



CHHATTISGARH STATE RENEWABLE ENERGY DEVELOPMENT AGENCY (CREDA)

(Dept. of Energy, Govt. of Chhattisgarh)

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क्रमांक 3318 / क्रेडा / नि.प्रको. / 2020-21

रायपुर, दिनांक: 29 JUN 2020

//CORRIGENDUM (Addendum/Amendment For T.No. 2064, dated 09-06-2020//

In continuation of Tender No. 2064, dated 09-06-2020 for Supply and Installation of solar drinking water pumping systems (SPV dual pumps) of 900wp/6m height staging/5kl,10kl water tank, with five years on site and unconditional warrantee anywhere in state of chhattisgarh.

As per queries received from interested bidders on 18.06.2020, following Addendum/Amendment are being made as below:-

S.No.	Clause/ Point No./Page No. of above Reference Tender	Existing Clause	Amendment/ Addendum
1	NIT/ Page No. 04	Approximate quantity of - 1. 900 Wp/01 HP/06 Mtr./5000 Ltr. Tank - 3000 2. 900 Wp/01 HP/06 Mtr./10000 Ltr. Tank - 2000	Amended Approximate quantity of - 1. 900 Wp/01 HP/06 Mtr./5000 Ltr. Tank - + 2. 900 Wp/01 HP/06 Mtr./10000 Ltr. Tank - = Total 5000 Nos.
2	Eligibility Criteria/ Point No. 1(A)/ Page No. 8	Tenderer must have valid test report of SPV Pumps for 900 Wp/1.0 HP (integrated systems) as per guidelines issued for SPV Drinking Water Pumps, at 90 meters duty head and 120 meters shut off head in their names They will have to provide copy of such test report of the integrated systems from Solar Energy Test Centre or any other test centre approved by Ministry of New & Renewable Energy (MNRE)/ NABL. Tenderer must also have to submit test reports of offered SPV Pumping System and manufacturer's test report / data sheet of major components such as SPV Module, Pump, Controller and detailed FEA report for structures (covering all elements and sections) issued by a qualified structural engineer	The test report from MNRE authorised NABL accredited labs will be acceptable
3	Eligibility Criteria/ Point No. 1(A)/ Page No. 08	Tenderer must have valid test report of SPV Pumps for 900 Wp/1.0 HP (integrated systems) as per guidelines issued for SPV Drinking Water Pumps, at 90 meters duty head and 120 meters shut off head in their names They will have to provide copy of such test report of the integrated systems from Solar Energy Test Centre or any other test centre approved by Ministry of New & Renewable Energy (MNRE)/ NABL. Tenderer must also have to submit test reports of offered SPV Pumping System and manufacturer's test report / data sheet of major components such as SPV Module, Pump, Controller and detailed FEA report for structures (covering all elements and sections) issued by a qualified structural engineer.	Testing of pump and controller is not necessary because test report of solar pumping system in which pump, controller, module performance is already mandatory to submit.
4	Additional Clause/ Point No. 1(A-i)/ Page No. 08	MNRE MICRO PUMPING GUIDELINES (2016-17), JNNSM SOLAR PHOTOVOLTAIC WATER PUMPING GUIDELINES FOR DRINKING WATER APPLICATION (2014-15) FOR b&c	Latest MNRE guideline for drinking water pump will be applicable & Valid test report have to be submitted.

निरंतर.....

“Truth is One, Paths are many” : Mahatma Gandhi

“स्वहित एवं राष्ट्रहित में ऊर्जा बचायें”

