CHHATTISGARH STATE RENEWABLE ENERGY DEVELOPMENT AGENCY (CREDA)
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15 YEARS OF CELEBRATING THE MAHATMA

क्रमांक.3218 / क्रेडा / नि.प्रको. / 2020–21 रायपुर, दिनांक: 27.06.2020

//CORRIGENDUM (Addendum/Amendment For T.No. 2065, dated 09-06-2020//

In continuation of Tender No. 2065, dated 09-06-2020 for Supply and Installation of Solar Drinking Water Pumping Systems (SPV Dual Pumps) of Capacity 1200 Wp/09 M & 12 M, Height Staging / 10kl 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	Recommendations of Tender Committee
1	NIT/ Page No. 04	Approximate quantity of - 1. 1200 Wp /1 HP/09 Mtr./ 10000 Ltr.Tank – 3500 Nos. 2. 1200 Wp/01 HP/12 Mtr./ 10000 Ltr. Tank –1500 Nos	Amended approximate quantity of - 1. 1200 Wp/01 HP/09 Mtr./10000 Ltr. Tank - + 2. 1200 Wp/01 HP/12 Mtr./10000 Ltr. Tank - Total = 5000 Nos.
2	Elegibility Criteria/ Point no. 01(A)/ Page no. 08,	Tenderer must have valid test report of SPV Pumps for 1200 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.
3	Eligibility Criteria/ Point no. 1-B/ Page No. 08	In the serial no. of table under clause no. 1B, For all categories of minimum experience of SPV Dual Pumps are mentioned with 6 mtr. staging.	The experience will be counted only for those solar dual pumps, which are with **GI** Staging. So the word 6 mtr. Staging is being replaced by 6 mtr. GI staging.

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S.NO.	Clause/ Point No./Page No. of above Reference Tender	Existing Clause	Recommendations of Tender Committee
4	Eligibility Criteria/Point No. 1(E)/ Page No. 8 & 9	E. Bidders should have an aggregate turnover of minimum 10 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 Original Summarised Sheet of turnover certified by registered CA must be enclosed.	Scanned copy of C.A. certified documents are allowed and original hard copy is required before issuing of work order.
5	SECTION - 1 Instructions for bidders/ Point G/ page No.-9	MSME (registered in Chhattisgarh State) working for manufacturing or services of Solar Pumps shall only be considered. They shall have to fulfil 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 fulfil all technical criteria for eligibility for the Tender.
6	BID DOCUMENT FEE AND EARNEST MONEY/ POINT NO. 16-B/ PAGE NO. 11	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 perticular product from NSIC.
7	Clasue No. 17, Page No. 11	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. either1200 Wp/01 HP/09 Mtr./10000 Ltr. Tank **OR** 1200 Wp/01 HP/12 Mtr./10000 Ltr. Tank

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S.NO.	Clause/ Point No./Page No. of above Reference Tender	Existing Clause	Recommendations of Tender Committee
8	Eligibility Criteria/ Point no. 19-A/ Page No. 12	Tenderer must have valid test report of SPV Pumps for 1200 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.
9	PRICE OF SUPPLY OF SOLAR DUAL PUMPING SYSTEMS WITH INSTALLATION, COMMISSIONING AND TESTING OF SOLAR PUMP SET/ Point no.21-I/ Page no. 12	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.

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S.NO.	Clause/ Point No./Page No. of above Reference Tender	Existing Clause	Recommendations of Tender Committee
10	WARRANTEE PERIOD AND POST INSTALLATION SERVICES/ Point no. 13-A, B/ Page no. 17	A. 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. B. Warrantee 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.	Warranty will be applicable for only in major components, i.e. Modules,Structure, Controller , Pump.
11	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 would be applicable.
12	INSURANCE/ Point No. 17-A/ 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.
13	SCOPE OF WORK Point no. 2.20/ Page no. 21	Provision for RMS / Data Logger is mandatory.	RMS, Data Loggar& SPD are mandatory.

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S.NO.	Clause/ Point No./Page No. of above Reference Tender	Existing Clause	Recommendations of Tender Committee
14	Successful Bidder / Bidder here-in-after called the SI (System Integrator)/ Point No. 4.12/ Page No. 23	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..
15	MECHANICAL COMPONENTS MODULE AND TANK MOUNTING STRUCTURE/ Point No. E-3/ Page No. 27	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	GI hardware will also be permitted.
16	MECHANICAL COMPONENTS MODULE AND TANK MOUNTING STRUCTURE/ Point No. E-3/ Page No. 27	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	GI hardware and GI Fasteners will also be permitted
17	MECHANICAL COMPONENTS MODULE AND TANK MOUNTING STRUCTURE/ Point No. E-6/ Page No. 27	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	Maximum 05 GI sheets of 1.5 mm thickness (for 12 m high structure) and 3 nos (for 9 m high structure) of appropriate size may be allowed, subject to approval of CREDA
18	MECHANICAL COMPONENTS MODULE AND TANK MOUNTING STRUCTURE/ Point No. E-8/ Page No. 27	The inlet and delivery pipe line must be welded in the structure to avoid damaged of pipe line or dislocation of pipe line	The inlet and delivery pipe line should be separate and fixed by GI Clamp to Main Pole.
19	SOLAR DUAL PUMP CONTROLLER/ point no. F-1/ Page no. 27	Controller must be as per BIS/IEC/CE standards	Minimum IP-54 box and IP 65 for controller is allowed

