



न्यूक्लियर पावर कॉर्पोरेशन ऑफ इंडिया लिमिटेड
(भारत सरकार का उद्यम)
NUCLEAR POWER CORPORATION OF INDIA LIMITED
(A Govt. of India Enterprise)
(CIN : U40104MH1987GOI149458)



संविदा एवं सामग्री प्रबंधन निदेशालय
नाभिकीय ऊर्जा भवन,
ए-'O' ब्लॉक, तलमाला,
अणुशक्तिनगर, मुंबई - 400 094.
दुरभाष: 2599 3000 / 2599 1000
फैक्स: 91-22-2558 0741



DIRECTORATE OF CONTRACTS & MATERIALS MANAGEMENT

Nabhikiya Urja Bhavan,
A-'O' Block, Ground Floor,
Anushaktinagar, Mumbai - 400 094.
Tel.: 2599 3000 / 2599 1000
Fax : 91-22-25580741

CMM-45/Rev.4

MSE Type	NA
MSE Category	NA
Budget Head	Capital

USI No --	IAEA Code: 245 244.2 to 2445.5 243.31 to 243.37	PROJ/STN	KKNPP 5&6 Project
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Purchase Order No. CMM/EIC/91-00-3-3653/PO/58

Date: 31 DEC 2025

To, M/s Electronics Corporation of India Limited. Control Instrumentation Division (CnID) Control System Group (CSG), ECIL-Post, Medchal Malkajgiri-Dist, Hyderabad-500 062, Ph : 040-27186264, 2786233 Email : headscada@ecil.co.in In Consortium With M/s TEMA India Private Limited., Darabshaw House, 1 st floor, S.V. Marg, Ballard Estate, Mumbai - 400 001. Ph: 022 66662293 , 8898237994, 989275225 Email : arvind.k@temaindia.com Calvin.r@temaindia.com	Ref : 1) Your Bid No. ECHO/CnID/Mktg/2024-25/NPCIL-KKNPP-5&6/793 Dtd. 04.03.2025 2) Consortium Agreement Dtd. 27.02.2025 3) Part-I opened on 25.03.2025 4) Part-II Opened on 31.07.2025 5) MOM Dtd. 19.09.2025 6) Your Letter No. ECIL/CnID/KKNPP-5&6/Price SoQR/Rev-01 Dtd. 23.09.2025 7) Your Letter No. ECIL/CnID/KKNPP-5&6/ offer -validity-extn/205/01 dtd. 28.11.2025 8) Your Letter No. ECIL/CnID/KKNPP-5&6/offer- Payment Terms/2025/01 dtd. 29/12/2025
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Dear Sirs,

Your bid contained in the Tender No. CMM/EIC/91-00-3-3653 Dtd. 28.10.2024 to supply the under mentioned Stores is accepted for and on behalf of the Nuclear Power Corporation of India Ltd., subject to the Conditions of Contract as contained in Section-B of the tender documents and the terms and conditions contained in this Purchase Order, to the extent of the quantity and at the price specified below:

Sl. No.	Description	Quantity	Unit	Rate	Value
	CONTROL INSTRUMENTATION PACKAGE (CIP) : KKNPP-5&6 (Supply) : Design, Engineering, Procurement, Manufacturing, Testing, Supply, Storage, Installation & Erection, Preservation, Commissioning, Performance Testing, Handing over and Performance Guarantee (PG) of Control and Instrumentation Package (CIP) for KKNPP-5&6 For Detailed scope of work and quantity, refer the Specifications attached under Section-C. forwarded under Tender No. CMM/EIC/91-00-3-3653 Dtd. 28.10.2024 and further described in following :		As Per Section-A		

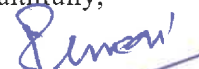
SECTION-A	: Items and Price Schedule			
SECTION-B	: Commercial Terms and Conditions: Basis of price, Statutory levies, Delivery Schedule, Terms of Payment, etc.			
SECTION-C	: Technical Particulars			
Annexure – A1 to A10	: Break up of Price Schedule.			
Annexure – 2	: Price Adjustment Formula			
Annexure- 3	: Annexure-B1: Milestones Schedule of Control and Instrumentation Package (CIP) of KKNPP-3&4			
Annexure-A	: Format for “ Bank Guarantee for Advance ”			
Annexure-B	: Format for “Bank Guarantee for Performance Security Bond”			
Annexure-C	: Format for “Retention Bank Guarantee”			
Annexure-E	: Suggested sub-vendor list			
Annexure-J	: Format for “Operational Acceptance Certificate”			
Annexure-F	: Format for GST			
KKNPP 5&6		Tamilnadu		33AAACN3154F2ZW

Price Basis As per Section-B Delivery Period As per Section-B
Place of Delivery As per Section-B

Conditions of Contract contained in Section-B of the tender documents and this Purchase Order shall be the sole repository of the Contract.

Please acknowledge receipt immediately in the form sent herewith.

Yours faithfully,



(Pankaj Trivedi)

General Manager (C&MM)

For and on behalf of Nuclear Power Corpn. of India Ltd.
(The Purchaser)

Important:

1. Bills should be submitted in triplicate to the Paying Authority at the address as indicated in the Purchase Order alongwith all relevant Documents as enlisted under Clause 5.6 of GCC Form No. EPC-3/R-4 and or as specified in this Purchase Order.

Delivery Instructions:

1. Stores are to be delivered at the place of delivery stipulated in this Purchase Order on any working day between 10.30 a.m. and 3.00 p.m.
2. No Stores shall be accepted by the Stores unless Delivery Challan giving full details of the Purchase Order No. and Date, Description of Stores, Quantity, Make, Unit and Gross Weight or Net Weight is submitted with the Stores. In absence of any of the above, the Storekeeper shall refuse to take delivery of the Stores.

SECTION- A
ITEMS AND PRICE SCHEDULE

Sr. No.	Description	Quantity	Total DAP Value inclusive of GST (₹)
	CONTROL INSTRUMENTATION PACKAGE (CIP) : KKNPP-5&6 (SUPPLY)		
	Design, Engineering, Procurement, Manufacturing, Testing, Supply, Storage, Installation & Erection, Preservation, Commissioning, Performance Testing, Handing over and Performance Guarantee (PG) of Control and Instrumentation Package (CIP) for KKNPP-5&6 For Detailed scope of work and quantity, refer the Specification number attached under Section-C. forwarded under Tender No. CMM/EIC/91-00-3-3653 Dtd. 28.10.2024		
1.0	Item supply by M/s ECIL		
1.1	Template-S1 (Supply of Field Instrumentation)	As per Annexure-A1	1588565320.46
1.2	Mandatory Spares of S1 supply (Field Instrumentation)	As per Annexure-A2	218302695.12
1.3	Template-S2 (Supply of Control Cables)	As per Annexure-A3	2432064224.86
1.4	Template-S3 (Supply of System)	As per Annexure-A4	1106449236.72
1.5	Mandatory Spares of S3 (Supply of System)	As per Annexure-A5	33326642.78
1.6	Template-S4 Supply of Hardware	As per Annexure-A6	640722912.42
	Sub Total for items supply by M/s ECIL (A)		6019431032.36
2.0	Item supply by M/s TEMA		
2.1	Template-S1 (Supply of Field Instrumentation)	As per Annexure-A7	5231445694.90
2.2	Mandatory Spares of S1 supply (Field Instrumentation)	As per Annexure-A8	276820560.10
2.3	Template-S3 (Supply of System)	As per Annexure-A9	1193592077.80
2.4	Mandatory Spares of S3 (Supply of System)	As per Annexure-A10	61618219.40
	Sub Total for items supply by M/s TEMA (B)		6763476552.20
	TOTAL PO VALUE (Sub total of A + B) IN RUPEES (₹)		12782907584.56

(Rupees One Thousand Two Hundred Seventy Eight Crores Twenty Nine Lakhs Seven Thousand Five Hundred Eighty Four & Fifty Six Paisa only)

Pankaj Trivedi

(Pankaj Trivedi)

General Manager (C&MM)

For & on behalf of Nuclear Power Corporation of India Ltd.,
(The Purchaser)



Template Name : S1 - Supply of Field Instrumentation									
M/s Electronics Corporation of India Ltd.									
S.No.	Instrument name	Reference Specification	Unit of Measurement	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020	
					Basic Price (inclusive of P&F charges)	Freight & Insurance		E=A[(B+C)(1+D/100)]	
2.1	Differential Pressure Switches	102.KK56.0.0.AK.TS.PR003	No's	585	133498.00	1348.00	18.00	9,30,84,193.80	
2.2	Pressure Switches		No's	181	93162.00	941.00	18.00	2,00,98,518.74	
3	Temperature Gauges								
3.1	Temperature Gauges - Bimetallic type	102.KK56.0.0.AK.TS.PR004	No's	666	27267.00	275.00	18.00	2,16,44,706.96	
4	Indicating Temperature Switch								
4.1	Indicating Temperature Switch	102.KK56.0.0.AK.TS.PR005	No's	92	114564.00	1157.00	18.00	1,25,62,671.76	
5	Displacer type level transmitter								
5.1	Displacer type level transmitter	102.KK56.0.0.AK.TS.PR032	No's	12	5592920.00	56494.00	18.00	7,99,95,702.24	
6	Temperature Compensated Humidity Transmitter								
6.1	Temperature Compensated Humidity Transmitter	102.KK56.0.0.AK.TS.PR033	No's	45	5799874.00	58585.00	18.00	31,10,84,172.90	
7	Indicating Pressure Switch								
7.1	Indicating Pressure Switch Range 0-1 MPa	102.KK56.0.0.AK.TS.PR006	No's	10	188874.00	1908.00	18.00	22,51,227.60	
7.2	Indicating Pressure Switch Range 0-1.6 MPa		No's	10	216838.00	2190.00	18.00	25,84,530.40	
8	Capacitance type level switch								
8.1	Single Point Capacitance type level switch		No's	133	122019.00	1233.00	18.00	1,93,43,168.88	
8.2	Three point Capacitance type level switch	102.KK56.0.0.AK.TS.PR030	No's	78	168050.00	1697.00	18.00	1,56,23,513.88	
8.3	Interconnecting cable		DELETED						
9	Conductivity type level switch								
9.1	Single point Conductivity type level switch - Rigid electrode		No's	616	88223.00	891.00	18.00	6,47,75,184.32	
9.2	Single point Conductivity type level switch - Flexible electrode		No's	36	216207.00	2184.00	18.00	92,77,249.68	
9.3	Three point conductivity type level switch - Rigid electrode		No's	48	192122.00	1941.00	18.00	1,09,91,728.32	
9.4	Three point conductivity type level switch - Flexible electrode		No's	3	387176.00	3911.00	18.00	13,84,447.98	
9.5	Four point conductivity type level switch - Flexible electrode	102.KK56.0.0.AK.TS.PR031	DELETED						
9.6	Interconnecting cable		DELETED						
9.7	DEC equipment								
9.7.1	Conductivity type level switch		No's	8	1430341.00	14448.00	18.00	1,36,38,808.16	
9.7.2	Interconnecting cable		Mtr	100	413.00	4.00	18.00	49,206.00	



Template Name : S1 - Supply of Field Instrumentation									
M/s Electronics Corporation of India Ltd.									
S.No.	Instrument name	Reference Specification	Unit of Measurement	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST			GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance	C		
10	Dew point transmitter				B	C	D		E=A[(B+C)(1+D/100)]
10.1	Dew point transmitter	102.KK56.0.0.AK.TS.PR034	No's	4	5799874.00	58585.00		18.00	2,76,51,926.18
10.2	Cabel connecting Detector & Indicator unit		Mtr	600	458.00	5.00		18.00	3,27,804.00
11	Float type level switch								
11.1	Float operated magnetic level switch for diesel tanks	102.KK56.0.0.AK.TS.PR007	No's	13	326253.00	3295.00		18.00	50,55,266.32
12	Air Flow Switch								
12.1	Air Flow Switch	102.KK56.0.0.AK.TS.PR008	No's	16	568133.00	5739.00		18.00	1,08,34,703.36
13	Rotameters								
13.1	Rotameters	102.KK56.0.0.AK.TS.PR009	No's	17	88089.00	890.00		18.00	17,84,918.74
14	Hydrogen Leak Detection System								
14.1	Hydrogen sensors		No's	48	103020.00	1041.00		18.00	58,94,015.04
14.2	Signal Conditioning Unit (SCU) along with wall mounted panel and mounting accessories	102.KK56.0.0.AT.TS.PR003	No's	48	410793.00	4149.00		18.00	2,35,02,314.88
14.3	Cable connecting Sensor and SCU		Mtr	1000	259.00	3.00		18.00	3,09,160.00
15	Thermal mass flow meter								
15.1	Thermal mass flow meter	102.KK56.0.0.AK.TS.PR035	No's	73	1158257.00	11700.00		18.00	10,07,80,095.98
25	Resistance Temperature Detector(RTD)								
25.1	RTD of insertion length in range 100-160mm		No's	1221	50201.00	507.00		18.00	7,30,59,072.24
25.2	RTD of insertion length in range 200-320mm		No's	1111	51834.00	524.00		18.00	6,86,40,290.84
25.3	RTD of insertion length 350mm		No's	1	52141.00	527.00		18.00	62,148.24
25.4	RTD of insertion length 400mm		No's	18	53297.00	538.00		18.00	11,43,455.40
25.5	RTD of insertion length 500mm		No's	20	57834.00	584.00		18.00	13,78,664.80
25.6	RTD of insertion length 630mm		No's	8	62358.00	630.00		18.00	5,94,606.72
25.7	Long length RTDs of length from 0.63 mtr Upto 15mtr	102.KK56.0.0.AK.TS.PR023	No's	100	126616.00	1279.00		18.00	1,50,91,610.00
25.9	DEC RTD								
	Long Length RTDs inside Containment:		No's	6	126616.00	1279.00		18.00	9,05,496.60
25.9.1	RTDs of length from 0.63 mtr Upto 15mtr		No's	2	126616.00	1279.00		18.00	3,01,832.20
25.9.2	Short Length RTDs inside Containment RTDs of length 0.5 mtr		No's						



Template Name : SI - Supply of Field Instrumentation
M/s Electronics Corporation of India Ltd.

S.No.	Instrument name	Reference Specification	Unit of Measurement	Total Supply Quantity for KKNPP Units S&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance		
					B	C	D	E=A[(B+C)/(1+D/100)]
26	Thermowells							
26.1	SS316L Thermowells of different insertion lengths to be installed along with RTDs (of connection type M20x1.5 mm2 or M33x2 mm2)							
26.1.1	SS316L Thermowell of insertion length in the range 100-160mm		No's	630	50201.00	507.00	18.00	3,76,96,327.20
26.1.2	SS316L Thermowell of insertion length in the range 200-320mm		No's	908	51834.00	524.00	18.00	5,60,98,455.52
26.1.3	SS316L Thermowell of insertion length 320-350mm		No's	2	52141.00	527.00	18.00	1,24,296.48
26.1.4	SS316L Thermowell of insertion length 400mm		No's	14	53297.00	538.00	18.00	8,89,354.20
26.1.5	SS316L Thermowell of insertion length 425mm		No's	4	53297.00	538.00	18.00	2,54,101.20
26.1.6	SS316L Thermowell of insertion length 500mm		No's	14	57834.00	584.00	18.00	9,65,065.36
26.1.7	SS316L Thermowell of insertion length 580mm		No's	2	59940.00	605.00	18.00	1,42,886.20
26.1.8	SS316L Thermowell of insertion length 630mm		No's	6	62358.00	630.00	18.00	4,45,955.04
26.2	SS321 Thermowells of different insertion lengths to be installed along with RTDs (of connection type M20x1.5 mm2 or M33x2 mm2)							
26.2.1	SS321 Thermowell of insertion length in the range 100-160mm		No's	231	49121.00	496.00	18.00	1,35,24,601.86
26.2.2	SS321 Thermowell of insertion length in the range 200-320mm		No's	133	50590.00	511.00	18.00	80,19,790.94
26.2.3	SS321 Thermowell of insertion length 400mm		No's	4	52217.00	527.00	18.00	2,48,951.68
26.2.4	SS321 Thermowell of insertion length 500mm		No's	4	53488.00	540.00	18.00	2,55,012.16
26.2.5	SS321 Thermowell of insertion length 630mm		No's	2	56051.00	566.00	18.00	1,33,616.12
26.3	Titanium Thermowell							
26.3.1	Titanium Thermowell of insertion length in the range 200-320mm		No's	62	501346.00	5064.00	18.00	3,70,48,955.60
26.4	Monel Thermowell							
26.4.1	Monel Thermowell of insertion length 500 mm		No's	6	355008.00	3586.00	18.00	25,38,845.52
26.4.2	Monel Thermowell of insertion length 450 mm		No's	4	348906.00	3524.00	18.00	16,63,469.60
26.5	Thermowell for Indicating Temperature Switches							
26.5.1	SS316L Thermowell of insertion length in range 100-160mm		Deleted					
26.5.2	SS316L Thermowell of insertion length in range 200-320mm		Deleted					
26.6	Thermowell for Temperature gauges							
26.6.1	SS316L Thermowell of insertion length in range 80-160mm		No's	469	49121.00	496.00	18.00	2,74,59,040.14
26.6.2	SS316L Thermowell of insertion length in range 200-320mm		No's	33	50590.00	511.00	18.00	19,89,872.94
38	Ultrasonic Level Transmitter							
38.1	Ultrasonic Level Transmitter	102.KK56.0.0.AK.TS.PR016	No's	20	378086.00	3819.00	18.00	90,12,958.00



Template Name : SI - Supply of Field Instrumentation									
M/s Electronics Corporation of India Ltd.									
S.No.	Instrument name	Reference Specification	Unit of Measurement	Total Supply Quantity for KKNPP Units S&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020	
					Basic Price (inclusive of P&F charges)	Freight & Insurance			
					B	C	D	E=A[(B+C)(1+D/100)]	
39	Ultrasonic contact type level switch								
39.1	Ultrasonic Level Switch (0.25 m)		No's	2	395747.00	3997.00	18.00	9,43,395.84	
39.2	Ultrasonic Level Switch (0.30 m)	102.KK56.0.0.AK.TS.PR013	No's	2	395747.00	3997.00	18.00	9,43,395.84	
39.3	Ultrasonic Level Switch (0.80 m)		No's	2	410666.00	4148.00	18.00	9,78,961.04	
39.4	Ultrasonic Level Switch (1.5m)		No's	1	418125.00	4223.00	18.00	4,98,370.64	
40	Submersible Level Transmitter								
40.1	Submersible Level Transmitter	102.KK56.0.0.AK.TS.PR012	No's	70	451569.00	4561.00	18.00	3,76,76,338.00	
41	Non-Contact Type Level cum Flow Transmitter								
41.1	Non-Contact Type Level cum Flow Transmitter	102.KK56.0.0.AK.TS.PR014	No's	30	856317.00	8650.00	18.00	3,06,19,831.80	
41.2	Titanium tuber (150mm ND, min length 12m grade-2, thickness 3 mm or better along with installation accessories)	102.KK56.0.0.AK.TS.PR014	Deleted						
42	Radar (Non-guided) level transmitter								
42.1	Radar (Non-guided) level transmitter (Radiation)								
42.1.1	Radar (Non-guided) level transmitter (Radiation)	102.KK56.0.0.AK.TS.PR011	No's	18	573180.00	5790.00	18.00	1,22,97,322.80	
42.2	Non Contact type level transmitter								
42.2.1	Non Contact type level transmitter	102.KK56.0.0.AK.TS.PR010	No's	86	333841.00	3372.00	18.00	3,42,20,373.24	
42.2.2	Titanium tuber (150mm ND, min length 12m grade-2, thickness 3 mm or better along with installation accessories)	102.KK56.0.0.AK.TS.PR010	Deleted						
48	PH analyser								
48.1	PH analyser	102.KK56.0.0.AK.TS.PR050	No's	6	493105.00	4981.00	18.00	35,26,448.88	
49	Conductivity analyser								
49.1	Conductivity analyser	102.KK56.0.0.AK.TS.PR050	No's	7	464672.00	4694.00	18.00	38,76,963.16	
50	Silica Analyser								
50.1	Silica Analyser	102.KK56.0.0.AK.TS.PR050	No's	1	1298418.00	13115.00	18.00	15,47,608.94	
51	Orifice								



Template Name : S1 - Supply of Field Instrumentation
M/s Electronics Corporation of India Ltd.

S.No.	Instrument name	Reference Specification	Unit of Measurement	Total Supply Quantity for KKNPP Units S&6 (A)	Rate Excluding GST			GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance	C		
51.1	Orifice	I02.KK56.0.0.AK.TS.PR050	No's	38	189554.00		1915.00	18.00	E=A[(B+C)(1+D/100)] 85,85,469.96
52	Density indicator								
52.1	Density indicator	I02.KK56.0.0.AK.TS.PR050	No's	2	20912.00		211.00	18.00	49,850.28
53	Float and dial type level gauge								
53.1	Float and dial type level gauge	I02.KK56.0.0.AK.TS.PR050	No's	7	52682.00		532.00	18.00	4,39,547.64
54	Hardness analyser								
54.1	Hardness analyser	I02.KK56.0.0.AK.TS.PR050	No's	4	2050134.00		20708.00	18.00	97,74,374.24
55	Float and board type level indicator								
55.1	Float and board type level indicator	I02.KK56.0.0.AK.TS.PR050	No's	4	58907.00		595.00	18.00	2,80,849.44
57	Pitot tube								
57.1	Pitot tube	I02.KK56.0.0.AK.TS.PR050	No's	8	772217.00		7800.00	18.00	73,63,360.48
58	Vibration transmitter								
58.1	Vibration transmitter	I02.KK56.0.0.AK.TS.PR050	No's	14	95673.00		966.00	18.00	15,96,476.28
59	Flow Switch								
59.1	Flow Switch	I02.KK56.0.0.AK.TS.PR050	No's	21	175286.00		1771.00	18.00	43,87,472.46
60	Transparent flat level gauge								
60.1	Transparent flat level gauge	I02.KK56.0.0.AK.TS.PR050	No's	10	120954.00		1222.00	18.00	14,41,676.80
61	PLC based control system								
61.1	UGD								
61.1.1	PLC		No's	1	41207675.00		416239.00	18.00	4,91,16,218.52
61.2	UEJ								
61.2.1	PLC		No's	1	11357737.00		114725.00	18.00	1,35,37,505.16
61.3	UQR								
61.3.1	PLC		No's	1	15546842.00		157039.00	18.00	1,85,30,579.58



Template Name : S1 - Supply of Field Instrumentation M/s Electronics Corporation of India Ltd.									
S.No.	Instrument name	Reference Specification	Unit of Measurement	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020	
					Basic Price (inclusive of P&F charges)	Freight & Insurance	D	E=A[(B+C)(1+D/100)]	
61.4	UKU	102.KK56.0.0.AT.TS.PR001							
61.4.1	PLC		No's	1	11661157.00	117789.00	18.00	1,38,99,156.28	
61.5	UYB								
61.5.1	PLC		No's	1	15816093.00	159759.00	18.00	1,88,51,505.36	
61.6	UGF								
61.6.1	PLC		No's	1	9769567.00	98683.00	18.00	1,16,44,535.00	
61.7	UTF								
61.7.1	PLC of UTF		No's	1	14062546.00	142046.00	18.00	1,67,61,418.56	
61.8	UAB								
61.8.1	PLC of UAB		No's	1	11969360.00	120903.00	18.00	1,42,66,510.34	
61.9	UAC								
61.9.1	PLC of UAC		No's	1	11969360.00	120903.00	18.00	1,42,66,510.34	
61.10	UAD								
61.10.1	PLC of UAD	No's	1	11091220.00	112033.00	18.00	1,32,19,838.54		
61.11	UBG								
61.11.1	PLC of UBG	No's	1	10852037.00	109617.00	18.00	1,29,34,751.72		
Total (In INR)							1,58,85,65,320.46		



(Pankaj Trivedi)
General Manager, C&MM
For & on behalf of Nuclear Power Corporation of India Limited
(The Purchaser)



Template Name : Mandatory Spares of SI supply (Field Instrumentation)									
M/s Electronics Corporation of India Ltd.									
S.No.	Instrument name	Reference Specification	Unit of Measure	Mandatory Spares for KKNPP Units 5&6 (A)	Rate Excluding GST Basic Price (inclusive of P&F charges)	Freight & Insurance	GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020	
					B	C	D	E=A[(B+C)(1+D/100)]	
	Mandatory Spares Supply & delivery of items complete in all respect including Design, Procurement of raw materials and bought out items, Manufacture, Fabrication, Assembly, Shop Inspection, Testing (Including Type Test), preapartion of Drawings & Documentation, Delivery to site with proper packing, establishing the performance parameters of items supplied complete with all controls, accessories and auxiliaries as specified in technical specification For Detailed scope of work and quantity, refer the Specification number attached under Section-C.								
	FIELD INSTRUMENTATION								
1	Pressure Gauge and Differential Pressure Gauge								
1.1	Pressure gauge SS316L Bourdon tube type		No's	126	5877.00	59.00	18.00	8,82,564.48	
1.2	Pressure gauge Monel Bourdon tube type		No's	18	17358.00	175.00	18.00	3,72,400.92	
1.3	Pressure gauge SS316L Diaphragm type		No's	4	15444.00	156.00	18.00	73,632.00	
1.4	Differential pressure gauges SS 316L Diaphragm Type,	102.KK56.0.0.AK.TS.PR002	No's	1	47426.00	479.00	18.00	56,527.90	
1.5	Diaphragm seal & Bourdon tube type pressure gauges		No's	8	31982.00	323.00	18.00	3,04,959.20	
2	Pressure Switches and Differential Pressure Switches								
2.1	Differential Pressure Switches		No's	59	133498.00	1348.00	18.00	93,87,978.52	
2.2	Pressure Switches	102.KK56.0.0.AK.TS.PR003	No's	19	93162.00	941.00	18.00	21,09,789.26	
3	Temperature Gauges								
3.1	Temperature Gauges - Bimetallic type	102.KK56.0.0.AK.TS.PR004	No's	67	27267.00	275.00	18.00	21,77,470.52	
4	Indicating Temperature Switch								
4.1	Indicating Temperature Switch	102.KK56.0.0.AK.TS.PR005	No's	10	114564.00	1157.00	18.00	13,65,507.80	
5	Displacer type level transmitter								

Template Name : Mandatory Spares of S1 supply (Field Instrumentation)

M/s Electronics Corporation of India Ltd.

S.No.	Instrument name	Reference Specification	Unit of Measure	Mandatory Spares for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance		E=A[(B+C)(1+D/100)]
5.1	Displacer type level transmitter	102.KK56.0.0.AK.TS.PR032	No's	2	5592920.00	56494.00	18.00	1,33,32,617.04
6	Temperature Compensated Humidity Transmitter							
6.1	Temperature Compensated Humidity Transmitter	102.KK56.0.0.AK.TS.PR033	No's	5	5799874.00	58585.00	18.00	3,45,64,908.10
7	Indicating Pressure Switch							
7.1	Indicating Pressure Switch	102.KK56.0.0.AK.TS.PR006	No's	2	188874.00	1908.00	18.00	4,50,245.52
8	Capacitance type level switch							
8.1	Single Point Capacitance type level switch		No's	13	122019.00	1233.00	18.00	18,90,685.68
8.2	Three point Capacitance type level switch	102.KK56.0.0.AK.TS.PR030	No's	8	168050.00	1697.00	18.00	16,02,411.68
8.3	Interconnecting cable		Deleted					
9	Conductivity type level switch							
9.1	Single point Conductivity type level switch - Rigid electrode		No's	62	88223.00	891.00	18.00	65,19,580.24
9.2	Single point Conductivity type level switch - Flexible electrode		No's	4	216207.00	2184.00	18.00	10,30,805.52
9.3	Three point conductivity type level switch - Rigid electrode		No's	5	192122.00	1941.00	18.00	11,44,971.70
9.4	Three point conductivity type level switch - Flexible electrode		No's	1	387176.00	3911.00	18.00	4,61,482.66
9.5	Four point conductivity type level switch - Flexible electrode	102.KK56.0.0.AK.TS.PR031	Deleted					
9.6	Interconnecting cable		Deleted					
9.7	DEC equipment							
9.7.1	Conductivity type level switch		No's	1	1430341.00	14448.00	18.00	17,04,851.02
9.7.2	Interconnecting cable		Mtr	10	413.00	4.00	18.00	4,920.60
10	Dew point transmitter							
10.1	Dew point transmitter		No's	1	5799874.00	58585.00	18.00	69,12,981.62
10.2	Cable connecting Detector & Indicator unit	102.KK56.0.0.AK.TS.PR034	Mtr	60	458.00	5.00	18.00	32,780.40
11	Float type level switch							
11.1	Float operated magnetic level switch for diesel tanks	102.KK56.0.0.AK.TS.PR007	No's	2	326253.00	3295.00	18.00	7,77,733.28



Template Name : Mandatory Spares of SI supply (Field Instrumentation)
M/s Electronics Corporation of India Ltd.

S.No.	Instrument name	Reference Specification	Unit of Measure	Mandatory Spares for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance		
					B	C	D	E=A/(B+C)(1+D/100)
12	Air Flow Switch							
12.1	Air Flow Switch	102.KK56.0.0.AK.TS.PR008	No's	2	568133.00	5739.00	18.00	13,54,337.92
13	Rotameters							
13.1	Rotameters	102.KK56.0.0.AK.TS.PR009	No's	2	88089.00	890.00	18.00	2,09,990.44
14	Hydrogen Leak Detection System							
14.1	Hydrogen sensors		No's	5	103020.00	1041.00	18.00	6,13,959.90
14.2	Signal Conditioning Unit (SCU) along with wall mounted panel and mounting accessories	102.KK56.0.0.AT.TS.PR003	No's	5	410793.00	4149.00	18.00	24,48,157.80
14.3	Cable connecting Sensor and SCU		Mtr	100	259.00	3.00	18.00	30,916.00
14.4	Spare set Panel components (minimum 2 or 20%, whichever is higher)		Set	1	397732.00	4018.00	18.00	4,74,065.00
15	Thermal mass flow meter							
15.1	Thermal mass flow meter	102.KK56.0.0.AK.TS.PR035	No's	8	1158257.00	11700.00	18.00	1,10,44,394.08
26	Resistance Temperature Detector(RTD)							
26.1	RTD of insertion length in range 100-160mm		No's	133	50201.00	507.00	18.00	79,58,113.52
26.2	RTD of insertion length in range 200-320mm		No's	137	51834.00	524.00	18.00	84,64,194.28
26.3	RTD of insertion length 350mm		No's	1	52141.00	527.00	18.00	62,148.24
26.4	RTD of insertion length 400mm		No's	2	53297.00	538.00	18.00	1,27,050.60
26.5	RTD of insertion length 500mm		No's	2	57834.00	584.00	18.00	1,37,866.48
26.6	RTD of insertion length 630mm		No's	1	62358.00	630.00	18.00	74,325.84
26.7	Long length RTDs of length more than 630mm	102.KK56.0.0.AK.TS.PR023	No's	10	126616.00	1279.00	18.00	15,09,161.00
26.8	DEC RTD							
26.8.1	Long Length RTDs inside Containment		No's	1	126616.00	1279.00	18.00	1,50,916.10
26.8.2	Short Length RTDs inside Containment		No's	1	126616.00	1279.00	18.00	1,50,916.10
26.9	Spare components of RTD							
26.9.1	Wago connector		No's	250	6834.00	69.00	18.00	20,36,385.00
27	Thermowells							



Template Name : Mandatory Spares of SI supply (Field Instrumentation)									
M/s Electronics Corporation of India Ltd.									
S.No.	Instrument name	Reference Specification	Unit of Measure	Mandatory Spares for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination – INCOTERMS 2020	E=A[(B+C)(1+D/100)]
					Basic Price (inclusive of P&F charges)	Freight & Insurance			
27.1	SS316L Thermowells of different insertion lengths to be installed along with RTDs (of connection type M20x1.5 mm2 or M33x2 mm2)	102.KK.56.0.0.AK.TS.PR022							
27.1.1	SS316L Thermowell of insertion length in the range 100-160mm		No's	93	50201.00	507.00	18.00	55,64,695.92	
27.1.2	SS316L Thermowell of insertion length in the range 200-320mm		No's	91	51834.00	524.00	18.00	56,22,202.04	
27.1.3	SS316L Thermowell of insertion length 320-350mm		No's	1	52141.00	527.00	18.00	62,148.24	
27.1.4	SS316L Thermowell of insertion length 400mm		No's	2	53297.00	538.00	18.00	1,27,050.60	
27.1.5	SS316L Thermowell of insertion length 425mm		No's	1	53297.00	538.00	18.00	63,525.30	
27.1.6	SS316L Thermowell of insertion length 500mm		No's	2	57834.00	584.00	18.00	1,37,866.48	
27.1.7	SS316L Thermowell of insertion length 580mm		No's	1	59940.00	605.00	18.00	71,443.10	
27.1.8	SS316L Thermowell of insertion length 630mm		No's	1	62358.00	630.00	18.00	74,325.84	
27.2	SS321 Thermowells of different insertion lengths to be installed along with RTDs (of connection type M20x1.5 mm2 or M33x2 mm2)								
27.2.1	SS321 Thermowell of insertion length in the range 100-160mm		No's	40	49121.00	496.00	18.00	23,41,922.40	
27.2.2	SS321 Thermowell of insertion length in the range 200-320mm		No's	39	50590.00	511.00	18.00	23,51,668.02	
27.2.3	SS321 Thermowell of insertion length 400mm		No's	1	52217.00	527.00	18.00	62,237.92	
27.2.4	SS321 Thermowell of insertion length 500mm		No's	1	53488.00	540.00	18.00	63,753.04	
27.2.5	SS321 Thermowell of insertion length 630mm		No's	1	56051.00	566.00	18.00	66,808.06	
27.3	Titanium Thermowell								
27.3.1	Titanium Thermowell of insertion length in the range 200-320mm		No's	8	501346.00	5064.00	18.00	47,80,510.40	
27.4.1	Monel Thermowell of insertion length 500 mm		No's	1	355008.00	3586.00	18.00	4,23,140.92	
27.4.2	Monel Thermowell of insertion length 450 mm		No's	1	348906.00	3524.00	18.00	4,15,867.40	
27.5	Thermowell for Indicating Temperature Switches								
27.5.1	SS316L Thermowell of insertion length in range 100-160mm		Deleted						
27.5.2	SS316L Thermowell of insertion length in range 200-320mm		Deleted						
27.6	Thermowell for Temperature gauges								
27.6.1	SS316L Thermowell of insertion length in range 80-160mm		No's	47	49121.00	496.00	18.00	27,51,758.82	

102.KK56.0.0.AK.TS.PR022



Template Name : Mandatory Spares of SI supply (Field Instrumentation)
M/s Electronics Corporation of India Ltd.

S.No.	Instrument name	Reference Specification	Unit of Measure	Mandatory Spares for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance		
					B	C	D	E=A[(B+C)(1+D/100)]
27.6.2	SS316L Thermowell of insertion length in range 200-320mm		No's	4	50590.00	511.00	18.00	2,41,196.72
41	Ultrasonic Level Transmitter							
41.1	Ultrasonic Level Transmitter	102.KK56.0.0.AK.TS.PR016	No's	4	378086.00	3819.00	18.00	18,02,591.60
42	Ultrasonic contact type level switch							
42.1	Ultrasonic Level Switch (0.25 m)		No's	1	395747.00	3997.00	18.00	4,71,697.92
42.2	Ultrasonic Level Switch (0.30 m)		No's	1	395747.00	3997.00	18.00	4,71,697.92
42.3	Ultrasonic Level Switch (0.80 m)	102.KK56.0.0.AK.TS.PR013	No's	1	410666.00	4148.00	18.00	4,89,480.52
42.4	Ultrasonic Level Switch (1.5m)		No's	1	418125.00	4223.00	18.00	4,98,370.64
43	Submersible Level Transmitter							
43.1	Submersible Level Transmitter	102.KK56.0.0.AK.TS.PR012	No's	14	451569.00	4561.00	18.00	75,35,267.60
44	Non-Contact Type Level cum Flow Transmitter							
44.1	Non-Contact Type Level cum Flow Transmitter	102.KK56.0.0.AK.TS.PR014	No's	6	856317.00	8650.00	18.00	61,23,966.36
44.2	Titanium tuber (150mm ND, min length 12m grade-2, thickness 3 mm or better along with installation accessories)	102.KK56.0.0.AK.TS.PR014	Deleted					
45	Radar (Non-guided) level transmitter							
45.1	Radar (Non-guided) level transmitter (Radiation)							
45.1.1	Radar (Non-guided) level transmitter (Radiation)	102.KK56.0.0.AK.TS.PR011	No's	4	573180.00	5790.00	18.00	27,32,738.40
45.2	Non Contact type level transmitter							
45.2.1	Non Contact type level transmitter	102.KK56.0.0.AK.TS.PR010	No's	12	333841.00	3372.00	18.00	47,74,936.08
45.2.2	Titanium tuber (150mm ND, min length 12m grade-2, thickness 3 mm or better along with installation accessories)	102.KK56.0.0.AK.TS.PR010	Deleted					
51	PH analyser							
51.1	PH analyser	102.KK56.0.0.AK.TS.PR050	No's	1	493105.00	4981.00	18.00	5,87,741.48



Template Name : Mandatory Spares of SI supply (Field Instrumentation)

M/s Electronics Corporation of India Ltd.

S.No.	Instrument name	Reference Specification	Unit of Measure	Mandatory Spares for KKNPP Units 5&6 (A)	Rate Excluding GST Basic Price (inclusive of P&F charges)	Freight & Insurance	GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					B	C	D	E=A[(B+C)(1+D/100)]
52	Conductivity analyser							
52.1	Conductivity analyser	102.KK56.0.0.AK.TS.PR050	No's	1	464672.00	4694.00	18.00	5,53,851.88
53	Silica Analyser							
53.1	Silica Analyser	102.KK56.0.0.AK.TS.PR050	No's	1	1298418.00	13115.00	18.00	15,47,608.94
54	Orifice							
54.1	Orifice	102.KK56.0.0.AK.TS.PR050	No's	10	189554.00	1915.00	18.00	22,59,334.20
55	Density indicator							
55.1	Density indicator	102.KK56.0.0.AK.TS.PR050	No's	1	20912.00	211.00	18.00	24,925.14
56	Float and dial type level gauge							
56.1	Float and dial type level gauge	102.KK56.0.0.AK.TS.PR050	No's	1	52682.00	532.00	18.00	62,792.52
57	Hardness analyser							
57.1	Hardness analyser	102.KK56.0.0.AK.TS.PR050	No's	1	2050134.00	20708.00	18.00	24,43,593.56
58	Float and board type level indicator							
58.1	Float and board type level indicator	102.KK56.0.0.AK.TS.PR050	No's	1	58907.00	595.00	18.00	70,212.36
60	Pitot tube							
60.1	Pitot tube	102.KK56.0.0.AK.TS.PR050	No's	1	772217.00	7800.00	18.00	9,20,420.06
61	Vibration transmitter							

Template Name : Mandatory Spares of SI supply (Field Instrumentation)

M/s Electronics Corporation of India Ltd.

S.No.	Instrument name	Reference Specification	Unit of Measure	Mandatory Spares for KKNPP Units 5&6 (A)	Rate Excluding GST			GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance	C		
61.1	Vibration transmitter	102.KK56.0.0.AK.TS.PR050	No's	2	95673.00		966.00	18.00	E=A[(B+C)(1+D/100)] 2,28,068.04
62	Flow Switch								
62.1	Flow Switch	102.KK56.0.0.AK.TS.PR050	No's	3	175286.00		1771.00	18.00	6,26,781.78
63	Transparent flat level gauge								
63.1	Transparent flat level gauge	102.KK56.0.0.AK.TS.PR050	No's	1	120954.00		1222.00	18.00	1,44,167.68
64	PLC based control system								
64.1	UGD								
64.1.1	UGD PLC Spare set		Set	1	8101442.00		81833.00	18.00	96,56,264.50
64.2	UEJ								
64.2.1	UEJ PLC Spare set		Set	1	1824619.00		18430.00	18.00	21,74,797.82
64.3	UQR								
64.3.1	UQR PLC Spare set		Set	1	2296149.00		23193.00	18.00	27,36,823.56
64.4	UKU								
64.4.1	UKU PLC Spare set		Set	1	1774048.00		17920.00	18.00	21,14,322.24
64.5	UYB								
64.5.1	UYB PLC Spare set		Set	1	2722577.00		27501.00	18.00	32,45,092.04
64.6	UGF								
64.6.1	UGF PLC Spare set	102.KK56.0.0.AT.TS.PR001	Set	1	2346036.00		23697.00	18.00	27,96,284.94
64.7	UTF								
64.7.1	UTE PLC Spare set		Set	1	2259246.00		22821.00	18.00	26,92,839.06
64.8	UAB								
64.8.1	UAB PLC Spare set		Set	1	1964027.00		19839.00	18.00	23,40,961.88



Template Name : Mandatory Spares of SI supply (Field Instrumentation)

M/s Electronics Corporation of India Ltd.

