न्यूक्लियर पॉवर कार्पोरेशन ऑफ इंडिया लिमिटेड

Nuclear Power Corporation of India Limited

(भारत सरकार का उद्यम Government of India Enterprise)

कैगा स्थल KAIGA SITE

CENTRALISED TENDER CELL केंद्रिय नीविदा प्रकोष्ठ

Corporate Identification No. U40104MH1987GOI149458

Phone:+91 8382 264002, Fax: +91 8382 264025, sdileep@npcil.co.in Website: www.npcil.nic.in

Head, CTC, NPCIL, Kaiga Site, Kaiga-581 400, Tq: Karwar, Dist: Uttara Kannada, State: Karnataka

TECHNOLOGIES FOR NEW INDIA@75

आजादी का अमृत महोत्सव

Ref: **NPCIL/KGS/CTC/CPPP-012/WO/2024/** 996

Date: 17-09-2024

To:

M/s Sundaram Associates,
No.:11, 7th cross, Venkateshwara layout,
Suddaguntapalya, Bangalore,
Pin - 560 029.

Cell No.: 7406733836 / 080-25521054
e-mail id: jssundar29@yahoo.com

Work Order No.	:	**700802**
S.L. Code	:	**S0235700802**
Account Code	:	**74200**
Charge Code	:	**6253**
MSME	:	**NA**

WORK ORDER NO.: 2024_NPCIL_189376_2/06000/WO

Name of work: "Refurbishment of Expansion joints of Main Plant buildings of Kaiga Generating Station 3&4, Kaiga Site, Kaiga."

Ref: 1) Tender No.: **NPCIL/KGS/CTC/C&SM-3&4/CPPP/2024/012/189376_2**
2) Last date of submission of tender is 16.07.2024

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Dear Sir

1) BID ACCEPTANCE:

1.1 This is to inform you that, the bid submitted by you as referred above has been accepted for and on behalf of NPCIL, for the items of work shown in the enclosed schedule of quantities and rates for a total value of ₹. **57,70,250**/- (Rupees Fifty-seven Lakhs, Seventy thousand two hundred and fifty only) inclusive of all applicable taxes and including **18% GST.**

2) QUANTITIES & RATES

2.1 You may note that the rates are for complete items of work including supply of all materials (unless otherwise specified), consumables, all temporary arrangements, all labours, all prevailing duties, taxes including GST.

2.2 **AHR Items: Nil & ALR Item: Nil**

2.3 Payment to the manpower deployed for this work shall be made as specified in the tender.

3) CONTRACT PRICE ADJUSTMENT:

Escalation of payment shall be applicable as per **Sl. No.: 21** of Schedule – **A.**

4) EXECUTION OF WORK:

The work shall be carried out strictly in accordance with the terms, conditions, specifications and drawings stipulated in the tender and also in best work man like manner. You shall employ and maintain qualified engineers / supervisors in the job at all times. You shall also bring to the site and employ such machinery and equipment and other materials as are necessary for the satisfactory completion of this work.

5) CONTRACT PERIOD:

5.1 **Schedule completion Period:**

The work shall be completed in all respect within **365 calendar days (including monsoon period)** from the date of commencement. The date of commencement of work will be reckoned within **Seven** (07) **days** from the **date** of **issue** of **Work Order**. The time shall be essence of the contract and the work shall be completed as per approved program of work.

5.2 **Defect Liability Period:**

The Defect Liability Period is 10 Years - **Sl. No.: 18** of Schedule - **A**.

6) AUTHORISED OFFICIALS:

6.1 You are requested to inform the name of the authorized representative who will deal with all matter relating to the contract and the Power of Attorney in his favour duly executed on stamped paper of an appropriate value shall be furnished.

6.2 During the execution of the contract and until completion certificate is issued you will be fully liable to compensate all concerned for any loss, damage or destruction of work, structure, property etc. including third party risk arising due to causes attributable to you which will be decided by the engineer-in-charge whose decision in this regard will be final.

