the opinion of the Employer either the qualification data is incomplete, or the Bidder cannot satisfactorily perform the works.
		12. The Bidders members who are Blacklisted by any Govt.  Department/Agency in India as on the date of submission of bid are not eligible to participate in this bid.
		13. The Bidder member should submit a certificate from their principal statutory auditor declaring all the above.
		14. In case of joint venture, JV members should be limited to <b>Two (2)</b> and all JV members should combinedly meet the above requirements. The joint venture partners should have a legally valid agreement among themselves and shall be "Jointly and Severally responsible".
		A. The joint venture group members must be a Civil and /or Hydro-Mechanical Engineering company and having experience in Hydro Power Project/Irrigation Projects/ Barrages Bidder.
20.	Officer Inviting Bids	Vice President - C&P (Projects)
21.	Address	Greenko RJ01 IREP Private Limited
		13, Sy.No.64 Part, Block-D, Third Floor,
		Hitech City Layout, Madhapur Village,
		Hyderabad-500081,
		Telangana, India, Ph: 040-40301700
22.	Contact Details	All Queries to be addressed to: manish.a@greenkogroup.com
		mohiddin.sk@greenkogroup.com; madhava.b@greenkogroup.com

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23.	Procedure for bid submission	The Bidder should read and understand clearly the general instructions and terms & conditions of the tender document before submission of the tender.  All the technical & PQ documents shall be submitted duly signed & stamped to the Authority as mentioned in the ICB. Further, these Technical & PQ documents shall be submitted in soft copies (through mail), duly signed & stamped (on all pages in pdf mode), scanned and send to the Authority as mentioned in the ICB.  The Commercial / Priced documents shall be submitted duly signed & stamped to the Authority as mentioned in the ICB to reach the tender inviting authority (in sealed envelope). The List of the documents to be submitted is given in the Annexure.
	.00	1) The Bids shall be quoted in INR only.
		The Bidder shall submit the bid and all related correspondence in English language only.
24	Statutory Requirements	<ul> <li>The Bidders shall fulfil and furnish the following statutory requirements:</li> <li>a) Income tax Clearance Certificate: Bidder shall furnish copies of Permanent Account Number (PAN) card, latest IT returns and latest IT assessment orders.</li> <li>b) The Bidder should furnish the valid registration certificate along with Corporate Identity Number (CIN).</li> <li>c) The Bidder should furnish valid GST Registration Certificate</li> <li>d) Explosive License for Blasting- Certificate from Chief controller of Explosives from Nagpur / Zonal Offices to be submitted by successful bidder before commencement of work.</li> </ul>
25.	Documents to be submitted (Hard copies) to the Tender inviting authority	The successful Bidder should furnish all the hard copies of the information submitted by them to be received by the tender inviting authority within the stipulated date as communicated by the tender inviting authority after finalizing the tender and before issue of LOA/Contract.  If the documents uploaded or submitted in the hard copies are found to be fake / defective / manipulated at a later date, the bid will be cancelled, the bid security will be forfeited, and Bidder will be blacklisted.
26.	Other relevant information	<ol> <li>GREENKO RJ01 IREP PRIVATE LIMITED reserves the right to reject any or all the tenders without assigning any reasons thereof.</li> </ol>

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		<ol> <li>GREENKO RJ01 IREP PRIVATE LIMITED reserves the right to amend or modify the tender and its conditions before last date/time for submission of bids.</li> <li>GREENKO RJ01 IREP PRIVATE LIMITED reserves the right to order/award "Partial or in full" as per the Packages indicated in the ICB.</li> </ol>
		4) The Bidders are requested to submit the original Bank Guarantees along with other hard copies required as soon as requested by the tender inviting authority.
		5) The Bidders should upload the technical documents duly stamped and signed on each and every page of the bid.
27.	Superscription on Tender Cover (Hard Copies to be furnished on request from the tender inviting authority)	The Bidders shall mention the following superscriptions on the tender cover:  i) Tender Specification No.  ii) Name of the Work  iii) Due Date  iv) EMD/BG PARTICULARS  v) Validity of the Tender
28.	Downloading the	The Bidder shall provide their official mail id for obtaining the link for
	Bid Documents	downloading the Tender Documents.
	Our Website:	https://greenkogroup.com/tenders.php

For Greenko RJ01 IREP Private Limited

Sd/-Authorized Signatory

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