S.No.	Clause/ Point No./Page No. of above Reference Tender	Existing Clause	Amendment/ Addendum
5	Eligibility Criteria/ Point No. 1(B) / Page No. 08	In the table under clause no. 1B, For all categories of minimum experience of SPV Dual Pumps are mentioned with 4.5 mtr. or 06 mtr. staging.	The experience will be counted only for those solar dual pumps, which are with <u>GI</u> Staging. So the word 4.5 mtr. Staging is being replaced by 4.5 mtr. GI staging and 06 mtr. Staging is being replaced by 06 mtr. GI
6	Eligibility Criteria/ Point No.1(B)/ Page No. 08	For C.G. State - SPV Dual Pumps 900 Wp /1.0 HP DC Submersible with 6 Meters staging and 10000 Litres Storage Tank (Min. experience required 50 nos. of Solar Dual Pump)	For C.G. State - SPV Dual Pumps 900 Wp /1.0 HP DC Submersible with 6 Meters staging and 10000 Litres Storage Tank (Min. experience should be 25 nos. of Solar Dual Pump)
7	Eligibility Criteria/ Point No. 1(B) / Page No. 08	For Start Ups and New Entrepreneurs:- 1. Minimum 05 numbers of SPV Dual Pumps of capacity minimum 600 Wp -0.5 HP with 5000 Litres Tank at minimum 4.5 Meters Staging. 2. Minimum 05 numbers of SPV Dual Pumps of capacity minimum 900 Wp -1.0 HP with 5000 Litres Tank at minimum 6 Meters Staging	Changes in clause 3C is required as New Entrepreneur means System Integrator who doesn't fulfil the eligibility criteria as per clause 1A, 1D & 1E may be mentioned in corrigendum.
	START-UP AND NEW ENTREPRENEUR/ Point No. 3(C)/ Page No. 09	(New Entrepreneur means System Integrator who doesn't fulfil the eligibility criteria as per clause 1A to 1E). CREDA shall consider Companies/Proprietorship firm/Partnership firm which are registered in CREDA as NEW ENTREPRENEUR.	
8	Eligibility Criteria / Point no. 1 (D)/ Page No. 9	Bidders must have a Positive Net worth of Rs.01 Crore (Positive Net Worth means "Net value of the Assets minus(-) Net value of liabilities") as on 31st March 2019 or 31-03-2020 (only if the bidder has audited reports of their accounts for FY 2019-20). They shall have to submit a Certificate duly signed by a qualified and registered Chartered Accountant having UDI number as a proof. Produced certificate must tally with the audited balance sheet.	The network certificate, issued by a registered qualified chartered accountant shall be considered.
9	ELIGIBILITY CRITERIA/ Point No.1 (E)/ Page No. 9	E. Bidders should have an aggregate turnover of minimum 5 Crores in last three consecutive financial years i.e. 2016-17/ 2017-18, 2018-19 & 2019-20 (only if the bidder has audited reports of their accounts for FY 2019-20). in SPV Projects. Certified copies of the annual returns and audited balance sheet submitted to the Registrar of Companies/ Income Tax Authorities should be enclosed. For the preceding years a Summarised Sheet of turnover certified by registered CA must be enclosed	Scanned copy of CA certified documents are allowed and original hard copy is required before issuing of work order.
10	Consortium/ Point no. 2 (ii)/ Page No. 9	The lead partner should fulfil criteria as per clause 1D individually and other partner should have Positive Net worth as on 31st March 2019. For Positive Net worth of other partner Audited balance sheet must be enclosed.	The lead Partner should fulfill criteria as per clause 1D individually and other partner should have positive net worth as on 31st march 2019. For positive net worth of other partner audited balance sheet or CA Certified Certificate must be enclosed