7) INSURANCE:

You are required to take out following insurance policies applicable to this contract at your cost immediately after receipt of this work order from the date of commencement of work to the **end** of the **Defect Liability Period** for the whole contract value inclusive of GST.

a) **CAR policy for the whole contract value** – Applicable as per Schedule A
b) **The Insurance amount should cover THIRD PARTY LIABILITY** to **10%** of **Contract value subjected** to **maximum** of **Rs. 50.00 Lakhs.** – Applicable as per Schedule A
c) **Employees State Insurances for contract workers.** – Applicable as per Schedule A
d) **Wherever ESI Act not covers the contract worker based on monthly wage / salary, contractor shall obtain the employees / Workmen compensation for such workers.**

You may note that all insurance policies taken under 7 (a), (b) & (d) are to be in Joint names of Corporation and the contractor and specific to work by mentioning the name of work and Work Order Number in the policies and all Policies in Original should be submitted to the engineer-in-charge before the date of commencement of work. Copy of ESI registration certificate shall be submitted to **engineer-in-charge** of **work**, before commencement of the work.

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8) TAXES & DUTIES:

For tax related compliance (including TDS) refer Supplement/ Amendment to GCC (Additional document pg no.:291/346).

9) ENGINEER-IN-CHARGE:

Shri Rahul Mundotiya, SO/D, C&SM-3&4, will be the **Engineer-in-charge** of this work. You may make necessary arrangements for commencing the work immediately in consultation with Engineer-in-Charge.

10) SECURITY DEPOSIT:

Security Deposit shall be @ **10 %** of the contract value will be ₹. 5,77,025/- (including GST), (Rupees Five Lakhs, Seventy-seven thousand and twenty-five only)

10.1 **Performance Guarantee**: (This clause revised on 09.12.2022)

As per **Clause No.: 4.2.3** of **GCC** you shall submit a performance guarantee for ₹. **2,88,512**/- (50% of Security Deposit) to the Corporation within 30 days after issue of work order. It should cover the contract period plus Defects Liability period. In case, the Bank Guarantee need to be submitted as per the format given in tender document.

10.2 **Retention Money**:

As per **Clause No.: 4.2.5** of **GCC**, the remaining amount (50% of Security Deposit) of Security Deposit of ₹. **2,88,513**/- will be deducted as a Retention money from the RA bill / final bill at the rate of 6% of each bill amount. Security Deposit amount will not bear any interest.

10.3 **Refund of Security Deposit:**

Refund of Security deposit will be regularized as per **General Condition** of **Contract**.

11) APPLICABLE LAWS & ACTS:

11.1 You shall comply with various provisions of the contract labour (Regulations & Abolition) Act 1970 and rules framed thereafter from time to time. In case, the Contract Labour Act does not apply to your organization you should intimate the Engineer-in-Charge of this work accordingly before commencing the work. Further you shall also comply with the provisions of other laws such as Workmen's Compensation Act 1923, Minimum Wages Act 1948, E.P.F. Act, ESI Act, Gratuity Act and other labor laws as applicable to your organization. In case, NPCIL is required to incur any expenses as principal employer under the provisions of the various laws, NPC shall be entitled to recover the same from you / your bills.

11.2 You have to give request for the issue of Principal Employer's Certificate for obtaining labour license based on the maximum number of workmen you proposed to employ for this work. You may please note that within 14 days from the date of issue of this work order, you will have to apply for a labour license to the Asstt. Labour Commissioner, of the area, for the maximum number of workers you had indicated to engage on the work.

11.3 The contractor shall make the payment to all its labours on or before **7th** of succeeding month and as per special condition of contract.

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11. 4 Labour License (if applicable),

12) PAYMENT TERMS:

12.1 The progressive monthly payment for the work completed and accepted by Engineer-in-charge shall be made through Running Account bills once in a month on submission of measurement / bill by the contractor. Submission of bills on monthly basis shall be ensured by the contractor.

12.2 Payment of bills will be processed on submission of GST invoice duly supported with Annexure-8 (Declaration form for GST).

12.3 In addition to above, first Running Account bill will be processed only on submission of Intimation from Tender Section regarding Work order acceptance & agreement signed by the contractor, Insurance Policies, copy of PAN, GST Registration Certificate, cancelled cheque for bank account details etc., to the Engineer-in-charge.