S.No.	Instrument name	Reference Specification	Unit of Measure	Mandatory Spares for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance		
					B	C	D	E=A[(B+C)(1+D/100)]
64.9	UAC							
64.9.1	UAC PLC Spare set		Set	1	1942980.00	19626.00	18.00	23,15,875.08
64.10	UAD							
64.10.1	UAD PLC Spare set		Set	1	1959927.00	19797.00	18.00	23,36,074.32
64.11	UBG							
64.11.1	UBG PLC Spare set		Set	1	1923025.00	19424.00	18.00	22,92,089.82
Total (In INR)								21,83,02,695.12



(Pankaj Trivedi)

General Manager, C&MM

For & on behalf of Nuclear Power Corporation of India Limited
(The Purchaser)

S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance	D	
					B	C		E=A[(B+C)(1+D/100)]
	Supply & delivery of items complete in all respect including Design, Procurement of raw materials and bought out items, Manufacture, Fabrication, Assembly, Shop Inspection, Testing (Including Type Test), preparation of Drawings & Documentation, Delivery to site with proper packing, establishing the performance parameters of items supplied complete with all controls, accessories and auxiliaries as specified in technical specification							
	For Detailed scope of work and quantity, refer the Specification number attached under Section-C.							
	CABLES							
	CS-BOP Cables							
1	Instrumentation Cable							
1.1	2P X 0.75 SQMM	102.KK56.0.0.AK.TS.PR050	Mtr	30393	292.00	3.00	18.00	1,05,79,803.30
1.2	4P X 0.75 SQMM		Mtr	7321	448.00	5.00	18.00	39,13,367.34
1.3	6P X 0.75 SQMM		Mtr	11000	672.00	7.00	18.00	88,13,420.00
1.4	8P X 0.75 SQMM		Mtr	7700	869.00	9.00	18.00	79,77,508.00
1.5	12P X 0.75 SQMM		Mtr	5955	1210.00	12.00	18.00	85,86,871.80
1.6	16P X 0.75 SQMM		Mtr	16119	1531.00	15.00	18.00	2,94,05,569.32
2	Control Cable							
2.1	3C X 0.75 SQMM	102.KK56.0.0.AK.TS.PR050	Mtr	11000	246.00	2.00	18.00	32,19,040.00
2.2	5C X 0.75 SQMM		Mtr	23795	342.00	3.00	18.00	96,86,944.50
2.3	7C X 0.75 SQMM		Mtr	4400	441.00	4.00	18.00	23,10,440.00
2.4	10C X 0.75 SQMM		Mtr	93500	603.00	6.00	18.00	6,71,90,970.00
2.5	14C X 0.75 SQMM		Mtr	80010	798.00	8.00	18.00	7,60,95,910.80
2.6	3C X 1.5 SQMM		Mtr	23320	337.00	3.00	18.00	93,55,984.00
2.7	5C X 1.5 SQMM		Mtr	34041	495.00	5.00	18.00	2,00,84,190.00
3	Earthing Cable							
3.1	1C X 4 SQMM	102.KK56.0.0.AK.TS.PR050	Mtr	3000	76.00	1.00	18.00	2,72,580.00
3.2	1C X 6 SQMM		Mtr	3000	111.00	1.00	18.00	3,96,480.00
3.3	1C X 10 SQMM		Mtr	1750	173.00	2.00	18.00	3,61,375.00
3.4	1C X 16 SQMM		Mtr	1750	263.00	3.00	18.00	5,49,290.00
4	Cables of E-BOP							

Template Name : S2 - Supply of Control Cables M/s Electronics Corporation of India Ltd.									
S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020	
					Basic Price (inclusive of P&F charges)	Freight & Insurance			
									B
4.1	KVVGng-LS 4x1.5	102.KK56. 0.0. ET.TS.PR114	Mtr	1069	133.00	1.00	18.00	1,69,030.28	
4.2	KVVGng-LS 7x1.5	102.KK56. 0.0. ET.TS.PR114	Mtr	4652	223.00	2.00	18.00	12,35,106.00	
4.3	KVVGng-LS 10x1.5	102.KK56. 0.0. ET.TS.PR114	Mtr	1505	305.00	3.00	18.00	5,46,977.20	
4.4	KVVGng-LS 14x1.5	102.KK56. 0.0. ET.TS.PR114	Mtr	280	411.00	4.00	18.00	1,37,116.00	
4.5	KVVGng-LS 19x1.5	102.KK56. 0.0. ET.TS.PR114	Mtr	500	496.00	5.00	18.00	2,95,590.00	
4.6	KVVGng-LS 4x2.5	102.KK56. 0.0. ET.TS.PR114	Mtr	1363	208.00	2.00	18.00	3,37,751.40	
4.7	KVVGng-LS 5x2.5	102.KK56. 0.0. ET.TS.PR114	Mtr	45	249.00	3.00	18.00	13,381.20	
4.8	KVVGng-LS 7x2.5	102.KK56. 0.0. ET.TS.PR114	Mtr	225	343.00	3.00	18.00	91,863.00	
4.9	KVVGng-LS 4x4	102.KK56. 0.0. ET.TS.PR114	Mtr	385	308.00	3.00	18.00	1,41,287.30	
4.10	KVVGng-LS 4x6	102.KK56. 0.0. ET.TS.PR114	Mtr	1505	458.00	5.00	18.00	8,22,241.70	
4.11	KVVGEng-LS 4x1	102.KK56. 0.0. ET.TS.PR114	Mtr	1511	192.00	2.00	18.00	3,45,898.12	
4.12	KVVGEng-LS 4x1.5	102.KK56. 0.0. ET.TS.PR114	Mtr	5780	254.00	3.00	18.00	17,52,842.80	
4.13	KVVGEng-LS 7x1.5	102.KK56. 0.0. ET.TS.PR114	Mtr	1130	373.00	4.00	18.00	5,02,691.80	
4.14	KVVGEng-LS 10x1.5	102.KK56. 0.0. ET.TS.PR114	Mtr	525	486.00	5.00	18.00	3,04,174.50	
4.15	KVVGEng-LS 14x1.5	102.KK56. 0.0. ET.TS.PR114	Mtr	240	636.00	6.00	18.00	1,81,814.40	
4.16	KVVGEng-LS 19x1.5	102.KK56. 0.0. ET.TS.PR114	Mtr	35	860.00	9.00	18.00	35,889.70	
4.17	KVVGEng-LS 4x2.5	102.KK56. 0.0. ET.TS.PR114	Mtr	2310	348.00	4.00	18.00	9,59,481.60	

Template Name : S2 - Supply of Control Cables
M/s Electronics Corporation of India Ltd.

S.No.	Instrument name	Reference Specification	Unit of Measurement	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance		
					B	C	D	E=A[(B+C)(1+D/100)]
4.18	KVVGEng-LS 7x2.5	102.KK56.0.0.ET.TS.PR114	Mtr	465	533.00	5.00	18.00	2,95,200.60
4.19	KVVGEng-LS 10x2.5	102.KK56.0.0.ET.TS.PR114	Mtr	70	713.00	7.00	18.00	59,472.00
4.20	KVVGEng-LS 14x2.5	102.KK56.0.0.ET.TS.PR114	Mtr	210	940.00	9.00	18.00	2,35,162.20
4.21	KVVGEng-LS 27x2.5	102.KK56.0.0.ET.TS.PR114	Mtr	70	1753.00	18.00	18.00	1,46,284.60
4.22	KVVGEng-LS 4x4	102.KK56.0.0.ET.TS.PR114	Mtr	90	498.00	5.00	18.00	53,418.60
4.23	KVVGEng-LS 7x4	102.KK56.0.0.ET.TS.PR114	Mtr	690	782.00	8.00	18.00	6,43,218.00
4.24	KVVGEng-LS 4x6	102.KK56.0.0.ET.TS.PR114	Mtr	70	654.00	7.00	18.00	54,598.60
4.25	KMPVEVng-LS 7x0.5	102.KK56.0.0.ET.TS.PR029	Mtr	60	221.00	2.00	18.00	15,788.40
5	Main Plant Cables							
5.1	KMPVEVng(A)-LS 2x0.35	102.KK56.0.0.ET.TS.PR030	Mtr	250	145.00	1.00	18.00	43,070.00
5.2	KMPVEVng(A)-LS 4x0.35	102.KK56.0.0.ET.TS.PR030	Mtr	8800	179.00	2.00	18.00	18,79,504.00
5.3	KMPVEVng(A)-LS 12x0.35	102.KK56.0.0.ET.TS.PR030	Mtr	1900	452.00	5.00	18.00	10,24,594.00
5.4	KMPVEVng(A)-LS 37x0.35	102.KK56.0.0.ET.TS.PR030	Mtr	500	1475.00	15.00	18.00	8,79,100.00
5.5	KMPVEVng(A)-LS 7x1	102.KK56.0.0.ET.TS.PR030	Mtr	19400	527.00	5.00	18.00	1,21,78,544.00
5.6	KMPVEVng(A)-LS 2x0.5	102.KK56.0.0.ET.TS.PR029	Mtr	1600	173.00	2.00	18.00	3,30,400.00
5.7	KMPVEVng(A)-LS 4x0.5	102.KK56.0.0.ET.TS.PR029	Mtr	8300	244.00	2.00	18.00	24,09,324.00
5.8	KMPVEVng(A)-LS 7x0.5	102.KK56.0.0.ET.TS.PR029	Mtr	1450	333.00	3.00	18.00	5,74,896.00



Template Name : S2 - Supply of Control Cables M/s Electronics Corporation of India Ltd.									
S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units S&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020	
					Basic Price (inclusive of P&F charges)	Freight & Insurance		F=A[(B+C)(1+D/100)]	
5.9	KMPVEVng(A)-LS 10x0.5	102.KK56.0.0.EI.TS.PR029	Mtr	3350	451.00	5.00	18.00	18,02,568.00	
5.10	KMPVEVng(A)-LS 12x0.5	102.KK56.0.0.EI.TS.PR029	Mtr	850	528.00	5.00	18.00	5,34,599.00	
5.11	KMPVEVng(A)-LS 14x0.5	102.KK56.0.0.EI.TS.PR029	Mtr	1000	609.00	6.00	18.00	7,25,700.00	
5.12	KMPVEVng(A)-LS 19x0.5	102.KK56.0.0.EI.TS.PR029	Mtr	27500	782.00	8.00	18.00	2,56,35,500.00	
5.13	KMPVEVng(A)-LS 24x0.5	102.KK56.0.0.EI.TS.PR029	Mtr	9750	1033.00	10.00	18.00	1,19,99,715.00	
5.14	KMPVEVng(A)-LS 37x0.5	102.KK56.0.0.EI.TS.PR029	Mtr	3800	1516.00	15.00	18.00	68,65,004.00	
5.15	KMPVEVng(A)-LS 52x0.5	102.KK56.0.0.EI.TS.PR029	Mtr	5850	2227.00	22.00	18.00	1,55,24,847.00	
5.16	KMPVEVng(A)-LS 37x1	102.KK56.0.0.EI.TS.PR029	Mtr	1250	2147.00	22.00	18.00	31,99,275.00	
5.17	KMPVEVng(A)-LS 2x1.5	102.KK56.0.0.EI.TS.PR029	Mtr	1100	270.00	3.00	18.00	3,54,354.00	
5.18	KPETIng-FRHF 2x2x0.35	102.KK56.0.0.ET.TS.PR031	Mtr	64700	226.00	2.00	18.00	1,74,06,888.00	
5.19	KPETIng-FRHF 7x2x0.35	102.KK56.0.0.ET.TS.PR031	Mtr	3450	476.00	5.00	18.00	19,58,151.00	
5.20	KPETIng-FRHF 12x2x0.35	102.KK56.0.0.ET.TS.PR031	Mtr	20200	678.00	7.00	18.00	1,63,27,660.00	
5.21	KPETIng-FRHF 14x2x0.35	102.KK56.0.0.ET.TS.PR031	Mtr	58400	763.00	8.00	18.00	5,31,31,152.00	
5.22	KPETIng-HF 1x2x0.35	102.KK56.0.0.ET.TS.PR032	Mtr	4150	120.00	1.00	18.00	5,92,537.00	
5.23	KPETIng-HF 7x2x0.35	102.KK56.0.0.ET.TS.PR032	Mtr	1800	499.00	5.00	18.00	10,70,496.00	
5.24	KPETIng-HF 12x2x0.35	102.KK56.0.0.ET.TS.PR032	Mtr	4000	733.00	7.00	18.00	34,92,800.00	
5.25	KPETIng-HF 1x2x0.7 XA	102.KK56.0.0.ET.TS.PR032	Mtr	6600	173.00	2.00	18.00	13,62,900.00	



Template Name : S2 - Supply of Control Cables
M/s Electronics Corporation of India Ltd.

S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance		
					B	C	D	E=A[(B+C)(1+D/100)]
5.26	KPETing-HF 1x2x0.7 XK	102.KK56.0.0.ET.TS.PR032	Mtr	7900	173.00	2.00	18.00	16,31,350.00
5.27	KMPvVEVng(A)-FRLS 4x0.5	102.KK56.0.0.ET.TS.PR117	Mtr	650	230.00	2.00	18.00	1,77,944.00
5.28	KMPvVEVng(A)-FRLS 7x0.5	102.KK56.0.0.ET.TS.PR117	Mtr	250	313.00	3.00	18.00	93,220.00
5.29	KMPvVEVng(A)-FRLS 10x0.5	102.KK56.0.0.ET.TS.PR117	Mtr	350	433.00	4.00	18.00	1,80,481.00
5.30	KMPvVEVng(A)-FRLS 12x0.5	102.KK56.0.0.ET.TS.PR117	Mtr	550	498.00	5.00	18.00	3,26,447.00
5.31	KMPvVEVng(A)-FRLS 37x0.5	102.KK56.0.0.ET.TS.PR117	Mtr	900	1323.00	13.00	18.00	14,18,832.00
5.32	KMPvVEVng(A)-FRLS 2x0.35	102.KK56.0.0.ET.TS.PR033	Mtr	1000	233.00	2.00	18.00	2,77,300.00
5.33	KMPvVEVng(A)-FRLS 4x0.35	102.KK56.0.0.ET.TS.PR033	Mtr	58800	324.00	3.00	18.00	2,26,88,568.00
5.34	KMPvVEVng(A)-FRLS 7x0.35	102.KK56.0.0.ET.TS.PR033	Mtr	33900	445.00	5.00	18.00	1,80,00,900.00
5.35	KMPvVEVng(A)-FRLS 12x0.35	102.KK56.0.0.ET.TS.PR033	Mtr	3500	638.00	6.00	18.00	26,59,720.00
5.36	KMPvVEVng(A)-FRLS 14x0.35	102.KK56.0.0.ET.TS.PR033	Mtr	1700	726.00	7.00	18.00	14,70,398.00
5.37	KMPvVEVng(A)-FRLS 19x0.35	102.KK56.0.0.ET.TS.PR033	Mtr	4700	973.00	10.00	18.00	54,51,718.00
5.38	KMPvVEVng(A)-FRLS 4x0.5	102.KK56.0.0.ET.TS.PR033	Mtr	1500	383.00	4.00	18.00	6,84,990.00
5.39	KMPvVEVng(A)-FRLS 4x0.75	102.KK56.0.0.ET.TS.PR033	Mtr	34800	427.00	4.00	18.00	1,76,98,584.00
5.40	KMPvVEVng(A)-FRLS 7x0.75	102.KK56.0.0.ET.TS.PR033	Mtr	7100	601.00	6.00	18.00	50,85,446.00
5.41	KMPvVEVng(A)-FRLS 12x0.75	102.KK56.0.0.ET.TS.PR033	Mtr	7250	873.00	9.00	18.00	75,45,510.00
5.42	KMPvVEVng(A)-FRLS 12x1	102.KK56.0.0.ET.TS.PR033	Mtr	5100	992.00	10.00	18.00	60,30,036.00



Template Name : S2 - Supply of Control Cables										
M/s Electronics Corporation of India Ltd.										
S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020		
					Basic Price (inclusive of P&F charges)	Freight & Insurance				
									B	C
5.43	KMPvEVEYng(A)-FRLS 4x1.5	102.KK56.0.0.El.TS.PR033	Mtr	9300	527.00	5.00	18.00	58,38,168.00		
5.44	KUPPmng(A)-FRHF 1x2x0.5	102.KK56.0.0.El.TS.PR037	Mtr	56000	145.00	1.00	18.00	96,47,680.00		
5.45	KUPPmng(A)-FRHF 2x2x0.5	102.KK56.0.0.El.TS.PR037	Mtr	1083500	226.00	2.00	18.00	29,15,04,840.00		
5.46	KUPPmng(A)-FRHF 1x2x0.5	102.KK56.0.0.El.TS.PR037	Mtr	821800	145.00	1.00	18.00	14,15,79,704.00		
5.47	KUPPmng(A)-FRHF 8x2x0.5	102.KK56.0.0.El.TS.PR037	Mtr	164500	614.00	6.00	18.00	12,03,48,200.00		
5.48	KUPPmng(A)-FRHF 12x2x0.5	102.KK56.0.0.El.TS.PR037	Mtr	60900	851.00	9.00	18.00	6,18,01,320.00		
5.49	KUPPmng(A)-FRHF 16x2x0.5	102.KK56.0.0.El.TS.PR037	Mtr	30600	1096.00	11.00	18.00	3,99,71,556.00		
5.50	KUPPmng(A)-FRHF 20x2x0.5	102.KK56.0.0.El.TS.PR037	Mtr	42250	1345.00	14.00	18.00	6,77,52,945.00		
5.51	KUPPmng(A)-FRHF 32x2x0.5	102.KK56.0.0.El.TS.PR037	Mtr	20900	2072.00	21.00	18.00	5,16,17,566.00		
5.52	KUPPmng(A)-HF 1x2x0.5	102.KK56.0.0.El.TS.PR036	Mtr	198000	105.00	1.00	18.00	2,47,65,840.00		
5.53	KUPPmng(A)-HF 2x2x0.5	102.KK56.0.0.El.TS.PR036	Mtr	428500	150.00	2.00	18.00	7,68,55,760.00		
5.54	KUPPmng(A)-HF 4x2x0.5	102.KK56.0.0.El.TS.PR036	Mtr	943300	201.00	2.00	18.00	22,59,58,082.00		
5.55	KUPPmng(A)-HF 8x2x0.5	102.KK56.0.0.El.TS.PR036	Mtr	251900	563.00	6.00	18.00	16,91,30,698.00		
5.56	KUPPmng(A)-HF 12x2x0.5	102.KK56.0.0.El.TS.PR036	Mtr	63350	689.00	7.00	18.00	5,20,28,088.00		
5.57	KUPPmng(A)-HF 16x2x0.5	102.KK56.0.0.El.TS.PR036	Mtr	91900	864.00	9.00	18.00	9,46,69,866.00		
5.58	KUPPmng(A)-HF 20x2x0.5	102.KK56.0.0.El.TS.PR036	Mtr	44700	1095.00	11.00	18.00	5,83,37,076.00		
5.59	KUPPmng(A)-HF 32x2x0.5	102.KK56.0.0.El.TS.PR036	Mtr	73680	1536.00	16.00	18.00	13,49,34,604.80		



Template Name : S2 - Supply of Control Cables									
M/s Electronics Corporation of India Ltd.									
S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020	
					Basic Price (inclusive of P&F charges)	Freight & Insurance			
					B	C	D	E=A[(B+C)(1+D/100)]	
5.60	KUPPmg(A)-HF 40x2x0.5	102.KK56.0.0.ET.TS.PR036	Mtr	32800	1873.00	19.00	18.00	7,32,27,968.00	
5.61	KUGPvEPvng/A-FRHF 1x2x0.5	102.KK56.0.0.ET.TS.PR038	Mtr	7300	140.00	1.00	18.00	12,14,574.00	
5.62	KUGPvEPvng/A-FRHF 2x2x0.5	102.KK56.0.0.ET.TS.PR038	Mtr	61800	214.00	2.00	18.00	1,57,51,584.00	
5.63	KUGPvEPvng/A-FRHF 4x2x0.5	102.KK56.0.0.ET.TS.PR038	Mtr	38750	296.00	3.00	18.00	1,36,71,775.00	
5.64	KUGPvEPvng/A-FRHF 8x2x0.5	102.KK56.0.0.ET.TS.PR038	Mtr	8800	528.00	5.00	18.00	55,34,672.00	
5.65	KUGPvEPvng/A-HF 1x2x0.5	102.KK56.0.0.ET.TS.PR039	Mtr	7860	148.00	2.00	18.00	13,91,220.00	
5.66	KUGPvEPvng/A-HF 2x2x0.5	102.KK56.0.0.ET.TS.PR039	Mtr	28600	215.00	2.00	18.00	73,23,316.00	
5.67	KUGPvEPvng/A-HF 4x2x0.5	102.KK56.0.0.ET.TS.PR039	Mtr	92300	324.00	3.00	18.00	3,56,14,878.00	
5.68	KUGPvEPvng/A-HF 8x2x0.5	102.KK56.0.0.ET.TS.PR039	Mtr	32000	493.00	5.00	18.00	1,88,04,480.00	
5.69	KUGPvEPvng/A-HF 12x2x0.5	102.KK56.0.0.ET.TS.PR039	Mtr	1100	676.00	7.00	18.00	8,86,534.00	
5.70	KUGPvEPvng/A-HF 16x2x0.5	102.KK56.0.0.ET.TS.PR039	Mtr	1600	916.00	9.00	18.00	17,46,400.00	
5.71	LAN KC-HF SFTP 4 Cat 5e 4x2x0.51	102.KK56.0.0.ET.TS.PR040	Mtr	7400	257.00	3.00	18.00	22,70,320.00	
5.72	LAN KC-HF SSTP 4 Cat 7 4x2x0.64	102.KK56.0.0.ET.TS.PR041	Mtr	4100	405.00	4.00	18.00	19,78,742.00	
5.73	LAN KC-HF UTP 4 Cat 5e 4x2x0.51	102.KK56.0.0.ET.TS.PR042	Mtr	41500	102.00	1.00	18.00	50,43,910.00	
5.74	LAN KC-HF UTP 4 Cat 6 4x2x0.55	102.KK56.0.0.ET.TS.PR043	Mtr	39300	635.00	6.00	18.00	2,97,25,734.00	
5.75	KPoPEng-HF 4x1	102.KK56.0.0.ET.TS.PR044	Mtr	6100	185.00	2.00	18.00	13,46,026.00	
5.76	KPoPEng-HF 4x1.5	102.KK56.0.0.ET.TS.PR044	Mtr	6200	290.00	3.00	18.00	21,43,588.00	



Template Name : S2 - Supply of Control Cables									
M/s Electronics Corporation of India Ltd.									
S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020	
					Basic Price (inclusive of P&F charges)	Freight & Insurance			
B	C	D	E=A[(B+C)(1+D/100)]						
5.77	KPoPEng-HF 4x2.5	102.KK56.0.0.ET.TS.PR044	Mtr	1000	441.00	4.00	18.00	5,25,100.00	
5.78	KPoPEng-HF 5x2.5	102.KK56.0.0.ET.TS.PR044	Mtr	400	499.00	5.00	18.00	2,37,888.00	
5.79	KPoPEng-HF 7x0.75	102.KK56.0.0.ET.TS.PR044	Mtr	800	290.00	3.00	18.00	2,76,592.00	
5.80	KPoPEng-HF 7x1.5	102.KK56.0.0.ET.TS.PR044	Mtr	400	417.00	4.00	18.00	1,98,712.00	
5.81	KPoPEng-HF 7x2.5	102.KK56.0.0.ET.TS.PR044	Mtr	900	620.00	6.00	18.00	6,64,812.00	
5.82	KPoPEng-HF 27x1	102.KK56.0.0.ET.TS.PR044	Mtr	2000	980.00	10.00	18.00	23,36,400.00	
5.83	KPoPEng-HF 27x1.5	102.KK56.0.0.ET.TS.PR044	Mtr	2000	1282.00	13.00	18.00	30,56,200.00	
5.84	KPoPEng-FRHF (class 2) 14x1	102.KK56.0.0.ET.TS.PR045	Mtr	250	630.00	6.00	18.00	1,87,620.00	
5.85	KPoPEng-FRHF (class 2) 7x4	102.KK56.0.0.ET.TS.PR045	Mtr	18900	852.00	9.00	18.00	1,92,02,022.00	
5.86	KPoPEng-HF 14x1.5	102.KK56.0.0.ET.TS.PR044	Mtr	200	679.00	7.00	18.00	1,61,896.00	
5.87	KPoPEng-HF 14x2.5	102.KK56.0.0.ET.TS.PR044	Mtr	400	991.00	10.00	18.00	4,72,472.00	
5.88	KPoPEng-FRHF 7x4	102.KK56.0.0.ET.TS.PR045	Mtr	3000	852.00	9.00	18.00	30,47,940.00	
5.89	KUGVEVng-FRLS 7x0.35	102.KK56.0.0.ET.TS.PR034	Mtr	1500	254.00	3.00	18.00	4,54,890.00	
5.90	KUGVEVng-LS 14x0.35	102.KK56.0.0.ET.TS.PR035	Mtr	1300	351.00	4.00	18.00	5,44,570.00	
5.91	KUGVEVng-LS 24x0.35	102.KK56.0.0.ET.TS.PR035	Mtr	900	539.00	5.00	18.00	5,77,728.00	
5.92	KUGVEVng-LS 37x0.35	102.KK56.0.0.ET.TS.PR035	Mtr	500	736.00	7.00	18.00	4,38,370.00	
5.93	OKZng(A)-FRHF 01-M8-4MG2-3000	102.KK56.0.0.ET.TS.PR116	Mtr	6000	727.00	7.00	18.00	51,96,210.00	



Template Name : S2 - Supply of Control Cables
M/s Electronics Corporation of India Ltd.

S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance		
					B	C	D	E=A[(B+C)(1+D/100)]
5.94	OKZng(A)-FRHF 01-M4-4MG2-1500	102.KK56.0.0.ET.TS.PR116	Mtr	1450	696.00	7.00	18.00	12,02,833.00
5.95	OKMng(A)-HF 01-O4-4MG2(B)-300	102.KK56.0.0.ET.TS.PR116	Mtr	450	396.00	4.00	18.00	2,12,400.00
5.96	OKSng(A)-FRHF 01-M4-6MG2-1500	102.KK56.0.0.ET.TS.PR116	Mtr	1150	831.00	8.00	18.00	11,38,523.00
5.97	Mineral insulated (MI) cables KNMS 4x1	102.KK56. 0.0.ET.TS.PR118	Mtr	800	2198.00	22.00	18.00	20,95,680.00
5.98	Mineral insulated (MI) cables KNMS 6x1	102.KK56. 0.0.ET.TS.PR118	Mtr	800	4736.00	48.00	18.00	45,16,096.00
Total (in INR)							2,43,20,64,224.86	



(Pankaj Tripathi)

General Manager, C&MM

For & on behalf of Nuclear Power Corporation of India Limited
(The Purchaser)



Template Name: S3 - Supply of Systems

M/s Electronics Corporation of India Ltd.

S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance		
	Supply & delivery of items complete in all respect including Design & Engineering, Procurement of raw materials and bought out items, Manufacture, Fabrication, Assembly, Shop Inspection, Testing(Including Type Test), preparation of Drawings & Documentation, Delivery to site with proper packing, establishing the performance parameters of items supplied complete with all controls, accessories and auxiliaries as specified in technical specification For Detailed scope of work and quantity, refer the Specification number attached under Section-C.				B	C	D	E=A[(B+C)(1+D/100)]
1	SYSTEMS							
1.1	Detailed Engineering and Supply of Communication System							
1.1.1	CYC (Duplex communication system)							
1.1.1.1	Central controllers/ Distributed intelligent node (including Personal computer and UPS with battery)		No's	4	56,29,422.00	56,863.00	18.00	2,68,39,265.20
1.1.2	Operator consoles for CYC system							
1.1.2.1	Operator Console/Master Call Station (90 keys)		No's	7	2,55,105.00	2,577.00	18.00	21,28,453.32
1.1.2.2	Operator Console/Master Call Station (16 keys)		No's	4	2,55,105.00	2,577.00	18.00	12,16,259.04
1.1.2.3	Operator Console/Master Call Station (8 keys)		No's	2	1,49,642.00	1,512.00	18.00	3,56,723.44
1.1.2.4	Operator Console/Master Call Station (4 keys)		No's	4	1,49,642.00	1,512.00	18.00	7,13,446.88
1.1.3	Field call station for CYC System							
1.1.3.1	All-weather 2 way duplex speaker field call station		No's	134	2,15,200.00	2,174.00	18.00	3,43,71,176.88
1.1.3.2	All-weather 4 way Duplex field call station		No's	74	1,90,973.00	1,929.00	18.00	1,68,44,202.64
1.1.3.3	2 way All-weather Duplex field call station with external speaker and flash		No's	16	3,52,016.00	3,556.00	18.00	67,13,199.36
1.1.4	Junction Box for CYC System							
1.1.4.1	Telephone Junction Box 2/30		No's	5	54,000.90	606.00	18.00	3,22,180.71
1.1.4.2	Telephone Junction Box 2/50		No's	12	76,388.40	857.00	18.00	10,93,794.86
1.1.4.3	Telephone Junction Box 2/100		No's	7	1,14,151.50	1,281.00	18.00	9,33,472.45
1.1.4.4	Junction Box ASU-BC-SS-8		No's	2	75,035.00	758.00	18.00	1,78,871.48
1.1.4.5	Junction Box ASU-BC-SS-16		No's	1	95,809.00	968.00	18.00	1,14,196.86
1.1.4.6	Junction Box ASU-BC-SS-24		No's	2	1,31,209.00	1,325.00	18.00	3,12,780.24
1.1.4.7	Junction Box ASU-BC-SS-32		No's	1	1,69,204.00	1,709.00	18.00	2,01,677.34
1.1.4.8	Junction Box ASU-BC(IC)-SS-96		No's	2	4,83,968.00	4,889.00	18.00	11,53,702.52



Template Name: S3 - Supply of Systems

M/s Electronics Corporation of India Ltd.

S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance		
					B	C	D	E=A[(B+C)(1+D/100)]
1.1.4.9	Junction Box ASU-BC-AL-12		No's	130	39,089.00	395.00	18.00	60,56,845.60
1.1.4.10	Junction Box ASU-BC-AL-24		No's	12	41,276.00	417.00	18.00	5,90,372.88
1.1.4.11	Junction Box ASU-BC-AL-64		No's	4	62,598.00	632.00	18.00	2,98,445.60
1.1.5	Work Station (Table for Maintenance team)		No's	4	2,42,279.00	2,447.00	18.00	11,55,106.72
1.2	Command, search and annunciation system (CYH)							
1.2.1	Central controllers/Distributed Intelligent Node including Amplification system, Computer, Power Supply, UPS with battery		No's	4	1,20,79,380.00	1,22,014.00	18.00	5,75,90,579.68
1.2.2	Operator Console for CYH System							
1.2.2.1	Operator Console/Master Call Station (32 keys)		No's	2	2,55,105.00	2,577.00	18.00	6,08,129.52
1.2.2.2	Operator Console/Master Call Station (16 keys)		No's	7	2,55,105.00	2,577.00	18.00	21,28,453.32
1.2.2.3	Operator Console/Master Call Station (7 keys)		No's	1	1,49,642.00	1,512.00	18.00	1,78,361.72
1.2.2.4	Operator Console/Master Call Station (8 keys)		No's	4	1,49,642.00	1,512.00	18.00	7,13,446.88
1.2.3	Speaker for CYH System							
1.2.3.1	6 watt wall mount speaker		No's	429	12,826.00	130.00	18.00	65,58,586.32
1.2.3.2	6 watt horn speaker		No's	451	12,826.00	130.00	18.00	68,94,924.08
1.2.3.3	10 watt horn speaker		No's	522	17,102.00	173.00	18.00	1,06,40,709.00
1.2.3.4	50 watt horn speaker		No's	11	30,499.00	308.00	18.00	3,99,874.86
1.2.3.5	100 watt horn speaker		No's	7	31,924.00	322.00	18.00	2,66,351.96
1.2.4	Junction Box for CYH System							
1.2.4.1	Junction box type ASU-BC(IC)-SS-6		No's	140	1,16,858.00	1,180.00	18.00	1,94,99,877.60
1.2.4.2	Junction box type ASU-BC-AL-12		No's	220	39,089.00	1,259.00	18.00	1,04,74,340.80
1.2.4.3	Junction box type ASU-BC-PL-6		No's	410	39,089.00	395.00	18.00	1,91,02,359.20
1.2.4.4	Junction box type ASU-BC(IC)-SS-12		No's	28	31,299.00	316.00	18.00	10,44,559.60
1.2.4.5	Universal branch box		No's	1007	2,565.00	26.00	18.00	30,78,781.66
1.2.4.6	Universal limiting box		No's	348	2,565.00	26.00	18.00	10,63,968.24
1.3	CYA (Common Station Telephone Communication System)							
1.3.1	Telephone Exchange panels for CYA							



Template Name: S3 - Supply of Systems									
M/s Electronics Corporation of India Ltd.									
S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020	
					Basic Price (inclusive of P&F charges)	Freight & Insurance			
									B
							D	E=A[(B+C)(1+D/100)]	
1.3.1.1	Automatic Telephone Exchange	102.KK56.0.0.SS.TS.PR002	No's	1	3,12,22,620.00	3,15,380.00	18.00	3,72,14,840.00	
1.3.1.2	Main Distribution Frame (MDF)		No's	1	20,09,131.00	20,294.00	18.00	23,94,721.50	
1.3.1.3	UPS with Battery cabinet		No's	1	28,67,808.00	28,968.00	18.00	34,18,195.68	
1.3.1.4	Rackmounted Computer		No's	1	7,17,547.00	7,248.00	18.00	8,55,258.10	
1.3.2 Telephone sets for CYA System									
1.3.2.1	Analog telephone sets (Type 1)		No's	1700	1,999.00	20.00	18.00	40,50,114.00	
1.3.2.2	Analog telephone sets (Type 2)		No's	20	3,873.00	39.00	18.00	92,323.20	
1.3.2.3	Digital telephone sets		No's	32	31,859.00	322.00	18.00	12,15,154.56	
1.3.2.4	VOIP Phone		No's	10	1,55,810.00	1,574.00	18.00	18,57,131.20	
1.3.2.5	Sockets(RJ-11)		No's	1752	57.00	1.00	18.00	1,19,906.88	
1.3.3 Junction Box of CYA System									
1.3.3.1	Telephone Junction box(2/10)	No's	660	43,970.31	458.00	18.00	3,46,00,770.16		
1.3.3.2	Telephone Junction box(2/20)	No's	28	46,127.70	518.00	18.00	15,41,173.93		
1.3.3.3	Telephone Junction box(2/30)	No's	19	54,000.90	606.00	18.00	12,24,286.70		
1.3.3.4	Telephone Junction box(2/50)	No's	20	76,388.40	857.00	18.00	18,22,991.44		
1.3.3.5	Telephone Junction box(2/100)	No's	8	1,14,151.50	1,281.00	18.00	10,89,682.80		
1.3.3.6	Telephone Junction box(2/300)	No's	4	2,08,621.80	2,341.00	18.00	9,95,744.12		
1.3.3.7	Junction box (ASU-BC(IC)-SS-24)	No's	4	1,80,548.00	1,824.00	18.00	8,60,795.84		
1.3.3.8	Junction box (ASU-BC(IC)-SS-12)	No's	2	1,24,648.00	1,259.00	18.00	2,97,140.52		
1.3.4	Telephone stand	No's	1200	6,151.00	62.00	18.00	87,97,608.00		
1.3.5	Work station (Table for maintenance team)	No's	1	94,183.00	951.00	18.00	1,12,258.12		
1.3.6	Maintenance Kit	set	1	30,752.00	311.00	18.00	36,654.34		
1.3.7	Phone for Maintenance team	Nos	10	27,676.80	311.00	18.00	3,30,256.04		
1.3.8	Mobile Programming device (laptop)	Nos	1	3,38,272.00	3,417.00	18.00	4,03,193.02		
1.3.9	Operator console (PC)	Nos	1	3,58,773.00	3,624.00	18.00	4,27,628.46		
1.4	CYB(Operative Telephone Communication System)								

Annexure-A4

102.KK56.0.0.SS.TS.PR002



Template Name: S3 - Supply of Systems
M/s Electronics Corporation of India Ltd.

S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance		
					B	C	D	E=A[(B+C)(1+D/100)]
1.4.1	Telephone Exchange panels for CYB System (including Computer, UPS)							
1.4.1.1	Automatic Telephone Exchange including MDF		No's	9	44,29,438.00	44,742.00	18.00	4,75,15,791.60
1.4.1.2	Rackmounted Computer		No's	1	7,17,547.00	7,248.00	18.00	8,55,258.10
1.4.1.3	UPS with Battery cabinet		No's	9	3,33,147.00	3,365.00	18.00	35,73,757.44
1.4.2	Telephone Sets for CYB System							
1.4.2.1	Analog telephone sets (Type 1)		No's	260	1,999.00	20.00	18.00	6,19,429.20
1.4.2.2	Analog telephone sets (Type 2)		No's	30	3,873.00	39.00	18.00	1,38,484.80
1.4.2.3	Sockets(RJ-11)		No's	315	57.00	1.00	18.00	21,558.60
1.4.3	Operator Console for CYB System							
1.4.3.1	Operator Console (90 keys)		No's	8	1,27,108.00	1,284.00	18.00	12,12,020.48
1.4.3.2	Operator Console (32 keys)		No's	1	1,27,108.00	1,284.00	18.00	1,31,502.56
1.4.3.3	Operator Console (16 keys)		No's	12	82,006.00	828.00	18.00	11,72,929.44
1.4.3.4	Operator Console (4 keys)		No's	4	50,229.00	507.00	18.00	2,39,473.92
1.4.4	Telephone stand		No's	260	6,151.00	62.00	18.00	19,06,148.40
1.4.5	Work station (Table for maintenance team)		No's	4	94,183.00	951.00	18.00	4,49,032.48
1.4.6	Maintenance Kit		set	1	30,752.00	311.00	18.00	36,654.34
1.4.7	Phone for Maintenance team		Nos	10	30,752.00	311.00	18.00	3,66,543.40
1.4.8	Junction Box for CYB System							
1.4.8.1	Telephone Junction box(2/10)		No's	189	40,839.30	458.00	18.00	92,10,123.85
1.4.8.2	Telephone Junction box(2/20)		No's	14	46,127.70	518.00	18.00	7,70,586.96
1.4.8.3	Telephone Junction box(2/30)		No's	7	54,000.90	606.00	18.00	4,31,052.99
1.4.8.4	Telephone Junction box(2/50)		No's	4	76,388.40	857.00	18.00	3,64,598.29
1.4.8.5	Junction box (ASU-BC(IC)-SS-24)		No's	4	1,80,548.00	1,824.00	18.00	8,60,795.84
1.4.9	Mobile Programming device (laptop)		Nos	2	1,16,858.00	1,180.00	18.00	2,78,569.68
1.5	CYG (Common Time System)							
1.5.1	Master Clock for CYG System							
1.5.1.1	GPS Receiver with Master Clock including redundant GPS antenna and interconnecting cables.		No's	1	36,94,948.00	37,323.00	18.00	44,04,079.78
1.5.1.2	UPS with Battery cabinet		No's	1	7,31,863.00	7,393.00	18.00	8,72,322.08



Template Name: S3 - Supply of Systems									
M/s Electronics Corporation of India Ltd.									
S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST			GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance	C		
1.5.1.3	Personal Computer		No's	1	4,81,489.00	4,864.00		18.00	E=A[(B+C)(1+D/100)] 5,73,896.54
1.5.2	Signal Distributor		No's	2	8,51,273.00	8,599.00		18.00	20,29,297.92
1.5.3	Clocks for CYG System		No's						
1.5.3.1	Digital Clock		No's	203	39,193.00	396.00		18.00	94,83,149.06
1.5.3.2	Alphanumeric Displays		No's	4	1,11,706.00	1,128.00		18.00	5,32,576.48
1.5.4	Junction Box for CYG System								
1.5.4.1	Universal Box		No's	210	1,059.00	11.00		18.00	2,65,146.00
1.5.4.2	Junction Box (ASU-BC)(C)-SS-6)		No's	4	1,16,858.00	1,180.00		18.00	5,57,139.36
1.5.5	Power Sockets		No's	210	1,252.00	13.00		18.00	3,13,467.00
1.5.6	Work Station (Table for maintenance team)		No's	1	1,38,669.00	1,401.00		18.00	1,65,282.60
1.6	CYL (Recording System)								
1.6.1	Recorder panels of CYL System								
1.6.1.1	Recorder		No's	4	2,08,58,874.00	2,10,696.00		18.00	9,91,48,370.40
1.6.1.2	UPS with Battery cabinet		No's	4	3,28,022.00	3,313.00		18.00	15,63,901.20
1.6.1.3	Work station		No's	4	1,64,010.00	1,657.00		18.00	7,81,948.24
1.6.1.4	Microphone		No's	16	1,64,010.00	1,657.00		18.00	31,27,792.96
1.7	CYS (Stand-by Internal Radio communication system)								
1.7.1	Repeater Station for CYS System								
1.7.1.1	Stationary radio station repeater set - one channel		No's	2	11,85,390.00	11,974.00		18.00	28,25,779.04
1.7.1.2	Stationary radio station repeater set - two channel		No's	2	11,85,390.00	11,974.00		18.00	28,25,779.04
1.7.1.3	UPS with Battery cabinet		No's	4	6,91,477.00	6,985.00		18.00	32,96,740.64
1.7.2	Stationary radio station set		No's	10	3,55,617.00	3,592.00		18.00	42,38,666.20
1.7.3	Antenna for CYS System								
1.7.3.1	Transceiving Antennae - Type 1 including cables		No's	6	59,269.00	599.00		18.00	4,23,865.44
1.7.3.2	Transceiving Antennae - Type 2 including cables		No's	4	59,269.00	599.00		18.00	2,82,576.96
1.7.3.3	Transceiving Antennae - Type 3 including cables		No's	10	59,269.00	599.00		18.00	7,06,442.40
1.7.3.4	Portable radio handset		No's	140	1,24,466.00	1,257.00		18.00	2,07,69,439.60
1.7.3.5	Charger for radio handset		No's	16	71,124.00	718.00		18.00	13,56,376.96
1.7.3.6	Car radio station with antenna		No's	2	2,96,348.00	2,993.00		18.00	7,06,444.76



Template Name: S3 - Supply of Systems									
M/s Electronics Corporation of India Ltd.									
S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST			GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance	C		
1.7.7	Licensing Fee		No's	1	78,51,989.00		79,313.00	D 18.00	E=A[(B+C)(1+D/100)] 93,58,936.36
1.9	Control Cables for Communication System								
1.9.1	Cable type LAN KC-HF UTP Cat6								
1.9.1.1	4x2x0.55	102.KK56.0.0.ET.TS.PR043	Meter	45000	319.00		3.00	18.00	1,70,98,200.00
1.9.2	Cable type LAN KC-HF UTP 4 Cat 5e								
1.9.2.1	4x2x0.51	102.KK56.0.0.ET.TS.PR042	Meter	50000	105.00		1.00	18.00	62,54,000.00
1.9.3	Cable type LANKC-HFSSTP4Cat7								
1.9.3.1	4x2x0.64	102.KK56.0.0.ET.TS.PR041	Meter	5000	408.00		4.00	18.00	21,30,800.00
1.9.4	Cable type PK-75-4-19nr-HF								
1.9.4.1	7x0.3	102.KK56.0.0.ET.TS.PR119	Meter	15300	751.00		8.00	18.00	1,37,02,986.00
1.9.5	Cable type TPVng-LS								
1.9.5.1	10x2x0.5	102.KK56.0.0.ET.TS.PR120	Meter	209400	283.00		3.00	18.00	7,06,68,312.00
1.9.5.2	20x2x0.5		Meter	20000	517.00		5.00	18.00	1,23,19,200.00
1.9.5.3	30x2x0.5		Meter	7000	771.00		8.00	18.00	64,34,540.00
1.9.5.4	50x2x0.5		Meter	24700	1,204.00		12.00	18.00	3,54,41,536.00
1.9.5.5	100x2x0.5		Meter	11000	2,238.00		23.00	18.00	2,93,47,780.00
1.9.6	Cable type KVVEng-FRLS								
1.9.6.1	4x2.5	102.KK56. 0.0. ET.TS.PR113	Meter	7100	786.00		8.00	18.00	66,52,132.00
1.9.6.2	4x1.5		Meter	4500	298.00		3.00	18.00	15,98,310.00
1.9.7	Cable type KVVEng-LS								
1.9.7.1	4x2.5	102.KK56.0.0.ET.TS.PR114	Meter	70000	331.00		3.00	18.00	2,75,88,400.00
1.9.7.2	4x1.5		Meter	131100	239.00		2.00	18.00	3,72,82,218.00
1.9.7.3	27x1.5		Meter	6600	1,069.00		11.00	18.00	84,11,040.00



Template Name: S3 - Supply of Systems									
M/s Electronics Corporation of India Ltd.									
S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST			GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance	C		
1.9.8	Cable type KVV Gng-LS								E=A[(B+C)(1+D/100)]
1.9.8.1	4x1.5	102.KK56.0.0.ET.TS.PR114	Meter	6100	136.00		1.00	18.00	9,86,126.00
1.9.8.2	4x4		Meter	1300	320.00		3.00	18.00	4,95,482.00
1.9.8.3	7x4		Meter	5900	545.00		6.00	18.00	38,36,062.00
1.9.8.4	4x2.5		Meter	700	212.00		2.00	18.00	1,76,764.00
1.9.8.5	10x2.5		Meter	1100	489.00		5.00	18.00	6,41,212.00
1.9.8.6	10x6		Meter	12700	1,090.00		11.00	18.00	1,64,99,586.00
1.9.8.7	10x4		Meter	1000	765.00		8.00	18.00	9,12,140.00
1.9.8.8	14x2.5		Meter	4700	498.00		5.00	18.00	27,89,638.00
1.9.8.9	27x1.5		Meter	1000	795.00		8.00	18.00	9,47,540.00
1.9.8.10	27x2.5		Meter	700	1,217.00		12.00	18.00	10,15,154.00
1.9.9	Cable type KPoPEng-HF								
1.9.9.1	4x1	102.KK56.0.0.ET.TS.PR044	Meter	7600	186.00		2.00	18.00	16,85,984.00
1.9.9.2	4x2.5		Meter	8600	418.00		4.00	18.00	42,82,456.00
1.9.9.3	4x1.5		Meter	16300	292.00		3.00	18.00	56,74,030.00
1.9.9.4	4x4		Meter	8600	570.00		6.00	18.00	58,45,248.00
1.9.9.5	10x6		Meter	900	1,490.00		15.00	18.00	15,98,310.00
1.9.9.6	10x2.5		Meter	600	760.00		8.00	18.00	5,43,744.00
1.9.9.7	10x1		Meter	17100	439.00		4.00	18.00	89,38,854.00
1.9.9.8	14x2.5		Meter	600	992.00		10.00	18.00	7,09,416.00
1.9.9.9	19x1		Meter	600	666.00		7.00	18.00	4,76,484.00
1.9.9.10	27x1.5		Meter	7700	1,241.00		13.00	18.00	1,13,93,844.00
1.9.9.11	27x2.5		Meter	600	1,810.00		18.00	18.00	12,91,224.00
1.9.10	Cable type KPEPng-HF								



Template Name: S3 - Supply of Systems

M/s Electronics Corporation of India Ltd.