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S.No.	Clause/ Point No./Page No. of above Reference Tender	Existing Clause	Amendment/ Addendum
11	Consortium/ Point No. 2 (vi)/ Page No. 9	In Consortium if one or both the partners are from Chhattisgarh then they should have minimum experience of 100 pumps and if both the partners are from outside the state then they should have minimum experience of 200 pumps.	In Consortium if one or both the partners are from Chhattisgarh then they should have minimum experience as mentioned in 3rd column of table mentioned at clause no. 1-B and if both the partners are from outside the state then they should have minimum experience as mentioned in 4th column of table mentioned at clause no. 1-B
12	START-UP AND NEW ENTREPRENEUR/ Point No. 3(H)/ Page No.-9	H. MSME (registered in Chhattisgarh State) working for manufacturing or services of Solar Pumps shall only be considered subjected to submission of valid production competency certificate. They shall have to fulfill all technical criteria for eligibility for the tender	MSME (registered anywhere in India) working for manufacturing or services of Solar Pumps shall be considered, Subjected to submission of competency certificate. They shall have to fulfill all technical criteria for eligibility for the tender.
13	ANALYSIS OF RATE/ Point no. 10(A)/ Page No. 10	Bidder should quote their rates considering variation of site conditions and all other factors in price of different components and keeping the quantum and quality of work in mind. Every care has been taken in preparing the cost estimation i.e. Benchmark Cost (Annexure – XVI) however, these are for guidance purpose only	Bidder should quote their rates considering variation of site conditions and all other factors in price of different components and keeping the quantum and quality of work in mind. Every care has been taken in preparing the cost estimation i.e Benchmark Cost (Annexure-XIII) however, these are for guidance purpose only. (Benchmark cost should be according to Annexure-XIII given on page no. 94)
	Benchmark cost of solar dual Pumps/ Point No. 34/ Page No. 94	Annexure-XIII, mentioned in benchmark cost of solar dual pump	
14	BID DOCUMENT FEE AND EARNEST MONEY/ Point No. 16 (B)/ Page No. 12	MSME unit registered for manufacturing or service of solar pumps or components in Chhattisgarh state and public sectors of government are exempted from EMD subjected to submission of valid competency document	Competency of NSIC shall be considered for manufacturers having certificate for production capacity and monetary limit for particular product from NSIC
15	SUBMISSION / DISPLAY OF SAMPLES/ Point No. 17/ Page No. 12	Bidders will have to provide samples individually of their Module, Pump, Controller, Tanks, assembled Structures, Stand Posts, Special Chamber, Taps, LA & Chemical Earthing Kit, B.O.S. and etc. All components should be submitted for examination on the date, shall be communicated separately at Ground near H.O. CREDA, VIP Airport Road, Raipur. These samples shall be examined by Technical Committee of CREDA	Bidders will have to provide samples individually of their Module, Pump, Controller, Tanks, assembled Structures, Stand Posts, Special Chamber, Taps, LA & Chemical Earthing Kit, B.O.S. and etc. for any one solar dual pump i.e. either 900 Wp/01 HP/06 Mtr./5000 Ltr. Tank OR 900 Wp/01 HP/06 Mtr./10000 Ltr. Tank
16	PRICE OF SUPPLY OF SOLAR DUAL PUMPING SYSTEMS WITH INSTALLATION, COMMISSIONING AND TESTING OF SOLAR PUMP SET/ Point no.21(I)/ Page No. 13	The Price quoted for all models of each category solar dual pumping system with installation, commissioning and testing, of SPV Modules, DC Submersible pumps, Structure, Tanks, HDPE Pipe, Suction Pipe, Rope wire, Clamp, Special Chamber, Stand post, Bore cap, Lightening arrester, 02-numbers earthing , Civil works and all other required BOS like Cables, Suitable Nut Bolts etc. with 5 years system warranty, insurance and COMC. The GST shall be paid extra as per prevailing rate (the GST regulation notification no. 24/2018-Central tax (Rate) dated 31-12-2018). The prices shall be filled exactly as per e-Price Bid enclosed	Two separate earthings will be required . One for LA and other for SPV Pump, Structure & Controller.
	EARTHING ARRANGEMENT/ Point no.3(G-1)/ Page no. 28 & 29	Earthing of the pump/controller shall be done as per IS 9283 in accordance with the relevant provisions of IS 3043. Separate earthing shall be provided for Controller, pump and SPV array. Marconite earthing shall be preferred instead of conventional earthing.	