13) PENALTY & LIQUIDATED DAMAGES CLAUSE:

Penalties imposed by Engineer-in-charge for non-compliance or violation of certain conditions of contract, Liquidated Damages for delay in execution and any other penalty in the nature of fine imposed during execution of work will be recovered along with applicable GST there on from bills of the contractor before release of payment.

14) SECURITY, SAFETY & HOUSEKEEPING:

You may have to comply all Security, Safety rules & regulations, Environmental measure as defined in the Contract.

You shall submit the Police Verification Certificate [PVC] for you, your staff and labour; as a pre-condition to issue of RFID cards / Gate Passes [if applicable].

15) TRANSPORT & ACCOMMODATION:

Contractor shall make his own arrangement for Accommodation & Transportation of manpower deployed for this work.

16) AGREEMENT:

A formal agreement incorporating all the terms and conditions agreed between NPCIL and **M/s Sundaram Associates,** will be executed within the period from the date of issue of this work order. Till a **formal agreement** is executed the original tender together with letters under reference and this work order shall form the binding contract between NPCIL and **M/s Sundaram Associates.**

Kindly acknowledge receipt of this Work Order.

Thanking you,

Yours faithfully
For and on behalf of NPCIL

16/9/24

अनुरक्षण अधीक्षक, (केजीएस # 3 व 4)
Maintenance Superintendent, (KGS # 3&4)

13/09/24

NUCLEAR POWER CORPORATION OF INDIA LIMITED

(A Government of India Enterprise)

Kaiga Generating Station

Schedule Of Quantities And Rates

Print Date: 13-Sep-2024

Co[illegible]

Name of Work: Refurbishment of Expansion joints of Main Plant buildings of Kaiga Generating Station 3&4, Kaiga Site, Kaiga.
WO / SOQR Number : 700802
Agency Name : M/s Sundaram Associates

Item No	Description	Unit	Quantity	Rate in ₹	Rebate in %	Rebated Rate	Amount in ₹
		Rate in Words					
Schedule : SMU:NA							
1	Dismantling / breaking / removing of screed concrete/ BBC (Brick Bat Coba) / RCC(Reinforced Cement Concrete) by mechanical means . Disposing the generated debris, waste, up to a lead of 2000 to 3000 meters from the place of work & cleaning the work area, etc. complete all as directed by engineer-in-charge at all locations.	CuM	145	1842	-	-	**2,67,090.00**
		Rupees One Thousand Eight Hundreds Forty Two Only					
2	Expansion Joint Preparation for carrying out of treatment as per item no. 3 : Carrying out surface preparation like removing existing sealant in expansion joint, chipping, micro chipping, grinding, micro grinding over dismantled area, surface to be treated shall be workable dry and free from oil, grease and loose particle and making area level by using Polymer mortar / Epoxy mortar ([as per technical specification 2ai.e. Density of 1.65 gm/cm3, mixing ratio parts by weight is 5:1, minimum application temperature may 8 to 10 °C, pot life of material may 20 to 25 minutes. the product should match following properties i.e. fine grade concrete repair mortar, in powder form, shelf life shall be 12 months from date of manufacture and as per technical specification 2b i.e. Density 1.98gm/cm3, pot life shall be 30 minutes, minimum application temperature =50°C, mixing ratio by weight of cement shall be 13%-14%, compressive strength at 28 days may 500 Kg/cm2 , flexural strength at 28 days may 70 Kg/cm2 Pull out bond strength 6.6 Kg/cm2 and 3.4 Kg/cm2 for 12 mm dia rod and 28 mm dia rod respectively and failure in steel and concrete respectively, maximum processing time shall be 30 min and change in volume 1.84% after 1, 7 ,& 28 days. Product characteristics are as follow, Material meant for micro-concrete / grout, in powder form, shelf life 6 months from the date of [As per technical specification 2Ci i.e compressive strength of 39.7 N/mm² and 56.3 N/mm² in 7 and 28 days respectively, Flexural strength 7.3 N/mm² and 7.8 N/mm² in 7 and 28 days respectively, Dynamic E-modulus 3.19x104 N/mm² & 3.37x104N/mm² in 7&28 days respectively, liquid contents to achive Heagermann flow table 13.5% for 15cm flow and 15.5% for 21 cm flow, Setting time: Initial 7.05 hours and Final 12 hours at 21 cm flow, bleeding test 0% by weight test at 21 cm flow, Diffusion resistance 97.1 M at 21 cm flow, water penetration under pressure 0% under 1.5 kg/cm2 & 2 kg/cm2, Chloride content shall be 0% and Bonding strength 4.04 N/mm² . Product characteristics are product shall be crystallization based waterproofing liquidapplied membrane syatem, in powder form, shelf life 12 months from date of manufacture.& as per technical specification 2 Cii i.e. Bulk density 2.39Kg/dm3 , flow table spread 21 CM, Air content 3.1%, Adhesive strength in tension: specimen stored at 23 degree celcius & 50% relative humidity is 1.9 N/mm2 in 7 days, 2.4 N/mm2 in 28 days, 3.6 N/mm2 in 90 days, compressive strength of mortar system 26 N/mm2 in 2 days, 36 N/mm2 in 7 days, 55 N/mm2 in 28 days. flexural strength of mortar system 5.9 N/mm2 in 2 days, 7.0 N/mm2 in 7 days, 11.0 N/mm2 in 28 days. and manufacture.]. as per site condition and including a coat of crystalline waterproofing slurry on broken surfaces adjoining expansion joint querying etc. Product characteristics are as follow, product meant for acrylic copolymer used as bonding agent & polymer component in repairs, available in liquid form, shelf life 9 months from the date of manufacture.] Disposing the generated debris, waste, up to a lead of 2000 to 3000 meters from the place of work & cleaning the work area, etc. complete all as directed by Engineer-in-charge , technical specification, manufacturers instruction and procedure at all locations.	RM	400	817	-	-	**3,26,800.00**
		Rupees Eight Hundreds Seventeen Only					