S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST			GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	B	C	D	E=A[(B+C)(1+D/100)]
1.9.10.1	2x2x.5	102.KK56.0.0.ET.TS.PR121	Meter	1700	72.00		1.00	18.00	1,46,438.00
1.9.10.2	10x2x0.5		Meter	2200	269.00		3.00	18.00	7,06,112.00
1.9.11	Cable type KPEPng-FRHF								
1.9.11.1	10x2x0.5	102.KK56.0.0.ET.TS.PR122	Meter	22000	392.00		4.00	18.00	1,02,80,160.00
1.9.12	Cable type VVGng-LS								
1.9.12.1	2x1.5	102.KK56.0.0.ET.TS.PR003	Meter	42800	170.00		2.00	18.00	86,86,688.00
1.9.12.2	2x4		Meter	6100	267.00		3.00	18.00	19,43,460.00
1.9.12.3	2x2.5		Meter	4500	217.00		2.00	18.00	11,62,890.00
1.9.12.4	2x6		Meter	1500	353.00		4.00	18.00	6,31,890.00
1.9.12.5	2x10		Meter	2500	536.00		5.00	18.00	15,95,950.00
1.9.12.6	4x4		Meter	1800	436.00		4.00	18.00	9,34,560.00
1.9.12.7	4x10		Meter	14100	945.00		10.00	18.00	1,58,89,290.00
1.9.13	Cable type VVGng-FRLS								
1.9.13.1	3x2.5	102.KK56.0.0.ET.TS.PR004	Meter	600	337.00		3.00	18.00	2,40,720.00
1.9.13.2	2x10		Meter	7000	753.00		8.00	18.00	62,85,860.00
1.9.14	Cable type KPETng-HF								
1.9.14.1	2x2x0.35	102.KK56.0.0.ET.TS.PR032	Meter	600	203.00		2.00	18.00	1,45,140.00
1.9.15	Cable type OKSn-B-HF								
1.9.15.1	4x2x0.9	102.KK56.0.0.ET.TS.PR116	Meter	50000	751.00		8.00	18.00	4,47,81,000.00
1.9.16	Cable type PRVVMng-LS								
1.9.16.1	2x0.9	102.KK56.0.0.ET.TS.PR124	Meter	50000	51.00		1.00	18.00	30,68,000.00
1.9.17	Cable type KPoPEng-FRHF								
1.9.17.1	27x1.5	102.KK56.0.0.ET.TS.PR045	Meter	3400	1,272.00		13.00	18.00	51,55,420.00



Template Name: S3 - Supply of Systems									
M/s Electronics Corporation of India Ltd.									
S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020	
					Basic Price (inclusive of P&F charges)	Freight & Insurance			
3	DETAILED ENGINEERING AND SUPPLY OF CONTAINMENT MONITORING SYSTEM				B	C	D	E=A{(B+C)(1+D/100)}	
3.1	Cable connecting MJB to MPT		Meter	10000	329.00	3.00	18.00	39,17,600.00	
3.2	Multichannel programmable terminal (MPT)	102.KK56.UJA.JMY.AS.TS.PR001	No's	2	23993049.00	242354.00	18.00	5,71,95,551.08	
3.3	Cable connecting MPT to WS		Meter	200	620.00	6.00	18.00	1,47,736.00	
3.4	Workstation (WS)		No's	2	1529358.00	15448.00	18.00	36,45,742.16	
4	Detailed Engineering and Supply of Sea water temperature monitoring system								
4.1	Submersible type temperature and pressure sensor (located in the same housing) along with sensor cable upto instrument JB		No's	12	218681.00	2209.00	18.00	31,27,802.40	
4.2	Perforated protective pipe with diameter 150mm made up of titanium (minimum length 12mtr) (3mm thickness)		Deleted						
4.3	Instrument JB MOC-FRP IP 67	102.KK56.0.0.TW.TS.PR001	No's	12	11618.00	117.00	18.00	1,66,167.60	
4.4	Data Aquisition and processing unit		No's	2	332463.00	3358.00	18.00	7,92,537.56	
4.5	Trunk cable 0.75sqmm X 6 core		Meter	3500	355.00	4.00	18.00	14,82,670.00	
4.6	PC based workstation for local data logging and acquisition System with modem and all required license and software suitable for Storing, Logging, Reporting, Printing data with UPS and interconnecting singal and power cable		No's	2	683378.00	6903.00	18.00	16,29,063.16	
Total (in INR)								1,10,64,49,236.72	



(Pankaj Trivadi)

General Manager, C&MM

For & on behalf of Nuclear Power Corporation of India Limited
(The Purchaser)

Template Name: Mandatory Spares of S3 (Supply of Systems)
M/s Electronics Corporation of India Ltd.

S.No.	Instrument name	Reference Specification	Unit of Measure	Mandatory Spares for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance		
					B	C	D	E=A[(B+C)(1+D/100)]
	Mandatory Spares Supply & delivery of items complete in all respect including Design & Engineering, Procurement of raw materials and bought out items, Manufacture, Fabrication, Assembly, Shop Inspection, Testing(Including Type Test), preparation of Drawings & Documentation, Delivery to site with proper packing, establishing the performance parameters of items supplied complete with all controls, accessories and auxiliaries as specified in technical specification For Detailed scope of work and quantity, refer the Specification number attached under Section-C.							
	SYSTEMS							
1	Mandatory Spares Supply of Communication System							
1.1	CYC (Duplex communication system)							
1.1.1	Junction Box for CYC System							
1.1.1.1	Telephone Junction Box 2/30		No's	1	54000.90	606.00	18.00	64,436.14
1.1.1.2	Telephone Junction Box 2/50		No's	3	76388.40	857.00	18.00	2,73,448.72
1.1.1.3	Telephone Junction Box 2/100		No's	1	114151.50	1281.00	18.00	1,36,210.35
1.1.1.4	Junction Box ASU-BC-SS-8		No's	1	75035.00	758.00	18.00	89,435.74
1.1.1.5	Junction Box ASU-BC-AL-12		No's	5	39089.00	395.00	18.00	2,32,955.60
1.1.1.6	Junction Box ASU-BC-AL-24		No's	1	41276.00	417.00	18.00	49,197.74
1.1.1.7	Junction Box ASU-BC-AL-64		No's	1	62598.00	632.00	18.00	74,611.40
1.1.2	Spares of CYC system							
1.1.2.1	Operator Console/Master Call Station (90 keys)		No's	1	255105.00	2577.00	18.00	3,04,064.76
1.1.2.2	Operator Console/Master Call Station (16 keys)		No's	1	255105.00	2577.00	18.00	3,04,064.76
1.1.2.3	Operator Console/Master Call Station (8 keys)		No's	1	149642.00	1512.00	18.00	1,78,361.72
1.1.2.4	Operator Console/Master Call Station (4 keys)		No's	1	149642.00	1512.00	18.00	1,78,361.72
1.1.2.5	All-weather 2 way duplex speaker field call station		No's	6	215200.00	2174.00	18.00	15,39,007.92
1.1.2.6	All-weather 4 way Duplex field call station		No's	6	190973.00	1929.00	18.00	13,65,746.16
1.1.2.7	All-weather 2 way Duplex field call station with external speaker and flash		No's	2	352016.00	3556.00	18.00	8,39,149.92
1.2	Command, search and annunciation system (CYH)							
1.2.1	Junction Box for CYH System							
1.2.1.1	Junction box type ASU-BC(IC)-SS-6		No's	5	116858.00	1180.00	18.00	6,96,424.20
1.2.1.2	Junction box type ASU-BC-AL-12		No's	10	124648.00	1259.00	18.00	14,85,702.60
1.2.1.3	Junction box type ASU-BC-PL-6		No's	20	39089.00	395.00	18.00	9,31,822.40
1.2.1.4	Junction box type ASU-BC(IC)-SS-12		No's	2	31299.00	316.00	18.00	74,611.40
1.2.1.5	Universal branch box		No's	20	2565.00	26.00	18.00	61,147.60



Template Name: Mandatory Spares of S3 (Supply of Systems)

M/s Electronics Corporation of India Ltd.

S.No.	Instrument name	Reference Specification	Unit of Measure	Mandatory Spares for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance		
					B	C	D	E=A[(B+C)(1+D/100)]
1.2.1.6	Universal limiting box		No's	17	2565.00	26.00	18.00	31,975.46
1.2.2 Spares for CYH System								
1.2.2.1	Operator Console/Master Call Station (32 keys)		No's	1	255105.00	2577.00	18.00	3,04,064.76
1.2.2.2	Operator Console/Master Call Station (16 keys)		No's	1	255105.00	2577.00	18.00	3,04,064.76
1.2.2.3	Operator Console/Master Call Station (7 keys)		No's	1	149642.00	1512.00	18.00	1,78,361.72
1.2.2.4	Operator Console/Master Call Station (8 keys)		No's	1	149642.00	1512.00	18.00	1,78,361.72
1.2.2.5	6 watt wall mount speaker		No's	25	12826.00	130.00	18.00	3,82,202.00
1.2.2.6	6 watt horn speaker		No's	25	12826.00	130.00	18.00	3,82,202.00
1.2.2.7	10 watt horn speaker		No's	25	17102.00	173.00	18.00	5,09,612.50
1.2.2.8	50 watt horn speaker		No's	1	30499.00	308.00	18.00	36,352.26
1.2.2.9	100 watt horn speaker		No's	1	31924.00	322.00	18.00	38,050.28
1.3 CYA (Common Station Telephone Communication System)								
1.3.1 Telephone sets for CYA System								
1.3.1.1	VOIP Phone		No's	2	155810.00	1574.00	18.00	3,71,426.24
1.3.2 Junction Box of CYA System								
1.3.2.1	Telephone Junction box(2/10)		No's	40	40839.30	458.00	18.00	19,49,232.56
1.3.2.2	Telephone Junction box(2/20)		No's	2	46127.70	518.00	18.00	1,10,083.85
1.3.2.3	Telephone Junction box(2/30)		No's	1	54000.90	606.00	18.00	64,436.14
1.3.2.4	Telephone Junction box(2/50)		No's	1	76388.40	857.00	18.00	91,149.57
1.3.2.5	Telephone Junction box(2/100)		No's	1	114151.50	1281.00	18.00	1,36,210.35
1.3.2.6	Telephone Junction box(2/300)		No's	1	208621.80	2341.00	18.00	2,48,936.10
1.3.2.7	Junction box (ASU-BC(IC)-SS-24)		No's	1	180548.00	1824.00	18.00	2,15,198.96
1.3.2.8	Junction box (ASU-BC (IC)-SS-12)		No's	1	124648.00	1259.00	18.00	1,48,570.26
1.3.3 Telephone stand			No's	25	6151.00	62.00	18.00	1,83,283.50
1.3.4 Spares for CYA System								
1.3.4.1	Analog telephone sets (Type 1)		No's	100	1999.00	20.00	18.00	2,38,242.00
1.3.4.2	Analog telephone sets (Type 2)		No's	2	3873.00	39.00	18.00	9,252.32
1.3.4.3	Digital telephone sets		No's	5	31859.00	322.00	18.00	1,89,867.90
1.3.4.4	Sockets(RJ-11)		No's	175	57.00	1.00	18.00	11,977.00
1.3.10.5	Mandatory Spares (set) (10% of periphery cards, 10% of power supply modules, and 10% of controller modules)		Set	1	2460159.20	31063.00	18.00	29,39,642.20
1.4 CYB(Operative Telephone Communication System)								
1.4.1 Telephone stand			No's	10	6151.00	62.00	18.00	73,313.40
1.4.2 Junction Box for CYB System								
1.4.2.1	Telephone Junction box(2/10)		No's	20	40839.30	458.00	18.00	9,74,616.28

102.KK56.0.0.SS.TS.PR002



Template Name: Mandatory Spares of S3 (Supply of Systems)
M/s Electronics Corporation of India Ltd.

S.No.	Instrument name	Reference Specification	Unit of Measure	Mandatory Spares for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance		
					B	C	D	E=A[(B+C)(1+D/100)]
1.4.2.2	Telephone Junction box(2/20)		No's	3	46127.70	518.00	18.00	1,65,125.78
1.4.2.3	Telephone Junction box(2/30)		No's	2	54000.90	606.00	18.00	1,28,872.28
1.4.2.4	Telephone Junction box(2/50)		No's	2	76388.40	857.00	18.00	1,82,299.14
1.4.2.5	Junction box (ASU-BC(IC)-SS-24)		No's	1	180548.00	1824.00	18.00	2,15,198.96
1.4.3	Spares for CYB System							
1.4.3.1	Analog telephone sets (Type 1)		No's	20	1999.00	20.00	18.00	47,648.40
1.4.3.2	Analog telephone sets (Type 2)		No's	5	3873.00	39.00	18.00	23,080.80
1.4.3.3	Sockets(RJ-11)		No's	30	57.00	1.00	18.00	2,053.20
1.4.3.4	Operator Console (90 keys)		No's	1	127108.00	1284.00	18.00	1,51,502.56
1.4.3.5	Operator Console (32 keys)		No's	1	127108.00	1284.00	18.00	1,51,502.56
1.4.3.6	Operator Console (16 keys)		No's	1	82006.00	828.00	18.00	97,744.12
1.4.3.7	Operator Console (4 keys)		No's	1	50229.00	507.00	18.00	59,868.48
1.5	CYG (Common Time System)							
1.5.1	Junction Box for CYG System							
1.5.1.1	Universal Box		No's	10	1059.00	11.00	18.00	12,626.00
1.5.1.2	Junction Box (ASU-BC(IC)-SS-6)		No's	1	116858.00	1180.00	18.00	1,39,284.84
1.5.2	Power Sockets		No's	10	1252.00	13.00	18.00	14,927.00
1.5.3	Spares for CYG System							
1.5.3.1	Digital Clock		No's	10	39193.00	396.00	18.00	4,67,150.20
1.5.3.2	Alphanumeric Displays		No's	1	111706.00	1128.00	18.00	1,33,144.12
1.5.7.3	Mandatory Spares (set) (10% of periphery cards, 10% of power supply modules, and 10% of controller modules)		Set	1	1589632.71	13355.00	18.00	18,91,525.50
1.6	CYL (Recording System)							
1.6.1	Spares for CYL System							
1.6.1.1	Microphone		No's	3	164010.00	1657.00	18.00	5,86,461.18
1.7	CYS (Stand-by internal Radio communication system)							
1.7.1	Spares for CYS System							
1.7.1.1	Stationary radio station set		No's	2	355617.00	3592.00	18.00	8,47,733.24
1.7.1.2	Transreceiving Antennae - Type 1		No's	1	59269.00	599.00	18.00	70,644.24
1.7.1.3	Transreceiving Antennae - Type 2		No's	1	59269.00	599.00	18.00	70,644.24
1.7.1.4	Transreceiving Antennae - Type 3		No's	1	59269.00	599.00	18.00	70,644.24
1.7.1.5	Portable radio handset		No's	20	124466.00	1257.00	18.00	29,67,062.80
1.7.1.6	Car radio station with antenna		No's	1	296348.00	2993.00	18.00	3,53,222.38
3	Mandatory Spares Supply of CONTAINMENT MONITORING SYSTEM (CMS)							



Purchase Order No. : CMM/EIC/91-00-3-3653/PO/58									
Annexure-A5									
Template Name: Mandatory Spares of S3 (Supply of Systems)									
M/s Electronics Corporation of India Ltd.									
S.No.	Instrument name	Reference Specification	Unit of Measure	Mandatory Spares for KKNPP Units 5&6 (A)	Rate Excluding GST		Freight & Insurance	GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	B	C	D	E=A[(B+C)(1+D/100)]
3.1	Spare set Panel components (minimum 2 or 20%, whichever is higher)	102.KK56.UJA.JMY.AS.TS.PR001	Set	1	3980210.40		50255.00	18.00	47,55,949.17
4	Mandatory Spares Supply of Sea water temperature monitoring system								
4.1	Submersible type temperature and pressure sensor (located in the same housing) along with sensor cable upto instrument JB	102.KK56.0.0.TW.TS.PR001	No's	2	218681.00		2209.00	18.00	5,21,300.40
Total (in INR)									3,33,26,642.78


(Pankaj Trivedi)
General Manager, C&MM
For & on behalf of Nuclear Power Corporation of India Limited
(The Purchaser)



Template Name: S4 - Supply of Hardware M/s Electronics Corporation of India Ltd.						
Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		Value inclusive of GST - DAP Destination - INCOTERMS 2020
				Basic Price (inclusive of P&F charges)	Freight & Insurance	
				B	C	D
						E=A[(B+C)(1+D/100)]
1	Supply & delivery of items complete in all respect including Design, Procurement of raw materials and bought out items, Manufacture, Fabrication, Assembly, Shop Inspection, Testing and Qualification (Including Type Test), preparation of Drawings & Documentation, Delivery to site with proper packing, establishing the performance parameters of items supplied complete with all controls, accessories and auxiliaries as specified in technical specification For Detailed scope of work and quantity, refer the Specification number attached under Section-C.					
2	Supply of following sizes of MS hot-dip galvanized perforated light channels with connection accessories and hardware 1.1 20x50x20x2 mm thick light channel 1.2 20x90x20x2 mm thick light channel 1.3 20x125x20x2 mm thick light channel 1.4 40x150x40x2 mm thick light channel 1.5 40x200x40x2 mm thick light channel Supply of following sizes of MS Epoxy coated perforated light channels (epoxy paint vellum shade and total thickness of paint film shall be as stipulated in technical specification) with connection accessories and hardware 2.1 20x50x20x2 mm thick light channel 2.2 20x90x20x2 mm thick light channel 2.3 20x125x20x2 mm thick light channel 2.4 40x150x40x2 mm thick light channel 2.5 40x200x40x2 mm thick light channel Supply of following sizes of MS Epoxy coated NON perforated light channels with COVERS (epoxy paint vellum shade and total thickness of paint film shall be as stipulated in technical specification) 3.1 20x50x20x1.2 mm thick light channel 3.2 20x90x20x1.2 mm thick light channel 3.3 40x150x40x1.2 mm thick light channel Supply of hot dipped galvanized G1 Rigid conduit of sizes 32mm as per IS-9537					
3	Supply of following sizes of MS Epoxy coated NON perforated light channels with COVERS (epoxy paint vellum shade and total thickness of paint film shall be as stipulated in technical specification) 3.1 20x50x20x1.2 mm thick light channel 3.2 20x90x20x1.2 mm thick light channel 3.3 40x150x40x1.2 mm thick light channel Supply of hot dipped galvanized G1 Rigid conduit of sizes 32mm as per IS-9537					
4	Supply of hot dipped galvanized G1 Rigid conduit of sizes 32mm as per IS-9537					
5	Supply of hot dipped galvanized G1 Flexible conduit of sizes 32mm as per IS-3480					

Not Applicable

Template Name: S4 - Supply of Hardware									
M/s Electronics Corporation of India Ltd.									
	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020	
					Basic Price (inclusive of P&F charges)	Freight & Insurance		C	D E=A[(B+C)(1+D/100)]
6	Supply of 275 gsm GI sheet of thickness 1 mm, or as per required thickness and gsm for fabrication and installation (separate item for fabrication and installation of GI sheets along with accessories in Sch. E1) as per IS-277		Kgs	30000	164.00	2.00	18.00		58,76,400.00
7	Structural Steel (As per IS 2062:2011)								
7.1	ISA , ISMC , ISMB of MS E250 Grade A IS 2062-2011 and plates of MS E250 Grade BR IS 2062-2011 for the C&I works and preparation & submission of reports.		Kgs	400000	150.88	2.00	18.00		7,21,59,360.00
7.2	Stainless steel sections of SS 304, SS 304L & SS 321 in Bar stoke /Plates / rods for the C&I works.	Not Applicable	Kgs	25000	487.35	5.00	18.00		1,45,24,325.00
7.3	Mu metal sheets of 0.1mm thickness for the C&I works		Kgs	100	39799.76	442.00	18.00		47,48,527.68
8	Supply of Impulse tube Clamps								
8.1	Clip CH-14 Bracket Stainless Steel with set M6 x35 nut bolt, 6mm washer(two),Branch Pipe 10x1mm of 14mm length		No's	140000	103.00	1.00	18.00		1,71,80,800.00
8.2	Clip CH-14 Bracket Stainless Steel with set M6 x120 nut bolt, 6mm washer(two) , Branch Pipe 10x1mm of 15mm length		No's	80000	103.00	1.00	18.00		98,17,600.00
8.3	Clip CO-14 Stainless Steel ONE TAB Bracket with set M6 x35, 6mm washer(two)		No's	50000	82.00	1.00	18.00		48,97,000.00
8.4	Clip CD-14 Stainless Steel Two Tab with M6 x35 set nut bolt washer, 6mm washer (four)	102.KK56.0.0.AK.TS.PR044	No's	50000	103.00	1.00	18.00		61,36,000.00
8.5	Clip CH-18 Bracket Stainless Steel with set M6 x120 nut bolt , 6mm washer(two) ,Branch Pipe 10x1mm of 14mm length		No's	4000	103.00	1.00	18.00		4,90,880.00
8.6	Clip CO-18 Stainless Steel ONE TAB Bracket with set M6 x35 , 6mm washer(two)		No's	2000	82.00	1.00	18.00		1,95,880.00
8.7	Clip CD-18 Stainless Steel Two Tab with M 6 x35 set nut bolt washer,6mm washer (four)		No's	14000	103.00	1.00	18.00		17,18,080.00
8.8	Tube Supports For 14x2 (511)		No's	226	1161.00	12.00	18.00		3,12,815.64
8.9	Tube Supports For 32x2 (510)		No's	45	2187.00	22.00	18.00		1,17,297.90
9	Supply of Anchor fasteners (Make-HILTI) (separate item for installation in Sch. E1)								
9.1	HSL 4G M8 d12x107 /20		No's	90000	753.30	8.00	18.00		8,08,50,060.00
9.2	HSL 4G M8 d12x127 40/20		No's	25000	1001.70	11.00	18.00		2,98,74,650.00
9.3	HSL 4G M16 d24x175 /25		No's	20000	2907.90	33.00	18.00		6,94,05,240.00
9.4	HSL 4G M20 d28x205 /30		No's	5000	5152.50	58.00	18.00		3,07,41,950.00
9.5	HST3 M8x75/10	Not Applicable	No's	45000	190.80	2.00	18.00		1,02,37,680.00
9.6	HST3 M10X90 30/10		No's	1500	264.60	3.00	18.00		4,73,652.00



Template Name: S4 - Supply of Hardware M/s Electronics Corporation of India Ltd.									
Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		Freight & Insurance	GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020	
				Basic Price (inclusive of P&F charges)	B	C	D	E= A[(B+C)(1+D/100)]	
9.7 HIDAT-20 M10 X100 /20		No's	200	6851.70		77.00	18.00	16,35,173.20	
9.8 HSL 4G M10 d / 20		No's	10000	1421.10		16.00	18.00	1,69,57,780.00	
9.9 HSL 4G M12 d / 25		No's	10000	1946.70		22.00	18.00	2,32,30,660.00	
10 Supply of GI pipes as per IS-1239 (Part-I) - 2004 / IS -1161 of diameter 50-125 mm as per requirement for cable laying laying (separate item for laying and fixing with accessories of GI pipes in Sch. E1)									
10.1 50 mm	Not Applicable	mters	5000	836.00		8.00	18.00	49,70,600.00	
10.2 65 mm		mters	3000	1141.00		12.00	18.00	40,81,620.00	
10.3 80 mm		mters	2000	1351.00		14.00	18.00	32,21,400.00	
10.4 100 mm		mters	5000	2084.00		21.00	18.00	1,24,19,500.00	
10.5 125 mm		mters	1000	2854.00		29.00	18.00	34,01,940.00	
11 Supply of tinned metallic (brass / stainless steel) cable glands of various sizes as per IS-2148, IEC 60079 and NPCIL requirement which are not covered in the scope of supply items (separate item for installation in Sch. E1)									
11.1 Up to 16 mm dia	Not Applicable	No's	4000	1359.00		15.00	18.00	64,85,280.00	
11.2 17 mm to 32 mm		No's	2500	3538.80		40.00	18.00	1,05,57,460.00	
11.3 33 mm to 50 mm		No's	1500	8718.30		98.00	18.00	1,56,04,851.00	
12 Light Channel Support for Pulse Tubing									
12.1 Perforated Channels 45x30x2 mm	102.KK56.0.0.AK.TS.PR044	Mtrs	5100	1292.00		13.00	18.00	78,53,490.00	
12.2 Perforated Channels 60x32x2.5 mm		Mtrs	8700	1537.00		16.00	18.00	1,59,43,098.00	
12.3 Perforated Channels 36x36x2 mm		Mtrs	7700	923.00		9.00	18.00	84,68,152.00	
12.4 Perforated Z - shape 40x32x2 mm		Mtrs	2000	1292.00		13.00	18.00	30,79,800.00	
12.5 Perforated strip 30x2 mm		Mtrs	1000	369.00		4.00	18.00	4,40,140.00	
Total (in INR)								64,07,22,912.42	

(Pankaj Trivedi)
General Manager, C&MM
For & on behalf of Nuclear Power Corporation of India Limited
(The Purchaser)



Template Name : S1 - Supply of Field Instrumentation							
M/s TEMA							
S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)
					Basic Price (inclusive of P&F charges)	Freight & Insurance	
	Supply & delivery of items complete in all respect including Design, Procurement of raw materials and bought out items, Manufacture, Fabrication, Assembly, Shop Inspection, Testing and Qualification (Including Type Test), preparation of Drawings & Documentation, Delivery to site with proper packing, establishing the performance parameters of items supplied complete with all controls, accessories and auxiliaries as specified in technical specification For Detailed scope of work and quantity, refer the Specification number attached under Section-C.				B	C	D
							$E=A(B+C)(1+D/100)$
	FIELD INSTRUMENTATION						
16	Instrument Isolation Valves - Gland valve						
16.1	Instrument Isolation Valves - Gland valve of size 14X2mm	I02.KK56.0.0.AK.TS.PR036	No's	5387	9652.00	98.00	18.00
							6,19,77,435.00
17	Instrument Isolation Valves - Bellow seal valve						
17.1	Instrument Isolation Valves - Bellow seal valve of size 14X2mm	I02.KK56.0.0.AK.TS.PR037	No's	6776	30145.00	305.00	18.00
							24,34,68,456.00
18	Instrument valve- Ball type (Titanium)						
18.1	Instrument Isolation Valves - Ball valve of size 14X2mm	I02.KK56.0.0.AK.TS.PR038	No's	572	35640.00	360.00	18.00
							2,42,98,560.00
19	Instrument valve-SS Ball type (for RMS)						
19.1	Instrument Isolation Valves - Ball valve of size 18X2.5mm	I02.KK56.0.0.AK.TS.PR049	No's	240	20335.00	205.00	18.00
							58,16,928.00
20	Instrument Isolation Valves (3 WAY VALVE)						
20.1	Three way valve DN15 Bronze	I02.KK56.0.0.AK.TS.PR051	No's	110	23760.00	240.00	18.00
							31,15,200.00
21	HRE Pressure Transmitters (including cost of connector, nipple, nut, and adaptor with applicable transmitter types)						
21.1	Excess (Gauge) Pressure Transmitters						
21.1.1	HRE Excess safety class-3 Range 0-6 kPa		No's	16	440550.00	4450.00	18.00
							84,01,600.00

Template Name : S1 - Supply of Field Instrumentation

M/s TEMA

S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST			GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance			
						B	C	D	
21.1.2	HRE Excess safety class-3 Range 0-10 kPa	102.KK56.0.0.AK.TS.PR025	No's	16	440550.00	4450.00	18.00	E=A[(B+C)(1+D/100)] 84,01,600.00	
21.1.3	HRE Excess safety class-3 Range 0-1 MPa		No's	24	440550.00	4450.00	18.00	1,26,02,400.00	
21.2 Differential Pressure Transmitters									
21.2.1	HRE Differential safety class-3 Range 0-0.4 MPa		No's	24	455400.00	4600.00	18.00	1,30,27,200.00	
21.2.2	HRE Differential safety class-3 Range 0-1.6 kPa		No's	8	455400.00	4600.00	18.00	43,42,400.00	
22	MRE Pressure Transmitters (including cost of connector, nipple, nut, and adaptor with applicable transmitter types)								
22.1	Excess (Gauge) Pressure Transmitters								
22.1.1	Excess (Gauge) Pressure Transmitters (Safety class 2 and 3)								
22.1.1.1	MRE Excess Safety Class-2 Range 0-1.6 MPa		No's	8	269280.00	2720.00	18.00	25,67,680.00	
22.1.1.2	MRE Excess Safety Class-2 Range 0-10 MPa		No's	404	269280.00	2720.00	18.00	12,96,67,840.00	
22.1.1.3	MRE Excess Safety Class-2 Range 0-1 MPa		No's	74	269280.00	2720.00	18.00	2,37,51,040.00	
22.1.1.4	MRE Excess Safety Class-2 Range 0-2.5 MPa		No's	90	269280.00	2720.00	18.00	2,88,86,400.00	
22.1.1.5	MRE Excess Safety Class-2 Range 0-25 kPa		No's	24	269280.00	2720.00	18.00	77,03,040.00	
22.1.1.6	MRE Excess Safety Class-2 Range 0-25 MPa		No's	234	269280.00	2720.00	18.00	7,51,04,640.00	
22.1.1.7	MRE Excess Safety Class-2 Range 0-4 MPa		No's	40	269280.00	2720.00	18.00	1,28,38,400.00	
22.1.1.8	MRE Excess Safety Class-2 Range 0-6 MPa		No's	24	269280.00	2720.00	18.00	77,03,040.00	
22.1.1.9	MRE Excess Safety Class-3 Range 0-0.4 MPa		No's	26	269280.00	2720.00	18.00	83,44,960.00	
22.1.1.10	MRE Excess Safety Class-3 Range 0-0.6 MPa		No's	32	269280.00	2720.00	18.00	1,02,70,720.00	
22.1.1.11	MRE Excess Safety Class-3 Range 0-1.6 kPa		No's	16	269280.00	2720.00	18.00	51,35,360.00	
22.1.1.12	MRE Excess Safety Class-3 Range 0-1.6 MPa		No's	38	269280.00	2720.00	18.00	1,21,96,480.00	
22.1.1.13	MRE Excess Safety Class-3 Range 0-100 kPa		No's	26	269280.00	2720.00	18.00	83,44,960.00	
22.1.1.14	MRE Excess Safety Class-3 Range 0-10 Mpa		No's	46	269280.00	2720.00	18.00	1,47,64,160.00	
22.1.1.15	MRE Excess Safety Class-3 Range 0-12.5 kPa		No's	8	269280.00	2720.00	18.00	25,67,680.00	
22.1.1.16	MRE Excess Safety Class-3 Range 0-160 kPa		No's	26	269280.00	2720.00	18.00	83,44,960.00	
22.1.1.17	MRE Excess Safety Class-3 Range 0-16 kPa		No's	10	269280.00	2720.00	18.00	32,09,600.00	
22.1.1.18	MRE Excess Safety Class-3 Range 0-1 MPa		No's	92	269280.00	2720.00	18.00	2,95,28,320.00	
22.1.1.19	MRE Excess Safety Class-3 Range 0-2.5 Mpa		No's	14	269280.00	2720.00	18.00	44,93,440.00	
22.1.1.20	MRE Excess Safety Class-3 Range 0-250 kPa		No's	10	269280.00	2720.00	18.00	32,09,600.00	



Template Name : S1 - Supply of Field Instrumentation									
M/s TEMA									
S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020	
					Basic Price (inclusive of P&F charges)	Freight & Insurance			
					B	C	D	E=A[(B+C)(1+D/100)]	
22.1.1.21	MRE_Excess_Safety Class-3_Range 0-25 kPa		No's	5	269280.00	2720.00	18.00	16,04,800.00	
22.1.1.22	MRE_Excess_Safety Class-3_Range 0-25 MPa		No's	96	269280.00	2720.00	18.00	3,08,12,160.00	
22.1.1.23	MRE_Excess_Safety Class-3_Range 0-40 kPa		No's	10	269280.00	2720.00	18.00	32,09,600.00	
22.1.1.24	MRE_Excess_Safety Class-3_Range 0-40 MPa		No's	4	269280.00	2720.00	18.00	12,83,840.00	
22.1.1.25	MRE_Excess_Safety Class-3_Range 0-60 kPa		No's	16	269280.00	2720.00	18.00	51,35,360.00	
22.1.1.26	MRE_Excess_Safety Class-3_Range 0-6 MPa		No's	5	269280.00	2720.00	18.00	16,04,800.00	
22.1.2	Excess (Gauge) Pressure Transmitters (Safety class 4)								
22.1.2.1	MRE_Excess_Safety Class-4_Range 0-0.4 kPa		No's	4	269280.00	2720.00	18.00	12,83,840.00	
22.1.2.2	MRE_Excess_Safety Class-4_Range 0-0.4 MPa		No's	4	269280.00	2720.00	18.00	12,83,840.00	
22.1.2.3	MRE_Excess_Safety Class-4_Range 0-0.6 MP		No's	10	269280.00	2720.00	18.00	32,09,600.00	
22.1.2.4	MRE_Excess_Safety Class-4_Range 0-1.6 MPa		No's	38	269280.00	2720.00	18.00	1,21,96,480.00	
22.1.2.5	MRE_Excess_Safety Class-4_Range 0-100 kPa		No's	29	269280.00	2720.00	18.00	93,07,840.00	
22.1.2.6	MRE_Excess_Safety Class-4_Range 0-10 kPa		No's	4	269280.00	2720.00	18.00	12,83,840.00	
22.1.2.7	MRE_Excess_Safety Class-4_Range 0-10 MPa		No's	18	269280.00	2720.00	18.00	57,77,280.00	
22.1.2.8	MRE_Excess_Safety Class-4_Range 0-160 kPa		No's	4	269280.00	2720.00	18.00	12,83,840.00	
22.1.2.9	MRE_Excess_Safety Class-4_Range 0-16 kPa		No's	8	269280.00	2720.00	18.00	25,67,680.00	
22.1.2.10	MRE_Excess_Safety Class-4_Range 0-16 MPa		No's	4	269280.00	2720.00	18.00	12,83,840.00	
22.1.2.11	MRE_Excess_Safety Class-4_Range 0-1 MPa		No's	109	269280.00	2720.00	18.00	3,49,84,640.00	
22.1.2.12	MRE_Excess_Safety Class-4_Range 0-2.5 MPa		No's	21	269280.00	2720.00	18.00	67,40,160.00	
22.1.2.13	MRE_Excess_Safety Class-4_Range 0-25 kPa		No's	14	269280.00	2720.00	18.00	44,93,440.00	
22.1.2.14	MRE_Excess_Safety Class-4_Range 0-40 kPa		No's	27	269280.00	2720.00	18.00	86,65,920.00	
22.1.2.15	MRE_Excess_Safety Class-4_Range 0-60 kPa		No's	8	269280.00	2720.00	18.00	25,67,680.00	
22.2	Vacuum (Negative) Pressure Transmitters and Vacuum and Excessive (negative and positive) pressure Transmitters								
22.2.1	Vacuum (Negative) Pressure Transmitters (Safety class 2 and 3)								
22.2.1.1	MRE_Vacuum_Safety Class-3_Range (-)1000 - 0 kPa		No's	10	239580.00	2420.00	18.00	28,55,600.00	

Template Name : SI - Supply of Field Instrumentation									
M/s TEMA									
S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020	
					Basic Price (inclusive of P&F charges)	Freight & Insurance		E=A[(B+C)(1+D/100)]	
22.2.1.2	MRE_Vacuum_Safety Class-3_Range (-) 60-0 kPa		No's	2	239580.00	2420.00	18.00	5,71,120.00	
22.2.1.3	MRE_Vacuum_Safety Class-3_Range (-) 630-0 kPa		No's	6	239580.00	2420.00	18.00	17,13,360.00	
22.2.2	Vacuum and Excessive (negative and positive) pressure transmitters (Safety class 2 and 3)								
22.2.2.1	MRE_Vacuum+Excess_Safety Class-2_Range (-) 0.1-2.4MPa		No's	4	239580.00	2420.00	18.00	11,42,240.00	
22.2.2.2	MRE_Vacuum+Excess_Safety Class-2_Range (-) 0.3-0.3kPa		No's	4	239580.00	2420.00	18.00	11,42,240.00	
22.2.2.3	MRE_Vacuum+Excess_Safety Class-2_Range (-) 50-50kPa		No's	36	239580.00	2420.00	18.00	1,02,80,160.00	
22.2.2.4	MRE_Vacuum+Excess_Safety Class-2_Range (-) 5-20kPa		No's	40	239580.00	2420.00	18.00	1,14,22,400.00	
22.2.2.5	MRE_Vacuum+Excess_Safety Class-3_Range (-) 0.5-0.5kPa		No's	4	239580.00	2420.00	18.00	11,42,240.00	
22.2.2.6	MRE_Vacuum+Excess_Safety Class-3_Range (-) 20-12.5kPa		No's	4	239580.00	2420.00	18.00	11,42,240.00	
22.2.2.7	MRE_Vacuum+Excess_Safety Class-3_Range (-) 20-60kPa		No's	6	239580.00	2420.00	18.00	17,13,360.00	
22.2.2.8	MRE_Vacuum+Excess_Safety Class-3_Range (-) 2-12.5kPa		No's	6	239580.00	2420.00	18.00	17,13,360.00	
22.2.2.9	MRE_Vacuum+Excess_Safety Class-3_Range (-) 30-60kPa		No's	8	239580.00	2420.00	18.00	22,84,480.00	
22.2.2.10	MRE_Vacuum+Excess_Safety Class-3_Range (-) 50-12.5kPa		No's	4	239580.00	2420.00	18.00	11,42,240.00	
22.2.2.11	MRE_Vacuum+Excess_Safety Class-3_Range (-) 50-20kPa		No's	16	239580.00	2420.00	18.00	45,68,960.00	
22.2.2.12	MRE_Vacuum+Excess_Safety Class-3_Range (-) 50-50kPa		No's	2	239580.00	2420.00	18.00	5,71,120.00	
22.2.2.13	MRE_Vacuum+Excess_Safety Class-3_Range (-) 5-8kPa		No's	4	239580.00	2420.00	18.00	11,42,240.00	
22.2.2.14	MRE_Vacuum+Excess_Safety Class-3_Range (-) 8-8kPa		No's	14	239580.00	2420.00	18.00	39,97,840.00	
22.2.3	Vacuum and Excessive (negative and positive) pressure transmitters (Safety class 4)								
22.2.3.1	MRE_Vacuum+Excess_Safety Class-4_Range (-) 0.2-0.2kPa		No's	2	239580.00	2420.00	18.00	5,71,120.00	
22.2.3.2	MRE_Vacuum+Excess_Safety Class-4_Range (-) 0.3-0.3kPa		No's	2	239580.00	2420.00	18.00	5,71,120.00	
22.3	Differential Pressure Transmitters								
22.3.1	Differential Pressure Transmitters (Safety class 2 and 3)								
22.3.1.1	MRE_Differential_Safety class 2_Range (-) 0.5-0.5kPa		No's	24	259380.00	2620.00	18.00	74,19,840.00	
22.3.1.2	MRE_Differential_Safety class 2_Range 0-0.16kPa		No's	16	259380.00	2620.00	18.00	49,46,560.00	
22.3.1.3	MRE_Differential_Safety class 2_Range 0-0.25kPa		No's	12	259380.00	2620.00	18.00	37,09,920.00	
22.3.1.4	MRE_Differential_Safety class 2_Range 0-0.4kPa		No's	5	259380.00	2620.00	18.00	15,45,800.00	
22.3.1.5	MRE_Differential_Safety class 2_Range 0-0.63kPa		No's	8	259380.00	2620.00	18.00	24,73,280.00	
22.3.1.6	MRE_Differential_Safety class 2_Range 0-0.63MPa		No's	8	259380.00	2620.00	18.00	24,73,280.00	



Template Name : S1 - Supply of Field Instrumentation									
M/s TEMA									
S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST			GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance	C	D	$E=A[(B+C)(1+D/100)]$
22.3.1.7	MRE_Differential_Safety class 2_Range 0-1.6kPa	102.KK56.0.0.AK.TS.PR026	No's	5	259380.00		2620.00	18.00	15,45,800.00
22.3.1.8	MRE_Differential_Safety class 2_Range 0-1.6MPa		No's	144	259380.00		2620.00	18.00	4,45,19,040.00
22.3.1.9	MRE_Differential_Safety class 2_Range 0-100kPa		No's	158	259380.00		2620.00	18.00	4,88,47,280.00
22.3.1.10	MRE_Differential_Safety class 2_Range 0-125kPa		No's	5	259380.00		2620.00	18.00	15,45,800.00
22.3.1.11	MRE_Differential_Safety class 2_Range 0-160kPa		No's	44	259380.00		2620.00	18.00	1,36,03,040.00
22.3.1.12	MRE_Differential_Safety class 2_Range 0-16kPa		No's	16	259380.00		2620.00	18.00	49,46,560.00
22.3.1.13	MRE_Differential_Safety class 2_Range 0-16MPa		No's	24	259380.00		2620.00	18.00	74,19,840.00
22.3.1.14	MRE_Differential_Safety class 2_Range 0-1MPa		No's	24	259380.00		2620.00	18.00	74,19,840.00
22.3.1.15	MRE_Differential_Safety class 2_Range 0-2.5kPa		No's	12	259380.00		2620.00	18.00	37,09,920.00
22.3.1.16	MRE_Differential_Safety class 2_Range 0-250kPa		No's	28	259380.00		2620.00	18.00	86,56,480.00
22.3.1.17	MRE_Differential_Safety class 2_Range 0-25kPa		No's	16	259380.00		2620.00	18.00	49,46,560.00
22.3.1.18	MRE_Differential_Safety class 2_Range 0-40kPa		No's	40	259380.00		2620.00	18.00	1,23,66,400.00
22.3.1.19	MRE_Differential_Safety class 2_Range 0-6.3kPa		No's	5	259380.00		2620.00	18.00	15,45,800.00
22.3.1.20	MRE_Differential_Safety class 2_Range 0-63kPa		No's	20	259380.00		2620.00	18.00	61,83,200.00
22.3.1.21	MRE_Differential_Safety class 2_Range 32-132kPa		No's	6	259380.00		2620.00	18.00	18,54,960.00
22.3.1.22	MRE_Differential_Safety class 2_Range 32-95kPa		No's	36	259380.00		2620.00	18.00	1,11,29,760.00
22.3.1.23	MRE_Differential_Safety class 2_Range 87-187kPa		No's	24	259380.00		2620.00	18.00	74,19,840.00
22.3.1.24	MRE_Differential_Safety class 3_Range 0-0.16kPa		No's	28	259380.00		2620.00	18.00	86,56,480.00
22.3.1.25	MRE_Differential_Safety class 3_Range 0-0.25kPa		No's	5	259380.00		2620.00	18.00	15,45,800.00