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S.No.	Clause/ Point No./Page No. of above Reference Tender	Existing Clause	Amendment/ Addendum
17	WARRANTEE PERIOD AND POST INSTALLATION SERVICES/ Point No. 13(E)/ Page No.17	This warrantee must be an unconditional onsite warrantee and the eligible SI will have to replace the defective material within 7 days positively from the date of information given to him.	If pump/motor's fault is found within 01 year due to sand/clay/silt, then the warranty clause will be applicable.
18	WARRANTEE PERIOD AND POST INSTALLATION SERVICES/ Point No.- 13(A)/ Page No. 17	The work done/material supplied by the eligible SI should be warranted for satisfactory operation and against any defect in material and workmanship including Pumps, Controllers, Tank and Structures and other balance of equipment's, at least for a period of 5 (five) years, from the date of commissioning of the SPV dual Pumps including other works as per scope of work	Warranty will be applicable for only in major components i.e. modules, structure, controller, pump.
	WARRANTEE PERIOD AND POST INSTALLATION SERVICES/ Point No.-13(B)/ Page No. 17	Warranty on SPV Modules shall be for 10 (ten) years from the date of commissioning of the SPV dual Pumps must be warranted for their output peak watt capacity, which should not be less than 90% at the end of 10 years and not less than 80% at the end of 25 years	
19	INSURANCE/ Point No. 17/ Page No. 18	The eligible SI shall arrange insurance coverage for the materials and SPV Dual Pumping system at his/ beneficiary's custody for the work under execution and successful commissioning and subsequent handover to the beneficiary. The eligible SI shall take up insurance or such other measures for the manpower so as to cover the claim for damage / accident under workmen's compensation Act and other applicable State/Central laws. CREDA shall not bear any responsibility on this account	Insurance cover shall be till commissioning and hand over
20	Scope of Work/ Point No. 2.20/ Page No. 22	Provision for RMS / Data Logger is compulsory.	RMS/ Data Logger and SPD are mandatory
21	Scope of Work/ Point No. 4.12/ Page No. 24	All the electrical works should be done as per various provisions of Indian Electricity Act. The persons engaged for carrying out electrical works should have a valid B-class license or above issued by licensing board of Chhattisgarh.	All the electrical works should be done by a qualified electrician as per specifications and norms.
22	Motor & controller/ Point No. 3(B-i)/ Page No. 25	Overall Efficiency of Submersible pump set be minimum 50 %	Solar pumps shall also comply the MNRE Specification.
	MOTOR-PUMP SET/ Point No. 3(D-1)/ Page No. 27	Solar pump must be as per BIS/IEC/CE standards	
23	MOTOR-PUMP SET/ Point No. D (3-b)/ Page no. 27	The "Motor-Pump Set" should have a capacity in the range of 0.5 HP to 1HP.	Pump capacity should be 1HP only

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S.No.	Clause/ Point No./Page No. of above Reference Tender	Existing Clause	Amendment/ Addendum
24	MECHANICAL COMPONENTS MODULE AND TANK MOUNTING STRUCTURE/ Point No. 3(E-1)/ Page no.27	The Structure as per drawings (which is given as annexure "III-X") should be installed along with the hot dipped galvanized (minimum 80 microns) structure at site. The structure should be capable of withstanding a minimum wind load of 150 Km per hour, after grouting and installation. MTS should be sturdy & designed to assist SPV Modules to render maximum discharge. The hardware (fasteners) used for installation of SPV Modules & structure should be of suitable Stainless Steel (SS 304). Structure should be grouted on pedestals & Foundation as per drawings. Each module should be fastener by four theft proof nut bolt	GI hardware will also be permitted
	MECHANICAL COMPONENTS MODULE AND TANK MOUNTING STRUCTURE/ Point No. 3(E-3)/ Page no.28	The general hardware for structure fitment should be either SS 304 or 8.8 grade. Modules should be locked with antitheft bolts of SS 304 Grade. Foundation should be as per drawing attached	
25	MECHANICAL COMPONENTS MODULE AND TANK MOUNTING STRUCTURE/ Point No. 3(E-5)/ Page no.28	Modules must be compulsorily fitted with SS anti-theft bolts (with SS washers of 20mm diameter and 2.5mm thickness	Round washer are preferable since square washers are not readily available in market.
	I&C PROCEDURES FOR SOLAR WATER PUMPING (MMS and Module Assembly)/ Point No. 24/ Page No. 78	Square washer used for Module fixing to structures as square washers have a larger surface area than round washers. This type of washer is also specified for handling vibrations especially in high speed wind zones	
26	SOLAR DUAL PUMP CONTROLLER/ Point No. 3(F-1)/ Page no.28	Controller must be as per BIS/IEC/CE standards.	Controller should be as per IP 65 also.
27	MECHANICAL COMPONENTS MODULE AND TANK MOUNTING STRUCTURE/ Point No. 3(E-9)/ Page no.28	The ladder must be provided with suitable cage for easy movement technician up to tank tower base to avoid any fatal accidents	No cage for stair required, if staging is 6 Mtr.
28	MECHANICAL COMPONENTS MODULE AND TANK MOUNTING STRUCTURE/ Point No. 3(E-6)/ Page No.28	Only one GI sheets of thickness 1.2mm as per drawing Annex-III,IV,V shall be permitted for placing of water tank on structure	02 G.I. Sheets (thickness 1.5 mm) for 5KL SDP & 04 Sheets (thickness 1.5 mm) for 10 KL SDP