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Name of Work: Refurbishment of Expansion joints of Main Plant buildings of Kaiga Generating Station 3&4, Kaiga Site, Kaiga.
WO / SOQR Number : 700802 **Agency Name : M/s Sundaram Associates**

Item No	Description	Unit	Quantity	Rate in ₹	Rebate in %	Rebated Rate	Amount in ₹
		Rate in Words					
3	Refurbishment of Expansion Joint by providing and laying of treatment as per specification mentioned against each sub items below.				-	-	-
3.1	25mm to 50 mm wide joints: Providing and applying Alkaline resistant coating [as per technical specification 3a i.e Availability in liquid form(Composition of 2 component) workability period 25 min. approx., rainproof after 6 hours approx., ready to walk on 16 hours approx., next coat to be applied 16 hours approx., Usage for primer-500 g/m2 as a alkaline protection 400-600 g/m2 approx.] over prepared surface including surface preparation, Sprinkling Quartz sand/Silica Sand[0.3 to 0.7 mm] for better adhesion and bonding of further coat, along with liquid applied polyester resin base, flexible UV resistant waterproofing system. [as per technical specification 3b i.e. Available in 3 component composition, flexible polymer resin, water vapour diffusion factor 10960 µ, resistance to wind loads >=50kPa, external fire performance i.e. classification in accordance with EN 13501-5 2006: DIN 4102-7 - resistance to spreading fire and radiant heat is : BROOF(t1), Reaction to fire-E (Classification in accordance with EN 13501-1 2006: DIN 4102-1. Classification is done in class B2.), statement to dangerous substance: Does not contain any, working life - W3, climatic zones M&S, Imposed loads-P1 to P4, roof slope- S1 to S4, Lowest surface temperature -TL4, Highest surface temperature -TH4, shelf life - 12 months, workability period 15 min. approx, rainproof after 30 min. approx, can be walked on 6 hours approx., cured after 3 days, next coat can be applied after 6 hours.] with fleece of 165 GSM in two layer system expansion joint, having first layer of fleece 26.25 cm and laying Polyethylene rod [Bond Breaker rod, as per technical specification 3c, i.e. excellent chemical resistance and absorption, unaffected by climatic fluctuations, melt flow index 3.3-3.8 g/10 min, Density@23° Celsius is 0.922-0.924 g/cm3 crystalline melting point 111°C, Vicat Softening Point 93°Celsius, tensile strength @yield MD 12MPa TD 10MPa, Tensile strength @break MD 19 MPa TD 21MPa, Elongation break MD 450% TD 550%, impact strength 160 g, coefficient of friction 0.09, Haze 8%, Gloss @60° Celsius 100 gu, clarity 70%] of suitable size and second layer of fleece 35 cm. [as per technical specification 3d i.e. composition of fleece based on polyester, weight 165 g/m2]. Including reducing the expansion joint gap by 25-30 mm wide by brick bat coba / concrete [Refer Item No.: 5] at floor level with Polyethylene rod (Bond Breaker rod) and laying pourable grade polysulphide sealant, [as per technical specification 3e i.e. specific gravity 1.7 at 20 degree Celsius, mixing ration 92:08 pbw, pot life 60-160 min, Initial cure time160-360 min, full curing time 7 days, shore A hardness 14, shear strength 0.3MPa, Tensile strength 0.22 MPa, Application tempreture+5°C to 45°C , service temperature -40°C to +80°C , Elongation 450%, MAF 25%, UV resistant-Good, elastic recover >90%] and finishing the same with existing slope level to make ease flow of water. Disposing the generated debris, waste, up to a lead of 2000 to 3000 meters from the place of work & cleaning the work area, etc. complete all as directed by engineer-in-charge at all locations. NOTE : (1) Brick bat coba will be paid under item no-5, (2) Execution of the job shall be carried out as per technical specification and work procedure mentioned in tender.	RM	50	5379	-	-	**2,68,950.00**
		Rupees Five Thousand Three Hundreds Seventy Nine Only					