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S.NO.	Clause/ Point No./Page No. of above Reference Tender	Existing Clause	Recommendations of Tender Committee
20	EARTHING ARRANGEMENT/ Point no.G-1/ Page no. 27	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. Marconiteearthing shall be preferred instead of conventional earthing	Two separate Earthings will be required. (One for LA and other for SPV pump, Structure & Controller.
21	Cables/Wires/ Point No. 3-I/ Page No. 28	All cables should be of copper as per IS and should be of suitablegrade 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 specifications.
22	SWITCHING DEVICE & FLUID LEVEL CONTROLLER/ Point No. 3-J/ Page no. 28	Switching Device and Fluid Level Controller should be of the approved make and it should be in accordance with the electrical parameters of the Motor / Pump. Controllers should be fixed in suitable IP 65 Box. Controller must have provisions for Remote Monitoring.	Minimum IP-54 Box and IP 65 for controller is allowed.
23	TESTS FOR HYDRAULIC AND ELECTRICAL PERFORMANCE OF PUMPSET/ Point no. 4-I/ Page no.29	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.
24	PERFORMANCE REQUIREMENTS/ Point No. L-A (1)/ Page No. 29	Minimum 12000 litres of water per day from a total Dynamic Head of 90 meter and with the shut off head being at least 120 meter	water output as per Wpcalculation.i.e for 1280Wp-12800 LPD is also acceptable

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S.NO.	Clause/ Point No./Page No. of above Reference Tender	Existing Clause	Recommendations of Tender Committee
25	DESIGN AND SPECIFICATION OF HAND PUMP PLATEFORM AND SAOKPIT/ Point No. 11 & 12, /Page No. 39	11. 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 12. 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	Soakpit&Handpump platform are optional (should not be included in rates)
26	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 Gl 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 32 mm dia. Considered.)
27	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 ,8 Sq 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.

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S.NO.	Clause/ Point No./Page No. of above Reference Tender	Existing Clause	Recommendations of Tender Committee
28	Complete drawing of Stand Post with all civil works (ANNEXURE-V)/ Page no.56 Page no.57	Complete drawing of Stand Post with all civil works (ANNEXURE-V)	As per new (attached) drawings
29	MMS and Module Assembly/ Page no.64	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	Round washers are preferrable, since square washer are not readily available in Market.

- **Price comparision will be done for cost of supply + cost of installation & commissioning of complete solar dual pump. Comc price will be compared seperately.**

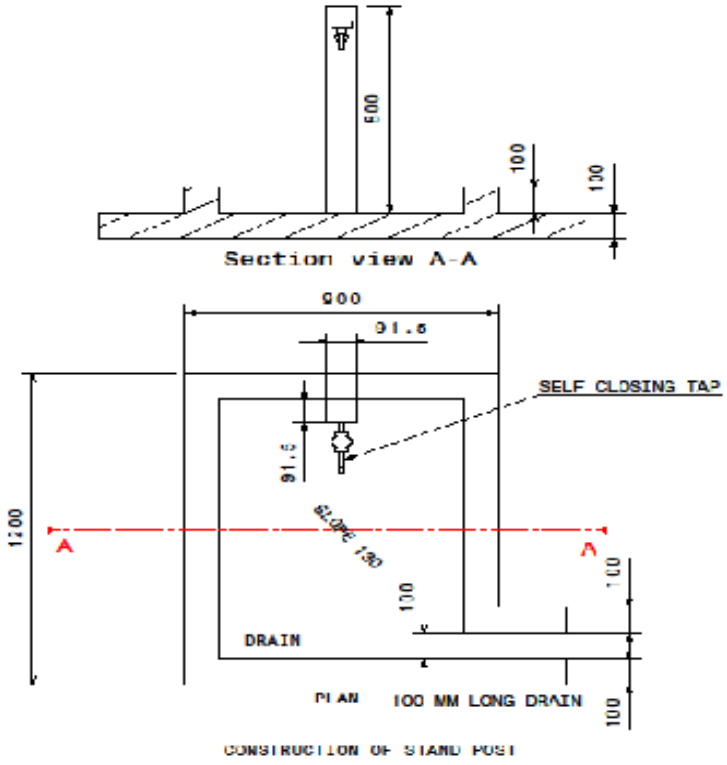
- **The Amended drawing of water stand post is attached herewith. It shall be deemed as final and approved drawing.**
- **The benchmark of 9 mtr. & 12 mtr. solar dual pumps are amended as follows (Point No. 33/ Page No. 77) :-**

Capacity of Solar dual pump	Benchmark price for supply of material for Solar Dual Pump (Excluding GST) (In Rs.)	Benchmark price for Installation and commissioning of Solar Dual Pump (Excluding GST) (In Rs.)	Total Cost of Solar Dual Pump Excluding GST	Rates for 5 Years COMC Excluding GST(In Rs.)	Total price Excluding GST(In rs.)
	A	B	C	D	E=A+B+C+D
SPV Dual Pumps 1200 W/1.0 HP DC Submersible with 9 Meters staging and 10000 Litres Storage Tank	5,34,009	2,07,970	7,41,979	80,000	8,21,979 Say 8,20,000
SPV Dual Pumps 1200 W/1.0 HP DC Submersible with 12 Meters staging and 10000 Litres Storage Tank	8,24,010	3,17,000	11,41,010	1,00,000	12,41,010 Say 12,40,000

(Sanjeev Jain)
Chief Engineer (RE-02)

DRAWING OF G.I. STAND POST (SINGLE TAP)

DRAWING OF STAND POST



ALL DIVENSIONS ARE IN MM

CHATTISGARH STATE RENEWABLE ENERGY DEVELOPMENT AGENCY (CREDA)

STAND POST CONSTRUCTION

CREDA - 001