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S.No.	Clause/ Point No./Page No. of above Reference Tender	Existing Clause	Amendment/ Addendum
29	CABLES/WIRE/ Point No.3(i)/ Page No. 29	All cables should be of copper as per IS and should be of suitable grade as per requirement. All connections should be properly made through suitable lug/terminal crimped with use of suitable proper cable glands. The size of cables/wires should be designed considering the line losses, maximum load on line, keeping voltage drop within permissible limit and other related factors. The cable/wire should be of ISI/ISO mark for overhead distribution, with prior approval of CREDA	Cable should be as per the IEC/BIC Specification
30	TESTS FOR HYDRAULIC AND ELECTRICAL PERFORMANCE OF PUMPSET/ Point No. 4(i)/ Page no.30	The motor-pump set shall be tested independently for hydraulic and electrical performance as per the relevant IS specification including following test - a) Constructional requirements /features b) General requirements c) Design features d) Insulation resistance test e) High voltage test f) Leakage current test	Manufacturer's certificates regarding testing of motor pump set will be considered.
31	DESIGN AND SPECIFICATION OF HAND PUMP PLATFORM/ Point No. 11/ Page No.39	Bidder shall have to Construct cement concrete platform & drainage as per UNICEF type design (Annx-X) around the hand pump in M-15 cement concrete including excavation, centring, shuttering. Construction of platform & drainage includes filling in 30 cm depth sand/stone dust after removing soil including ramming, watering etc	Soakpit & Handpump platform are optional (Should Not be included in rates)
	DESIGN AND SPECIFICATION OF SOAKPIT/ Point No. 12/ Page No.39	Bidder shall have to construct a soakage pit of 70CM ID& 100CM OD dia. and 1.0 m deep including excavation, brick lining at top in 1:4 cement mortar, filling of broken bricks for water conservation & recharging of water near plate form as per the drawing in Annx-XI	
32	WATER SUPPLY SYSTEM & WIRE ROPE/ Point no. 13/ Page no.39	The depth of submersible Pump shall be max 120 Mtrs or as per the depth of the bore with independent riser pipe. HDPE pipe as per IS of 63 mm size shall be used from pump to hand pump special water chamber. Only GI pipe of 50/32/25 mm size shall be used for over ground connection such as inlet, outlet and over flow connection of over head tank and to distribution line connected to four/Two/One mouth hot dip galvanised Common stand post with stainless steel self closing (304 grades) taps at a height 800mm. After testing of the pipe distributions and stand posts the trenches to be filled up with excavated earth up to a depth of 30 cm watering and riming and making good to the damages of the road as per pre road condition (WBM/CC/Bituminous)	HDPE Pipe should be as per pump outlet. (HDPE pipe of 32mm dia. Considered)

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S.No.	Clause/ Point No./Page No. of above Reference Tender	Existing Clause	Amendment/ Addendum
33	WATER SUPPLY SYSTEM & WIRE ROPE/ Point no. 13/ Page no.39	The wire rope must be used to protect the pump from falling down and easy removal of pump in case of any faults. The wire rope must be made up of stainless steel ,8Sq mm dia with all wire rope fittings, Slings etc. Selection of wire rope should be made in such a way that it should hold the pump perfectly if in any case the pump falls down due to breaking of wire rope then it shall be responsibility of SI to provide the new pump	The wire rope must be made up of stainless steel ,6 Sq mm dia with all wire rope fittings
34	e-Price Bid (For supply, installation, Commissioning & Testing of Pump)/ Point No* 25/ Page No. 80		Price comparison will be done for cost of Supply + Cost of Installation & Commissioning of Complete Solar Dual Pump and COMC Price will be compared seperately.


EE o/pm


(Sanjeev Jain)
Chief Engineer (RE-02)