Template Name : S1 - Supply of Field Instrumentation									
M/s TEMA									
S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST			GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	B	C		
22.3.1.26	MRE_Differential_Safety class 3 _Range 0-0.4kPa		No's	8	259380.00		2620.00	18.00	24,73,280.00
22.3.1.27	MRE_Differential_Safety class 3 _Range 0-0.63kPa		No's	94	259380.00		2620.00	18.00	2,90,61,040.00
22.3.1.28	MRE_Differential_Safety class 3 _Range 0-0.63MPa		No's	50	259380.00		2620.00	18.00	1,54,58,000.00
22.3.1.29	MRE_Differential_Safety class 3 _Range 0-1.6kPa		No's	20	259380.00		2620.00	18.00	61,83,200.00
22.3.1.30	MRE_Differential_Safety class 3 _Range 0-100kPa		No's	54	259380.00		2620.00	18.00	1,66,94,640.00
22.3.1.31	MRE_Differential_Safety class 3 _Range 0-10kPa		No's	10	259380.00		2620.00	18.00	30,91,600.00
22.3.1.32	MRE_Differential_Safety class 3 _Range 0-160kPa		No's	52	259380.00		2620.00	18.00	1,60,76,320.00
22.3.1.33	MRE_Differential_Safety class 3 _Range 0-16kPa		No's	34	259380.00		2620.00	18.00	1,05,11,440.00
22.3.1.34	MRE_Differential_Safety class 3 _Range 0-1kPa		No's	82	259380.00		2620.00	18.00	2,53,51,120.00
22.3.1.35	MRE_Differential_Safety class 3 _Range 0-2.5kPa		No's	6	259380.00		2620.00	18.00	18,54,960.00
22.3.1.36	MRE_Differential_Safety class 3 _Range 0-2.5MPa		No's	6	259380.00		2620.00	18.00	18,54,960.00
22.3.1.37	MRE_Differential_Safety class 3 _Range 0-250kPa		No's	16	259380.00		2620.00	18.00	49,46,560.00
22.3.1.38	MRE_Differential_Safety class 3 _Range 0-25kPa		No's	30	259380.00		2620.00	18.00	92,74,800.00
22.3.1.39	MRE_Differential_Safety class 3 _Range 0-40kPa		No's	92	259380.00		2620.00	18.00	2,84,42,720.00
22.3.1.40	MRE_Differential_Safety class 3 _Range 0-4kPa		No's	126	259380.00		2620.00	18.00	3,89,54,160.00
22.3.1.41	MRE_Differential_Safety class 3 _Range 0-6.3kPa		No's	20	259380.00		2620.00	18.00	61,83,200.00
22.3.1.42	MRE_Differential_Safety class 3 _Range 0-63kPa		No's	84	259380.00		2620.00	18.00	2,59,69,440.00



Template Name : S1 - Supply of Field Instrumentation									
M/s. TEMA									
S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020	
					Basic Price (inclusive of P&F charges)	Freight & Insurance		E=A[(B+C)(1+D/100)]	
22.3.1.43	MRE_Differential_Safety class 3 _Range 1.8-64.8kPa		No's	8	259380.00	2620.00	18.00	24,73,280.00	
22.3.1.44	MRE_Differential_Safety class 3 _Range 14.7-21kPa		No's	5	259380.00	2620.00	18.00	15,45,800.00	
22.3.1.45	MRE_Differential_Safety class 3 _Range 21.3-31.3kPa		No's	56	259380.00	2620.00	18.00	1,73,12,960.00	
22.3.1.46	MRE_Differential_Safety class 3 _Range 24.67-34.67kPa		No's	8	259380.00	2620.00	18.00	24,73,280.00	
22.3.1.47	MRE_Differential_Safety class 3 _Range 32-95kPa		No's	6	259380.00	2620.00	18.00	18,54,960.00	
22.3.1.48	MRE_Differential_Safety class 3 _Range 5.8-68.8kPa		No's	6	259380.00	2620.00	18.00	18,54,960.00	
22.3.1.49	MRE_Differential_Safety class 3 _Range 8-44.45kPa		No's	32	259380.00	2620.00	18.00	98,93,120.00	
22.3.1.50	MRE_Differential_Safety class 3 _Range 8-48kPa		No's	144	259380.00	2620.00	18.00	4,45,19,040.00	
22.3.1.51	MRE_Differential_Safety class 3 _Range 0-60kPa		No's	2	259380.00	2620.00	18.00	6,18,320.00	
22.3.2	Differential Pressure Transmitters (Safety class 4								
22.3.2.1	MRE_Differential_Safety class 4 _Range 0-0.63MPa		No's	30	259380.00	2620.00	18.00	92,74,800.00	
22.3.2.2	MRE_Differential_Safety class 4 _Range 0-1.6kPa		No's	2	259380.00	2620.00	18.00	6,18,320.00	
22.3.2.3	MRE_Differential_Safety class 4 _Range 0-100kPa		No's	6	259380.00	2620.00	18.00	18,54,960.00	
22.3.2.4	MRE_Differential_Safety class 4 _Range 0-10kPa		No's	10	259380.00	2620.00	18.00	30,91,600.00	
22.3.2.5	MRE_Differential_Safety class 4 _Range 0-160kPa		No's	14	259380.00	2620.00	18.00	43,28,240.00	
22.3.2.6	MRE_Differential_Safety class 4 _Range 0-250kPa		No's	2	259380.00	2620.00	18.00	6,18,320.00	
22.3.2.7	MRE_Differential_Safety class 4 _Range 0-25kPa		No's	42	259380.00	2620.00	18.00	1,29,84,720.00	
22.3.2.8	MRE_Differential_Safety class 4 _Range 0-40kPa		No's	6	259380.00	2620.00	18.00	18,54,960.00	
22.3.2.9	MRE_Differential_Safety class 4 _Range 0-4kPa		No's	4	259380.00	2620.00	18.00	12,36,640.00	
22.3.2.10	MRE_Differential_Safety class 4 _Range 0-6.3kPa		No's	16	259380.00	2620.00	18.00	49,46,560.00	
22.3.2.11	MRE_Differential_Safety class 4 _Range 0-63kPa		No's	10	259380.00	2620.00	18.00	30,91,600.00	
22.3.2.12	MRE_Differential_Safety class 4 _Range 2-18kPa		No's	2	259380.00	2620.00	18.00	6,18,320.00	



Template Name : SI - Supply of Field Instrumentation									
M/s TEMA									
S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020	
					Basic Price (inclusive of P&F charges)	Freight & Insurance	D	E=A[(B+C)(1+D/100)]	
23	Pressure Transmitter - NRE-Normal Application (including cost of connector, nipple, nut, and adaptor with applicable transmitter types)								
23.1	Absolute Pressure Transmitters and Excess (gauge) Pressure Transmitters								
23.1.1	Absolute Pressure Transmitters (Safety class 2 and 3)								
23.1.1.1	NRE-NA_Absolute_Safety class 3_Range 0-100kPa		No's	2	182160.00	1840.00	18.00		4,34,240.00
23.1.1.2	NRE-NA_Absolute_Safety class 3_Range 0-100kPa		No's	8	182160.00	1840.00	18.00		17,36,960.00
23.1.1.3	NRE-NA_Absolute_Safety class 3_Range 0-160kPa		No's	30	182160.00	1840.00	18.00		65,13,600.00
23.1.1.4	NRE-NA_Absolute_Safety class 3_Range 0-160kPa		No's	8	182160.00	1840.00	18.00		17,36,960.00
23.1.1.5	NRE-NA_Absolute_Safety class 3_Range 0-250kPa		No's	8	182160.00	1840.00	18.00		17,36,960.00
23.1.1.6	NRE-NA_Absolute_Safety class 3_Range 0-101kPa		No's	12	182160.00	1840.00	18.00		26,05,440.00
23.1.2	Excess (gauge) Pressure Transmitters								
23.1.2.1	NRE-NA_Excess_Safety class 3_Range 0-0.16MPa		No's	11	182160.00	1840.00	18.00		23,88,320.00
23.1.2.2	NRE-NA_Excess_Safety class 3_Range 0-0.6kPa		No's	9	182160.00	1840.00	18.00		19,54,080.00
23.1.2.3	NRE-NA_Excess_Safety class 3_Range 0-0.6MPa		No's	15	182160.00	1840.00	18.00		32,56,800.00
23.1.2.4	NRE-NA_Excess_Safety class 3_Range 0-1.6kPa		No's	17	182160.00	1840.00	18.00		36,91,040.00
23.1.2.5	NRE-NA_Excess_Safety class 3_Range 0-1.6MPa		No's	83	182160.00	1840.00	18.00		1,80,20,960.00
23.1.2.6	NRE-NA_Excess_Safety class 3_Range 0-10MPa		No's	49	182160.00	1840.00	18.00		1,06,38,880.00
23.1.2.7	NRE-NA_Excess_Safety class 3_Range 0-160kPa		No's	8	182160.00	1840.00	18.00		17,36,960.00
23.1.2.8	NRE-NA_Excess_Safety class 3_Range 0-16MPa		No's	86	182160.00	1840.00	18.00		1,86,72,320.00
23.1.2.9	NRE-NA_Excess_Safety class 3_Range 0-1MPa		No's	88	182160.00	1840.00	18.00		1,91,06,560.00
23.1.2.10	NRE-NA_Excess_Safety class 3_Range 0-2.5MPa		No's	41	182160.00	1840.00	18.00		89,01,920.00
23.1.2.11	NRE-NA_Excess_Safety class 3_Range 0-250kPa		No's	8	182160.00	1840.00	18.00		17,36,960.00
23.1.2.12	NRE-NA_Excess_Safety class 3_Range 0-4MPa		No's	49	182160.00	1840.00	18.00		1,06,38,880.00
23.1.2.13	NRE-NA_Excess_Safety class 3_Range 0-6MPa		No's	49	182160.00	1840.00	18.00		1,06,38,880.00
23.1.2.14	NRE-NA_Excess_Safety class 2_Range 0-1.6MPa		No's	33	182160.00	1840.00	18.00		71,64,960.00
23.1.2.15	NRE-NA_Excess_Safety class 2_Range 0-1MPa		No's	9	182160.00	1840.00	18.00		19,54,080.00



Template Name : S1 - Supply of Field Instrumentation									
M/s TEMA									
S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units S&G (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020	
					Basic Price (inclusive of P&F charges)	Freight & Insurance		E=A[(B+C)(1+D/100)]	
23.1.2.16	NRE-NA_Excess_Safety class 2_Range 0-25kPa		No's	9	182160.00	1840.00	18.00	19,54,080.00	
23.1.3	Excess (gauge) Pressure Transmitters (Safety class 4)								
23.1.3.1	NRE-NA_Excess_Safety class 4_Range 0-0.25MPa		No's	8	₹ 85,000.00	750.00	18.00	8,09,480.00	
23.1.3.2	NRE-NA_Excess_Safety class 4_Range 0-0.4MPa		No's	14	₹ 85,000.00	750.00	18.00	14,16,590.00	
23.1.3.3	NRE-NA_Excess_Safety class 4_Range 0-0.6MPa		No's	168	₹ 85,000.00	750.00	18.00	1,69,99,080.00	
23.1.3.4	NRE-NA_Excess_Safety class 4_Range 0-1.6MPa		No's	40	₹ 85,000.00	750.00	18.00	40,47,400.00	
23.1.3.5	NRE-NA_Excess_Safety class 4_Range 0-100kPa		No's	5	₹ 85,000.00	750.00	18.00	5,05,925.00	
23.1.3.6	NRE-NA_Excess_Safety class 4_Range 0-160kPa		No's	38	₹ 85,000.00	750.00	18.00	38,45,030.00	
23.1.3.7	NRE-NA_Excess_Safety class 4_Range 0-16kPa		No's	10	₹ 85,000.00	750.00	18.00	10,11,850.00	
23.1.3.8	NRE-NA_Excess_Safety class 4_Range 0-16MPa		No's	7	₹ 85,000.00	750.00	18.00	7,08,295.00	
23.1.3.9	NRE-NA_Excess_Safety class 4_Range 0-1MPa		No's	180	₹ 85,000.00	750.00	18.00	1,82,13,300.00	
23.1.3.10	NRE-NA_Excess_Safety class 4_Range 0-2.5MPa		No's	16	₹ 85,000.00	750.00	18.00	16,18,960.00	
23.1.3.11	NRE-NA_Excess_Safety class 4_Range 0-250kPa		No's	5	₹ 85,000.00	750.00	18.00	5,05,925.00	
23.1.3.12	NRE-NA_Excess_Safety class 4_Range 0-25kPa		No's	3	₹ 85,000.00	750.00	18.00	3,03,555.00	
23.1.3.13	NRE-NA_Excess_Safety class 4_Range 0-400kPa		No's	18	₹ 85,000.00	750.00	18.00	18,21,330.00	
23.1.3.14	NRE-NA_Excess_Safety class 4_Range 0-40kPa		No's	6	₹ 85,000.00	750.00	18.00	6,07,110.00	
23.1.3.15	NRE-NA_Excess_Safety class 4_Range 0-60kPa		No's	7	₹ 85,000.00	750.00	18.00	7,08,295.00	
23.1.3.16	NRE-NA_Excess_Safety class 4_Range 2-62kPa		No's	3	₹ 85,000.00	750.00	18.00	3,03,555.00	
23.1.3.17	NRE-NA_Excess_Safety class 4_Range 0-25kPa		No's	2	₹ 85,000.00	750.00	18.00	2,02,370.00	
23.1.3.18	NRE-NA_Excess_Safety class 4_Range 0.1-0.3MPa		No's	3	₹ 85,000.00	750.00	18.00	3,03,555.00	
23.1.3.19	NRE-NA_Excess_Safety class 4_Range 0.1-0.65MPa		No's	3	₹ 85,000.00	750.00	18.00	3,03,555.00	
23.1.3.20	NRE-NA_Excess_Safety class 4_Range 0.1-0.6MPa		No's	5	₹ 85,000.00	750.00	18.00	5,05,925.00	

Template Name : SI - Supply of Field Instrumentation									
M/s TEMA									
S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020	
					Basic Price (inclusive of P&F charges)	Freight & Insurance			
23.1.3.21	NRE-NA_Excess_Safety class 4_Range 0 - 6 Kg/cm2	102.KK56.0.0.AK.TS.PR027	No's	28	₹ 85,000.00	750.00	18.00	28,33,180.00	
23.1.3.22	NRE-NA_Excess_Safety class 4_Range 0 - 10 Kg/cm2		No's	17	₹ 85,000.00	750.00	18.00	17,20,145.00	
23.1.3.23	NRE-NA_Excess_Safety class 4_Range 0 - 8 Kg/cm2		No's	4	₹ 85,000.00	750.00	18.00	4,04,740.00	
23.1.3.24	NRE-NA_Excess_Safety class 4_Range 0 - 14 Kg/cm2		No's	1	₹ 85,000.00	750.00	18.00	1,01,185.00	
23.1.3.25	NRE-NA_Excess_Safety class 4_Range 0 - 16 Kg/cm2		No's	19	₹ 85,000.00	750.00	18.00	19,22,515.00	
23.1.3.26	NRE-NA_Excess_Safety class 4_Range 0 - 35 Kg/cm2		No's	4	₹ 85,000.00	750.00	18.00	4,04,740.00	
23.1.3.27	NRE-NA_Excess_Safety class 4_Range 0 - 12 Kg/cm2		No's	4	₹ 85,000.00	750.00	18.00	4,04,740.00	
23.1.3.28	NRE-NA_Excess_Safety class 4_Range 0 - 100 Kg/cm2		No's	7	₹ 85,000.00	750.00	18.00	7,08,295.00	
23.1.4	Absolute Pressure Transmitters (Safety class 4)								
23.1.4.1	NRE-NA_Absolute_Safety class 4_Range 0 - 6 Kg/cm2		No's	4	163350.00	1650.00	18.00	7,78,800.00	
23.1.4.2	NRE-NA_Absolute_Safety class 4_Range 0 - 10 Kg/cm2		No's	2	163350.00	1650.00	18.00	3,89,400.00	
23.1.4.3	NRE-NA_Absolute_Safety class 4_Range 0 - 16 Kg/cm2		No's	3	163350.00	1650.00	18.00	5,84,100.00	
23.2	Vacuum (Negative) Pressure Transmitters								
23.2.1	Vacuum (Negative) Pressure Transmitters (Safety class 2 and 3)								
23.2.1.1	NRE-NA_Vacuum_Safety class 3_Range (-)1000-0kPa	No's	6	146520.00	1480.00	18.00	10,47,840.00		
23.2.1.2	NRE-NA_Vacuum_Safety class 3_Range (-)60-0kPa	No's	2	146520.00	1480.00	18.00	3,49,280.00		
23.2.2	Vacuum (Negative) Pressure Transmitters (Safety class 2 and 3)								
23.2.2.1	NRE-NA_Vacuum + Excess_Safety class 3_Range (-)0.1-1.5MPa	No's	16	88011.00	889.00	18.00	16,78,432.00		
23.2.2.2	NRE-NA_Vacuum + Excess_Safety class 3_Range (-)100-150kPa	No's	8	88011.00	889.00	18.00	8,39,216.00		
23.2.2.3	NRE-NA_Vacuum + Excess_Safety class 3_Range (-)30-30kPa	No's	2	88011.00	889.00	18.00	2,09,804.00		
23.2.3	Vacuum and excess (negative and positive) Pressure transmitters (Safety class 4)								
23.2.3.1	NRE-NA_Vacuum+Excess_Safety class 4_Range (-)100-60kPa	No's	4	88011.00	889.00	18.00	4,19,608.00		
23.2.3.2	NRE-NA_Vacuum+Excess_Safety class 4_Range (-)760 - 0 mmHG	No's	1	88011.00	889.00	18.00	1,04,902.00		
23.3	Differential Pressure Transmitters								



Template Name : SI - Supply of Field Instrumentation									
M/s TEMA									
S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020	
					Basic Price (inclusive of P&F charges)	Freight & Insurance	D	E=A[(B+C)(1+D/100)]	
23.3.1	Differential Pressure Transmitters (Safety class 2 and 3)		No's	9	160380.00	1620.00	18.00	17,20,440.00	
23.3.1.1	NRE-NA_Differential_Safety class 3_Range 0-0.4MPa		No's	40	160380.00	1620.00	18.00	76,46,400.00	
23.3.1.2	NRE-NA_Differential_Safety class 3_Range 0-0.63MPa		No's	5	160380.00	1620.00	18.00	9,55,800.00	
23.3.1.3	NRE-NA_Differential_Safety class 3_Range 0-1.6MPa		No's	72	160380.00	1620.00	18.00	1,37,63,200.00	
23.3.1.4	NRE-NA_Differential_Safety class 3_Range 0-100kPa		No's	11	160380.00	1620.00	18.00	21,02,760.00	
23.3.1.5	NRE-NA_Differential_Safety class 3_Range 0-160kPa		No's	40	160380.00	1620.00	18.00	76,46,400.00	
23.3.1.6	NRE-NA_Differential_Safety class 3_Range 0-16kPa		No's	15	160380.00	1620.00	18.00	28,67,400.00	
23.3.1.7	NRE-NA_Differential_Safety class 3_Range 0-250kPa		No's	21	160380.00	1620.00	18.00	40,14,360.00	
23.3.1.8	NRE-NA_Differential_Safety class 3_Range 0-25kPa		No's	50	160380.00	1620.00	18.00	95,58,000.00	
23.3.1.9	NRE-NA_Differential_Safety class 3_Range 0-40kPa		No's	3	160380.00	1620.00	18.00	5,73,480.00	
23.3.1.10	NRE-NA_Differential_Safety class 3_Range 0-4kPa		No's	3	160380.00	1620.00	18.00	5,73,480.00	
23.3.1.11	NRE-NA_Differential_Safety class 3_Range 0-6.3kPa		No's	19	160380.00	1620.00	18.00	36,32,040.00	
23.3.1.12	NRE-NA_Differential_Safety class 3_Range 0-63kPa		No's	13	160380.00	1620.00	18.00	24,85,080.00	
23.3.1.13	NRE-NA_Differential_Safety class 3_Range (-)100-300kPa		No's	5	160380.00	1620.00	18.00	9,55,800.00	
23.3.1.14	NRE-NA_Differential_Safety class 3_Range 4-14kPa		No's	7	160380.00	1620.00	18.00	13,38,120.00	
23.3.1.15	NRE-NA_Differential_Safety class 3_Range 16-26kPa		No's	9	160380.00	1620.00	18.00	17,20,440.00	
23.3.1.16	NRE-NA_Differential_Safety class 3_Range 24.86-34.86kPa		No's	3	160380.00	1620.00	18.00	5,73,480.00	
23.3.1.17	NRE-NA_Differential_Safety class 3_Range 25-40kPa		No's	5	160380.00	1620.00	18.00	9,55,800.00	
23.3.1.18	NRE-NA_Differential_Safety class 3_Range 26.2-42.2kPa		No's	9	160380.00	1620.00	18.00	17,20,440.00	
23.3.1.19	NRE-NA_Differential_Safety class 3_Range 26.2-51.2kPa		No's	7	160380.00	1620.00	18.00	13,38,120.00	
23.3.1.20	NRE-NA_Differential_Safety class 3_Range 43.01-55.71kPa		No's	7	160380.00	1620.00	18.00	13,38,120.00	
23.3.1.21	NRE-NA_Differential_Safety class 3_Range 5.75-21.75kPa		No's	7	160380.00	1620.00	18.00	13,38,120.00	



Template Name : S1 - Supply of Field Instrumentation										
M/s TEMA										
S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020		
					Basic Price (inclusive of P&F charges)	Freight & Insurance				
										B
23.3.1.22	NRE-NA_Differential_Safety class 3 _Range 8.5-33.5kPa		No's	5	160380.00	1620.00	18.00	E=A[(B+C)(1+D/100)] 9,55,800.00		
23.3.1.23	NRE-NA_Differential_Safety class 2 _Range 0-0.25kPa		No's	5	160380.00	1620.00	18.00	9,55,800.00		
23.3.1.24	NRE-NA_Differential_Safety class 2 _Range 0-0.63kPa		No's	5	160380.00	1620.00	18.00	9,55,800.00		
23.3.1.25	NRE-NA_Differential_Safety class 2 _Range 0-1.6kPa		No's	5	160380.00	1620.00	18.00	9,55,800.00		
23.3.1.26	NRE-NA_Differential_Safety class 3 _Range 0-6.3kPa		No's	5	160380.00	1620.00	18.00	9,55,800.00		
23.3.1.27	NRE-NA_Differential_Safety class 2 _Range 0-16kPa		No's	9	160380.00	1620.00	18.00	17,20,440.00		
23.3.1.28	NRE-NA_Differential_Safety class 2 _Range 0-63kPa		No's	9	160380.00	1620.00	18.00	17,20,440.00		
23.3.2	Differential Pressure Transmitters (Safety class 4)									
23.3.2.1	NRE_NA_Differential_Safety class 4 _Range 0-0.63MPa			No's	4	₹ 95,000.00	500.00	18.00	4,50,760.00	
23.3.2.2	NRE_NA_Differential_Safety class 4 _Range 0-100kPa			No's	12	₹ 95,000.00	500.00	18.00	13,52,280.00	
23.3.2.3	NRE_NA_Differential_Safety class 4 _Range 0-10kPa		No's	8	₹ 95,000.00	500.00	18.00	9,01,520.00		
23.3.2.4	NRE_NA_Differential_Safety class 4 _Range 0-160kPa		No's	3	₹ 95,000.00	500.00	18.00	3,38,070.00		
23.3.2.5	NRE_NA_Differential_Safety class 4 _Range 0-16kPa		No's	12	₹ 95,000.00	500.00	18.00	13,52,280.00		
23.3.2.6	NRE_NA_Differential_Safety class 4 _Range 0-250kPa		No's	8	₹ 95,000.00	500.00	18.00	9,01,520.00		
23.3.2.7	NRE_NA_Differential_Safety class 4 _Range 0-25kPa		No's	20	₹ 95,000.00	500.00	18.00	22,53,800.00		
23.3.2.8	NRE_NA_Differential_Safety class 4 _Range 0-400kPa		No's	3	₹ 95,000.00	500.00	18.00	3,38,070.00		
23.3.2.9	NRE_NA_Differential_Safety class 4 _Range 0-40kPa		No's	8	₹ 95,000.00	500.00	18.00	9,01,520.00		
23.3.2.10	NRE_NA_Differential_Safety class 4 _Range 0-63kPa		No's	28	₹ 95,000.00	500.00	18.00	31,55,320.00		
23.3.2.11	NRE_NA_Differential_Safety class 4 _Range 0.07-1.3MPa		No's	4	₹ 95,000.00	500.00	18.00	4,50,760.00		
23.3.2.12	NRE_NA_Differential_Safety class 4 _Range 0.1-1.3MPa		No's	2	₹ 95,000.00	500.00	18.00	2,25,380.00		
23.3.2.13	NRE_NA_Differential_Safety class 4 _Range 0.2-1.3MPa		No's	4	₹ 95,000.00	500.00	18.00	4,50,760.00		
23.3.2.14	NRE_NA_Differential_Safety class 4 _Range 0.3-1.3MPa		No's	2	₹ 95,000.00	500.00	18.00	2,25,380.00		

Template Name : SI - Supply of Field Instrumentation									
M/s TEMA									
S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020	
					Basic Price (inclusive of P&F charges)	Freight & Insurance		E=A[(B+C)(1+D/100)]	
23.3.2.15	NRE_NA_Differential_Safety class 4_Range 0-0.25MPa		No's	11	₹ 95,000.00	500.00	18.00	12,39,590.00	
23.3.2.16	NRE_NA_Differential_Safety class 4_Range 0-2500 mm WC		No's	41	₹ 95,000.00	500.00	18.00	46,20,290.00	
23.3.2.17	NRE_NA_Differential_Safety class 4_Range 0-2 Kg/cm2		No's	3	₹ 95,000.00	500.00	18.00	3,38,070.00	
23.3.2.18	NRE_NA_Differential_Safety class 4_Range 0-4000 mm WC		No's	3	₹ 95,000.00	500.00	18.00	3,38,070.00	
23.3.2.19	NRE_NA_Differential_Safety class 4_Range 0-5500 mm WC		No's	1	₹ 95,000.00	500.00	18.00	1,12,690.00	
23.3.2.20	NRE_NA_Differential_Safety class 4_Range 0-2.5 Kg/cm2		No's	8	₹ 95,000.00	500.00	18.00	9,01,520.00	
23.3.2.21	NRE_NA_Differential_Safety class 4_Range 0-1500 mm WC		No's	7	₹ 95,000.00	500.00	18.00	7,88,830.00	
23.3.2.22	NRE_NA_Differential_Safety class 4_Range 0-3000 mm WC		No's	3	₹ 95,000.00	500.00	18.00	3,38,070.00	
23.3.2.23	NRE_NA_Differential_Safety class 4_Range 0-5000 mm WC		No's	15	₹ 95,000.00	500.00	18.00	16,90,350.00	
23.3.2.24	NRE_NA_Differential_Safety class 4_Range 0-500 mm WC		No's	3	₹ 95,000.00	500.00	18.00	3,38,070.00	
23.3.2.25	NRE-NA_Differential_Safety class 4_Range (-)5098 to +5098 mm WC		No's	7	₹ 95,000.00	500.00	18.00	7,88,830.00	
23.3.2.26	NRE-NA_Differential_Safety class 4_Range (-)25492 to +25492 mm WC		No's	4	₹ 95,000.00	500.00	18.00	4,50,760.00	
23.3.2.27	NRE-NA_Differential_Safety class 4_Range 0-0.6 (Kg/cm ²)		No's	3	₹ 95,000.00	500.00	18.00	3,38,070.00	
24	Pressure Transmitter - NRE-Sea Water (including cost of connector, nipple, nut, and adaptor with applicable transmitter types)								
24.1	Excess (gauge) Pressure Transmitters								
24.1.1	Excess (gauge) Pressure Transmitters (Safety class 2 and 3)								
24.1.1.1	NRE-SW Excess Safety class 2_Range 0-1 MPa		No's	16	204435.00	2065.00	18.00	38,98,720.00	
24.1.1.2	NRE-SW Excess Safety class 3_Range 0-0.6 MPa		No's	4	204435.00	2065.00	18.00	9,74,680.00	
24.1.2	Excess (gauge) Pressure Transmitters (Safety class 4)								
24.1.2.1	NRE-SW Excess Safety class 4_Range 0-0.4kPa		No's	8	₹ 1,30,000.00	500.00	18.00	12,31,920.00	
24.1.2.2	NRE-SW Excess Safety class 4_Range 0-0.4MPa		No's	8	₹ 1,30,000.00	500.00	18.00	12,31,920.00	

Template Name : S1 - Supply of Field Instrumentation

M/s TEMA

S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST			GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (Inclusive of P&F charges)	Freight & Insurance	C	D	E=A[(B+C)(1+D/100)]
24.1.2.3	NRE-SW Excess Safety class 4 Range 0-0.6MPa	102.KK56.0.0.AK.TS.PR028	No's	6	₹ 1,30,000.00		500.00	18.00	9,23,940.00
24.1.2.4	NRE-SW Excess Safety class 4 Range 0-1.6MPa		No's	10	₹ 1,30,000.00		500.00	18.00	15,39,900.00
24.1.2.5	NRE-SW Excess Safety class 4 Range 0-1MPa		No's	8	₹ 1,30,000.00		500.00	18.00	12,31,920.00
24.1.2.6	NRE-SW Excess Safety class 4 Range 0-250kPa		No's	2	₹ 1,30,000.00		500.00	18.00	3,07,980.00
24.2	Vacuum (Negative) Pressure Transmitters								
24.2.1	Vacuum (Negative) Pressure Transmitters (Safety class 2 and 3)								
24.2.1.1	NRE-SW Differential Safety class 2 Range 0-63kPa		No's	64	₹ 1,75,000.00		750.00	18.00	1,32,72,640.00
24.3	Differential Pressure Transmitters								
24.3.1	Differential Pressure Transmitters (Safety class 2 and 3)								
24.3.1.1	NRE-SW Differential Safety class 2 Range 0-63kPa		No's	2	217800.00		2200.00	18.00	5,19,200.00
24.3.2	Differential Pressure Transmitters (Safety class 4)								
24.3.2.1	NRE-SW Differential Safety class 4 Range 0-40kPa		No's	8	₹ 1,35,000.00		750.00	18.00	12,81,480.00
24.3.2.2	NRE-SW Differential Safety class 4 Range 0-630kPa		No's	8	₹ 1,35,000.00		750.00	18.00	12,81,480.00
24.3.2.3	NRE-SW Differential Safety class 4 Range 0-63kPa		No's	18	₹ 1,35,000.00		750.00	18.00	28,83,330.00
24.3.2.4	NRE-SW Differential Safety class 4 Range (-)5098 to +5098 mmWC		No's	1	₹ 1,35,000.00		750.00	18.00	1,60,185.00
27	Instrument Junction Boxes of Stainless Steel including terminal blocks								
27.1	ASU-BC-SS-8	102.KK56.0.0.AK.TS.PR018	No's	94	23364.00		236.00	18.00	26,17,712.00
27.2	ASU-BC-SS-12		No's	38	27918.00		282.00	18.00	12,64,488.00
27.3	ASU-BC-SS-16		No's	24	34650.00		350.00	18.00	9,91,200.00
27.4	ASU-BC-SS-24		No's	68	43065.00		435.00	18.00	34,90,440.00
27.5	ASU-BC-SS-32		No's	36	51480.00		520.00	18.00	22,08,960.00
27.6	ASU-BC-SS-48		No's	32	66330.00		670.00	18.00	25,29,920.00
27.7	ASU-BC-SS-64		No's	20	148500.00		1500.00	18.00	35,40,000.00
27.8	ASU-BC-SS-96		No's	40	123750.00		1250.00	18.00	59,00,000.00
27.9	ASU-BC-SS-128		No's	10	142560.00		1440.00	18.00	16,99,200.00
27.10	ASU-BC-SS-144		No's	2	161370.00		1630.00	18.00	3,84,680.00
27.11	ASU-BC-SS-192		No's	12	233640.00		2360.00	18.00	33,41,760.00
27.12	ASU-BC(IC)-SS-12		No's	6	44550.00		450.00	18.00	3,18,600.00
27.13	ASU-BC(IC)-SS-16		No's	6	51084.00		516.00	18.00	3,65,328.00
27.14	ASU-BC(IC)-SS-24		No's	18	61380.00		620.00	18.00	13,16,880.00
27.15	ASU-BC(IC)-SS-32		No's	30	75240.00		760.00	18.00	26,90,400.00
27.16	ASU-BC(IC)-SS-48		No's	8	94050.00		950.00	18.00	8,96,800.00
27.17	ASU-BC(IC)-SS-64		No's	2	130680.00		1320.00	18.00	3,11,520.00
27.18	ASU-BC(IC)-SS-128		No's	4	191070.00		1930.00	18.00	9,10,960.00



Template Name : S1 - Supply of Field Instrumentation									
M/s TEMA									
S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020	
					Basic Price (inclusive of P&F charges)	Freight & Insurance	D	E=A[(B+C)(1+D/100)]	
28	Junction Boxes of CS-BOP including terminal blocks								
28.1	ASU-BC-AL-15		No's	14	25740.00	260.00	18.00		4,29,520.00
28.2	ASU-BC-AL-24		No's	32	33660.00	340.00	18.00		12,83,840.00
28.3	ASU-BC-AL-30	102.KK56.0.0.AK.TS.PR019	No's	5	36135.00	365.00	18.00		2,15,350.00
28.4	ASU-BC-AL-34		No's	1	38115.00	385.00	18.00		45,430.00
28.5	ASU-BC-AL-48		No's	36	51975.00	525.00	18.00		22,30,200.00
28.6	ASU-BC-AL-50		No's	38	53212.00	538.00	18.00		24,10,150.00
29	Instrument Junction Boxes of Aluminium including terminal blocks								
29.1	ASU-BC-AL-6		No's	8	15493.00	157.00	18.00		1,47,736.00
29.2	ASU-BC-AL-8		No's	426	17820.00	180.00	18.00		90,48,240.00
29.3	ASU-BC-AL-12		No's	124	21780.00	220.00	18.00		32,19,040.00
29.4	ASU-BC-AL-16		No's	132	26235.00	265.00	18.00		41,27,640.00
29.5	ASU-BC-AL-24		No's	166	33660.00	340.00	18.00		66,59,920.00
29.6	ASU-BC-AL-32	102.KK56.0.0.AK.TS.PR019	No's	75	37125.00	375.00	18.00		33,18,750.00
29.7	ASU-BC-AL-48		No's	78	51975.00	525.00	18.00		48,32,100.00
29.8	ASU-BC-AL-64		No's	52	62370.00	630.00	18.00		38,65,680.00
29.9	ASU-BC-AL-96		No's	30	86130.00	870.00	18.00		30,79,800.00
29.10	ASU-BC-AL-128		No's	28	119790.00	1210.00	18.00		39,97,840.00
29.11	ASU-BC-AL-144		No's	28	139590.00	1410.00	18.00		46,58,640.00
30	Valve Junction Boxes of Stainless Steel including terminal blocks								
30.1	ASU-BC-SS-8		No's	6	28710.00	290.00	18.00		2,05,320.00
30.2	ASU-BC/EA(IC)-SS-13-4(57A)-EC2		No's	84	70290.00	710.00	18.00		70,37,520.00
30.3	ASU-BC/EA(IC)-SS-13-5(57A)-EC2	102.KK56.0.0.AP.TS.PR002	No's	12	71280.00	720.00	18.00		10,19,520.00
30.4	ASU-BC/EA(IC)-SS-24-4(57A)-EC2		No's	1570	123750.00	1250.00	18.00		23,15,75,000.00
30.5	ASU-BC/EA(IC)-SS-30-4(57A)-EC2		No's	6	141570.00	1430.00	18.00		10,12,440.00
31	Valve Junction Boxes of Aluminium including terminal blocks								
31.1	ASU-BC-AL-6		No's	16	19800.00	200.00	18.00		3,77,600.00
31.2	ASU-BC-AL-8		No's	4	24750.00	250.00	18.00		1,18,000.00
31.3	ASU-BC-AL-12		No's	14	30195.00	305.00	18.00		5,03,860.00
31.4	ASU-BC-AL-16		No's	2	39105.00	395.00	18.00		93,220.00
31.5	ASU-BC-AL-24		No's	2	40095.00	405.00	18.00		95,580.00
31.6	ASU-BC/EA-AL-13-4(57A)-EC2	102.KK56.0.0.AP.TS.PR003	No's	228	65340.00	660.00	18.00		1,77,56,640.00

Template Name : S1 - Supply of Field Instrumentation

M/s TEMA

S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units S&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance		
					B	C	D	E=A[(B+C)(1+D/100)]
31.7	ASU-BC/EA-AI-24+4(32A)-EC3		No's	12	80190.00	810.00	18.00	11,46,960.00
31.8	ASU-BC/EA-AI-24+4(32A)-LC-EC3		No's	64	91228.00	922.00	18.00	69,59,168.00
31.9	ASU-BC/EA-AI-24+4(57A)-EC2		No's	256	105930.00	1070.00	18.00	3,23,22,560.00
31.10	ASU-BC/EA-AI-30+4(32A)-LC-EC3		No's	10	110880.00	1120.00	18.00	13,21,600.00
31.11	ASU-BC/EA-AI-48+4(32A)-LC-EC3		No's	12	135135.00	1365.00	18.00	19,32,840.00
32	Valve Junction Boxes of Glass Reinforced Plastic including terminal blocks							
32.1	ASU-BC-PI-12		No's	2812	13365.00	135.00	18.00	4,47,95,160.00
32.2	ASU-BC/EA-PI-13+4(57A)-EC2		No's	72	27720.00	280.00	18.00	23,78,880.00
32.3	ASU-BC/EA-PI-24+4(32A)-EC2		No's	376	35640.00	360.00	18.00	1,59,72,480.00
32.4	ASU-BC-EA-PI-24+4(57A)-EC2		No's	3832	42075.00	425.00	18.00	19,21,74,800.00
32.5	ASU-BC/EA-PI-24+4(32A)-LC-EC3	102.KK56.0.0.AP.TS.PR004	No's	6	41580.00	420.00	18.00	2,97,360.00
32.6	ASU-BC/EA-PI-24+4(57A)-LC-EC2		No's	6	47025.00	475.00	18.00	3,36,300.00
32.7	ASU-BC/EA-PI-30+4(32A)-EC2		No's	232	39600.00	400.00	18.00	1,09,50,400.00
32.8	ASU-BC/EA-PI-30+4(32A)-LC-EC2		No's	16	44550.00	450.00	18.00	8,49,600.00
32.9	ASU-BC/EA-PI-30+4(57A)-EC2		No's	488	44550.00	450.00	18.00	2,59,12,800.00
33	Push Button Control Stations including terminal blocks							
33.1	PKU-1	102.KK56.0.0.ET.TS.PR088	No's	1000	16186.00	164.00	18.00	1,92,93,000.00
33.2	PKU-2		No's	128	8415.00	85.00	18.00	12,83,840.00
34	Compensating Junction Box (CJB)							
34.1	Compensating Junction Box (CJB)	102.KK56.0.0.AK.TS.PR024	No's	40	₹ 5,30,000.00	1000.00	18.00	2,50,63,200.00
35	Special Grounding Junction Boxes							
35.1	Type-1	102.KK56.0.0.ET.TS.PR128	No's	34	₹ 1,72,000.00	1000.00	18.00	69,40,760.00
35.2	Type-2		No's	20	₹ 1,35,000.00	1000.00	18.00	32,09,600.00
36	Local Control Panel							
36.1	Radiation resistant Wall Mounted LCP		No's	5	463320.00	4680.00	18.00	27,61,200.00
36.2	Non-Radiation resistant Wall mounted LCP	102.KK56.0.0.AT.TS.PR007	No's	87	₹ 524700.00	5300.00	18.00	5,44,09,800.00



Template Name : S1 - Supply of Field Instrumentation

M/s TEMA

S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance		
					B	C	D	E=A[(B+C)(1+D/100)]
36.3	Radiation resistant Floor mounted LCP	102.KK56.0.0.AK.TS.PR050	No's	18	189090.00	1910.00	18.00	40,56,840.00
36.4	Non-Radiation resistant Floor Mounted LCP		No's	142	1646370.00	16630.00	18.00	27,86,52,280.00
36.5	LCPs of BOP areas							
36.5.1	Local Control Panel (LCP) or	102.KK56.0.0.AK.TS.PR050	No's	52	668250.00	6750.00	18.00	4,14,18,000.00
36.5.2	Local Starter cum Control Panel (LSCP)		No's	147	22770.00	230.00	18.00	39,89,580.00
36.5.3	Local Push Button Station (LPBS)		No's	12	139590.00	1410.00	18.00	19,96,560.00
	Explosion Proof type Local Push Button Station (LPBS)							
37	Three-Valve Manifold							
37.1	SS Manifold with bellow seal	102.KK56.0.0.AK.TS.PR029	No's	1918	61380.00	620.00	18.00	14,03,20,880.00
37.2	SS Manifold with gland seal		No's	505	18810.00	190.00	18.00	1,13,22,100.00
37.3	Titanium Manifold with gland seal		No's	34	67320.00	680.00	18.00	27,28,160.00
43	Instrument Tube fittings							
43.1	Equal tee (Stainless Steel - 14mm)	102.KK56.0.0.AK.TS.PR039	No's	2700	1386.00	14.00	18.00	44,60,400.00
43.2	Equal tee (Stainless Steel - 18mm)		No's	100	1633.00	17.00	18.00	1,94,700.00
43.3	Nipple (14mm)		No's	2050	574.00	6.00	18.00	14,03,020.00
43.4	Coupling Nut		No's	1700	515.00	5.00	18.00	10,43,120.00
43.5	Copper gasket		No's	2000	228.00	2.00	18.00	5,42,800.00
43.6	Cap (14mm)		No's	1300	337.00	3.00	18.00	5,21,560.00
43.7	Cap (18mm)		No's	120	470.00	5.00	18.00	67,260.00
43.8	Reducer (16X14 mm)		No's	100	921.00	9.00	18.00	1,09,740.00
43.9	Reducer (18X14 mm)		No's	500	921.00	9.00	18.00	5,48,700.00
43.10	Reducer (32X14 mm)		No's	15	2475.00	25.00	18.00	44,250.00
43.11	Tube Gland (for 14mm OD tube)		No's	15000	1980.00	20.00	18.00	3,54,00,000.00
43.12	Tube Gland (for 18mm OD tube)		No's	1500	2475.00	25.00	18.00	44,25,000.00
43.13	Dummy Tube Gland		No's	2000	2475.00	25.00	18.00	59,00,000.00
43.14	Hose Nipple (18x2.5)		No's	250	990.00	10.00	18.00	2,95,000.00
43.15	Ring Pipe 14X2 mm		No's	30	4702.00	48.00	18.00	1,68,150.00
43.16	Nipple for 14X2 mm tube with coupling nut M20x1.5, steel		No's	5	3960.00	40.00	18.00	23,600.00
43.17	Plug		No's	11000	1485.00	15.00	18.00	1,94,70,000.00
44	CS-BOP (Items pertaining to tube/pipe connections)							
44.1	SS304L material							
44.1.1	1/2" NPT (F), Gate Valve, 150#		No's	446	20790.00	210.00	18.00	1,10,51,880.00