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Name of Work: Refurbishment of Expansion joints of Main Plant buildings of Kaiga Generating Station 3&4, Kaiga Site, Kaiga.
WO / SOQR Number : 700802
Agency Name : M/s Sundaram Associates

Item No	Description	Unit	Quantity	Rate in ₹	Rebate in %	Rebated Rate	Amount in ₹
				Rate in Words			
3.2	55 mm to 100 mm wide joints : Providing and applying Alkaline resistant coating [as per technical specification 3a - technical details as described in item 3.1] over prepared surface including surface preparation, Sprinkling Quartz sand/Silica Sand[0.3 to 0.7 mm] for better adhesion and bonding of further coat, along with liquid applied polyester resin base, flexible UV resistant waterproofing system. [as per technical specification 3b - technical details as described in item 3.1] with fleece of 165 GSM in two layer system expansion joint, having first layer of fleece 35 cm and laying Polyethylene rod (Bond Breaker rod, as per technical specification 3c -technical details as described in item 3.1) of suitable size and second layer of fleece 52.5 cm. [as per technical specification 3d-technical details as described in item 3.1]. Including reducing the expansion joint gap by 25-30 mm wide by brick bat coba / concrete [Refer Item No.: 5] at floor level with Polyethylene rod (Bond Breaker rod) and laying pourable grade polysulphide sealant [as per technical specification 3e - technical details as described in item 3.1] and finishing the same with existing slope level to make ease flow of water. Disposing the generated debris, waste, up to a lead of 2000 to 3000 meters from the place of work & cleaning the work area, etc. complete all as directed by engineer-in-charge at all locations. NOTE : (1) Brick bat coba will be paid under item no-5, (2) Execution of the job shall be carried out as per technical specification and work procedure mentioned in tender.	RM	190	7469	-	-	**14,19,110.00**
		Rupees Seven Thousand Four Hundreds Sixty Nine Only					
3.3	105 mm to 150 mm wide joints : Providing and applying Alkaline resistant coating [as per technical specification 3a - technical details as described in item 3.1] over prepared surface including surface preparation, Sprinkling Quartz sand/Silica Sand[0.3 to 0.7 mm] for better adhesion and bonding of further coat, along with liquid applied polyster resin base, flexible UV resistant waterproofing system. [as per technical specification 3b - technical details as described in item 3.1] with fleece of 165 GSM in two layer system expansion joint, having first layer of fleece 52.5 cm and laying Polythylene rod (Bond Breaker rod as per technical specification 3c - technical details as described in item 3.1) of suitable size and second layer of fleece 70 cm. [as per technical specification 3d - technical details as described in item 3.1]. Including reducing the expansion joint gap by 25-30 mm wide by brick bat coba / concrete [Refer Item No.: 5] at floor level with Polythylene rod (Bond Breaker rod) and laying pourable grade polysulphide sealant [as per technical specification 3e - technical details as described in item 3.1] and finishing the same with existing slope level to make ease flow of water. Disposing the generated debris, waste, up to a lead of 2000 to 3000 meters from the place of work & cleaning the work area, etc. complete all as directed by engineer-in-charge at all locations. NOTE : (1) Brick bat coba will be paid under item no-5, (2) Execution of the job shall be carried out as per technical specification and work procedure mentioned in tender.	RM	150	9634	-	-	**14,45,100.00**
		Rupees Nine Thousand Six Hundreds Thirty Four Only					
4	Providing and applying Alkali Resistant Resistance primer [As per technical specification 3a - technical details as described in item 3.1] in case of over laying coat or coarse coming over joint treatment to protect the treatment. Disposing the generated debris, waste, up to a lead of 2000 to 3000 meters from the place of work & cleaning the work area, etc. complete all as per technical specification and as directed by engineer-in-charge at all elevations & locations.	SqM	500	349	-	-	**1,74,500.00**
		Rupees Three Hundreds Forty Nine Only					