Template Name : S1 - Supply of Field Instrumentation

M/s TEMA

S.No.	Instrument name	Reference Specification	Unit of Measurement	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance	D	E=A[(B+C)(1+D/100)]
44.1.2	1/2" NPT (M) Nipple - 4" Long, 150#		No's	408	544.00	6.00	18.00	2,64,792.00
44.1.3	1/2" NPTF, 3 way Gauge cock with 1/2" NPT (F) Vent, 150#		No's	87	17176.00	174.00	18.00	17,81,151.00
44.1.4	Equal Tee 1/2" OD X 1/2" OD X 1/2" OD, 150#		No's	212	2722.00	28.00	18.00	6,87,940.00
44.1.5	Tee 1/2" NPTF X 1/2" NPTF X 1/2" NPTF, 150#		No's	69	1287.00	13.00	18.00	1,05,846.00
44.1.6	5 way manifold with 1/2" NPTF connection, 150#		No's	58	9232.00	93.00	18.00	6,38,203.00
44.1.7	1/2" M X 1/2" OD male DC connector, 150#		No's	860	693.00	7.00	18.00	7,10,360.00
44.1.8	1/2" OD X 0.065" WT Tubing		Mtr	1013	1930.00	20.00	18.00	23,30,913.00
44.1.9	3" Neoprene Gasket (Size DN-100)		No's	59	1609.00	16.00	18.00	1,13,132.50
44.1.10	Bolt & Nut, M16X90 mm Long		No's	392	445.00	5.00	18.00	2,08,132.00
44.1.11	Bolt & Nut, M10X50 mm Long		No's	116	297.00	3.00	18.00	41,064.00
44.1.12	Bolt & Nut, M16X60 mm Long		No's	40	445.00	5.00	18.00	21,240.00
44.1.13	Condensate Pot 1/2" NPT F WITH 1/2" NPT F Vent & Drain		No's	2	46530.00	470.00	18.00	1,10,920.00
44.1.14	1/2" OD Tube union		No's	63	1609.00	16.00	18.00	1,20,802.50
44.1.15	Snubber 1/2" NPT (F) X 1/2" NPT (M), 150#		No's	105	4059.00	41.00	18.00	5,07,990.00
44.1.16	1/2" NPTF X 1/2" NPTF, 3 way Gauge cock with 1/2" NPT (F) Vent, 150#		No's	43	17226.00	174.00	18.00	8,82,876.00
44.1.17	1/2" NPT (M) X 1/2" OD Compression, 150#		No's	236	693.00	7.00	18.00	1,94,936.00
44.1.18	1/2" NPTF Socket, 150#		No's	47	421.00	4.00	18.00	23,570.50
44.1.19	Elbow 1/2" NPTF, 150# (90 Degree Type)		No's	105	693.00	7.00	18.00	86,730.00
44.1.20	End cap 1/2" NPT (F), 150#		No's	122	297.00	3.00	18.00	43,188.00
44.1.21	End cap 1/2" NPT (M), 150#		No's	171	257.00	3.00	18.00	52,462.80
44.1.22	Vent 1/2" NPTF valve		No's	46	381.00	39.00	18.00	2,08,978.00
44.1.23	Flange: OD : 220mm , PCD: 180 mm, No. of Bolt Holes : 08 Nos, Flange Thickness: 10 mm, Bolt Hole Size : 18 mm, TMOC : SS304		No's	4	7128.00	72.00	18.00	33,984.00
44.1.24	1/2" M X 1/2" OD compression 150#		No's	626	668.00	7.00	18.00	4,98,609.00
44.1.25	BOLT & NUTS, M14 x55MM LONG		No's	20	594.00	6.00	18.00	14,160.00
44.1.26	BOLT & NUTS, M14 x70MM LONG		No's	40	619.00	6.00	18.00	29,500.00
44.1.27	BOLT & NUTS, M14 x75MM LONG		No's	4	619.00	6.00	18.00	2,950.00
44.1.28	1/2" SW X 1/2" NPT(M) Nipple - 4" Long, 150#		No's	9	544.00	6.00	18.00	5,841.00
44.1.29	1/2" NPT(M) X 1/2" NPT(F) Elbow, 150#		No's	16	668.00	7.00	18.00	12,744.00
44.1.30	1/2" NPT SW, Gate Valve, 150#		No's	9	20542.00	208.00	18.00	2,30,365.00
44.1.31	1/2" NPT F x 1/2" OD NPT M Connector, 150#		No's	34	718.00	7.00	18.00	29,087.00
44.1.32	2" Weld Neck RF FLANGE 300#		No's	2	10197.00	103.00	18.00	24,308.00
44.1.33	Drain Plug Material SS304 for 2" Weld Neck RF FLANGE 300#		No's	2	10197.00	103.00	18.00	24,308.00
44.1.34	1/2" NPTF x 1/2" NPTF, 2 vline manifold 1/4" NPTF drain with PLUG		No's	14	9177.00	93.00	18.00	1,53,140.40
44.1.35	1/2" NPTM NIPPLE, 100 MM, LG		No's	16	544.00	6.00	18.00	10,384.00

Template Name : SI - Supply of Field Instrumentation									
M/s TEMA									
S.No.	Instrument name	Reference Specification	Unit of Measurement	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCO TERMS 2020	
					Basic Price (inclusive of P&F charges)	Freight & Insurance		E=A[(B+C)(1+D/100)]	
44.1.36	M10X 100LG ANCHOR BOLTS		No's	16	1188.00	12.00	18.00	22,636.00	
44.1.37	15 NIB Union Female to Female, 3000#		No's	16	990.00	10.00	18.00	18,880.00	
44.2	SS316L material								
44.2.1	1/2" Gate Valve Socket Weld type		No's	16	25542.00	258.00	18.00	4,87,104.00	
44.2.2	1/2" NPT (M) Nipple - 4" Long, 150# (SCH40)		No's	8	678.00	7.00	18.00	6,466.40	
44.2.3	1/2" NPTF X 1/2" NPTM, 3 way Gauge cock with 1/2" NPT (F) Vent, 150#		No's	2	23463.00	237.00	18.00	55,932.00	
44.2.4	1/2" NPTF, 3 way Gauge cock with 1/2" NPT (F) Vent, 150#		No's	125	23463.00	237.00	18.00	34,95,750.00	
44.2.5	Double Compression Type TEE Connector		No's	6	20641.00	209.00	18.00	1,47,618.00	
44.2.6	Tee 1/2" OD X 1/2" OD X 1/2" OD, 150#		No's	29	11088.00	112.00	18.00	3,53,264.00	
44.2.7	5 way manifold with 1/2" NPTF connection, 150#		No's	127	812.00	8.00	18.00	1,22,885.20	
44.2.8	1/2" M X 1/2" OD male Double Compression connector, 150#		Mtr	570	2346.00	24.00	18.00	15,94,062.00	
44.2.9	1/2" OD X 0.065" WT Tubing		No's	22	1614.00	16.00	18.00	42,314.80	
44.2.10	3" Neoprene Gasket (Thickness 3", Size DN-100)		No's	116	574.00	6.00	18.00	79,390.40	
44.2.11	Bolt & Nut, M16X90 mm Long		No's	74	1930.00	20.00	18.00	1,70,274.00	
44.2.12	1/2" NPTF X 1/2" NPTF, 3 way Gauge cock with 1/2" NPT (F) Vent, 150#		No's	7	23463.00	237.00	18.00	1,95,762.00	
44.2.13	1/2" NPTM Adjustable compression fitting		No's	4	3648.00	37.00	18.00	17,393.20	
44.2.14	1/2" NPTF Thermowell (Extension Length 50mm, Immersion length 200mm)		No's	4	16162.00	163.00	18.00	77,054.00	
44.2.15	1/2" NPTF Socket, 150#		No's	9	683.00	7.00	18.00	7,327.80	
44.2.16	Elbow 1/2" NPTF, 150#		No's	7	812.00	8.00	18.00	6,773.20	
44.2.17	Snubber 1/2" NPT (F) X 1/2" NPT (M)		No's	32	5098.00	52.00	18.00	1,94,464.00	
44.2.18	1/2" NPTF Flow through assembly		No's	2	25839.00	261.00	18.00	61,596.00	
44.2.19	Pipe (2" SCH40, SMLS)		No's	9	13068.00	132.00	18.00	1,40,184.00	
44.2.20	Nipple (80mm long) Sizes 1/2" PL X PL & 1/2" PL X NPTM SCH40		No's	102	678.00	7.00	18.00	82,446.60	
44.2.21	Ball valve (Size 1/2"NPTF)		No's	93	20295.00	205.00	18.00	22,49,670.00	
44.2.22	Flange 1-1/2" X 150# RF		No's	9	9232.00	93.00	18.00	99,031.50	
44.2.23	Mounting Bracket		No's	18	9157.00	93.00	18.00	1,96,470.00	
44.2.24	Tube 1/2" OD X 0.065" WT		Mtr	370	2326.00	24.00	18.00	10,26,010.00	
44.2.25	1/2" NPTM X 1/2" OD (Male Connector)		No's	74	812.00	8.00	18.00	71,602.40	
44.2.26	Threaded flange 1/2" ANSI LB 150#		No's	6	18117.00	183.00	18.00	1,29,564.00	
44.2.27	1/2" NPTF X 1/2" NPTM, 3 way Gauge cock with 1/4" NPT (F) Vent with plug, 150#		No's	9	23463.00	237.00	18.00	2,51,694.00	

Template Name : S1 - Supply of Field Instrumentation

M/s TEMIA

S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance	D	E=A[(B+C)(1+D/100)]
44.2.28	5 way manifold with 1/2" NPTF connection, 150#	102.KK56.0.0.AK.TS.PR050	No's	12	11088.00	112.00	18.00	1,58,592.00
44.2.29	BEZEL Ring Type Socket 1/2" NPT SS316+PTFE		No's	6	17226.00	174.00	18.00	1,23,192.00
44.2.30	Ball valve 1/2"NPT		No's	12	20196.00	204.00	18.00	2,88,864.00
44.2.31	Adaptor 1/4" NPT(M) X 1/2" NPT (M)		No's	6	569.00	6.00	18.00	4,071.00
44.2.32	Conduit Support		No's	6	4678.00	47.00	18.00	33,453.00
44.2.33	PULLY PTFE bushed zinc plated SS 316L		No's	6	13266.00	134.00	18.00	94,872.00
44.2.34	Wire rope (multi strand) Ø 1.6		No's	2	12672.00	128.00	18.00	30,208.00
44.2.35	Cylindrical Float Ø73X240L		No's	2	23364.00	236.00	18.00	55,696.00
44.2.36	Stillwell 3"NB, Pipe 4000L		No's	2	608850.00	6150.00	18.00	14,51,400.00
44.2.37	Flange 4" NB ANSI B 16.5 150# RF		No's	2	25740.00	260.00	18.00	61,360.00
44.2.38	1/2" NPTF x 1/2" NPTM, 2 Valve Manifold with 1/2" NPTF VENT 150#M		No's	2	13860.00	140.00	18.00	33,040.00
44.2.39	Flange-3" ANSI 150# Flange SS316		No's	1	19800.00	200.00	18.00	23,600.00
44.2.40	ST BOLT 5/8X140 11UNC A193-B7 W/2 NUTS and washers		No's	4	6138.00	62.00	18.00	29,264.00
44.3	MONEL 400							
44.3.1	1/2" NPT (M) X 1/2" OD Compression, 150#		No's	14	12474.00	126.00	18.00	2,08,152.00
44.3.2	End cap 1/2" NPT (F), 150#		No's	3	5395.00	55.00	18.00	19,293.00
44.3.3	Equal Tee 1/2" OD X 1/2" OD X 1/2" OD, 150#		No's	3	71280.00	720.00	18.00	2,54,880.00
44.3.4	Tee 1/2" NPTF X 1/2"NPTF X 1/2" NPTF, 150#		No's	3	57420.00	580.00	18.00	2,05,320.00
44.3.5	1/2" NPT (M) Nipple - 4" Long, 150#		No's	5	16038.00	162.00	18.00	95,580.00
44.3.6	1/2" NPT (F), Gate Valve, 150#		No's	5	129195.00	1305.00	18.00	7,69,950.00
44.3.7	1/2" NPT(M) X 1/2" NPT(F) Elbow, 150#		No's	4	15048.00	152.00	18.00	71,744.00
44.3.8	1 1/2" Diaphragm Seal, 150#		No's	6	268290.00	2710.00	18.00	19,18,680.00
44.4	HastelloyC276							
44.4.1	1/2" NPT (M) Nipple - 4" Long, 150#		No's	24	20592.00	208.00	18.00	5,89,056.00
44.4.2	1/2" NPTF, 3 way Gauge cock with 1/2" NPT (F) Vent, 150#		No's	12	128700.00	1300.00	18.00	18,40,800.00
44.4.3	Snubber 1/2" NPT (F) X 1/2" NPT (M)		No's	6	118800.00	1200.00	18.00	8,49,600.00
44.4.4	Elbow 1/2" NPTF, 150#		No's	12	50985.00	515.00	18.00	7,29,240.00
44.4.5	Diaphragm Seal 3/8" BSP (F) X 1/2" NPT (M)		No's	12	33759.00	341.00	18.00	4,82,856.00
44.5	EPDM / Grafoil							
44.5.1	1-1/2" Gasket		No's	9	2277.00	23.00	18.00	24,426.00
44.5.2	2" Gasket		No's	12	2920.00	30.00	18.00	41,772.00

Template Name : SI - Supply of Field Instrumentation									
M/s TEMA									
S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020	
					Basic Price (inclusive of P&F charges)	Freight & Insurance	D	E=A[(B+C)(1+D/100)]	
44.5.3	3" Gasket		No's	4	3465.00	35.00	18.00	16,520.00	
44.5.4	4" Gasket		No's	11	4653.00	47.00	18.00	61,006.00	
44.5.5	Gasket-220 mm (OD)		No's	6	4653.00	47.00	18.00	33,276.00	
44.5.6	2" Gasket (Spiral wound + gasket)		No's	2	2623.00	27.00	18.00	6,254.00	
44.6	PTFE								
44.6.1	1" Gasket		No's	25	3366.00	34.00	18.00	1,00,300.00	
44.6.2	1.5 NB gasket		No's	4	2970.00	30.00	18.00	14,160.00	
44.7	ASTM A-193 GR B7 (Phosphated)								
44.7.1	Bolt & Nut, M16-60 mm Long		No's	64	668.00	7.00	18.00	50,976.00	
44.8	Carbon Steel (CS)								
44.8.1	2" Pipe		Mtr	147	5098.00	52.00	18.00	8,93,319.00	
44.8.2	1/2" NPTF HALF COUPLING Material Code SA105		No's	26	366.00	4.00	18.00	1,1351.60	
44.8.3	1.5 NB PIPE Material Code SA 106 GR.B (2 piece of length 0.5mtr each)		Mtr	1	1485.00	15.00	18.00	1,770.00	
44.8.4	1/2" Gate Valve Socket Welded , Material Code SA105		No's	28	4678.00	47.00	18.00	1,56,114.00	
44.8.5	ELBOW 1/2" SW#3000 Material SA105		No's	34	594.00	6.00	18.00	24,072.00	
44.8.6	1/2" NPTF full coupling, 3000# (SA105)		No's	2	465.00	5.00	18.00	1,109.20	
44.9	Mild Steem (MS)								
44.9.1	25X6 MM Flate		Mtr	53	916.00	9.00	18.00	57,849.50	
44.9.2	150X150X12 mm Plate		No's	188	1831.00	19.00	18.00	4,10,404.00	
44.9.3	100 X 10 mm Anchor bolts		No's	24	465.00	5.00	18.00	13,310.40	
44.9.4	MS Union		No's	4	1237.00	13.00	18.00	5,900.00	
44.9.5	Pipe		Mtr	2	5098.00	52.00	18.00	12,154.00	
44.10	PVDF								
44.10.1	Vent, 1/2" BSP Valve		No's	12	26532.00	268.00	18.00	3,79,488.00	
44.10.2									
44.10.3	SDSS								
44.10.4	1/2" M X 1/2" OD male Double Compression connector, 150#		No's	16	10345.00	105.00	18.00	1,97,296.00	
44.10.5	1/2" OD X 0.065" WT Tubing		Mtr	20	33858.00	342.00	18.00	8,07,120.00	

Template Name : S1 - Supply of Field Instrumentation									
M/s TEMA									
S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020	
					Basic Price (inclusive of P&F charges)	Freight & Insurance			
					B	C	D	E=A[(B+C)(1+D/100)]	
44.10.6	15 NB threaded flange (thickness to be selected as per the pressure ratings mentioned in Technical Specification.)		No's	16	25542.00	258.00	18.00	4,87,104.00	
44.11	GI								
44.11.1	1/2" C type clamp		No's	16	2475.00	25.00	18.00	47,200.00	
44.11.2	Pipe 20NB GI (thickness to be selected as per the pressure ratings mentioned in Technical Specification.)		Mtr	2	2475.00	25.00	18.00	5,900.00	
44.12	Stanchion								
44.12.1	Stanchion for single instrument		No's	66	21087.00	213.00	18.00	16,58,844.00	
44.12.2	Stanchion for double instrument		No's	26	35145.00	355.00	18.00	10,89,140.00	
45	Instrument Tube fittings (Titanium)								
45.1	Equal Tee		No's	180	15073.00	152.00	18.00	32,33,790.00	
45.2	Nipple with Coupling Nut and Gasket		No's	120	17325.00	175.00	18.00	24,78,000.00	
45.3	Cap		No's	100	832.00	8.00	18.00	99,120.00	
45.4	Plug		No's	100	9157.00	93.00	18.00	10,91,500.00	
45.5	Reducer for valve (external thread) Titanium alloy		No's	230	13018.00	132.00	18.00	35,68,910.00	
45.6	Reducer for gauge (internal thread) Titanium alloy	102.KK56.0.0.AK.TS.PR040	No's	80	13018.00	132.00	18.00	12,41,360.00	
45.7	Bend 90 degrees		No's	650	7920.00	80.00	18.00	61,36,000.00	
45.8	Bend 90 degrees for 32x2		No's	72	22275.00	225.00	18.00	19,11,600.00	
45.9	Bend 45 degrees for 32x2		No's	24	19305.00	195.00	18.00	5,52,240.00	
46	Levelling/Seperation vessel								
46.1	Levelling/Seperation vessel	102.KK56.0.0.AK.TS.PR041	No's	250	33858.00	342.00	18.00	1,00,89,000.00	
47	Composite Insert								
47.1	Composite insert		No's	2600	4752.00	48.00	18.00	1,47,26,400.00	
47.2	Reducer type composite insert 16x2mm/ 14x2mm	102.KK56.0.0.AK.TS.PR042	No's	600	4752.00	48.00	18.00	33,98,400.00	

Template Name : S1 - Supply of Field Instrumentation									
M/s TEMA									
S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020	
					Basic Price (inclusive of P&F charges)	Freight & Insurance		E=A[(B+C)(1+D/100)]	
47.3	Reducer type composite Insert 18x2mm/ 18x2.5mm		No's	200	12375.00		18.00	29,50,000.00	
56	Temperature transmitter								
56.1	Temperature transmitter	102.KK56.0.0.AK.TS.PR050	No's	42	57915.00	585.00	18.00	28,99,260.00	
62	Instrumentation Tubing								
62.1	SS 321 Austenitic Stainless Tubing of Size 14X2 mm		Mtr	175000	792.00	8.00	18.00	16,52,00,000.00	
62.2	SS 321 Austenitic Stainless Tubing of Size 18X2.5 mm	102.KK56.0.0.AK.TS.PR045	Mtr	7500	1089.00	11.00	18.00	97,35,000.00	
62.3	Titanium tube 14X2 mm		Mtr	3200	9325.00	100.00	18.00	3,55,88,800.00	
62.4	Titanium Tube, 32x2mm	102.KK56.0.0.AK.TS.PR046	Mtr	250	12375.00	125.00	18.00	36,87,500.00	
62.5	Carbon steel 14X1.6 mm		Mtr	25	2574.00	26.00	18.00	76,700.00	
62.6	Carbon steel 8X2.8 mm	102.KK56.0.0.AK.TS.PR052	Mtr	10	2574.00	26.00	18.00	30,680.00	
63	Instrument Support Stands (including spares)								
63.01	St(PI)-D-2-L-ASS-IIa-BV-F		No.'s	380	663300.00	6700.00	18.00	30,04,28,000.00	
63.02	St(PI)-D-2-L-ASS-IIa-BV-F		No.'s	317	663300.00	6700.00	18.00	25,06,20,200.00	
63.03	St(PI)-D-2-L-ASS-IIc-BV-F		No.'s	25	663300.00	6700.00	18.00	1,97,65,000.00	
63.04	St(PI)-D-2-L-ASS-IIa-GV-F		No.'s	103	346500.00	3500.00	18.00	4,25,39,000.00	
63.05	St(PI)-D-2-L-ASS-IIa-GV-F		No.'s	373	346500.00	3500.00	18.00	15,40,49,000.00	
63.06	St(PI)-D-2-L-ASS-IIc-GV-F		No.'s	98	346500.00	3500.00	18.00	4,04,74,000.00	
63.07	St(PI)-D-1-L-ASS-IIa-BV-F		No.'s	43	386100.00	3900.00	18.00	1,97,88,600.00	
63.08	St(PI)-D-1-L-ASS-IIc-BV-F		No.'s	3	386100.00	3900.00	18.00	13,80,600.00	
63.09	St(PI)-D-1-L-ASS-IIa-BV-F		No.'s	36	386100.00	3900.00	18.00	1,65,67,200.00	
63.10	St(PI)-M-2-U-ASS-IIa-BV-F		No.'s	348	500000.00	5300.00	18.00	20,74,96,392.00	
63.11	St(PI)-M-2-U-ASS-IIa-BV-F		No.'s	231	500000.00	5300.00	18.00	13,77,34,674.00	
63.12	St(PI)-M-2-U-ASS-IIc-BV-F		No.'s	22	500000.00	5300.00	18.00	1,31,17,588.00	
63.13	St(PI)-M-2-U-ASS-IIa-GV-F		No.'s	42	255000.00	2800.00	18.00	1,27,76,568.00	
63.14	St(PI)-M-2-U-ASS-IIa-GV-F		No.'s	315	255000.00	2800.00	18.00	9,58,24,260.00	
63.15	St(PI)-M-2-U-ASS-IIc-GV-F		No.'s	126	255000.00	2800.00	18.00	3,83,29,704.00	
63.16	St(PI)-M-2-LF-ASS-IIc-BV-F		No.'s	26	500000.00	5150.00	18.00	1,54,98,002.00	

Template Name : S1 - Supply of Field Instrumentation									
M/s TEMA									
S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020	
					Basic Price (inclusive of P&F charges)	Freight & Insurance			
63.17	St(PI)-M-1-U-ASS-IIIa-BV-F	102.KK56.0.0.AK.TS.PR047	No.'s	117	300000.00	3300.00	18.00	E=A[(B+C)(1+D/100)]	
63.18	St(PI)-M-1-U-ASS-IIIc-BV-F		No.'s	3	300000.00	3000.00	18.00	4,18,73,598.00	
63.19	St(PI)-M-1-L-F-ASS-IIIc-BV-F		No.'s	28	300000.00	3000.00	18.00	10,72,620.00	
63.20	St(PI)-M-2-L-ASS-IIIa-BV-F		No.'s	30	500000.00	5000.00	18.00	1,00,11,120.00	
63.21	St(PI)-M-2-L-ASS-IIIa-BV-F		No.'s	48	500000.00	5000.00	18.00	1,78,77,000.00	
63.22	St(PI)-M-2-L-ASS-IIIc-BV-F		No.'s	5	500000.00	5000.00	18.00	2,86,03,200.00	
63.23	St(PI)-M-2-L-ASS-IIIa-GV-F		No.'s	28	277200.00	2800.00	18.00	29,79,500.00	
63.24	St(PI)-M-2-L-ASS-IIIa-GV-F		No.'s	9	277200.00	2800.00	18.00	92,51,200.00	
63.25	St(PI)-M-2-L-ASS-IIIc-GV-F		No.'s	8	277200.00	2800.00	18.00	29,73,600.00	
63.26	St(PI)-M-1-L-ASS-IIIa-BV-F		No.'s	17	321750.00	3250.00	18.00	26,43,200.00	
63.27	St(PI)-M-1-L-ASS-IIIc-BV-F		No.'s	2	321750.00	3250.00	18.00	65,19,500.00	
63.28	St(PI)-D-2-L-Ti-IIIc-BLV-F		No.'s	18	1108800.00	11200.00	18.00	7,67,000.00	
63.29	St(PI)-D-1-L-Ti-IIIc-BLV-F		No.'s	12	653400.00	6600.00	18.00	2,37,88,800.00	
63.30	St(PI)-M-2-U-Ti-IIIc-BLV-F		No.'s	26	821700.00	8300.00	18.00	93,45,600.00	
63.31	St(PI)-M-2-U-Ti-IIIc-BLV-F		No.'s	20	821700.00	8300.00	18.00	2,54,64,400.00	
63.32	St(PI)-M-2-U-Ti-IIIc-BLV-F		No.'s	20	821700.00	8300.00	18.00	1,95,88,000.00	
63.33	St(PI)-M-1-U-Ti-IIIc-BLV-F		No.'s	10	495000.00	5000.00	18.00	1,95,88,000.00	
63.34	Type A-1		No.'s	20	821700.00	8300.00	18.00	59,00,000.00	
63.35	Type A-2		No.'s	62	495000.00	5000.00	18.00	1,95,88,000.00	
63.36	Type A-3		No.'s	1	821700.00	8300.00	18.00	1,95,88,000.00	
63.37	Type A-4		No.'s	1	495000.00	5000.00	18.00	3,65,80,000.00	
Total (In INR)							18.00	9,79,400.00	
								5,90,000.00	
								5,23,14,45,694.90	



(Pankaj Trivedi)
General Manager, CMM
For & on behalf of Nuclear Power Corporation of India Limited
(The Purchaser)



Template Name : Mandatory Spares of SI supply (Field Instrumentation)									
M/s TEMA									
S.No.	Instrument name	Reference Specification	Unit of Measure	Mandatory Spares for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020	
					Basic Price (inclusive of P&F charges)	Freight & Insurance			
					B	C	D	E=A[(B+C)(1+D/100)]	
FIELD INSTRUMENTATION									
16	Instrument Isolation Valves - Gland valve								
16.1	Instrument Isolation Valves - Gland valve of size 14X2mm	102.KK56.0.0.AK.TS.PR036	No's	539	9652.00		18.00	62,01,195.00	
17	Instrument Isolation Valves - Bellow seal valve								
17.1	Instrument Isolation Valves - Bellow seal valve of size 14X2mm	102.KK56.0.0.AK.TS.PR037	No's	678	30145.00	305.00	18.00	2,43,61,218.00	
18	Instrument valve- Ball type (Titanium)								
18.1	Instrument Isolation Valves - Ball valve of size 14X2mm	102.KK56.0.0.AK.TS.PR038	No's	58	35640.00	360.00	18.00	24,63,840.00	
19	Instrument valve-SS Ball type (for RMS)								
19.1	Instrument Isolation Valves - Ball valve of size 18X2.5mm	102.KK56.0.0.AK.TS.PR049	No's	24	20335.00	205.00	18.00	5,81,692.80	
20	Instrument Isolation Valves (3 WAY VALVE)								
20.1	Three way valve DN15 Bronze	102.KK56.0.0.AK.TS.PR051	No's	11	23760.00	240.00	18.00	3,11,520.00	
21	HRE Pressure Transmitters (including cost of connector, nipple, nut, and adaptor with applicable transmitter types)								
21.1	Excess (Gauge) Pressure Transmitters								
21.1.1	Excess (Gauge) Pressure Transmitters		No's	6	440550.00	4450.00	18.00	31,50,600.00	
21.2	Differential Pressure Transmitters	102.KK56.0.0.AK.TS.PR025	No's						

Template Name : Mandatory Spares of SI supply (Field Instrumentation)

M/s TEMA

S.No.	Instrument name	Reference Specification	Unit of Measure	Mandatory Spares for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance		
					B	C	D	E=A[(B+C)(1+D/100)]
21.2.1	Differential Pressure Transmitters		No's	4	455400.00	4600.00	18.00	21,71,200.00
22	MRE Pressure Transmitters (including cost of connector, nipple, nut, and adaptor with applicable transmitter types)							
22.1	Excess (Gauge) Pressure Transmitters							
22.1.1	Excess (Gauge) Pressure Transmitters (Safety class 2 and 3)		No's	138	269280.00	2720.00	18.00	4,42,92,480.00
22.1.2	Excess (Gauge) Pressure Transmitters (Safety class 4)		No's	31	269280.00	2720.00	18.00	99,49,760.00
22.2	Vacuum (Negative) Pressure Transmitters and Vacuum and Excessive (negative and positive) pressure Transmitters							
22.2.1	Vacuum (Negative) Pressure Transmitters (Safety class 2 and 3)		No's	2	239580.00	2420.00	18.00	5,71,120.00
22.2.2	Vacuum and Excessive (negative and positive) pressure transmitters (Safety class 2 and 3)	102.KK56.0.0.AK.TS.PR026	No's	15	239580.00	2420.00	18.00	42,83,400.00
22.2.3	Vacuum and Excessive (negative and positive) pressure transmitters (Safety class 4)		No's	1	239580.00	2420.00	18.00	2,85,560.00
22.3	Differential Pressure Transmitters							
22.3.1	Differential Pressure Transmitters (Safety class 2 and 3)		No's	176	259380.00	2620.00	18.00	5,44,12,160.00
22.3.2	Differential Pressure Transmitters (Safety class 4)		No's	15	259380.00	2620.00	18.00	46,37,400.00
23	Pressure Transmitter - NRE-Normal Application (including cost of connector, nipple, nut, and adaptor with applicable transmitter types)							
23.1	Absolute Pressure Transmitters and Excess (gauge) Pressure Transmitters							
23.1.1	Absolute Pressure Transmitters (Safety class 2 and 3)		No's	7	182160.00	1840.00	18.00	15,19,840.00
23.1.2	Excess (gauge) Pressure Transmitters (Safety class 2 and 3)		No's	56	182160.00	1840.00	18.00	1,21,58,720.00
23.1.3	Excess (gauge) Pressure Transmitters (Safety class 4)		No's	62	85000.00	750.00	18.00	62,73,470.00

Template Name : Mandatory Spares of S1 supply (Field Instrumentation)

M/s TEMA

S.No.	Instrument name	Reference Specification	Unit of Measure	Mandatory Spares for KKNPP Units 5&6 (A)	Rate Excluding GST Basic Price (inclusive of P&F charges)	Freight & Insurance	GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					B	C	D	E=A[(B+C)(1+D/100)]
23.1.4	Absolute Pressure Transmitters (Safety class 4)	102.KK56.0.0.AK.TS.PR027	No's	1	163350.00	1650.00	18.00	1,94,700.00
23.2	Vacuum (Negative) Pressure Transmitters and Vacuum and excess (negative and positive) Pressure transmitters							
23.2.1	Vacuum (Negative) Pressure Transmitters (Safety class 2 and 3)		No's	1	146520.00	1480.00	18.00	1,74,640.00
23.2.2	Vacuum (Negative) Pressure Transmitters (Safety class 4)		No's	3	88011.00	889.00	18.00	3,14,706.00
23.2.3	Vacuum and excess (negative and positive) Pressure transmitters (Safety class 4)		No's	1	88011.00	889.00	18.00	1,04,902.00
23.3	Differential Pressure Transmitters							
23.3.1	Differential Pressure Transmitters (Safety class 2 and 3)		No's	40	160380.00	1620.00	18.00	76,46,400.00
23.3.2	Differential Pressure Transmitters (Safety class 4)		No's	23	95000.00	500.00	18.00	25,91,870.00
24	Pressure Transmitter - NRE-Sea Water (including cost of connector, nipple, nut, and adaptor with applicable transmitter types)							
24.1	Excess (gauge) Pressure Transmitters							
24.1.1	Excess (gauge) Pressure Transmitters (Safety class 2 and 3)		No's	2	204435.00	2065.00	18.00	4,87,340.00
24.1.2	Excess (gauge) Pressure Transmitters (Safety class 4)		No's	4	130000.00	500.00	18.00	6,15,960.00
24.2	Vacuum (Negative) Pressure Transmitters	102.KK56.0.0.AK.TS.PR028						
24.2.1	Vacuum (Negative) Pressure Transmitters (Safety class 2 and 3)		No's	7	175000.00	750.00	18.00	14,31,695.00
24.3	Differential Pressure Transmitters							
24.3.1	Differential Pressure Transmitters (Safety class 2 and 3)		No's	1	217800.00	2200.00	18.00	2,59,600.00
24.3.2	Differential Pressure Transmitters (Safety class 4)		No's	4	135000.00	750.00	18.00	6,40,740.00
25	Spares components for Pressure Transmitters (applicable for items Sr.no. 21, 22, 23, 24)							
25.1	Connector		No's	500	2475.00	25.00	18.00	14,75,000.00
25.2	Adapter, Nipple And Nut SS-321	Refer respective technical specification of pressure transmitters	No's	150	2673.00	27.00	18.00	4,77,900.00
25.3	Adapter,Nipple And Nut Ti		No's	50	12870.00	130.00	18.00	7,67,000.00
25.4	Process connection Sealing Gaskets		No's	1000	198.00	2.00	18.00	2,36,000.00
28	Instrument Junction Boxes of Stainless Steel							
28.1	ASU-BC-SS-8		No's	2	23364.00	236.00	18.00	55,696.00
28.2	ASU-BC-SS-12		No's	1	27918.00	282.00	18.00	33,276.00
28.3	ASU-BC-SS-16		No's	1	34650.00	350.00	18.00	41,300.00
28.4	ASU-BC-SS-24		No's	2	43065.00	435.00	18.00	1,02,600.00

Template Name : Mandatory Spares of SI supply (Field Instrumentation)

M/s TEMA

S.No.	Instrument name	Reference Specification	Unit of Measure	Mandatory Spares for KKNPP Units 5&6 (A)	Rate Excluding GST			GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (Inclusive of P&F charges)	Freight & Insurance			
						B	C		
28.5	ASU-BC-SS-32	102.KK56.0.0.AK.TS.PR018	No's	1	51480.00	520.00	18.00	61,360.00	
28.6	ASU-BC-SS-48		No's	1	66330.00	670.00	18.00	79,160.00	
28.7	ASU-BC-SS-64		No's	1	148500.00	1500.00	18.00	1,77,400.00	
28.8	ASU-BC-SS-96		No's	1	123750.00	1250.00	18.00	1,47,500.00	
28.9	ASU-BC-SS-128		No's	1	142560.00	1440.00	18.00	1,69,920.00	
28.10	ASU-BC-SS-144		No's	1	161370.00	1630.00	18.00	1,92,340.00	
28.11	ASU-BC-SS-192		No's	1	233640.00	2360.00	18.00	2,78,480.00	
28.12	ASU-BC(IC)-SS-12		No's	1	44550.00	450.00	18.00	53,100.00	
28.13	ASU-BC(IC)-SS-16		No's	1	51084.00	516.00	18.00	60,888.00	
28.14	ASU-BC(IC)-SS-24		No's	1	61380.00	620.00	18.00	73,160.00	
28.15	ASU-BC(IC)-SS-32	102.KK56.0.0.AK.TS.PR019	No's	1	75240.00	760.00	18.00	89,680.00	
28.16	ASU-BC(IC)-SS-48		No's	1	94050.00	950.00	18.00	1,12,100.00	
28.17	ASU-BC(IC)-SS-64		No's	1	130680.00	1320.00	18.00	1,55,760.00	
28.18	ASU-BC(IC)-SS-128		No's	1	191070.00	1930.00	18.00	2,27,740.00	
29	Junction Boxes of CS-BOP								
29.1	ASU-BC-AL-15	102.KK56.0.0.AK.TS.PR019	No's	2	25740.00	260.00	18.00	61,360.00	
29.2	ASU-BC-AL-24		No's	4	33660.00	340.00	18.00	1,60,480.00	
29.3	ASU-BC-AL-30		No's	1	36135.00	365.00	18.00	43,070.00	
29.4	ASU-BC-AL-34		No's	1	38115.00	385.00	18.00	45,430.00	
29.5	ASU-BC-AL-48		No's	4	51975.00	525.00	18.00	2,47,800.00	
29.6	ASU-BC-AL-50		No's	4	53212.00	538.00	18.00	2,53,700.00	
30	Instrument Junction Boxes of Aluminium								
30.1	ASU-BC-AL-6	102.KK56.0.0.AK.TS.PR019	No's	1	15493.00	157.00	18.00	18,467.00	
30.2	ASU-BC-AL-8		No's	9	17820.00	180.00	18.00	1,91,160.00	
30.3	ASU-BC-AL-12		No's	3	21780.00	220.00	18.00	77,880.00	
30.4	ASU-BC-AL-16		No's	3	26235.00	265.00	18.00	93,810.00	
30.5	ASU-BC-AL-24		No's	4	33660.00	340.00	18.00	1,60,480.00	
30.6	ASU-BC-AL-32		No's	2	37125.00	375.00	18.00	88,500.00	
30.7	ASU-BC-AL-48		No's	2	51975.00	525.00	18.00	1,23,900.00	
30.8	ASU-BC-AL-64		No's	2	62370.00	630.00	18.00	1,48,680.00	
30.9	ASU-BC-AL-96		No's	1	86130.00	870.00	18.00	1,02,660.00	
30.10	ASU-BC-AL-128		No's	1	119790.00	1210.00	18.00	1,42,780.00	
30.11	ASU-BC-AL-144		No's	1	139590.00	1410.00	18.00	1,66,380.00	



Template Name : Mandatory Spares of SI supply (Field Instrumentation)

M/s TEMA

S.No.	Instrument name	Reference Specification	Unit of Measure	Mandatory Spares for KKNPP Units 5&6 (A)	Rate Excluding GST			GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	B	C	D	E=A[(B+C)(1+D/100)]
31 Valve Junction Boxes of Stainless Steel									
31.1	ASU-BC-SS-8	102.KK56.0.0.AP.TS.PR002	No's	1	28710.00		290.00	18.00	34,230.00
31.2	ASU-BC/EA(IC)-SS-13+4(57A)-EC2		No's	2	70290.00		710.00	18.00	1,67,560.00
31.3	ASU-BC/EA(IC)-SS-13+5(57A)-EC2		No's	1	71280.00		720.00	18.00	84,960.00
31.4	ASU-BC/EA(IC)-SS-24+4(57A)-EC2		No's	32	123750.00		1250.00	18.00	47,20,000.00
31.5	ASU-BC/EA(IC)-SS-30+4(57A)-EC2		No's	1	141570.00		1430.00	18.00	1,68,740.00
32 Valve Junction Boxes of Aluminium									
32.1	ASU-BC-AL-6	102.KK56.0.0.AP.TS.PR003	No's	1	19800.00		200.00	18.00	23,600.00
32.2	ASU-BC-AL-8		No's	1	24750.00		250.00	18.00	29,500.00
32.3	ASU-BC-AL-12		No's	1	30195.00		305.00	18.00	35,990.00
32.4	ASU-BC-AL-16		No's	1	39105.00		395.00	18.00	46,610.00
32.5	ASU-BC-AL-24		No's	1	40995.00		405.00	18.00	47,790.00
32.6	ASU-BC/EA-AL-13+4(57A)-EC2		No's	5	65340.00		660.00	18.00	3,89,400.00
32.7	ASU-BC/EA-AL-24+4(32A)-EC3		No's	1	80190.00		810.00	18.00	95,580.00
32.8	ASU-BC/EA-AL-24+4(32A)-LC-EC3		No's	2	91228.00		922.00	18.00	2,17,474.00
32.9	ASU-BC/EA-AL-24+4(57A)-EC2		No's	6	105930.00		1070.00	18.00	7,57,560.00
32.10	ASU-BC/EA-AL-30+4(32A)-LC-EC3		No's	1	110880.00		1120.00	18.00	1,32,160.00
32.11	ASU-BC/EA-AL-48+4(32A)-LC-EC3		No's	1	135135.00		1365.00	18.00	1,61,070.00
33 Valve Junction Boxes of Glass Reinforced Plastic									
33.1	ASU-BC-PL-12	102.KK56.0.0.AP.TS.PR004	No's	57	13365.00		135.00	18.00	9,08,010.00
33.2	ASU-BC/EA-PL-13+4(57A)-EC2		No's	2	27720.00		280.00	18.00	66,080.00
33.3	ASU-BC/EA-PL-24+4(32A)-EC2		No's	8	35640.00		360.00	18.00	3,39,840.00
33.4	ASU-BC-EA-PL-24+4(57A)-EC2		No's	77	42075.00		425.00	18.00	38,61,550.00
33.5	ASU-BC/EA-PL-24+4(32A)-LC-EC3		No's	1	41580.00		420.00	18.00	49,560.00
33.6	ASU-BC/EA-PL-24+4(57A)-LC-EC2		No's	1	47025.00		475.00	18.00	56,050.00
33.7	ASU-BC/EA-PL-30+4(32A)-EC2		No's	5	39600.00		400.00	18.00	2,36,000.00
33.8	ASU-BC/EA-PL-30+4(32A)-LC-EC2		No's	1	44550.00		450.00	18.00	53,100.00
33.9	ASU-BC/EA-PL-30+4(57A)-EC2		No's	10	44550.00		450.00	18.00	5,31,000.00
34 Push Button Control Stations									
34.1	PKU-1	102.KK56.0.0.ET.TS.PR088	No's	20	16186.00		164.00	18.00	3,85,860.00
34.2	PKU-2		No's	3	8415.00		85.00	18.00	30,090.00
35	Terminal Blocks (Spares are included at Sr.No.36 below)								

Template Name : Mandatory Spares of SI supply (Field Instrumentation)									
M/s TEMA									
S.No.	Instrument name	Reference Specification	Unit of Measure	Mandatory Spares for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020	
					Basic Price (inclusive of P&F charges)	Freight & Insurance		E= A[(B+C)(1+D/100)]	
36	Spare components for Junction Box (25 no. of Cable Glands of each type & 25 No. of Compensating Element and 100 no. of Terminal Blocks and accessories of each type) as per Technical Specification	Refer Technical specification of respective Junction Boxes	Set	1	1514700.00	15300.00	18.00	18,05,400.00	
37	Compensating Junction Box (CJB)								
37.1	Compensating Junction Box (CJB)	102.KK56.0.0.AK.TS.PR024	No's	4	530000.00	1000.00	18.00	25,06,320.00	
38	Special Grounding Junction Boxes								
38.1	Type-1	102.KK56.0.0.ET.TS.PR128	No's	4	172000.00	1000.00	18.00	8,16,560.00	
38.2	Type-2		No's	2	135000.00	1000.00	18.00	3,20,960.00	
39	Local Control Panel								
39.1	LCPs of BOP areas								
39.2	Local Push Button Station (LPBS)		No's	3	22770.00	230.00	18.00	81,420.00	
39.3	Explosion Proof type Local Push Button Station (LPBS)		No's	1	139590.00	1410.00	18.00	1,66,380.00	
40	Spare for Internal components of LCPs/LSPs under line item 36 (36.1 to 36.4) & 36.5.1 of schedule SI (1% of Overall LCP internal BOM or minimum 2, whichever is higher).	102.KK56.0.0.AK.TS.PR050	set	1	7425000.00	75000.00	18.00	88,50,000.00	
40.1	Three-Valve Manifold								
40.2	SS Manifold with bellow seal		No's	96	61380.00	620.00	18.00	70,23,360.00	
40.3	SS Manifold with gland seal	102.KK56.0.0.AK.TS.PR029	No's	24	18810.00	190.00	18.00	5,38,080.00	
46	Titanium Manifold with gland seal		No's	5	67320.00	680.00	18.00	4,01,200.00	
46.1	Instrument Tube fittings								
46.2	Equal tee (Stainless Steel - 14mm)		No's	270	1386.00	14.00	18.00	4,46,040.00	
46.3	Equal tee (Stainless Steel - 18mm)		No's	10	1633.00	17.00	18.00	19,470.00	
46.4	Nipple (14mm)		No's	205	574.00	6.00	18.00	1,40,302.00	
46.5	Coupling Nut		No's	170	515.00	5.00	18.00	1,04,312.00	
46.6	Copper gasket		No's	200	228.00	2.00	18.00	54,280.00	
46.7	Cap (14mm)		No's	130	337.00	3.00	18.00	52,156.00	
46.7	Cap (18mm)		No's	12	470.00	5.00	18.00	6,726.00	

Template Name : Mandatory Spares of SI supply (Field Instrumentation)

S.No.	Instrument name	Reference Specification	Unit of Measure	Mandatory Spares for KKNPP Units 5&6 (A)	Rate Excluding GST			GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance	C		
46.8	Reducer (16X14 mm)	102.KK56.0.0.AK.TS.PR039 M/s TEMA	No's	10	921.00		9.00	18.00	E=A][(B+C)(1+D/100)]
46.9	Reducer (18X14 mm)		No's	50	921.00		9.00	18.00	10,974.00
46.10	Reducer (32X14 mm)		No's	2	2475.00		25.00	18.00	54,870.00
46.11	Tube Gland (for 14mm OD tube)		No's	1500	1980.00		20.00	18.00	5,900.00
46.12	Tube Gland (for 18mm OD tube)		No's	150	2475.00		25.00	18.00	35,400.00
46.13	Dummy Tube Gland		No's	200	2475.00		25.00	18.00	4,42,500.00
46.14	Hose Nipple (18x2.5)		No's	25	990.00		10.00	18.00	5,90,000.00
46.15	Ring Pipe 14X2 mm		No's	3	4702.00		48.00	18.00	29,500.00
46.16	Nipple for 14X2 mm tube with coupling nut M20x1.5, steel		No's	1	3960.00		40.00	18.00	16,815.00
46.17	Plug		No's	1100	1485.00		15.00	18.00	4,720.00
47	CS-BOP Tube fittings								19,47,000.00
47.1	SS304L material								
47.1.1	1/2" NPT (F), Gate Valve, 150#		No's	45	20790.00		210.00	18.00	11,15,100.00
47.1.2	1/2" NPT (M) Nipple - 4" Long, 150#		No's	41	544.00		6.00	18.00	26,609.00
47.1.3	1/2" NPTF, 3 way Gauge cock with 1/2" NPT (F) Vent, 150#		No's	9	17176.00		174.00	18.00	1,84,257.00
47.1.4	Equal Tee 1/2" OD X 1/2" OD X 1/2" OD, 150#		No's	22	2722.00		28.00	18.00	71,390.00
47.1.5	Tee 1/2" NPTF X 1/2" NPTF X 1/2" NPTF, 150#		No's	7	1287.00		13.00	18.00	10,738.00
47.1.6	5 way manifold with 1/2" NPTF connection, 150#		No's	6	9232.00		93.00	18.00	66,021.00
47.1.7	1/2" M X 1/2" OD male DC connector, 150#		No's	86	693.00		7.00	18.00	71,036.00
47.1.8	1/2" OD X 0.065" WT Tubing		Mtr	102	1930.00		20.00	18.00	2,34,702.00
47.1.9	3" Neoprene Gasket (Size DN-100)		No's	6	1609.00		16.00	18.00	11,505.00
47.1.10	Bolt & Nut, M16X90 mm Long		No's	40	445.00		5.00	18.00	21,240.00
47.1.11	Bolt & Nut, M10X50 mm Long		No's	12	297.00		3.00	18.00	4,248.00
47.1.12	Bolt & Nut, M16X60 mm Long		No's	4	445.00		5.00	18.00	2,124.00
47.1.13	Condensate Pot		No's	1	46530.00		470.00	18.00	55,460.00
47.1.14	1/2" NPT F WITH 1/2" NPT F Vent & Drain		No's	7	1609.00		16.00	18.00	13,422.50
47.1.15	1/2" OD Tube union		No's	11	4059.00		41.00	18.00	53,218.00
47.1.16	Snubber 1/2" NPT (F) X 1/2" NPT (M), 150#		No's	5	17226.00		174.00	18.00	1,02,660.00
47.1.17	1/2" NPTF X 1/2" NPTF, 3 way Gauge cock with 1/2" NPT (F) Vent, 150#		No's	24	693.00		7.00	18.00	19,824.00
47.1.18	1/2" NPT (M) X 1/2" OD Compression, 150#		No's	5	421.00		4.00	18.00	2,507.50
47.1.19	1/2" NPTF Socket, 150#		No's	11	693.00		7.00	18.00	9,086.00
47.1.20	Elbow 1/2" NPTF, 150# (90 Degree Type)		No's	13	297.00		3.00	18.00	4,602.00
47.1.21	End cap 1/2" NPT (F), 150#		No's	18	257.00		3.00	18.00	5,522.40
47.1.21	End cap 1/2" NPT (M), 150#		No's						

Template Name : Mandatory Spares of SI supply (Field Instrumentation)

M/s TEMA

S.No.	Instrument name	Reference Specification	Unit of Measure	Mandatory Spares for KKNPP Units 5&6 (A)	Rate Excluding GST Basic Price (inclusive of P&F charges)	Freight & Insurance	GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020 E=A[(B+C)(1+D/100)]
47.1.22	Vent 1/2" NPTF valve		No's	5	3811.00	39.00	18.00	22,715.00
47.1.23	Flange: OD : 220mm , PCD: 180 mm, No. of Bolt Holes : 08 Nos, Flange Thickness: 10 mm, Bolt Hole Size : 18 mm, TMOG : SS304		No's	1	7128.00	72.00	18.00	8,496.00
47.1.24	1/2" M X 1/2" OD compression 150#		No's	63	668.00	7.00	18.00	50,179.50
47.1.25	BOLT & NUTS, M14 x55MM LONG		No's	2	594.00	6.00	18.00	1,416.00
47.1.26	BOLT & NUTS, M14 x70MM LONG		No's	4	619.00	6.00	18.00	2,950.00
47.1.27	BOLT & NUTS, M14 x75MM LONG		No's	1	619.00	6.00	18.00	737.50
47.1.28	1/2" SW X 1/2"NPT(M) Nipple - 4" Long, 150#		No's	1	544.00	6.00	18.00	649.00
47.1.29	1/2" NPT(M) X 1/2" NPT(F) Elbow, 150#		No's	2	668.00	7.00	18.00	1,503.00
47.1.30	1/2" NPT SW, Gate Valve, 150#		No's	1	20542.00	208.00	18.00	24,485.00
47.1.31	1/2"NPT F x 1/2" OD NPT M Connector, 150#		No's	4	718.00	7.00	18.00	3,422.00
47.1.32	2" Weld Neck RF FLANGE 300#		No's	1	10197.00	103.00	18.00	12,154.00
47.1.33	Drain Plug Material SS304 for 2" Weld Neck RF FLANGE 300#		No's	1	10197.00	103.00	18.00	12,154.00
47.1.34	1/2" NPTF x 1/2" NPTF, 2 valve manifold 1/4" NPTF drain with PLUG		No's	2	9177.00	93.00	18.00	21,877.20
47.1.35	1/2" NPTM NIPPLE, 100 MM, LG		No's	2	544.00	6.00	18.00	1,298.00
47.1.36	M10X 100LG ANCHOR BOLTS		No's	2	1188.00	12.00	18.00	2,832.00
47.1.37	15 NB Union Female to Female, 3000#		No's	2	990.00	10.00	18.00	2,360.00
47.2	SS316L material							
47.2.1	1/2" Gate Valve Socket Weld type		No's	2	25542.00	258.00	18.00	60,888.00
47.2.2	1/2" NPT (M) Nipple - 4" Long, 150# (SCH40)		No's	1	678.00	7.00	18.00	808.30
47.2.3	1/2" NPTF X 1/2" NPTM, 3 way Gauge cock with 1/2" NPT (F) Vent, 150#		No's	1	23463.00	237.00	18.00	27,966.00
47.2.4	1/2" NPTF, 3 way Gauge cock with 1/2" NPT (F) Vent, 150#		No's	13	23463.00	237.00	18.00	3,63,558.00
47.2.5	Double Compression Type TEE Connector		No's	1	20641.00	209.00	18.00	24,603.00
47.2.6	Tee 1/2" OD X 1/2 " OD X 1/2" OD, 150#		No's	3	11088.00	112.00	18.00	39,648.00
47.2.7	5 way manifold with 1/2" NPTF connection, 150#		No's	13	812.00	8.00	18.00	12,578.80
47.2.8	1/2" M X 1/2" OD male Double Compression connector, 150#		Mtr	57	2346.00	24.00	18.00	1,59,406.20
47.2.9	3" Neoprene Gasket (Thickness 3", Size DN-100)		No's	3	1614.00	16.00	18.00	5,770.20
47.2.10	Bolt & Nut, M16X90 mm Long		No's	12	574.00	6.00	18.00	8,212.80
47.2.11	1/2" OD Tube union		No's	8	1930.00	20.00	18.00	18,408.00
47.2.12	1/2" NPTF X 1/2" NPTF, 3 way Gauge cock with 1/2" NPT (F) Vent, 150#		No's	1	23463.00	237.00	18.00	27,966.00
47.2.13	1/2" NPTM Adjustable compression fitting		No's	1	3648.00	37.00	18.00	4,348.30
47.2.14	1/2" NPTF Thermowell (Extension Length 50mm, Immersion length 200mm)		No's	1	16162.00	163.00	18.00	19,263.50

Q of I

Template Name : Mandatory Spares of S1 supply (Field Instrumentation)									
M/s TEMA									
S.No.	Instrument name	Reference Specification	Unit of Measure	Mandatory Spares for KKNPP Units 5&6 (A)	Rate Excluding GST			GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance			
						B	C	D	
47.3.4	Tee 1/2" NPTF X 1/2"NPTF X 1/2" NPTF, 150#		No's	1	57420.00	580.00		18.00	E=A[(B+C)(1+D/100)]
47.3.5	1/2" NPT (M) Nipple - 4" Long, 150#		No's	1	16038.00	162.00		18.00	68,440.00
47.3.6	1/2" NPT (F), Gate Valve, 150#		No's	1	129195.00	1305.00		18.00	19,116.00
47.3.7	1/2" NPT(M) X 1/2" NPT(F) Elbow, 150#		No's	1	15048.00	152.00		18.00	1,53,990.00
47.3.8	1 1/2" Diaphragm Seal, 150#		No's	1	268290.00	2710.00		18.00	17,936.00
47.4	HastelloyC276								3,19,780.00
47.4.1	1/2" NPT (M) Nipple - 4" Long, 150#		No's	3	20592.00	208.00		18.00	
47.4.2	1/2" NPTF, 3 way Gauge cock with 1/2" NPT (F) Vent, 150#		No's	2	128700.00	1300.00		18.00	73,632.00
47.4.3	Snubber 1/2" NPT (F) X 1/2" NPT (M)		No's	1	118800.00	1200.00		18.00	3,06,800.00
47.4.4	Elbow 1/2" NPTF, 150#		No's	2	50985.00	515.00		18.00	1,41,600.00
47.4.5	Diaphragm Seal 3/8" BSP (F) X 1/2" NPT (M)		No's	2	33759.00	341.00		18.00	1,21,540.00
47.5	EPDM / Grafoil								80,476.00
47.5.1	1-1/2" Gasket		No's	1	2277.00	23.00		18.00	
47.5.2	2" Gasket		No's	2	2920.00	30.00		18.00	2,714.00
47.5.3	3" Gasket		No's	1	3465.00	35.00		18.00	6,902.00
47.5.4	4" Gasket		No's	2	4653.00	47.00		18.00	4,130.00
47.5.5	Gasket-220 mm (OD)		No's	1	4653.00	47.00		18.00	11,092.00
47.5.6	2" Gasket (Spiral wound + grafoil)		No's	1	2623.00	27.00		18.00	5,546.00
47.6	PTFE								3,127.00
47.6.1	1" Gasket		No's	3	3366.00	34.00		18.00	
47.6.2	1.5 NB gasket		No's	1	2970.00	30.00		18.00	12,036.00
47.7	ASTM A-193 GR B7 (Phosphated)								3,540.00
47.7.1	Bolt & Nut, M16-60 mm Long		No's	7	668.00	7.00		18.00	
47.8	Carbon Steel (CS)								5,575.50
47.8.1	2" Pipe		Mtr	15	5098.00	52.00		18.00	
47.8.2	1/2" NPTF HALF COUPLING Material Code SA105		No's	3	366.00	4.00		18.00	91,155.00
47.8.3	1.5NB PIPE Material Code SA 106 GR.B, 0.5x2		Mtr	1	1485.00	15.00		18.00	1,309.80
47.8.4	1/2" Gate Valve Socket Welded , Matrial Code SA105		No's	3	4678.00	47.00		18.00	1,770.00
47.8.5	ELBOW 1/2" SW#3000 Material SA105		No's	4	594.00	6.00		18.00	16,776.50
47.8.6	1/2" NPTF full coupling, 3000# (SA105)		No's	1	465.00	5.00		18.00	2,832.00
									554.60

Template Name : Mandatory Spares of S1 supply (Field Instrumentation)

M/s TEMA

S.No.	Instrument name	Reference Specification	Unit of Measure	Mandatory Spares for KKNPP Units 5&6 (A)	Rate Excluding GST	GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges) B	Freight & Insurance C	E=A[(B+C)(1+D/100)]
47.9	Mild Steem (MS)						
47.9.1	25X6 MM Plate		Mtr	6	916.00	9.00	6,549.00
47.9.2	150X150X12 mm Plate		No's	19	1831.00	19.00	41,477.00
47.9.3	100 X 10 mm Anchor bolts		No's	3	465.00	5.00	1,663.80
47.9.4	MS Union		No's	1	1237.00	13.00	1,475.00
47.9.5	Pipe		Mtr	1	5098.00	52.00	6,077.00
47.10	PVDF						
47.10.1	Vent, 1/2" BSP Valve		No's	2	26532.00	268.00	63,248.00
47.10.2							
47.10.3	SDSS						
47.10.4	1/2" M X 1/2" OD male Double Compression connector, 150#		No's	2	10345.00	105.00	24,662.00
47.10.5	1/2" OD X 0.065" WT Tubing		Mtr	2	33858.00	342.00	80,712.00
47.10.6	15 NB threaded flange (thickness to be selected as per the pressure ratings mentioned in Technical Specification.)		No's	2	25542.00	258.00	60,888.00
47.11	GI						
47.11.1	1/2" C type clamp		No's	2	2475.00	25.00	5,900.00
47.11.2	Pipe 20NB GI (thickness to be selected as per the pressure ratings mentioned in Technical Specification.)		Mtr	1	2475.00	25.00	2,950.00
47.12	Stanchion						
47.12.1	Stanchion for single instrument		No's	7	21087.00	213.00	1,75,938.00
47.12.2	Stanchion for double instrument		No's	3	35145.00	355.00	1,25,670.00
48	Instrument Tube fittings (Titanium)						
48.1	Equal Tee		No's	18	15073.00	152.00	3,23,379.00
48.2	Nipple with Coupling Nut and Gasket		No's	12	17325.00	175.00	2,47,800.00
48.3	Cap		No's	10	832.00	8.00	9,912.00
48.4	Plug		No's	10	9157.00	93.00	1,09,150.00
48.5	Reducer for valve (external thread) Titanium alloy		No's	23	13018.00	132.00	3,56,891.00
48.6	Reducer for gauge (internal thread) Titanium alloy		No's	8	13018.00	132.00	1,24,136.00

102.KK56.0.0.AK.TS.PR040



Template Name : Mandatory Spares of S1 supply (Field Instrumentation)									
M/s TEMA									
S.No.	Instrument name	Reference Specification	Unit of Measure	Mandatory Spares for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020	
					Basic Price (inclusive of P&F charges)	Freight & Insurance		E=A[(B+C)(1+D/100)]	
48.7	Bend 90 degrees		No's	65	7920.00	80.00	18.00	6,13,600.00	
48.8	Bend 90 for 32x2		No's	15	22275.00	225.00	18.00	3,98,250.00	
48.9	Bend 45 for 32x2		No's	6	19305.00	195.00	18.00	1,38,060.00	
49	Levelling/Seperation vessel								
49.1	Levelling/Seperation vessel	I02.KK56.0.0.AK.TS.PR041	No's	25	33858.00	342.00	18.00	10,08,900.00	
50	Composite Insert								
50.1	Composite insert		No's	260	4752.00	48.00	18.00	1,472,640.00	
50.2	Reducer type composite insert 16x2mm/ 14x2mm	I02.KK56.0.0.AK.TS.PR042	No's	60	4752.00	48.00	18.00	3,39,840.00	
50.3	Reducer type composite insert 18x2mm/ 18x2.5mm		No's	20	12375.00	125.00	18.00	2,95,000.00	
59	Temperature transmitter								
59.1	Temperature transmitter	I02.KK56.0.0.AK.TS.PR050	No's	5	57915.00	585.00	18.00	3,45,150.00	
65	Instrumentation Tubing								
65.1	SS 321 Austenitic Stainless Tubing of Size 14X2 mm	I02.KK56.0.0.AK.TS.PR045	Mtr	17500	792.00	8.00	18.00	1,65,20,000.00	
65.2	SS 321 Austenitic Stainless Tubing of Size 18X2.5 mm		Mtr	750	1089.00	11.00	18.00	9,73,500.00	
65.3	Titanium tube 14X2 mm		Mtr	320	9325.00	100.00	18.00	35,58,880.00	
65.4	Titanium Tube, 32x2mm	I02.KK56.0.0.AK.TS.PR046	Mtr	25	12375.00	125.00	18.00	3,68,750.00	
65.5	Carbon steel 14X1.6 mm		Mtr	3	2574.00	26.00	18.00	9,201.00	
65.6	Carbon steel 8X2.8 mm	I02.KK56.0.0.AK.TS.PR052	Mtr	1	2574.00	26.00	18.00	3,068.00	
Total (In INR)							27,68,20,560.10		


 (Pankaj Tripathi)
 General Manager, C&MM
 For & on behalf of Nuclear Power Corporation of India Limited
 (The Purchaser)



Template Name: S3 - Supply of Systems

M/s TEMA

S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance		
					B	C	D	E=A[(B+C)(1+D/100)]
	Supply & delivery of items complete in all respect including Design & Engineering, Procurement of raw materials and bought out items, Manufacture, Fabrication, Assembly, Shop Inspection, Testing(Including Type Test), preparation of Drawings & Documentation, Delivery to site with proper packing, establishing the performance parameters of items supplied complete with all controls, accessories and auxiliaries as specified in technical specification For Detailed scope of work and quantity, refer the Specification number attached under Section-C.							
	SYSTEMS							
1	Detailed Engineering and Supply of Communication System							
1.8	CYP(Industrial TV)							
1.8.1	Receiving side equipment including power supply, switching, control and recording equipment.							
1.8.1.1	Power supply, Switching and control equipment	102.KK56.0.0.SS.TS.PR001	No's	2	23,76,000.00	24,000.00	18.00	56,64,000.00
1.8.1.2	Recorder		No's	2	4,95,000.00	5,000.00	18.00	11,80,000.00
1.8.1.3	UPS with Battery cabinet		No's	2	12,87,000.00	13,000.00	18.00	30,68,000.00
1.8.2	Operator Workstation		No's	2	7,17,750.00	7,250.00	18.00	17,11,000.00
1.8.3	Camera of CYP system							
1.8.3.1	Radiation resistant camera		No's	40	90,00,000.00	1,00,000.00	18.00	42,95,20,000.00
2	DETAILED ENGINEERING AND SUPPLY OF AUTOMATED FIRE PROTECTION SYSTEM (AFPS)							
2.1	Master controller (PC based graphic floor mounted Cabinet)		No's	14	52,05,500.00	54,500.00	18.00	8,68,95,200.00
2.2	Gateway		No's	2	1,35,63,000.00	1,37,000.00	18.00	3,23,32,000.00
2.3	Gas fire fighting controller-1		No's	1	10,34,550.00	10,450.00	18.00	12,33,100.00
2.4	Gas fire fighting controller-2		No's	34	10,84,050.00	10,950.00	18.00	4,39,31,400.00
2.5	Aerosol fire fighting controller-1		No's	40	10,54,350.00	10,650.00	18.00	5,02,68,000.00
2.6	Fire alarm Controller-1		No's	1	10,59,300.00	10,700.00	18.00	12,62,600.00
2.7	Fire alarm Controller-2		No's	1	9,55,350.00	9,650.00	18.00	11,38,700.00
2.8	Fire alarm Controller-3		No's	4	10,29,600.00	10,400.00	18.00	49,08,800.00
2.9	Fire alarm Controller-4		No's	41	10,99,890.00	11,110.00	18.00	5,37,50,180.00

Template Name: S3 - Supply of Systems

M/s TEMA

S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance	D	E=A[(B+C)(1+D/100)]
2.10	Fire alarm Controller-5	102.KK56 0.0.P.A.TS.PR001	No's	3	10,52,370.00	10,630.00	18.00	37,63,020.00
2.11	Fire alarm and water fire fighting controller		No's	7	10,59,300.00	10,700.00	18.00	88,38,200.00
2.12	Ventilation controller		No's	2	9,05,850.00	9,150.00	18.00	21,59,400.00
2.13	Water fire fighting controller		No's	14	11,08,800.00	11,200.00	18.00	1,85,02,400.00
2.14	Water Fire Fighting Controller-1 (Floor mounted)		No's	2	30,34,350.00	30,650.00	18.00	72,33,400.00
2.15	Water Fire Fighting Controllers-2 (Floor mounted)		No's	10	38,36,250.00	38,750.00	18.00	4,57,25,000.00
2.16	Relay Cabinet-1		No's	2	66,330.00	670.00	18.00	1,58,120.00
2.17	Relay Cabinet-2		No's	16	75,240.00	760.00	18.00	14,34,880.00
2.18	Relay Cabinet-3		No's	33	87,120.00	880.00	18.00	34,26,720.00
2.19	Relay Cabinet-4		No's	2	9,65,250.00	9,750.00	18.00	23,01,000.00
2.20	Six point Audio - visual annunciator		No's	1	42,570.00	430.00	18.00	50,740.00
2.21	Photoelectric Smoke detector		No's	9214	5,247.00	53.00	18.00	5,76,24,356.00
2.22	base for Photoelectric Smoke detector		No's	8214	510.00	5.00	18.00	49,91,647.80
2.23	short circuit isolator base for Photoelectric Smoke detector		No's	1000	510.00	5.00	18.00	6,07,700.00
2.24	Heat addressable fire detector		No's	3320	5,247.00	53.00	18.00	2,07,63,280.00
2.25	Base for Heat addressable fire detector		No's	2970	510.00	5.00	18.00	18,04,869.00
2.26	Short circuit isolator base for Heat addressable fire detector		No's	350	510.00	5.00	18.00	2,12,695.00
2.27	Intrinsically safe rate-of-rise compensation heat detector		No's	50	56,925.00	575.00	18.00	33,92,500.00
2.28	Base for Intrinsically safe rate-of-rise compensation heat detector		No's	40	1,129.00	11.00	18.00	53,808.00
2.29	short circuit isolator base for Intrinsically safe rate-of-rise compensation heat detector		No's	10	1,129.00	11.00	18.00	13,452.00
2.30	Manual call point address type 1	No's	655	18,315.00	185.00	18.00	1,42,98,650.00	
2.31	Manual call point of address type 2	No's	241	18,315.00	185.00	18.00	52,61,030.00	
2.32	Manual call point of address type 3	No's	8	18,315.00	185.00	18.00	1,74,640.00	
2.33	Smoke linear fire detector with reflector	No's	76	2,01,960.00	2,040.00	18.00	1,82,94,720.00	
2.34	Flame detector	No's	10	3,26,700.00	3,300.00	18.00	38,94,000.00	
2.35	Conventional zone monitor module	No's	12	9,603.00	97.00	18.00	1,37,352.00	
2.36	Output Module	No's	10	13,266.00	134.00	18.00	1,58,120.00	
2.37	Audio-Visual Messenger	No's	600	17,622.00	178.00	18.00	1,26,02,400.00	
2.38	Light Annunciator	No's	805	17,820.00	180.00	18.00	1,70,98,200.00	

102.KK56.0.0.PA.TS.PR001



Template Name: S3 - Supply of Systems

M/s TEMA

S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance	D	E=A[(B+C)(1+D/100)]
2.39	Door limit switches		No's	271	15,246.00	154.00	18.00	49,24,612.00
2.40	Junction Box- Plastic-4 terminals-IP65		No's	835	3,168.00	32.00	18.00	31,52,960.00
2.41	Junction Box- Plastic-48 terminals-IP65		No's	2	13,860.00	140.00	18.00	33,040.00
2.42	Junction Box- Plastic-6 terminals-IP65		No's	120	3,217.00	33.00	18.00	4,60,200.00
2.43	Junction Box- Aluminium-24 terminals-IP65		No's	105	11,682.00	118.00	18.00	14,62,020.00
2.44	Junction Box- Aluminium-12 terminals-IP65		No's	110	5,445.00	55.00	18.00	7,13,900.00
2.45	Junction Box- Aluminium-64 terminals-IP65		No's	1	28,017.00	283.00	18.00	33,394.00
2.46	Junction Box- Aluminium-16 terminals-IP65		No's	23	5,544.00	56.00	18.00	1,51,984.00
2.47	Junction Box- Plastic-8 terminals-IP65		No's	90	3,267.00	33.00	18.00	3,50,460.00
2.48	Junction Box- Plastic-16 terminals-IP65		No's	16	4,702.00	48.00	18.00	89,680.00
2.49	Junction Box- Aluminium-32 terminals-IP65		No's	45	12,127.00	123.00	18.00	6,50,475.00
2.50	Junction Box- Plastic-12 terminals-IP65		No's	50	3,465.00	35.00	18.00	2,06,500.00
2.51	Junction Box- Plastic-24 terminals-IP65		No's	12	12,325.00	125.00	18.00	1,76,292.00
2.52	Junction Box- Aluminium-48 terminals-IP65		No's	55	12,127.00	123.00	18.00	7,95,025.00
2.53	Junction Box- Stainlesssteel-12 terminals-IP65		No's	8	9,157.00	93.00	18.00	87,330.00
2.54	Junction Box- Plastic-32 terminals-IP65		No's	2	13,365.00	135.00	18.00	31,860.00
2.55	Junction Box- Aluminium-8 terminals-IP65		No's	22	2,772.00	28.00	18.00	72,688.00
2.56	Junction Box- Aluminium-128 terminals-IP65		No's	1	55,935.00	565.00	18.00	66,670.00
2.57	Pressure Switch							
2.57.1	Pressure Switch Limit 0 - 1.5		No's	425	46,035.00	465.00	18.00	2,33,19,750.00
2.58	Software tools for modification in configuration and addition or deletion of any item in system for local and master controller		Set	1	7,42,500.00	7,500.00	18.00	8,85,000.00
2.59	Tool/ Kit for installation and commissioning of AFPS equipment.		Set	1	25,12,620.00	25,380.00	18.00	29,94,840.00
2.60	Printers		Set	3	82,764.00	836.00	18.00	2,95,944.00
2.61	Control cables for AFPS system							
2.61.1	Control cable							
2.61.1.1	Cable type - (KPEting-HF) 1x2x0.7							
2.61.2	Control cable							
2.61.2.1	Cable type - (KPEPg-FRIHF) 1x2x0.8	102.KK56.0.0.ET.TS.PRO32	Meter	700	168.00	2.00	18.00	1,40,430.00
2.61.2.1			Meter	29700	64.00	1.00	18.00	22,77,990.00



Template Name: S3 - Supply of Systems

M/s TEMA

S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST			GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance			
					B	C	D		E=A[(B+C)(1+D/100)]
2.61.2.2	1x2x1.38	102.KK56.0.0.ET.TS.PR122	Meter	119500	109.00	1.00	18.00		1,55,11,100.00
2.61.2.3	2x2x0.8		Meter	2900	114.00	1.00	18.00		3,93,530.00
2.61.2.4	2x2x1.38		Meter	27900	203.00	2.00	18.00		67,49,010.00
2.61.2.5	4x2x1.38		Meter	1700	346.00	4.00	18.00		7,02,100.00
2.61.2.6	6x2x1.38		Meter	700	525.00	5.00	18.00		4,37,780.00
2.61.2.7	10x2x1.38		Meter	600	841.00	9.00	18.00		6,01,800.00
2.61.3	Control cable Cable type - (KVVVGEng-LS)								
2.61.3.1	4x1.5	102.KK56.0.0.ET.TS.PR114	Meter	1800	198.00	2.00	18.00		4,24,800.00
2.61.3.2	4x2.5		Meter	1400	267.00	3.00	18.00		4,46,040.00
2.61.3.3	4x6		Meter	600	554.00	6.00	18.00		3,96,480.00
2.61.3.4	7x1.5		Meter	1300	297.00	3.00	18.00		4,60,200.00
2.61.3.5	10x1		Meter	22100	297.00	3.00	18.00		78,23,400.00
2.61.3.6	10x1.5		Meter	1000	421.00	4.00	18.00		5,01,500.00
2.61.3.7	14x1.5		Meter	1700	535.00	5.00	18.00		10,83,240.00
2.61.3.8	19x1.5	Meter	600	706.00	7.00	18.00		5,04,804.00	
2.61.3.9	27x1.5	Meter	600	975.00	10.00	18.00		6,97,380.00	
2.61.3.10	37x1	Meter	600	926.00	9.00	18.00		6,61,980.00	
2.61.3.11	52x1	Meter	600	1,237.00	13.00	18.00		8,85,000.00	
2.61.4	Control cable Cable type - (KVVVGEng-FRLS)								
2.61.4.1	4x1	Meter	1700	247.00	3.00	18.00			5,01,500.00
2.61.4.2	4x1.5	Meter	18900	282.00	3.00	18.00			63,56,070.00
2.61.4.3	4x2.5	Meter	1500	376.00	4.00	18.00			6,72,600.00
2.61.4.4	7x1	Meter	1800	342.00	3.00	18.00			7,32,780.00
2.61.4.5	7x1.5	Meter	1600	411.00	4.00	18.00			7,83,520.00
2.61.4.6	10x1	Meter	23700	460.00	5.00	18.00			1,30,04,190.00



Template Name: S3 - Supply of Systems

M/s TEMA

S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST			GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance			
						B	C		
2.61.4.7	14x1	102.KK56. 0.0. ET.TS.PR113	Meter	6400	579.00	6.00	18.00	E=A[(B+C)(1+D/100)] 44,17,920.00	
2.61.4.8	14x1.5		Meter	9500	733.00	7.00	18.00	82,95,400.00	
2.61.4.9	19x1		Meter	900	742.00	8.00	18.00	7,96,500.00	
2.61.4.10	19x1.5		Meter	4700	940.00	10.00	18.00	52,68,700.00	
2.61.4.11	27x1		Meter	600	1,039.00	11.00	18.00	7,43,400.00	
2.61.4.12	27x1.5		Meter	4600	1,287.00	13.00	18.00	70,56,400.00	
2.61.4.13	37x1.5		Meter	1100	1,683.00	17.00	18.00	22,06,600.00	
2.61.4.14	37x1		Meter	600	1,336.00	14.00	18.00	9,55,800.00	
2.61.4.15	52x1.5		Meter	1600	2,277.00	23.00	18.00	43,42,400.00	
2.61.5 Control cable Cable type - (KVV/Gng-LS)									
2.61.5.1	4x1.5	102.KK56.0.0.ET.TS.PR114	Meter	1300	198.00	2.00	18.00	3,06,800.00	
2.61.5.2	4x2.5		Meter	3500	267.00	3.00	18.00	11,15,100.00	
2.61.5.3	5x2.5		Meter	700	346.00	4.00	18.00	2,89,100.00	
2.61.5.4	5x1.5		Meter	600	247.00	3.00	18.00	1,77,000.00	
2.61.5.5	7x1		Meter	600	228.00	2.00	18.00	1,62,840.00	
2.61.5.6	7x1.5		Meter	600	297.00	3.00	18.00	2,12,400.00	
2.61.5.7	10x1.5		Meter	600	445.00	5.00	18.00	3,18,600.00	
2.61.5.8	14x1.5		Meter	1000	544.00	6.00	18.00	6,49,000.00	
2.61.6 Control cable Cable type - (KVV/Gng-FRLS)									
2.61.6.1	4x1.5	102.KK56. 0.0. ET.TS.PR113	Meter	25700	381.00	4.00	18.00	1,16,75,510.00	
2.61.6.2	5x1.5		Meter	600	346.00	4.00	18.00	2,47,800.00	
2.61.6.3	5x2.5		Meter	700	445.00	5.00	18.00	3,71,700.00	
2.61.6.4	7x1.5		Meter	9900	445.00	5.00	18.00	52,56,900.00	
2.61.6.5	10x1.5		Meter	5500	594.00	6.00	18.00	38,94,000.00	



Template Name: S3 - Supply of Systems

M/s TEMA

S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units S&6 (A)	Rate Excluding GST			GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance			
								B	
2.61.6.6	14x1.5		Meter	800	742.00	8.00	18.00	E=A[(B+C)(1+D/100)]	
2.61.6.7	27x1.5		Meter	1900	1,287.00	13.00	18.00	7,08,000.00	
2.61.6.8	19x1.5		Meter	2100	990.00	10.00	18.00	29,14,600.00	
2.61.7	Control cable Cable type - (KUGVEVng-LS)							24,78,000.00	
2.61.7.1	7x0.5	102.KK56.0.0.ET.TS.PR035	Meter	1400	495.00	5.00	18.00	8,26,000.00	
2.61.8	Control cable Cable type - (KUGVVEng-FRLS)								
2.61.8.1	7x.5	102.KK56.0.0.ET.TS.PR125	Meter	2100	594.00	6.00	18.00	14,86,800.00	
2.61.9	Control cable Cable type - (VVGng-LS)								
2.61.9.1	4x2.5	102.KK56.0.0.ET.TS.PR003	Meter	600	346.00	4.00	18.00	2,47,800.00	
2.61.10	Control cable Cable type - (VVGng-FRLS)								
2.61.10.1	3x16		Meter	600	1,336.00	14.00	18.00	9,55,800.00	
2.61.10.2	3x2.5		Meter	1400	396.00	4.00	18.00	6,00,800.00	
2.61.10.3	3x4	102.KK56.0.0.ET.TS.PR004	Meter	1100	544.00	6.00	18.00	7,13,900.00	
2.61.10.4	4x4		Meter	36000	643.00	7.00	18.00	2,76,12,000.00	
2.61.10.5	4x6		Meter	6800	792.00	8.00	18.00	64,19,200.00	
2.61.11	Control cable Cable type - (KPoEPEng-HF)								
2.61.11.1	4x1.5		Meter	900	544.00	6.00	18.00	5,84,100.00	
2.61.11.2	4x4		Meter	800	891.00	9.00	18.00	8,49,600.00	
2.61.11.3	10x4	102.KK56.0.0.ET.TS.PR126	Meter	600	2,079.00	21.00	18.00	14,86,800.00	
2.61.11.4	27x1.5		Meter	800	2,574.00	26.00	18.00	24,54,400.00	
2.61.11.5	37x1		Meter	600	2,772.00	28.00	18.00	19,82,400.00	
2.61.12	Control cable Cable type - (KMPEVEVng-LS)								
2.61.12.1	27x0.5	102.KK56.0.0.ET.TS.PR030	Meter	600	1,485.00	15.00	18.00	10,62,000.00	
2.61.12.2	37x0.5		Meter	600	1,881.00	19.00	18.00	13,45,200.00	



Purchase Order No. : CMM/EIC/91-00-3-3653/PO/58									
Annexure-A9									
Template Name: S3 - Supply of Systems									
M/s TEMA									
S.No.	Instrument name	Reference Specification	Unit of Measure	Total Supply Quantity for KKNPP Units 5&6 (A)	Rate Excluding GST Basic Price (Inclusive of P&F charges)	Freight & Insurance	GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020	
					B	C	D	E=A[(B+C)(1+D/100)]	
2.61.13	Control cable Cable type - (KPEITng-FRHF)								
2.61.13.1	8x2x1.38		Meter	600	1,386.00	14.00	18.00	9,91,200.00	
2.61.13.2	10x2x1.38	I02.KK56.0.0.ET.TS.PR031	Meter	600	1,683.00	17.00	18.00	12,03,600.00	
2.61.14	Control cable Cable type - (KPEITng-HF)								
2.61.14.1	2x2x0.35								
2.61.15	Control cable Cable type - (KPEPng-FRHF)								
2.61.15.1	6x2x1.38-250	I02.KK56.0.0.ET.TS.PR032	Meter	600	247.00	3.00	18.00	1,77,000.00	
2.61.15.2	6x2x0.8								
2.61.15.3	2x2x1.38-250	I02.KK56.0.0.ET.TS.PR122	Meter	600	544.00	6.00	18.00	3,89,400.00	
2.61.16	Control cable Cable type - (OKGng-0.7(50)-4P-1.5kN)								
2.61.16.1	OKGng-0.7(50)-4P-1.5kN	I02.KK56.0.0.ET.TS.PR116	Meter	10900	109.00	1.00	18.00	14,14,820.00	
Total (in INR)								1,19,35,92,077.80	


 (Pankaj Trivedi)
 General Manager, C&MM
 For & on behalf of Nuclear Power Corporation of India Limited
 (The Purchaser)



Template Name: Mandatory Spares of S3 (Supply of Systems)

S.No.	Instrument name	Reference Specification	Unit of Measure	Mandatory Spares for KKNPP Units 5&6 (A)	Rate Excluding GST			GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance	C		
	Mandatory Spares Supply & delivery of items complete in all respect including Design & Engineering, Procurement of raw materials and bought out items, Manufacture, Fabrication, Assembly, Shop Inspection, Testing(Including Type Test), preparation of Drawings & Documentation, Delivery to site with proper packing, establishing the performance parameters of items supplied complete with all controls, accessories and auxiliaries as specified in technical specification For Detailed scope of work and quantity, refer the Specification number attached under Section-C.				B		C	D	E=A[(B+C)(1+D/100)]
	SYSTEMS								
1	Mandatory Spares Supply of Communication System								
1.8	CYP(Industrial TV)								
1.8.1	Spares of CYP system								
1.8.1.1	Radiation resistant camera		No's	4	9000000.00	100000.00		18.00	4,29,52,000.00
1.8.1.2	Mandatory Spares (set) (10% of periphery cards, 10% of power supply modules, and 10% of controller modules)	102.KK56.0.0.SS.TS.PR001	Set	1	594000.00	6000.00		18.00	7,08,000.00
2	Mandatory Spares Supply of AUTOMATED FIRE PROTECTION SYSTEM (AFPS)								
2.1	Photoelectric Smoke detector		No's	920	5247.00	53.00		18.00	57,53,680.00
2.2	base for Photoelectric Smoke detector		No's	820	510.00	5.00		18.00	4,98,314.00
2.3	short circuit isolator base for Photoelectric Smoke detector		No's	100	510.00	5.00		18.00	60,770.00
2.4	Heat addressable fire detector		No's	332	5247.00	53.00		18.00	20,76,328.00
2.5	Base for Heat addressable fire detector		No's	297	510.00	5.00		18.00	1,80,486.90
2.6	Short circuit isolator base for Heat addressable fire detector		No's	35	510.00	5.00		18.00	21,269.50
2.7	Intrinsically safe rate-of-rise compensation heat detector		No's	5	56925.00	575.00		18.00	3,39,250.00
2.8	Base for Intrinsically safe rate-of-rise compensation heat detector		No's	4	1129.00	11.00		18.00	5,380.80
2.9	short circuit isolator base for Intrinsically safe rate-of-rise compensation heat detector		No's	1	1129.00	11.00		18.00	1,345.20
2.10	Manual call point address type 1		No's	66	18315.00	185.00		18.00	14,40,780.00
2.11	Manual call point of address type 2		No's	25	18315.00	185.00		18.00	5,45,750.00
2.12	Manual call point of address type 3		No's	1	18315.00	185.00		18.00	21,830.00
2.13	Smoke linear fire detector with reflector		No's	8	201960.00	2040.00		18.00	19,25,760.00
2.14	Flame detector		No's	1	326700.00	3300.00		18.00	3,89,400.00
2.15	Conventional zone monitor module		No's	2	9603.00	97.00		18.00	22,892.00
2.16	Output Module		No's	1	13266.00	134.00		18.00	15,812.00



Template Name: Mandatory Spares of S3 (Supply of Systems)

M/s TEMA

S.No.	Instrument name	Reference Specification	Unit of Measure	Mandatory Spares for KKNPP Units 5&6 (A)	Rate Excluding GST		GST IN % On (B+C)	Value inclusive of GST - DAP Destination - INCOTERMS 2020
					Basic Price (inclusive of P&F charges)	Freight & Insurance		
2.17	Audio-Visual Messenger	102.KK56.0.0.PA.TS.PR001	No's	25	17622.00	178.00	18.00	5,25,100.00
2.18	Light Annunciator		No's	33	17820.00	180.00	18.00	7,00,920.00
2.19	Door limit switches		No's	14	15246.00	154.00	18.00	2,54,408.00
2.20	Junction Box- Plastic-4 terminals-IP65		No's	26	3168.00	32.00	18.00	98,176.00
2.21	Junction Box- Plastic-6 terminals-IP65		No's	4	3217.00	33.00	18.00	15,340.00
2.22	Junction Box- Aluminium-24 terminals-IP65		No's	4	11682.00	118.00	18.00	55,696.00
2.23	Junction Box- Aluminium-12 terminals-IP65		No's	4	5445.00	55.00	18.00	25,960.00
2.24	Junction Box- Aluminium-16 terminals-IP65		No's	1	5544.00	56.00	18.00	6,608.00
2.25	Junction Box- Plastic-8 terminals-IP65		No's	2	3267.00	33.00	18.00	7,788.00
2.26	Junction Box- Plastic-16 terminals-IP65		No's	1	4702.00	48.00	18.00	5,605.00
2.27	Junction Box- Aluminium-32 terminals-IP65		No's	1	12127.00	123.00	18.00	14,455.00
2.28	Junction Box- Plastic-12 terminals-IP65		No's	1	3465.00	35.00	18.00	4,130.00
2.29	Junction Box- Plastic-24 terminals-IP65		No's	2	12325.00	125.00	18.00	29,382.00
2.30	Junction Box- Aluminium-48 terminals-IP65		No's	2	12127.00	123.00	18.00	28,910.00
2.31	Junction Box- Stainlesssteel-12 terminals-IP65	No's	1	9157.00	93.00	18.00	10,915.00	
2.32	Junction Box- Plastic-32 terminals-IP65	No's	1	13365.00	135.00	18.00	15,930.00	
2.33	Junction Box- Aluminium-8 terminals-IP65	No's	2	2772.00	28.00	18.00	6,608.00	
2.35	Pressure Switch Range in MPa							
2.35.1	Pressure Switch Limit 0 - 1.5		No's	52	46035.00	465.00	18.00	28,53,240.00
Total (in INR)								6,16,18,219.40



(Pankaj Trivedi)

General Manager, C&MM

For & on behalf of Nuclear Power Corporation of India Limited

(The Purchaser)



SECTION B

COMMERCIAL TERMS AND CONDITIONS

BASIS OF PRICE, STATUTORY LEVIES, DELIVERY SCHEDULE, TERM OF PAYMENT ETC

1.0 PRICE BASIS

1.1 The prices stipulated in Section-A of the Purchase Order are for delivery of items on "DAP" Kudankulam Nuclear Power Project-5&6, Kudankulam P.O Radhapuram Taluka, Tirunelveli Distt., Tamilnadu – 627 106 Site basis inclusive of packing charges & forwarding charges, Transportation & Transit insurance charges and GST & all other indirect taxes and duties as per Incoterms 2020.