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Name of Work: Refurbishment of Expansion joints of Main Plant buildings of Kaiga Generating Station 3&4, Kaiga Site, Kaiga.
WO / SOQR Number : 700802 **Agency Name : M/s Sundaram Associates**

Item No	Description	Unit	Quantity	Rate in ₹	Rebate in %	Rebated Rate	Amount in ₹
		Rate in Words					
5	Providing and laying Brickbat coba of various thickness in cement ; sand (1:4) with integral waterproofing admixture [as per technical specification 4a - i.e. 1% to 2% by the weight of cement but not less than 3 kg/CuM of concrete, shelf life of product 12 months conforms with IS 2645]at the dosage of 500 gms per bag of cement and chopped glass roving fibres [as per technical specification 4b i.e. sizing code: Japan 7065, product description : chopped glass roving, filament diameter -14 microns, LOI-1%, Moisture - 0.9%, Specific gravity - 2.68, softening point -845oC] added of the dosage 85 gms per bag of cement including finishing the top with IPS marked with false squares laid to proper slopes, curing etc. Including application of bond coat [as per technical specification 4c i.e.- Density 2.1 G/cm3 mixing ratio pbw 100:20 to 25, pot life 20 min., minimum application temperature +8 degree Celsius, consumption 1000 to 1100 g/m2 , product meant for mineral corrosion protection and bond coat, available in powder form, shelf life 12 months from date of manufacture.] at the interface of old and new layer. Disposing the generated debris, waste, up to a lead of 2000 to 3000 meters from the place of work & cleaning the work area, etc. complete all as directed by engineer-in-charge at all locations.	CuM	100	18687	-	-	**18,68,700.00**
		Rupees Eighteen Thousand Six Hundreds Eighty Seven Only					

Note: All Item Rates are considered to be in Indian Rupees unless otherwise explicitly specified and in wihcih case shall be always converted appropriately to arrive at the amount in Indian Rupees.

Work Order Total	Rs. 57,70,250.00
Overall Rebate (%)	0
Work Order Value After Overall Rebate in Figure	Rs. 57,70,250.00
Work Order Value After Overall Rebate in Words	Rupees Fifty Seven Lakh Seventy Thousand Two Hundreds Fifty Only

Signature Not Verified
Digitally signed by BASANAGOUDA SHIVAGOUDA NAGANURI
Date: 2024.09.18 12:44:13 IST
Location: eProcurement System for Central PSUs

13/09/24

AKASH CHOPRA
MAINTENANCE SUPERINTENDENT
Kaiga Generating Station