1.1.1 The Prices stipulated at Section-A are subject to Price Adjustment as per clause no. 1.2 of Section-B below.

1.1.2 **For all C&I Equipment except AFPS, Communication System, Containment Monitoring System and Sea Water Temperature Monitoring System:**

1.1.2.1 The Bill of Quantity as per Purchaser's detailed engineering, issued along with the Tender is only tentative and the Contractor may proceed with procurement of 50% of such tendered BOQ.

1.1.2.2 Any subsequent procurement would be done by the Contractor only after getting approval of the BOQ prepared by the Contractor based on the drawings issued for construction by the Purchaser. However, the Contractor shall bear the responsibility of correctness of the BOQ arrived at by him based on detailed engineering drawings issued by the Purchaser. Purchaser shall issue the drawings/ documentation required for finalization of remaining 50% BOQ within twelve months from the date of issue of the Purchase Order.

1.1.3 **For AFPS, Communication System, Containment Monitoring System and Sea Water Temperature Monitoring System:**

1.1.3.1 The Bill of Quantity as per Purchaser's detailed engineering, issued along with the Tender is only tentative. Contractor shall modify the BOQ as per the offered system after obtaining approval of Purchaser with no additional price implication to NPCIL. Also, the Contractor shall bear the responsibility of correctness of the BOQ arrived at by him based on detailed engineering drawings, developed by Contractor and approved by Purchaser.

1.2 PRICE ADJUSTMENT

1.2.1 The Prices stipulated at item no. 1.1, 1.3, 1.4, 1.6, 2.1 and 2.3 of Section-A will be subjected to Price Adjustment as per formula and other provisions contained in GCC/EPC-3/Rev.4 Clause No. 5.4, SCC & Annexure-2 of this Purchase Order, subject to a ceiling of $\pm 30\%$ of the Basic Price inclusive of P & F Charges (excluding GST and all other indirect taxes) component in INR.



- 1.2.2 Weightage of different price components (Fixed/material/labour) and base indices as applicable to various categories of items, for arriving at Price Adjustment amount are also indicated in the Annexure showing price break-up (base price) of corresponding items.
- 1.2.3 Price adjustment of individual items will be allowed to such an extent that net price adjustment of all the items in INR does not exceed this 30% ceiling and shall be payable/ recoverable accordingly
- 1.2.4 The Provision of Price Adjustment shall be as per original PO terms, regulated on the basis of the indices as applicable as per PO terms on the original CDD (Milestone date) of despatch or on actual delivery date, whichever is earlier
- 1.2.5 No Price adjustment shall be provided on the portion of Price for which advance is given.

1.3 TRANSPORTATION & TRANSIT INSURANCE CHARGES

- 1.3.1 The contractor shall solely remain responsible for safe delivery of items at the purchaser's site. The prices stipulated in Section-A of Purchase Order is inclusive of Transportation and Transit Insurance Charges.
- 1.3.2 Items shall be delivered at Kudankulam Nuclear Power Project-5&6, Kudankulam P.O Radhapuram Taluka, Tirunelveli Distt., Tamilnadu – 627106 through reputed transporter without transshipment enroute.
- 1.3.3 The contractor shall indicate the Transportation charges (Freight) and Transit Insurance charges separately while billing.
- 1.3.4 Transit Insurance shall be arranged by the contractor as in Clause No. 15.0 of Section-B below.

2.0 STATUTORY LEVIES:

2.1 GOODS & SERVICE TAX (GST) :

- 2.1.1 GST @ 18 % (9% CGST + 9% SGST) included in the DAP prices. Purchaser will not be liable to pay any increase in GST, if Supply / Services are delayed beyond the contractual delivery period.
- 2.1.2 Contractor shall be responsible for payment of all Indian Taxes, Duties including IGST on imports and all other statutory levies as applicable in connection with supply of the Stores. The DAP - Delivered at Place as per Incoterms 2020 price shall be inclusive of all Taxes, Duties and other Statutory levies payable under the law of the Land. GST and all other indirect taxes, duties are also not reimbursable separately on Price Adjustment for price portion, as base price is inclusive of all Taxes and Duties as applicable.
- 2.1.3 In case of increase in existing taxes/ duties and any other new indirect taxes / cess, if levied by Government during the contractual delivery period, the same shall be reimbursed / paid by the Purchaser, as the case may be, at actual against



documentary evidence. This provision shall not apply to changes in Personal Income tax or Corporate Income tax or to changes in non-Indian Taxes.

- 2.1.4 For extension in the contractual delivery period for the reasons attributable to the Purchaser and/or Force Majeure, increase in existing taxes & duties, if any, and new tax component introduced in the extended period shall be reimbursed to the Contractor subject to the submissions of necessary documentary evidence. No increase / new tax shall be payable during the delay period due to reasons attributable to the Contractor
- 2.1.5 GST on Liquidated Damages (LD), as applicable, shall be to the account of the Contractor and shall be recovered from payments due to the Contractor.
- 2.1.6 GST as per Purchase Order or paid, whichever is lower will be reimbursed by Purchaser limiting to the rate prevailing within the contractual delivery schedule.
- 2.1.7 GST shall be indicated separately in your invoice.
- 2.1.8 While claiming the GST supplier shall submit a certificate as per Annexure-F enclosed.
- 2.1.9 ECIL GSTIN registration No. : 36AAACE4809L1ZJ
TEMA GSTIN registration No. : 27AAACT1735C1ZR
- 2.1.10 **PAN of the Bidder:**
M/s ECIL PAN No. AAACE4809L
M/s TEMA PAN No. AAAC1735C

2.2 Direct Tax:- Tax Deduction at Source

- 2.2.1 The Purchaser shall have the right to withhold taxes on income, excess profits, royalty and other taxes from payments due to Contractor under this Contract to the extent that such withholding may be required by the government of India or any relevant authority thereof or by the government of any other country, and payment by the Purchaser to the respective governmental office of the amount of money so withheld will relieve the Purchaser from any further obligation to Contractor with respect to the amount so withheld.
- 2.2.2 The Purchaser shall, at the time of its payments due to the contractor, withhold the necessary taxes at such rate as is required by any Government Authority, unless and to the extent that the Contractor shall produce to the Purchaser any certificate issued by a Government Authority (having authority to issue such certificate) entitling the Contractor to receive the payments under the Contract for a prescribed period without deduction of any tax or deduction at a lower rate.
- 2.2.3 The Purchaser shall provide the necessary withholding tax certificates to the Contractor within the time stipulated by the relevant law to enable the contractor



to file the same with the Government Authority as a proof of payment of such taxes.

- 2.2.4 All taxes levied on Contractor's corporate income or profits shall be for the account of Contractor and shall not be reimbursed by the Purchaser. Contractor shall also be responsible for payment of income taxes of its personnel levied in India or elsewhere.
- 2.2.5 TCS as applicable, shall be collected by the contractor within the due date. TCS returns shall be filed by the contractor within the due date under NPCIL's PAN. Necessary information regarding the details of TCS deposited and return filed shall be provided by the contractor to the Purchaser (NPCIL) Paying authority.

2.3 Indirect Tax-Tax deduction at source

- 2.3.1 The Purchaser shall, at the time of its payments due to the Contractor, withhold the necessary tax at source at such rate if required under the legislation unless and to the extent that the Contractor shall produce to the Purchaser any certificate issued by a Government Authority (having authority to issue such certificate) entitling the Contractor to receive the payments under the Contract for a prescribed period without deduction of any tax or deduction at a lower rate.
- 2.3.2 In case of such deductions as mentioned above, the Purchaser shall provide the necessary withholding tax certificates to the Contractor within the time stipulated by the relevant law to enable the Contractor to file the same with the Government Authority as a proof of payment of such taxes.

3.0 SUBMISSION OF DRAWINGS, PROCEDURES/DOCUMENTS

- 3.1 The contractor shall prepare and submit all drawings, documents, Quality Assurance Plan, Data Sheets, Procedure etc. as specified in the tender specification for approval to:

ACE(Proc-LWR),
B-2-7, Nabhikiya Urja Bhavan,
Nuclear Power Corporation of India Ltd.,
Anuskatinagar, Mumbai 400 094.

with a copy to **General Manager(C&MM), NPCIL Mumbai.**

Please note that drawings / documents / quality assurance plan approved by the ACE (Proc-LWR), NPCIL, or his authorised Engineer will form part of this contract.

- 3.2 All correspondence of technical nature shall also be addressed to the designated official in Clause No. 3.1 above.



4.0 QUALITY SURVEILLANCE

- 4.1 It is the responsibility of the Contractor to ensure compliance with the quality assurance requirement stipulated in the Tender document. For this purpose, Contractor shall have appropriate quality assurance organisation and have personnel with requisite qualification to carry out inspection /quality surveillance.
- 4.2 All works covered by this purchase order shall be subject to Quality Surveillance by Executive Director (QA) or his authorised representative. The Contractor shall provide all required assistance for this purpose. Purchaser reserves the right to carryout auditing of the activities of the contractor/subcontractors at their works/premises.
- 4.3 Where the consignments are despatched / delivered after inspection/clearance by the Purchaser Quality Surveillance Engineer/ his authorised representative / inspection agency, a copy of the Shipping Release issued by him shall, invariably, be enclosed along with the delivery challan and other shipping documents (LR, RR etc.), accompanying the consignment.
- 4.4 The equipment / stores shall be despatched only after the same are cleared by the Purchaser/his representative nominated for this purpose & shipping release as per the prescribed format is obtained in writing.
- 4.5 E-mail ID for Quality Assurance Office : ed.qa@npcil.co.in Ph No. 022-25995030.

5.0 CONTRACTUAL DELIVERY SCHEDULE

- 5.1 The entire scope covering Engineering, Procurement and Construction of Control & Instrumentation Package (CIP) for KKNPP-5&6 Project plus the erection, commissioning, and handing over the complete facilities covered under this Purchase order shall be completed within **42 months** from the date of placement of this Purchase order i.e on or before ...**13 0 JUN 2029**...
- 5.2 Contractual Milestone dates shall be as per Annexure-3 (Annexure: BI). The contractor is required to complete the entire scope of supply, erection, commissioning and handing over within the above completion schedule. However, the milestones shall be met by the contractor for supply of the major equipment/ items to site. These milestones shall be reckoned for GCC Clause No 4.2.3 with respect to intermediate contractual milestones.
- 5.3 The Milestone date(s) for supply items of the Package for KKNPP-5&6 is given in months from the award of Purchase order.
- 5.4 Duration given against each milestone in Annexure-3 (Annexure: BI) is the maximum time allowed to complete the respective milestone. Contractor shall plan and supply all items listed in the milestone as well as other items required for unhindered progress of site work.



5.5 In case the Contractor fails to apply and secure extension of contractual delivery schedule indicated in Sr. no. 5.1 above before handing over of the facilities, acceptance of facility by the Purchaser will in no way prejudice the right of the Purchaser to levy liquidated damages for delays nor will it entitle contractor for payment of additional statutory levies that comes into force after the expiry of the contractual delivery schedule.

6.0 DEFECT LIABILITY PERIOD

6.1 Items/Equipment/System

6.1.1 The defect liability period shall be 18 months from the date of completion of facilities (satisfactory erection and pre-commissioning) or 12 months from the date of Operational Acceptance of Facilities (Commissioning), whichever occurs first, for each reactor unit as per clause no. 6.4 of GCC.

6.2 Spares

6.2.1 The defect liability period shall be 18 months from the date of receipt of items (last consignment) at site or 12 months from the date of acceptance, whichever occurs first as per clause no. 6.4 of GCC

7.0 PERFORMANCE SECURITY BOND (SECURITY DEPOSIT CUM PERFORMANCE BOND)

7.1 The contractor shall furnish a Performance Security Bond, as detailed below, for 10% of the purchase order value covering the total scope of work i.e, **Supply, Testing, Erection and Commissioning** under PO No. CMM/EIC/91-00-3-3653/PO/58 for Supply and PO No. CMM/EIC/91-00-3-3653/PO/59 for Erection & Commissioning contract in the form of a Bank guarantee as per prescribed format within 30 days from the date of issue of this purchase order and it shall be valid till satisfactory completion of defect liability period plus a grace period of 3 Months.

Sr. No.	Description	Value of Performance Security Deposit	Valid upto
1.0	Control & Instrumentation Package for KKNPP 5&6	₹ 135,54,08,023/- (Rupees One Hundred Thirty Five Crore Fifty Four Lakh Eight Thousand and Twenty Three Only)	13.1 DEC 2030 Plus Three Months Grace Period.

7.2 The Performance Security Bond shall be released, on successful completion of Defect Liability Period including extension thereof, if any, and on submission of Bank guarantee for Latent Defect Security as per Clause No. 23.0 of the Purchase Order.



- 7.3 All Bank Guarantee for acceptance shall be submitted strictly as per format enclosed to this office for acceptance in a sealed envelope under covering letter quoting our full purchase order reference number and supplier's name.

Sr. Manager (C&MM),

Directorate of Contracts & Materials Management,
Nuclear Power Corporation of India Limited,
EIC Section, Nabhikiya Urja Bhavan, Block No.E-0,
Anushaktinagar, Mumbai-400094.

- 7.4 Reduction in Bank Guarantee values of advances mentioned under clause no. 11.1.1 & 11.1.2 shall be allowed upon the pro-rata supplies once in six months.

8.0 PACKING AND TRANSPORTATION

- 8.1 The Items covered under this Purchase Order shall be packed as per the procedure mutually agreed between by the purchaser and the contractor.

- 8.2 The items shall be packed securely to avoid any damage to the consignment in transit.

- 8.3 The Stores shall be despatched to the Consignee / Place of Delivery through a reputed transport contractor without any transshipment en-route.

9.0 CONSIGNEE/PLACE OF DELIVERY

- 9.1 All items covered under this Purchase Order shall be despatched on door delivery basis without transshipment enroute to:

Manager (Materials),

Kudankulam Nuclear Power Project-5&6,
Kudankulam P.O Radhapuram
Taluka, Tirunelveli Distt., Tamilnadu – 627 106.

9.2 E-WAY BILL

- 9.2.1 For dispatching the materials to KKNPP-5&6, Kudankulam, Tamilnadu necessary E-Way Bill shall be generated by the Consigner before dispatch. Guidelines/Procedure of GST Council /Government of India shall be complied as issued from time to time.

10.0 UNLOADING AT SITE

- 10.1 Unloading at site shall be done by the contractor at his own cost. However, contractor shall intimate the consignee the following details by fax/email in advance:

- (i) Carrier's Name
- (ii) Truck No.
- (iii) Lorry Receipt No. and date.
- (iv) Approximate time of arrival of truck at site.



- (v) No. of packages and dimensions and weight of each package etc.

11.0 TERMS OF PAYMENT:

11.1 Payment terms for Supply item at Sr. No 1.1, 1.3, 1.4, 1.6, 2.1 and 2.3 of Section –A:-

11.1.1 10% of Basic Price inclusive of P & F Charges and exclusive of applicable taxes and duties as interest bearing advance will be released as an advance against submission of following:

- a) Unconditional order acceptance.
- b) Invoice of the contractor in triplicate.
- c) Bank Guarantee towards advance payment of equivalent amount valid till the Completion of Contractual delivery period plus a claim period of three months.
- d) Bank Guarantee towards Performance Security Bond as per clause no. 7.0.

And

- e) Certificate from Associate Director/Chief Engineer (Procurement-LWR) or his authorized representative indicating completion of following activities:
 - a. Conducting Kick-Start-Meeting
 - b. Submission of organization plan / chart to execute the contract
 - c. Submission of Project Execution Methodology along with detailed L2 network for execution of contract and submission of details on how the advance money will be spent by the contractor
 - d. Submission of Master Deliverable List (MDL) / Document Control Index for review.
 - e. Submission of Front End Schedule covering the activities planned for the first 90 days of contract.
 - f. Submission and finalization of Project Quality Assurance manual.

11.1.2 10% of Basic Price inclusive of P & F Charges and exclusive of applicable taxes and duties as interest bearing advance will be released as an advance against submission of following :

- a) Invoice of the contractor in triplicate.
- b) Bank Guarantee towards advance payment of equivalent amount valid till the Completion of Contractual delivery period plus a claim period of three months.

And

- c) Placement & acceptance of sub-orders for following items:
 1. Minimum 2500 KMs of Control Cables



2. Minimum 2000 Nos. Instrument Support Stands, Minimum 100 KM of Instrumentation tubing and Minimum 5000 Nos. Instrument isolation valves
 3. Minimum 3000 Nos. Pressure Transmitters (HRE, MRE, NRE-NA and NRE-SW)
 4. Minimum 5000 Nos. Junction Boxes (SS, MS, Aluminium, GRP)
 5. Automatic Fire Protection System (AFPS)
 6. Communication System (CYA, CYB, CYC, CYH, CYP)
- d) A certificate from Associate Director/Chief Engineer of Procurement-LWR or his authorized representative stating that contractor has satisfactorily completed activities listed above at (c) in all respects and payment can be released.
- 11.1.3 50% of Basic Price inclusive of P & F Charges of supply items along with 100% applicable taxes and duties, will be released on pro-rata basis upon receipt of material at site and submission of following :
- a) Invoice of the contractor in triplicate.
 - b) Shipping Release in original issued by the Inspection Authority duly signed in ink
 - c) Proof of receipt – Receipted delivery challan / Receipted LR in original issued by the consignee duly signed in ink with requisite office seal.
 - d) Certificate as per Annexure-F regarding GST.
- 11.1.4 20% of Basic Price inclusive of P & F Charges excluding applicable taxes and duties of supply items along with 100% of price adjustment will be released on acceptance of items at site on pro-rata basis against physical verification and certification and on submission of following documents:
- a) Invoice of the contractor in triplicate.
 - b) A Certificate from Chief Construction Engineer, KKNPP-5&6 Project or his authorised representative against physical verification of items as per packing list / delivery challan indicating that all documentation regarding receipt formalities is completed and payment as per clause no. 11.1.4 of the PO can released to the contractor.
 - c) Authentic copies of indices pertaining to applicable end dates along with each dispatch wise invoice for arriving at adjusted Basic Price component.
 - d) Certificate as per Annexure-F regarding GST.



- 11.1.5 7.5% of Basic Price inclusive of P & F Charges excluding applicable taxes and duties will be released on handing over of facilities to the purchaser and on submission of following documents:
- a) Invoice of the contractor in triplicate.
 - b) "Operational Acceptance Certificate" as per format in Annexure-J issued and accepted by Chief Construction Engineer (CCE) of KKNPP-5&6 or his authorized representative for each reactor unit and payment as per clause no. 11.1.5 can be released.
- 11.1.6 2.5% of Basic Price inclusive of P & F Charges excluding applicable taxes and duties will be released on completion of Material Accounting of overall package for each reactor unit and submission of following documents:
- a) Invoice of the contractor in triplicate.
 - b) Material Accounting completion certificate issued by Chief Construction Engineer (CCE) of KKNPP-5&6 or his authorized representative stating that material accounting has been completed satisfactorily and proposing recoveries (if any) and payment as per clause no. 11.1.6 can be released.
- 11.1.7 No Price adjustment shall be provided on the portion of Price for which advance is given.
- 11.1.8 In the event of delay in attaining the events pertaining to sub-clause 11.1.5 and 11.1.6 above for reasons attributable to the Purchaser, the corresponding payments can be released to the Contractor on expiry of Original CDD against Retention Bank Guarantee as per format given in Annexure-C of GCC, initially valid for 6 months and subsequently extendable till completion of the corresponding events subject to completion of all supply. In addition to be encashable for failure of the Contractor to fulfil his Contractual obligations covered by the Retention Bank Guarantee, this Bank Guarantee shall also be encashable for the purpose of recovery of LD along with applicable GST, if any, pursuant to GCC clause no. 6.2 (Delay in Supply).
- 11.1.9 On submission of this Retention Bank Guarantee, it shall be deemed and construed that the contractor has authorized the Purchaser to encash the retention Bank Guarantee, for recovery of any amount whatsoever it may be, in general and for recovery of liquidated damages (LD) in particular due to failure on the part of contractor to fulfill its part of obligation. The decision of NPCIL, in this regard, shall be final and binding.
- 11.2 Payment terms for Mandatory Spares item at Sr. No. 1.2, 1.5, 2.2 & 2.4 of Section -A :-**
- 11.2.1 75% of Basic Price inclusive of P & F Charges along with 100% applicable taxes and duties will be released on pro-rata basis upon dispatch of all spares of respective subsystems/systems/equipments to site against submission of following documents:



- a) Invoice of the contractor in triplicate.
- b) Proof of despatch i.e Photocopy of "Consignee Copy of LR" duly certified and signed in ink by the Contractor with requisite office seal.
- c) Shipping Release in original issued by the Inspection Authority duly signed in ink.
- d) Certificate as per Annexure-F regarding GST .

11.2.2 Balance 25% of Basic Price inclusive of P & F Charges excluding applicable taxes and duties will be released on pro-rata basis upon receipt and acceptance at site of respective subsystems/systems/ equipment's.

- a) Invoice of the contractor in triplicate.

Note :

1. Mandatory Spares shall be supplied as per the requirements of Technical Specifications and as per the price schedule.
2. However, in cases where the Mandatory Spares are specified in terms of 'Lot' or 'Set' and the actual quantity of mandatory spares to be supplied are assessed, reviewed and finalized during the detailed engineering / contract execution stage, in such cases, the inspection and verification of the Mandatory Spares supplied to site shall be carried out based on the approved document on the detailing of the mandatory spares along with certification of the same by AD(Proc – LWR) / CE (Procurement-LWR) and MRICAR/MRV on the same shall be generated at site for processing the release of balance payment.

11.3 Direct payment shall be made by NPCIL to Consortium partners viz. M/s. ECIL and M/s. TEMA for their scope of work/ BOQ items as defined in Section-A.

11.4 The advance payments will be interest bearing at the applicable rate as notified by NPCIL on first of April each year. The rate of interest applicable for financial year FY 2023-24 is 10.97% p.a., the rate of interest for the financial year FY 2024-25 is 11.13% and the rate of interest for the financial year FY 2025-26 is 10.14%. Upon completion of the activity/ milestone, payment will be released after adjusting advance payments and interest accrued. Unless otherwise stipulated, interest shall be calculated on advances from date of release until the preceding day of recovery of the bills.

11.5 In case contractor does not draw advance/stage payment (non-availed advance) against supply as per payment terms and deliver goods and raise Invoice for Supply, then the following shall be applicable:

- a) The non-availed advance/stage payments shall also be released along with stage payment for supplies, on pro rata basis without any bank guarantee on certification from Associate Director/Chief Engineer (Procurement-LWR) or his authorized representative stating that



materials are received at site and MRICAR (Material Receipt Intimation cum Acceptance Report) is issued.

12.0 MODE OF PAYMENT

- 12.1 The payments in Indian Rupees, as applicable, will be released directly by the Purchaser to the Contractor as per the terms of payment against submission of necessary documents.
- 12.2 The contractor shall provide their bank details for release of payment.

13.0 PAYING AUTHORITY

- 13.1 All Invoices / Bills for payment shall be addressed to Bill to : Place of delivery with GST No and HSN/SAC Code and ship to : Place of delivery with GST No. However, all invoices/ bills and other documents for payments alongwith Bank details for e-payment through RTGS/NEFT shall be submitted to:

Manager (F&A),
Directorate of Contracts & Materials Management,
Nuclear Power Corporation of India Limited,
A - '0' Block, Ground Floor,
Nabhikiya Urja Bhavan, Anushakti Nagar,
MUMBAI 400 094.

14.0 LIQUIDATED DAMAGES

- 14.1 In the event of delay in completion of facilities as detailed in Clause no. 5.0 above, Liquidated damages will be levied at the rate of 0.25% of the total value of purchase order per week or part thereof subject to a maximum of 5% of the total value of purchase order.
- 14.2 GST as applicable shall be levied on Liquidated damages.

15.0 INSURANCE COVER

- 15.1 The Contractor shall "at his own cost" take out and maintain in effect the following Insurance based on reinstatement value during the performance of the contract and the Purchaser shall be named as co-insured under all insurance policies. All Insurer's rights of subrogation against co-insured shall be waived. Deductible / excess if any, under the insurance policies shall be borne by the Contractor. The identity of the Insurers and the form of policies shall be subject to the approval of the Purchaser.



15.2 Cargo Insurance

- 15.2.1 During ocean transit and inland transportation, covering loss or damage as per ICC-Clause- 'A' with war/SRCC provision, for full replacement value of the consignment/cargo from the contractor's or subcontractor's works or stores until arrival and unloading at project site. The purchaser shall be named as LOSS PAYEE in this Insurance Policy

16.0 SUB-CONTRACT

- 16.1 The contractor shall evaluate the sub-vendor/subcontractors from the Suggested list of vendors/subcontractors given in Section-C of the tender (attached herewith as Annexure-E) as per the Contractor's in-house standard procedure and submit the evaluation report to NPCIL for acceptance before placement of Sub-Order.
- 16.2 Items shall be sourced from the suggested vendors list as per Annexure-E.
- 16.3 In case of unavoidable circumstances and technical constraints to source the items from the suggested vendors, then the same can be sourced from new /additional vendors by providing suitable justifications & documentary evidence for suggesting the new / additional vendor/s. For new /additional vendors/subcontractors, the bidder shall evaluate the vendors/sub-contractor credentials as per his in-house procedure and submit the evaluation report along with vendor's/subcontractor's credentials to Purchaser for its review and acceptance Bidder can also source the items from those subvendors / sub-contractors who have been evaluated /qualified and supplied similar items in other Indian NPPs including KKNPP – 3 & 4, subject to the condition that proposed new / additional vendor is meeting the technical specification requirements.
- 16.4 Approval by the Purchaser for any of the Subcontractors shall not relieve the Contractor from any of its obligations, duties or responsibilities under the Contract.
- 16.5 In so far as no Sub-contractors are listed against any such item, the Contractor shall prepare and submit to Purchaser a list of Subcontractors for such items for approval and inclusion in such list of subvendors as issued with the Contract shall be strictly adhered to for procurement of goods/services from designated subcontractor(s). However, under very special and extra-ordinary circumstances, Contractor may request Purchaser for change of sub-contractor giving sufficient reasons and submit name and credentials along with contractor's recommendation of subcontractor(s) proposed by him to the Purchaser for approval, in sufficient time so as not to impede the progress of work on the Facilities. Approval by the Purchaser for any of the Subcontractors shall not relieve the Contractor from any of its obligations, duties or responsibilities under the Contract.

17.0 SECRECY CLAUSE

- 17.1 The purchase order shall be governed by Confidentiality clause no. 1.10 of General Conditions of Contract, i.e GCC/EPC-3/Rev.4.



- 17.2 The design, drawings, specifications and other details furnished to the Contractor by the Purchaser towards manufacture of equipment are to be treated as secret and shall not be divulged to any third party. The Contractor, therefore, bind himself, his successor, his executors, administrators, employees and the permitted assignees or such other persons, agents directly or indirectly concerned with the works / supply to the secret nature of design, drawings, specifications etc.

18.0 SETTLEMENT OF DISPUTE:

- 18.1 Settlement of dispute will be governed as per Clause no.22 of GCC/EPC-3/Rev.4 and SCC clause no. 89

19.0 CHANGE IN SCOPE/NEW ITEM

- 19.1 After issue of Purchase Order, if any change in the facilities or scope of work results in requirement of additional items/additional quantities and/or extra work at site, the same shall fall under the scope of the contractor. The contractor shall be compensated for the same in accordance with GCC Clause No.19 (Change in the Facilities).

20.0 PROGRESS REPORTING

- 20.1 Format for monthly progress monitoring is to be finalized and updated time-to-time. The report shall comprise Executive Summary, Physical and Financial Progress, S-Curves, activity based progress, cost and schedule variances if any, plan for corrective actions, three monthly rolling plan of activities, Resource position, etc.
- 20.2 The Contractor shall also submit signed copy of the monthly Progress Report in an acceptable format to:

ACE(Proc-LWR),
B-2-7, Nabhikiya Urja Bhavan,
Nuclear Power Corporation of India Ltd.,
Anuskotinagar, Mumbai 400 094.

for monitoring the progress of the work with a copy to General Manager, C&MM, NPCIL, Mumbai for information.

- 20.3 A hindrance register shall be maintained by the contractor in an approved format in the office of ACE (Proc-LWR), NPCIL, MUMBAI and record of hindrance shall be get approved / endorsed by Engineer-in-charge for recording/monitoring of hindrance to the progress of work and resolution thereof.

21.0 RIGHT OF RECOURSE UNDER CIVIL LIABILITY FOR NUCLEAR DAMAGE ACT 2010 & RULE 2011:

- 21.1 The Purchaser shall have a Right to Recourse against the Contractor in accordance with provisions under Section-17 (a) of Civil Liability for Nuclear Damages Act,



2010, with following limitations, as stipulated in Rule 24 of the Civil Liability for Nuclear Damage Rules, 2011 :

The contractor's liability shall be to the extent of Operator's liability under sub-section 6 of the Act or the value of the contract, whichever is less,
AND

The duration of Contractor's liability shall be limited to duration of initial license issued by AERB or the product liability period, whichever is longer".

22.0 POST ORDER CORRESPONDANCE

- 22.1 All Correspondence regarding Technical matters in respect of this order shall henceforth be addressed to:

ACE (Proc-LWR),
B-2-7, Nabhikiya Urja Bhavan,
Nuclear Power Corporation of India Ltd.,
Anushakti Nagar, Mumbai 400 094.

with a copy to General Manager, Directorate of Contracts & Materials Management, Nuclear Power Corpn. of India Ltd., A - '0' Block, Ground Floor, Nabhikiya Urja Bhavan, Anushakti Nagar, Mumbai-400 094.

- 22.2 All Correspondence regarding Commercial matters in respect of this order shall henceforth be addressed to:

General Manager,
Directorate of Contracts & Materials Management,
Nuclear Power Corpn. of India Ltd.,
D - '0' Block, Ground Floor,
Nabhikiya Urja Bhavan, Anushakti Nagar,
Mumbai – 400 094.

23.0 LATENT DEFECT SECURITY

- 23.1 The Contractor shall submit a Bank Guarantee for 1% (One Percent) of the total value of goods sold in the respective currencies under **P.O.No. CMM/EIC/91-00-3-3653/PO/58** for Supply and PO No. CMM/EIC/91-00-3-3653/PO/59 for Erection as security against Latent Defect. This Bank Guarantee shall be valid for a period of 5 (Five) years (Plus claim period of Three Months) from the date of successful completion of the Defect Liability Period as per the contract.

24.0 TERMS AND CONDITIONS OF CONTRACT

- 24.1 This Purchase Order will be governed by the Terms and conditions contained in the Tender Document and documents as detailed below:

- a) Purchase Order.
- b) Special Conditions of Contract (SCC).



- c) General Conditions of the contract, GCC/EPC-3/Rev.4
- d) Tender (including technical specifications, drawings, etc.) document, other than Sr. No. (b) &(c)

24.2 In case of any contradiction between GCC and SCC, SCC shall prevail over GCC.



(Pankaj Trivedi)

General Manager, C&MM

For & on behalf of Nuclear Power Corporation of India Limited
(The Purchaser)



Purchase Order No: CMM/EIC/91-00-3-3653/PO/58

Section-C

Technical Particulars

(As per Tender document)



PRICE ADJUSTMENT FORMULA**1.0 PRICE ADJUSTMENT FOR SUPPLY PORTION**

- 1.1 Price under Sr. No 1.1, 1.3, 1.4, 1.6, 2.1 and 2.3 of Section-A will be subject to price adjustment during execution of the contract as per clause no. 5.4 of General Conditions of the Contract, GCC/EPC-3/Rev.4. The Price Adjustment will be allowed upto a ceiling of $\pm$ Thirty Percent (30%) of the Basic Price inclusive of P & F Charges (excluding GST and all other indirect taxes) component in INR. Price adjustment of individual items will be allowed to such an extent that net price adjustment of all the items in INR does not exceed this 30% ceiling and shall be payable/ recoverable accordingly. No Price adjustment shall be provided on the portion of Price for which advance is given.
- 1.2 No adjustment of prices is allowed on Mandatory Spares and accessories. Engineering charges, Testing charges, Analysis charges etc. shown/payable separately shall also not be eligible for price adjustment.
- 1.3 The price adjustment formula to be applied to the Basic price (Inclusive of P&F Charges) component of the supply items shall be as follows:

$$EC_1 = EC \left(F + a \frac{M_1}{M_0} + b \frac{N_1}{N_0} + c \frac{O_1}{O_0} + d \frac{P_1}{P_0} + l \frac{L_1}{L_0} \right)$$

Where,

- EC_1 = Adjusted Basic price (Inclusive of P&F Charges) - component of items /equipment
- EC = Basic price (Inclusive of P&F Charges)-component of items /equipment
- M = Average all India Wholesale Price index for “**Manufacturing of Basic Metals (M)**” as published by Reserve Bank of India
- N = Average all India Wholesale Price index for “**Other Electronic and Electric Wires and Cables (N)**” as published by Reserve Bank of India
- O = Average all India Wholesale Price index for “**Manufacturing of Plastic Products (O)**” as published by Reserve Bank of India
- P = Average all India Wholesale Price index for “**Other Rubber Products (P)**” as published by Reserve Bank of India
- L = Labour indices as published by Labour Bureau Government of India, Chandigarh.



F = Fixed portion of the Basic price (Inclusive of P&F Charges) component of the items/equipments which will not be subject to any adjustment.

a, b, c & d = Coefficients of major materials involved in the Basic price (Inclusive of P&F Charges) of the items/equipments. The band of these coefficients is given separately

Subscript '0' refers to indices/exchange rates as prevailing on the seventh day prior to the due date of submission of bid [Submission of both Part - I (Technical & Commercial except Price) and Part – II (Price Bid)]. For the purpose of exchange rate, if this day happens to be a holiday, the nearest previous working day shall be considered. The Contractor will submit authentic copies of relevant published indices as on this date applicable to the tender, along with his offer or any time before opening of Price bid.

Subscript '1' refers to indices as on:

90 days prior to the date of despatch of items/equipments, for labour component and expiry of 2/3rd period from the date of purchase order to the date of despatch for material component.

- 1.4 For purpose of this clause, the date of despatch shall mean Contractual Delivery Date as per Contract or actual date of despatch, whichever is earlier.
- 1.5 The contractor should furnish Authentic copies of indices pertaining to applicable end dates along with each dispatch wise invoice for arriving at adjusted Basic Price component.
- 1.6 In case of dispatches which are delayed beyond the Contractual Milestone Date of dispatch (as given in the Contract) for reasons attributable to the Purchaser, the price adjustment provisions shall continue to be applicable for an additional period equal to delay caused by the Purchaser, subject to GCC sub-clause 5.4.1, 5.4.2 & 5.4.3. This shall, however not deemed to be automatic extension of Contractual Date of Delivery.
- 1.7 In case of dispatches which are delayed beyond the Contractual Milestone Date of dispatch (as given in Contract) for reasons attributable to the Contractor or Force Majeure events, the provision of Price Adjustment shall be as per terms of PO, regulated on the basis of the indices as applicable as per PO terms on the original Contractual Milestone Date of dispatch or the indices as applicable as per PO terms on the actual delivery date, whichever is lower.
- 1.8 In case dispatches are delayed beyond the Contractual Milestone date of dispatch (as given in the Contract) and the total delayed period can be apportioned between delays due to the Purchaser, the Contractor and / or Force Majeure events, Price adjustments for the period of delay caused by the Purchaser will be allowed considering as if this delay due to the Purchaser happened first, immediately after Contractual Milestone Date, irrespective of actual point in time in which such delay by Purchaser occurs.



- 1.9 Coefficient/weightages of Material/Labour in the Basic price (Inclusive of P&F Charges) component of the Items (excluding Spares & tools and tackles) is as indicated below

Sr. No.	Item	Value of Coefficient used	Source of Indices used	Value base date indices as prevailing '7' days prior to the date of submission of Part-I & Part-II Bid
1	Fixed Portion	F=0.15	--	--
2	Materials			
	M- Manufacture of Basic Metal	a = 0.40	For material M,N, O, P RBI Monthly bulletin numbers of wholesale price in India, Base 2011-12=100 (Monthly Average)	Will be issued later
	N- Other Electronic and Electric Wires and Cables	b = 0.10		
	O- Manufacturing of Plastic Products	c= 0.04		
	P= Other Rubber Products	d=0.01		
3	Labour	L=0.30	Consumer Price Index for industrial workers on Base 2016=100 published by Labour Bureau of Government.	

Pankaj

(Pankaj Trivedi)

General Manager, C&MM

For and On behalf of Nuclear Power Corporation of India Limited
(The Purchaser)



Annexure-BI**Milestones Schedule of Control and Instrumentation Package (CIP) of KKNPP-3&4****I. Supply Milestones:**

S.No.	Description	Detailed Description	Time period for KKNPP Unit-5 and Common (In months from date of Purchase Order)	Time period for KKNPP Unit-6 (In months from date of Purchase Order)
1.	Field Instrumentation	Detailed Engineering, Manufacturing, Testing, Procurement / Supply, Inspection and Delivery of Field Instrumentation. Items covered under Field Instrumentation are included at Sr.No.III below.	18	27
2.	PLC based control systems	Detailed Engineering, Manufacturing, Testing, Procurement / Supply, Inspection and Delivery of PLC based control systems.	18	18
3.	Control Cables	Detailed Engineering, Manufacturing, Testing, Procurement / Supply, Inspection and Delivery of Control Cables.	18	27
4.	Automatic Fire Protection System (AFPS) pertaining to buildings required for switchyard commissioning activity i.e. UAB, UAC, UAD, UBG, UGD etc.	Detailed Engineering, Manufacturing, Testing, Procurement / Supply, Inspection and Delivery of Automatic Fire Protection System.	18	18
5.	Automatic Fire Protection System (AFPS) pertaining to remaining all other buildings	Detailed Engineering, Manufacturing, Testing, Procurement / Supply, Inspection and Delivery of Automatic Fire Protection System.	18	27
6.	Communication System CYA & CYB	Detailed Engineering, Manufacturing, Testing, Procurement / Supply, Inspection and Delivery of Communication System.	18	18



S.No.	Description	Detailed Description	Time period for KKNPP Unit-5 and Common (In months from date of Purchase Order)	Time period for KKNPP Unit-6 (In months from date of Purchase Order)
7.	Communication System CYC & CYH	Detailed Engineering, Manufacturing, Testing, Procurement / Supply, Inspection and Delivery of Communication System.	20	20
8.	Communication System CYP, CYS, CYG and CYL	Detailed Engineering, Manufacturing, Testing, Procurement / Supply, Inspection and Delivery of Communication System.	24	24
9.	Containment Monitoring System	Detailed Engineering, Manufacturing, Testing, Procurement / Supply, Inspection and Delivery of Containment Monitoring System.	18	27
10.	Sea Water Temperature Monitoring System	Detailed Engineering, Manufacturing, Testing, Procurement / Supply, Inspection and Delivery of Sea Water Temperature Monitoring System.	18	27

II. Erection and Commissioning activities shall be completed by 27 months for KKNPP Unit-5 and 36 months for KKNPP Unit-6 from the date of issuance of Purchase Order. Further 6 months i.e. 36 + 6 = 42 months is stipulated for carrying out the changes arising out of WD revisions, DCNs, FCNs at the end of the commissioning and miscellaneous works for KKNPP Units-5&6.

III. List of equipment under Field Instrument

1. Pressure Gauge and Differential Pressure Gauge
2. Pressure Switches and Differential Pressure Switches
3. Temperature Gauges
4. Indicating Temperature Switch
5. Displacer type level transmitter
6. Temperature Compensated Humidity Transmitter
7. Indicating Pressure Switch



8. Capacitance type level switch
9. Conductivity type level switch
10. Dew point transmitter
11. Float type level switch
12. Air Flow Switch
13. Rotameters
14. Hydrogen Leak Detection System
15. Thermal mass flow meter
16. Instrument Isolation Valves - Gland valve
17. Instrument Isolation Valves - Bellow seal valve
18. Instrument valve- Ball type (Titanium)
19. Instrument valve-SS Ball type (for RMS)
20. Instrument Isolation Valves (3 WAY VALVE)
21. HRE Pressure Transmitters
22. MRE Pressure Transmitters
23. Pressure Transmitter - NRE-Normal Application
24. Pressure Transmitter - NRE-Sea Water
25. Resistance Temperature Detector(RTD)
26. Thermowells
27. Instrument Junction Boxes of Stainless Steel
28. Junction Boxes of CS-BOP
29. Instrument Junction Boxes of Aluminium
30. Valve Junction Boxes of Stainless Steel
31. Valve Junction Boxes of Aluminium
32. Valve Junction Boxes of Glass Reinforced Plastic
33. Push Button Control Stations
34. Terminal Blocks
35. Compensating Junction Box (CJB)
36. Special Grounding Junction Boxes
37. Local Control Panel



38. Three-Valve Manifold
39. Ultrasonic Level Transmitter
40. Ultrasonic contact type level switch
41. Submersible Level Transmitter
42. Non-Contact Type Level cum Flow Transmitter
43. Radar (Non- guided) level transmitter
44. Non Contact type level transmitter
45. Instrument Tube fittings
46. CS-BOP Tube fittings
47. Instrument Tube fittings (Titanium)
48. Levelling/Seperation vessel
49. Composite Insert
50. PH analyser
51. Conductivity analyser
52. Silica Analyser
53. Orifice
54. Density indicator
55. Float and dial type level gauge
56. Hardness analyser
57. Float and board type level indicator
58. Temperature transmitter
59. Pitot tube
60. Vibration transmitter
61. Flow Switch
62. Transparent flat level gauge
63. Instrumentation Tubing
64. Instrument Support Stands
65. MS hot-dip galvanized perforated light channels
66. MS Epoxy coated perforated light channels
67. MS Epoxy coated NON perforated light channels with COVERS



Annexure-3

68. Hot dipped galvanized GI Rigid conduit
69. Hot dipped galvanized GI Flexible conduit
70. 275 gsm GI sheet
71. Structural Steel
72. Impulse tube Clamps
73. Anchor fasteners
74. GI pipes
75. tinned metallic (brass / stainless steel) cable glands
76. Light Channel Support for Pulse Tubing

P. Trivedi

(Pankaj Trivedi)

General Manager, C&MM

For & on behalf of Nuclear Power Corporation of India Limited
(The Purchaser)



Purchase Order No: CMM/EIC/91-00-3-3653/PO/58

Annexure- E

Suggested Vendor List



NUCLEAR POWER CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)

2 X 1000 MWe KUDANKULAM NUCLEAR POWER PROJECT
UNITS – 5&6



SUGGESTED VENDOR LIST
OF
CONTROL AND INSTRUMENTATION PACKAGE OF KKNPP-5&6

Number of the Document	I02	KK56	0	0	AP	REP	PR	004
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Title	Total Number of Pages	Date	Revision Number
SUGGESTED VENDOR LIST OF CONTROL AND INSTRUMENTATION PACKAGE OF KKNPP-5&6	16	June, 2023	R1



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	NUCLEAR POWER CORPORATION OF INDIA LIMITED KUDANKULAM NUCLEAR POWER PROJECT – 5&6	
SUGGESTED VENDOR LIST OF CONTROL AND INSTRUMENTATION PACKAGE OF KKNPP-5&6		PAGE NO. : 5 of 16 REV. NO. : R1

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SUGGESTED VENDOR LIST OF CONTROL AND INSTRUMENTATION PACKAGE OF KKNPP-5&6		PAGE NO. : 6 of 16 REV. NO. : R1

1.0 Scope

This document covers the list of suggested vendors for supplying the various items under Control and Instrumentation Package for KKNPP-5&6.

2.0 Suggested Vendor list

The list of suggested vendors for supplying the various items is provided in this document. Contractor is expected to evaluate and place the suborders accordingly. The Contractor can also propose vendors other than those listed in the suggested vendor list with proper justification as per General Conditions of Contract (GCC). In such cases, the Contractor shall evaluate these vendors and submit the reports to NPCIL for review and approval. Selection of vendors and inspection agencies & the inspectors, shall be subjected to approval of NPCIL. It shall be Contractor's responsibility to ensure that the Vendor selected, implements the quality assurance program in line with NPCIL's quality assurance program in respect of work he is performing. Approval by NPCIL for any of the Subcontractors shall not relieve the Contractor from any of its obligations, duties or responsibilities under the Contract.

Contractor/ Vendor while ordering shall ensure the availability of spare parts and maintenance support services for the offered equipment as per the technical specification. Contractor/ Vendor shall give a notice of at least one year to the NPCIL before phasing out the products/spares to enable NPCIL to place orders for spares and services.





**NUCLEAR POWER CORPORATION OF INDIA LIMITED
KUDANKULAM NUCLEAR POWER PROJECT – 5&6**

**SUGGESTED VENDOR LIST OF
CONTROL AND INSTRUMENTATION PACKAGE OF
KKNPP-5&6**

**PAGE NO. : 7 of 16
REV. NO. : R1**

S.No.	Item Description	Vendor Name
1.	Pressure Gauges and Differential Pressure Gauges	a. M/s General Instruments Consortium, Mumbai b. M/s Forbes Marshall Private Limited, Hyderabad c. M/s WIKA Instruments Limited Private Limited, Pune
2.	Pressure switches and Differential Pressure switches	a. M/s Switzer Process Instruments Private Limited, Chennai b. M/s WIKA Instruments Limited Private Limited, Pune c. M/s General Instruments Consortium, Mumbai
3.	Temperature Gauges	a. M/s General Instruments Consortium, Mumbai b. M/s Forbes Marshall Private Limited, Hyderabad c. M/s WIKA Instruments Limited Private Limited, Pune
4.	Indicating Temperature Switches	a. M/s General Instruments Consortium, Mumbai b. M/s Switzer Process Instruments Private Limited, Chennai c. M/s WIKA Instruments Limited Private Limited, Pune
5.	Displacer type level transmitter	a. M/s Electronet Equipments Private Limited, Pune b. M/s Krohne Marshall Private Limited, Pune c. M/s Magentrol International India, Mumbai
6.	Temperature Compensated Humidity Transmitter	a. M/s Testo India Private limited, Pune b. M/s Bartec India, Uttar Pradesh c. M/s Steam equipment Private Limited, Maharashtra





**NUCLEAR POWER CORPORATION OF INDIA LIMITED
KUDANKULAM NUCLEAR POWER PROJECT – 5&6**

**SUGGESTED VENDOR LIST OF
CONTROL AND INSTRUMENTATION PACKAGE OF
KKNPP-5&6**

**PAGE NO. : 8 of 16
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S.No.	Item Description	Vendor Name
7.	Indicating Pressure Switches	a. M/s General Instruments Consortium, Mumbai b. M/s Switzer Process Instruments Private Limited, Chennai c. M/s WIKA Instruments Limited Private Limited, Pune
8.	Capacitance type level switch	a. M/s Electronet Equipments Private Limited, Pune b. M/s Sapcon instruments Private Limited, Indore c. M/s Pune Techtrol Private Limited, Pune
9.	Conductivity type level switch	a. M/s Electronet Equipments Private Limited, Pune b. M/s Pune Techtrol Private Limited, Pune c. M/s Levcon controls Private Limited, Kolkata
10.	Dew point Transmitter	a. M/s Bartec India, Uttar Pradesh b. M/s Testo India Private limited, Pune c. M/s Steam equipment Private Limited, Maharashtra
11.	Float operated magnetic level switch	a. M/s Electronet Equipments Private Limited, Pune b. M/s Nivelco instruments India Private Limited, Pune c. M/s Pune Techtrol Private Limited, Pune
12.	Air flow switch	a. M/s Chandak Instruments Pvt Ltd, Nagpur b. M/s Endress+Hauser (India) Pvt. Ltd., Mumbai c. M/s Magnetrol International India, Mumbai





**NUCLEAR POWER CORPORATION OF INDIA LIMITED
KUDANKULAM NUCLEAR POWER PROJECT – 5&6**

**SUGGESTED VENDOR LIST OF
CONTROL AND INSTRUMENTATION PACKAGE OF
KKNPP-5&6**

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S.No.	Item Description	Vendor Name
13.	Rotameters	a. M/s Eureka Industrial Equipments Private Limited, Pune b. M/s Forbes Marshall Private Limited, Hyderabad c. M/s Instrumentation Engineers Private Limited, Hyderabad
14.	Hydrogen Leak Detection System	a. M/s Ambetronics Engineers Private Limited, Mumbai b. M/s Subtronics India Private Limited, Mumbai c. M/s Uniphos Envirotronic Private Limited, Valsad d. M/s Analyzer Instrument Co. Pvt. Ltd., Kota
15.	Thermal mass flowmeter	a. M/s Chandak Instruments Pvt Ltd, Nagpur b. M/s Endress+Hauser (India) Pvt. Ltd., Mumbai c. M/s Magnetrol International India, Mumbai
16.	Instrument isolation valve (Gland packing type)	a. M/s Panam Engineers Limited, Gujarat b. M/s Baldota Valve & Fitting Co. Pvt. Ltd., Mumbai c. M/s BELL-O-SEAL Valve Pvt Ltd, Udupi, Karnataka
17.	Instrument isolation valve (Bellows sealed type)	a. M/s Panam Engineers Limited, Gujarat b. M/s Baldota Valve & Fitting Co. Pvt. Ltd., Mumbai c. M/s BELL-O-SEAL Valve Pvt Ltd, Udupi, Karnataka
18.	Instrument isolation ball valve (Titanium)	a. M/s Panam Engineers Limited, Gujarat b. M/s Baldota Valve & Fitting Co. Pvt. Ltd., Mumbai c. M/s BELL-O-SEAL Valve Pvt Ltd, Udupi, Karnataka





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S.No.	Item Description	Vendor Name
19.	Instrument isolation SS ball valve	a. M/s Panam Engineers Limited, Gujarat b. M/s Baldota Valve & Fitting Co. Pvt. Ltd., Mumbai c. M/s BELL-O-SEAL Valve Pvt Ltd, Udupi, Karnataka
20.	Instrument Isolation Valves (3 WAY VALVE)	a. M/s Panam Engineers Limited, Gujarat b. M/S Baldota Valve & Fitting Co. Pvt. Ltd., Mumbai
21.	Pressure Transmitter (HRE, MRE, NRE-NA, NRE-SW)	a. M/s. Baldota Control & Equipments Pvt. Ltd. (SMAR) b. M/s Electronet Equipments Pvt. Ltd. Pune c. M/s FUJI, Chennai d. M/s Emerson
22.	RTD*	a. M/s. Tempsens, Udaipur b. M/s. Pyro Electric, Goa
23.	Thermowell*	a. M/s. Tempsens, Udaipur b. M/s. Pyro Electric, Goa
24.	Stainless Steel Junction Boxes (Instrument JB & Valve JB)	a. M/s Raychem RPG, Mumbai b. M/s. Weidmuller, Bengaluru c. M/s Panam Engineers Limited, Gujarat d. M/s Reliable Electricals, Mumabi
25.	Aluminum Junction Boxes (Instrument JB & Valve JB)	a. M/s Raychem RPG, Mumbai b. M/s. Weidmuller, Bengaluru c. M/s Panam Engineers Limited, Gujarat d. M/s Reliable Electricals, Mumabi
26.	Glass Reinforced Polyester Junction Boxes (Instrument JB & Valve JB)	a. M/s Raychem RPG, Mumbai b. M/s. Weidmuller, Bengaluru



	NUCLEAR POWER CORPORATION OF INDIA LIMITED KUDANKULAM NUCLEAR POWER PROJECT – 5&6
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S.No.	Item Description	Vendor Name
		c. M/s Panam Engineers Limited, Gujarat d. M/s Reliable Electricals, Mumabi
27.	Push Button Control Station	a. M/s Ajmera Electrotech LLP b. M/S Reliable Electricals, Mumbai c. M/s Raychem RPG, Mumbai
28.	Terminal Blocks	a. M/s Connectwell Industries, Mumbai b. M/s. Weidmuller, Bengaluru
29.	Local Control Panel	a. M/s. Pyrotech, Udaipur b. M/s. Rittal, Bengaluru c. M/s. Schneider electric President systems Ltd., Bengaluru
30.	3 Valve Manifold	a. M/s Panam Engineers Limited, Gujarat b. M/s Baldota Valve & Fitting Co. Pvt. Ltd., Mumbai c. M/s BELL-O-SEAL Valve Pvt Ltd, Udupi, Karnataka
31.	Compensating Junction Box	a. M/s. Tempsens, Udaipur
32.	Special Grounding Junction Box	a. M/s Ajmera Electrotech LLP b. M/s Raychem RPG, Mumbai c. M/s Reliable Electricals, Mumbai d. M/s Panam Engineers Limited, Gujarat
33.	Ultrasonic level transmitter	a. M/s Electronet Equipments Private Limited, Pune b. M/s EIP Enviro level Controls PVT LTD c. M/s Pune Techtrol Private Limited, Pune
34.	Ultrasonic contact type level switch	a. M/s Electronet Equipments Private Limited, Pune





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S.No.	Item Description	Vendor Name
		b. M/s EIP Enviro level Controls PVT LTD c. M/s Pune Techtrol Private Limited, Pune
35.	Ultrasonic Flow Transmitter	a. M/s EIP Enviro level Controls PVT LTD b. M/s Electronet Equipments Private Limited, Pune c. M/s Pune Techtrol Private Limited, Pune
36.	Submersible level transmitter	a. M/s Nivelco instruments India Private Limited, Pune b. M/s Pune Techtrol Private Limited, Pune c. M/s WIKA Instruments Limited Private Limited, Pune
37.	Non-contact type level cum flow transmitter	a. M/s EIP Enviro level Controls PVT LTD b. M/s Electronet Equipments Private Limited, Pune c. M/s Pune Techtrol Private Limited, Pune
38.	Radar (Non-guided) level transmitter	a. M/s Electronet Equipments Private Limited, Pune b. M/s EIP Enviro level Controls PVT LTD c. M/s Pune Techtrol Private Limited, Pune
39.	Non-contact type level transmitter	a. M/s EIP Enviro level Controls PVT LTD b. M/s Electronet Equipments Private Limited, Pune c. M/s Pune Techtrol Private Limited, Pune
40.	Tube fitting	a. M/s HP Valves & Fittings Pvt Ltd, Chennai b. M/s Panam Engineering Limited, Gujarat c. M/s Swagelok India Private Limited, Mumbai
41.	Leveling vessel / separation vessel	a. M/s Baldota Valve & Fitting Co. Pvt. Ltd., Mumbai



	NUCLEAR POWER CORPORATION OF INDIA LIMITED KUDANKULAM NUCLEAR POWER PROJECT – 5&6
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S.No.	Item Description	Vendor Name
		b. M/s Cold weld, Mumbai c. M/s Panam Engineers Limited, Gujarat
42.	Composite Insert	a. M/s HP Valves & Fittings Pvt Ltd, Chennai b. M/s Panam Engineers Limited, Gujarat c. M/s Swagelok India Private Limited, Mumbai
43.	Analysers	a. M/s Forbes Marshal, Hyderabad/Pune b. M/s Hach DHR Indi Private Limited, Bengaluru c. M/s Orbit technologies, Hyderabad
44.	Orifice	a. M/s Minco India Pvt Ltd, Mumbai b. M/s Electronet Equipments PVT. LTD., Pune
45.	Density indicator	a. M/s Eureka Industries Private Limited b. M/s Wika instruments, Pune
46.	Float and dial type level gauge and Float and board type level indicator	a. M/s Pune Techtrol Private Limited, Pune b. M/s Levcon Instruments Pvt Ltd c. M/s SBEM, Pune
47.	Temperature transmitter	a. M/s Baldota Control And Equipments Pvt. Ltd. b. M/s Masibus Automation & Instrumentation Pvt. Ltd., Gandhinagar
48.	Pitot tube	a. M/s Micro Precision Products Pvt Ltd., (Switzer)
49.	Vibration transmitter	a. M/s Precision Instruments & Electronics (Madras) Private Limited





**NUCLEAR POWER CORPORATION OF INDIA LIMITED
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S.No.	Item Description	Vendor Name
		b. M/s Masibus Automation & Instrumentation Pvt. Ltd., Gandhinagar
50.	Transparent flat level gauge	a. M/s Pune Techtrol Private Limited, Pune b. M/s Levcon Instruments Pvt Ltd c. M/s SBEM, Pune
51.	PLC based control system	a. M/s Fox solutions, Nashik (for Siemens make) b. M/s SSPL, Mumbai c. M/s Siemens, Mumbai
52.	Instrumentation Tubing	a. M/s Ratnamani metals and tubes limited, Ahmedabad b. M/s REMI tubular limited, Mumbai c. M/s Tubacex India Private Limited, Mumbai
53.	Flow Switch	a. M/s Switzer process instruments limited b. M/s Instrumentation Engineers, Hyderabad
54.	Instrument Support Stands	a. M/s TEMA, Mumbai
55.	Cables	a. M/s TEMPSSENS, Mumbai b. M/s Thermo cables, Mumbai c. M/s APAR, Umbergoan, Valsad, Gujarat
56.	Containment Monitoring System	a. M/s Core Energy Systems, Mumbai b. M/s Institute of Hydroproject (M/s Rys Hydro), Russia c. M/s Record Tech Electronics, Roorkee
57.	Industrial TV system (CYP)	b. M/s Core Energy system pvt. Limited (For ISEC, Sweden)



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S.No.	Item Description	Vendor Name
		c. M/s Technocrats Security Systems Pvt. Ltd, Mumbai d. M/s Nuvia-India Pvt. Ltd, New Delhi
58.	Master clock system (CYG)	a. M/s Signal and Systems ltd, Chennai b. M/s ABS India, Bangalore c. M/s Dynatek Controls, Mumbai
59.	Common telephone system (CYA)	a. M/s Unicom, Chennai (M/s Unify) b. M/s Taraspan Ltd (M/s Mitel, Canada) c. M/s Cosmos Business Machines (M/s NEC)
60.	Operative telephone system (CYB)	a. M/s Unicom, Chennai (M/s Unify) b. M/s Taraspan Ltd (M/s Mitel, Canada) c. M/s Cosmos Business Machines (M/s NEC)
61.	Loud speaking communication system (CYC)	a. M/s Netware, Gurugram (M/s ARMTEL, Russia) b. M/s Dee-em system, Ghatkopar, Mumbai (M/s Industronic, Germany) c. M/s Technoncrats Security Systems Pvt. Ltd, Mumbai (M/s Commend, India)
62.	Command, search and annunciation system (CYH)	a. M/s Netware, Gurugram (M/s ARMTEL, Russia) b. M/S Dee-em system, Ghatkopar, Mumbai (M/s Industronic, Germany) c. M/s Technoncrats Security Systems Pvt. Ltd, Mumbai (M/s BOSCH, Bangalore)
63.	Operative personnel command recording system (CYL)	a. M/s ABS India, Bangalore b. M/s Nice, USA c. M/s Xtend Technologies, Kochi
64.	Standby Internal radio communication system (CYS)	a. M/s ABS India, Bangalore b. M/s Manasrekha Ltd., Mumbai



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S.No.	Item Description	Vendor Name
		c. M/s Technoncrats Security Systems Pvt. Ltd, Mumbai
65.	Automated fire protection System (AFPS)	a. M/s SSPL, Mumbai b. M/s Honeywell, Mumbai c. M/s BOSCH, Mumbai
66.	Sea Water Temperature Monitoring system	a. M/s Environnement SA India Pvt. Ltd, Mumbai b. M/s Ideatec Softwares (India) Pvt Ltd, Coimbatore
67.	Conduits	a. M/s BEC Conduits Private Limited, New Delhi
68.	Structural Steel	a. M/s Raunaq steels private limited, Chennai
69.	LAXCON make stainless steel rod and stainless steel plate	a. M/s Salem stainless steel suppliers private limited, Chennai
70.	Anchor fastener	a. M/s HILTI, India b. M/s Parker, India
71.	Light channels	a. M/s Asian Ancillary Corporation, Mumbai b. M/s Eros Metal Works, Nagpur

Note: '*' – Thermowell shall be supplied in set with RTD by same vendor.



Annexure-I**Erection Completion Certificate**

No.: NPCIL/.....

Date :

To,

.....
.....

The Erection Completion Certificate is hereby issued for the System or Subsystem or Major component or Facilities as per the details given below;

Sr. No.	Item Description	References / Details
1.	Ref. P.O. No. and Date of issue	
2.	Name of Package	
3.	Name of Contractor	
4.	Ref. contract clauses in respect of issue of Erection Completion Certificate to the contractor;	
5.	Description of the System or Subsystem or Major components or Facilities for which Erection Completion is identified:	
6.	Date of Submission of CCC/STD of the systems / subsystems described in Sr. No. 5.	
7.	Date of Erection Completion of the systems / subsystems described in Sl. No. 5.	
8.	Remarks, if any	

This certificate does not relieve the contractor of its obligation of construction, erection, inspection, commissioning, testing and performance obligations for works under the contract including obligations during the Warranty Period / Performance Guarantee Period, as mentioned in the contract and purchase order, as amended from time to time.

This Erection Completion Certificate is issued to M/s for satisfactory completion of the systems/ sub systems described under Sl. No. 5 in totality.

(.....)
Chief Construction Engineer
For and on behalf of the Purchaser
Nuclear Power Corporation of India Limited

CC: Site- PD/
HQ- C&MM; PROC



(NPCIL Letterhead)

Annexure-J

Operational Acceptance Certificate

No.: NPCIL/.....

Date :

To,

.....
.....

The Operational Acceptance Certificate is hereby issued for the System or Subsystem or Major component or Facilities as per the details given below;

Sr. No.	Item Description	References / Details
1.	Ref. P.O. No. and Date of issue	
2.	Name of Package	
3.	Name of Contractor	
4.	Ref. contract clauses in respect of issue of Operational Acceptance Certificate to the contractor;	
5.	Description of the System or Subsystem or Major components or Facilities for which Operational Acceptance is identified:	
6.	Date of Submission of CCC/STD/History Docket of the systems / subsystems described in Sr. No. 5.	
7.	Date of Operational Acceptance of the systems / subsystems described in Sl. No. 5.	
8.	Remarks, if any	

This certificate does not relieve the contractor of its obligation of construction, erection, commissioning, testing and performance obligations for works under the contract including obligations during the Warranty Period / Performance Guarantee Period as mentioned in the contract and purchase order, as amended time to time.

This Operational Acceptance Certificate is issued to M/s for satisfactory completion of the systems/ sub systems described under Sl. No. 5 in totality.

(.....)

Chief Construction Engineer

For and on behalf of the Purchaser

Nuclear Power Corporation of India Limited

CC: Site- PD/
HQ- C&MM; PROC



ADVANCE PAYMENT

NUCLEAR POWER CORPORATION OF INDIA LIMITED
(Acting through) Executive Director,
Directorate Of Contracts & Materials Management
NUB, Anushaktinagar, Mumbai-400094.

1. WHEREAS on or about the _____ day of 201_
M/s. _____ a Company registered
under the Companies Act 1956 and having its registered office at

(hereinafter referred to as 'The Contractor') entered into an agreement bearing
No. _____ (hereinafter referred to as 'The Contract'),
with Nuclear Power Corporation of India Limited (A Government of India
Enterprise) acting through Director, Contracts & Material Management (hereinafter
referred to as (Purchaser) for _____
(hereinafter referred to as 'The Equipment').
2. AND WHEREAS under the terms & conditions of the contract an amount of Rs.
_____ (Rupees _____ only) representing
_____ per cent advance payment out of a contract value of Rs _____ (Rupees
_____ only) is to be paid by the Purchaser to the
contractor.
3. AND WHEREAS the Purchaser has agreed in pursuance of the said terms and
conditions of the contract to make an advance payment of Rs. _____ (Rupees
_____ only) to the Contractor on the Contractor furnishing
a Bank Guarantee in the manner herein contained.



4. NOW WE, the _____ (Bank) in consideration of the purchaser having agreed to pay to the contractor an advance payment of Rs. _____ (Rupees _____ only) do hereby agree and undertake to indemnify the Purchaser and keep the Purchaser indemnified to the extent of a sum not exceeding the said sum of Rs. _____ (Rupees _____ only) against any damage or loss that may be suffered by the Purchaser by reason of non-fulfilment of any of the terms and conditions of the contract by the contractor.
5. WE, _____ (Bank) do hereby undertake to pay the amount due and payable under this guarantee without any demur merely on a demand from on behalf of Messrs NUCLEAR POWER CORPORATION OF INDIA LTD stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the Purchaser by reason of breach by the said Contractor (s) of any of the terms and conditions contained in the said agreement or by reason of the Contractor(s) 's failure to perform the said agreement. Any such demand made on the bank shall be conclusive as regards the amount due and payable by Bank under this guarantee. However, our liability under this guarantee, shall be restricted to an amount not exceeding Rs. _____ (Rupees _____ only .
6. We undertake to pay to the Purchaser any money so demanded notwithstanding any dispute or disputes raised by the Contractor (s) in any suit or proceeding pending before any Court or Tribunal relating thereto our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be valid discharge of our liability for payment thereunder and the Contractor (s) shall have no claim against us for making such payment.



7. AND WE _____ (Bank) hereby further agree that the decision of the said NUCLEAR POWER CORPORATION OF INDIA LTD., as to whether the Contractor has committed breach of any such terms and conditions of the contract or not and as to the amount of damages or loss assessed by the said NUCLEAR POWER CORPORATION OF INDIA LTD., as damage or loss suffered by the Purchaser on account of such breach would be final and binding on us.
8. AND WE _____ (Bank) further agree with the Purchaser that the Purchaser shall have the fullest liberty without our consent and without affection in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extent time of performance by the said Contractor (s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Purchaser against the said Contractor (s) and to forbear or enforce any of the terms and conditions relating the said agreement and we shall not be relieved form our liability by reason of any such variation or extension being granted to the said contractor (s) or for any forbearance, act or omission on the part of the Purchaser or any indulgence by the Purchaser to the said contractor (s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of relieving us.
9. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor (s).



10. Our guarantee shall remain in force until _____ and unless a claim under the guarantee is lodged with us within three months from that date all rights of the Purchaser under the guarantee shall be forfeited and we shall be relieved and discharged from all liabilities, thereunder.
11. Notwithstanding anything contrary contained in any law for the time being in force or banking practice, this guarantee shall not be assignable or transferable by the beneficiary. Notice or invocation by any person such as assignee, transferee or agent of beneficiary shall not be entertained by the bank. Any invocation of the guarantee can be made only by the beneficiary directly.

Dated the _____ day of _____ 201_

For _____
(Indicate the name of the bank)



PERFORMANCE SECURITY BOND

NUCLEAR POWER CORPORATION OF INDIA LIMITED
(Acting through) Executive Director,
Directorate Of Contracts & Materials Management
NUB, Anushaktinagar, Mumbai-400094.

1. WHEREAS on or about the (Date of the Purchase Order)
M/s. _____ a Company
incorporated under the Companies Act 1956 and having its registered office at _____
(hereinafter referred to as 'The Contractor') entered into an agreement bearing
No. _____ (hereinafter referred to as 'The Contract'),
with Nuclear Power Corporation of India Limited (A Government of India Enterprise)
acting through Director, Contracts & Material Management (hereinafter referred to as
(Purchaser) for supply of _____ (hereinafter
referred to as 'The Equipment').
2. AND WHEREAS under the terms & conditions of the contract, the Contractor shall
furnish Performance Security Bond for an amount of Rs. _____ (Rupees
_____ only) representing 10% of the total value of the
contract in the form of a bank guarantee, in a manner herein contained duly executed
by a scheduled/nationalised bank towards satisfactory performance of the contract and
performance of the equipment and against any loss or damage caused to or suffered or
would be caused to or suffered by the Purchaser by reason of any breach by the said
Contractor(s) of any terms and conditions contained in the said agreement. The
Performance Security Bond shall be valid till satisfactory completion of Defect
Liability Period covering the Warranty/Guarantee period of the equipment as per the
terms & conditions of the said agreement.



3. NOW WE, the _____ (Bank) in consideration of the promises do hereby agree and undertake to pay to the Nuclear Power Corporation of India Limited. (the purchaser) on behalf of the Contractor, the said sum of Rs. _____ (Rupees _____ Only), the amount due and payable under the guarantee without any demur, merely on a demand from the Nuclear Power Corporation of India Limited stating that the amount claimed is due by way of loss or damage caused to, or suffered by, the Purchaser by reason of any breach by the said Contractor of any of the terms and conditions contained in the said agreement or by reason of the contractors failure to perform the said agreement or by reason of unsatisfactory performance of the equipment during the Warranty period. Any such demand, made on the bank, shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. _____ (Rupees _____ only).
4. WE undertake to pay to the Purchaser the said sum of Rs. _____ (Rupees _____ Only), demanded notwithstanding any dispute or disputes raised by the Contractor(s), in any suit on proceedings pending before any Court or Tribunal relating thereto, our liability under this presents being absolute irrevocable and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment thereunder and the Contractor shall have to no claim against us for making such payment.
5. WE HEREBY further agree that the decision of the Nuclear Power Corporation of India Limited as to the amount of damages suffered by the Purchaser by reasons(s) of any breach by the said Contractor or whether the said equipment is giving satisfactory



performance or not during the Warranty Period as per the terms and conditions of the said agreement, shall be final and binding on us.

6. AND WE, the _____ (Bank) do hereby further agree that our liability hereinunder shall not be discharged by virtue of any agreement between the Purchaser and the Contractor whether with or without our knowledge and/or consent and shall remain in full force and effect during the period that would be taken for the performance of the said agreement or by reason of the Purchaser showing any indulgence or forbearance to the Contractor whether as to payment, time for performance, or any other matter whatsoever relating to the contract, which but for this provision, would amount to discharge of the surety under the law.
7. THIS guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor.
8. OUR Guarantee shall remain in force until _____ and unless a claim under the guarantee is lodged with us within three months from the said date, all rights of the Purchaser under the guarantee shall be forfeited and we shall be relieved and discharged from all our liabilities hereunder.
9. Notwithstanding anything contrary contained in any law for the time being in force or banking practice, this guarantee shall not be assignable or transferable by the beneficiary. Notice or invocation by any person such as assignee, transferee or agent of beneficiary shall not be entertained by the bank. Any invocation of the guarantee can be made only by the beneficiary directly.

Dated the _____ day of _____ 201_

For _____

(indicate the Name of bank)



RETENTION BANK GUARANTEE

NUCLEAR POWER CORPORATION OF INDIA LIMITED
(Acting through) Executive Director,
Contracts & Materials Management
Nabhikiya Urja Bhavan,
Anushaktinagar,
Mumbai - 400 094.

1. WHEREAS on or about the _____ day of _____ M/s. _____ a Company registered under the Companies Act 1956 and having its registered office at _____ (hereinafter referred to as 'The Contractor') entered into an agreement bearing No. _____ dtd. _____ (hereinafter referred to as the 'The Contract'), with Nuclear Power Corporation of India Limited (acting through Executive Director, Contracts & Materials Management Group) (hereinafter referred to as the 'The Purchaser') for supply of _____ (hereinafter referred to as 'The Equipment').
2. AND WHEREAS under the terms and conditions of the contract balance 10% payment is to be made against _____ and on the supplier furnishing a retention bank guarantee for Rs. _____ (Rupees _____ only) representing 10% of the contract value in the manner herein contained.
3. NOW WE, (Bank) _____ in consideration of the Purchaser having agreed to pay to the Contractor balance payment of Rs. _____ (Rupees _____ only) do hereby agree and undertake to indemnify the Purchaser and keep the Purchaser indemnified to the extent of a sum not exceeding the said sum of Rs. _____ (Rupees _____ only) against any damage or loss that may be suffered by the Purchaser by reason of non fulfillment of any of the terms and conditions of the contract by the CONTRACTOR.
4. WE, the (Bank) _____, do hereby undertake to pay the amount due and payable under this guarantee without any demur merely on a demand from the EXECUTIVE DIRECTOR, CONTRACTS AND MATERIALS MANAGEMENT on behalf of M/s. NUCLEAR POWER CORPORATION OF INDIA LIMITED stating that the amount claimed is due byway of loss or damage caused to or would be caused to or suffered by the Purchaser by reason of breach by the said Contractor of any of the terms and conditions contained in the said agreement or by reason of the Contractor(s) failure to perform the said agreement. Any such demand made on the bank shall be conclusive as regards the amount due and payable by bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. _____ (Rupees _____ only).



5. We undertake to pay to the Purchaser any money so demanded notwithstanding any dispute or disputes raised by the Contractor(s), in any suit or proceedings pending before any court or tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the Contractor(s) shall have no claim against us for making such payment.
6. AND WE, the (Bank) _____, hereby further agree that the decision of the said EXECUTIVE DIRECTOR, CONTRACTS AND MATERIALS MANAGEMENT GROUP, NUCLEAR POWER CORPORATION OF INDIA LIMITED as to whether the Contractor has committed breach of any such terms and conditions of the contract or not and as to the amount of damages or loss assessed by the said EXECUTIVE DIRECTOR, CONTRACTS AND MATERIALS MANAGEMENT GROUP, NUCLEAR POWER CORPORATION OF INDIA LIMITED as damage or loss suffered by the Purchaser on account of such breach would be final and binding on us.
7. WE, the (Bank) _____, further agree with the Purchaser that the Purchaser shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor from time to time or to postpone for any time or from time to time any of the powers exercisable by the Purchaser against the said Contractor and to forebear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variations or extensions being granted to the said Contractor or for any forbearance, act or omission on the part of the Purchaser or any indulgence by the Purchaser to the said Contractor or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision have effect of relieving us.
8. THIS GUARANTEE will not be discharged due to the change in the constitution of the Bank of the Contractor(s)/Supplier(s).
9. Notwithstanding anything contrary contained in any law for the time being in force or banking practice, this guarantee shall not be assignable or transferable by the beneficiary. Notice or invocation by any person such as assignee, transferee or agent of beneficiary shall not be entertained by the bank. Any invocation of the guarantee can be made only by the beneficiary directly.

NOTWITHSTANDING ANYTHING CONTAINED herein above, our liability under this guarantee is restricted to Rs. _____ (Rupees _____ only). Our guarantee shall remain in force for a period of three months from the date of the bank guarantee i.e. up to _____ and unless a claim under the guarantee is lodged within the above date, all rights of the Purchaser under the guarantee shall be forfeited and we shall be relieved and discharged from all liabilities under this guarantee there under.

Dated the _____ day of _____ 201__

For _____
(Indicate the name of the Bank)

* * *



PO No. _____

Invoice No. & Date: _____

Declaration Form for GST

The Supplier/Contractor while submitting their bill to the Paying Authority shall furnish the following certificates:

Certified that:

- (a) Additional Input Tax Credit under GST availed against invoices submitted here under is Rs. _____.
- (b) Certified that the goods and services on which GST has been charged are not exempted under the GST Act or the rules made there under and the amount charged on account of GST on these goods and services are not more than what is payable under the relevant act or the rules there under.
- (c) Certified that we have taken into account all input tax credits available under GST and have not loaded the same in the basic price while furnishing their bids.
- (d) Certified that in respect of amount of taxes claimed in the bill no claim is pending for refund/or is admissible for refund from any other agency and /or no other tax credit is available in respect of the same. In the event of getting refund in whole or in part of the element of GST claimed from Government, the same shall be passed on the benefit to the Purchaser by remitting the amount equivalent to the amount of refund obtained.
- (e) Certified that the GST charged herein the invoices has been/ shall be deposited within the due date and the Invoice details have been/ shall be populated in GSTR1/ANX-1 of the GSTN portal facilitating Input Tax Credit to the Purchaser.
- (f) Certified that we have complied with the Anti-profiteering measure provisions under CGST/SGST/UTGST Acts and passed on commensurate reduction of price to the purchaser.
- (g) Certified that a quarterly statement shall be submitted to NPCIL confirming the payment of GST invoiced on NPCIL along with copy of GST paid Challan.
- (h) Certified that in case of any change in the Invoice which has been accepted by the Purchaser in the IMS portal, the corresponding amendment in the Original Invoice shall be made by the Supplier/Contractor, by raising Debit Note/Credit Note or any other document, as applicable, within the timelines stipulated under the GST Act.

Declaration Form for TDS

The Supplier/Contractor while submitting their bill to the Paying Authority shall furnish the following certificates:

Certified that:

- (a) Whether Provisions of Section 194Q are applicable (For Supply of Goods worth 50 Lakhs p.a.): YES/NO
- (b) We have filed the return of income for the previous year (AY _____) preceding the year in which tax is liable to be deducted, within the prescribed time limit and hence, confirm that applicable rate of TDS is at Normal Rate.
- (c) We have linked the PAN to Aadhar and the PAN is not inoperative (applicable in case of Individuals)

Incomplete information against point (a), (b) & (c) above under Declaration form for TDS, shall be subject to deduction of tax at higher rate as applicable.

Signature of Contractor or their Authorised Representative with company seal.





न्यूक्लियर पावर कॉर्पोरेशन ऑफ इंडिया लिमिटेड
(भारत सरकार का उद्यम)
NUCLEAR POWER CORPORATION OF INDIA LIMITED
(A Govt. of India Enterprise)
(CIN : U40104MH1987GOI149458)



सविदा एवं सामग्री प्रबंधन निदेशालय
नाभिकीय ऊर्जा भवन,
ए-'O' ब्लॉक, तलमाला,
अणुशक्तिनगर, मुंबई - 400 094.
दूरभाष: 2599 3000 / 2599 1000
फैक्स: 91-22-2558 0741



DIRECTORATE OF CONTRACTS & MATERIALS MANAGEMENT

Nabhikiya Urja Bhavan,
A-'O' Block, Ground Floor,
Anushaktinagar, Mumbai - 400 094.
Tel.: 2599 3000 / 2599 1000
Fax : 91-22-25580741

CMM-45/Rev.4

MSE Type	NA
MSE Category	NA
Budget Head	Capital

	USI No --	IAEA Code: 245 244.2 to 2445.5 243.31 to 243.37	PROJ/STN	KKNPP 5&6 Project
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Purchase Order No. CMM/EIC/91-00-3-3653/PO/59

Date **31 DEC 2025**

To,
M/s Electronics Corporation of India Limited.
Control Instrumentation Division (CnID)
Control System Group (CSG), ECIL-Post,
Medchal Malkajgiri-Dist, Hyderabad-500 062,

Ph : 040-27186264, 2786233
Email : headscada@ecil.co.in.

In Consortium With

M/s TEMA India Private Limited.,
Darabshaw House, 1st floor, S.V. Marg,
Ballard Estate, Mumbai - 400 001.

Ph: 022 66662293 , 8898237994, 989275225
Email : arvind.k@temaindia.com
Calvin.r@temaindia.com

Ref :

- 1) Your Bid No. ECHO/CnID/Mktg/2024-25/NPCIL-KKNPP-5&6/793 Dtd. 04.03.2025
- 2) Consortium Agreement Dtd. 27.02.2025
- 3) Part-I opened on 25.03.2025
- 4) Part-II Opened on 31.07.2025
- 5) MOM Dtd. 19.09.2025
- 6) Your Letter No. ECIL/CnID/KKNPP-5&6/Price SoQR/Rev-01 Dtd. 23.09.2025
- 7) Your Letter No. ECIL/CnID/KKNPP-5&6/ offer -validity-extn/205/01 Dtd. 28.11.2025
- 8) Your Letter No. ECIL/CnID/KKNPP-5&6/offer-Payment Terms/2025/01 dtd. 29/12/2025

Dear Sirs,

Your bid contained in the Tender No. CMM/EIC/91-00-3-3653 Dtd. 28.10.2024 to supply the under mentioned Stores is accepted for and on behalf of the Nuclear Power Corporation of India Ltd., subject to the Conditions of Contract as contained in Section-B of the tender documents and the terms and conditions contained in this Purchase Order, to the extent of the quantity and at the price specified below:

Sl. No.	Description	Quantity	Unit	Rate	Value
	CONTROL INSTRUMENTATION PACKAGE (CIP): KKNPP-5&6 (Erection & Commissioning) Design, Engineering, Procurement, Manufacturing, Testing, Supply, Storage, Installation & Erection, Preservation, Commissioning, Performance Testing, Handing over and Performance Guarantee (PG) of Control and Instrumentation Package (CIP) for KKNPP-5&6 For Detailed scope of work and quantity, refer the Specifications attached under Section-C. forwarded under Tender No. CMM/EIC/91-00-3-3653 Dtd. 28.10.2024 and further described in following :		As Per	Section-A	

SECTION-A	: Items and Price Schedule			
SECTION-B	: Commercial Terms and Conditions: Basis of price, Statutory levies, Delivery Schedule, Terms of Payment, etc.			
SECTION-C	: Technical Particulars			
Annexure – A1 to A5	: Break up of Price Schedule.			
Annexure – 2	: Price Adjustment Formula.			
Annexure-A	: Format for “ Bank Guarantee for Advance ”			
Annexure-B	: Format for “Bank Guarantee for Performance Security Bond”			
Annexure-C	: Format for “Retention Bank Guarantee”			
Annexure-J	: Format for “Operational Acceptance Certificate”			
Annexure-F	: Format for GST			
KKNPP 5&6		Tamilnadu		33AAACN3154F2ZW

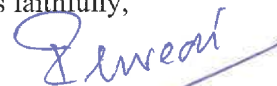
Price Basis As per Section-B Delivery Period As per Section-B

Place of Delivery As per Section-B

Conditions of Contract contained in Section-B of the tender documents and this Purchase Order shall be the sole repository of the Contract.

Please acknowledge receipt immediately in the form sent herewith.

Yours faithfully,



(Pankaj Trivedi)

General Manager (C & MM)

For and on behalf of Nuclear Power Corpn. of India Ltd.
(The Purchaser)

Important:

1. Bills should be submitted in triplicate to the Paying Authority at the address as indicated in the Purchase Order alongwith all relevant Documents as enlisted under Clause 5.6 of GCC Form No. EPC-3/R-4 and or as specified in this Purchase Order.

Delivery Instructions:

1. Stores are to be delivered at the place of delivery stipulated in this Purchase Order on any working day between 10.30 a.m. and 3.00 p.m.
2. No Stores shall be accepted by the Stores unless Delivery Challan giving full details of the Purchase Order No. and Date, Description of Stores, Quantity, Make, Unit and Gross Weight or Net Weight is submitted with the Stores. In absence of any of the above, the Storekeeper shall refuse to take delivery of the Stores.

SECTION- A
ITEMS AND PRICE SCHEDULE

Sr. No.	Description	Quantity	Total DAP Value inclusive of GST (₹)
	CONTROL INSTRUMENTATION PACKAGE (CIP) : KKNPP-5&6 (Erection & Commissioning)		
A	Design, Engineering, Procurement, Manufacturing, Testing, Supply, Storage, Installation & Erection, Preservation, Commissioning, Performance Testing, Handing over and Performance Guarantee (PG) of Control and Instrumentation Package (CIP) for KKNPP-5&6 For Detailed scope of work, Specification number attached under Section-C. forwarded under Tender No. CMM/EIC/91-00-3-3653 Dtd. 28.10.2024		
1.0	Template-E1 (Erection of Supply items S1,S2 & S3)	As per Annexure-A1	2305565115.48
2.0	Template-E2 (Erection of System items S3)	As per Annexure-A2	247145830.47
3.0	Template-E3 (Erection of FIM)	As per Annexure-A3	99218002.95
4.0	Template-E4 (Erection of Miscellaneous items)	As per Annexure-A4	388257764.22
5.0	Template-F (Commissioning)	As per Annexure-A5	170720376.32
		TOTAL PO VALUE IN RUPEES (₹)	3210907089.44

(Rupees Three Hundred Twenty One Crores Nine Lakhs Seven Thousand Eighty Nine and Forty Four Paise Only)

Pankaj

(Pankaj Trivedi)
General Manager (C&MM)

For & on behalf of Nuclear Power Corporation of India Ltd.,
(The Purchaser)



Purchase order No.: CMM/EIC/91-00-3-3653/PO/59						
Template Name: E1 - Detailed Schedule of Quantities & Rates For Erection of Supply Items (S1, S2 & S4) (Reference Specification: 101.KK56.0.0.TH.TS.PR001)						
M/s Electronics Corporation of India Ltd						
Item No.	Description of Item/Scope of works	Unit of Measure	Total Quantity for KKNPP-Unit 5&6 (A)	Unit Price (Inclusive of GST and Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)	Rate of GST included in Total Price in percentage (%) (D)
INSTRUMENTS CALIBRATION						
A	Inspection, testing, response check/ calibration, documentation, preservation till its actual installation at site for the following Instruments :					
1	Electronic Pressure transmitters					
1.1	HRE-Excess (Gauge) Pressure Transmitters	No's	62	2018.61	125,153.82	18.00
1.2	HRE-Differential Pressure Transmitters	No's	36	3792.69	136,536.84	18.00
1.3	MRE-Excess (Gauge) Pressure Transmitters	No's	1849	3285.81	6,075,462.69	18.00
1.4	MRE-Vacuum (Negative) Pressure Transmitters	No's	20	3285.81	65,716.20	18.00
1.5	MRE-Vacuum and Excessive (negative and positive) pressure Transmitters	No's	172	3943.17	678,225.24	18.00
1.6	MRE-Differential Pressure Transmitters	No's	2099	4941.09	10,371,347.91	18.00
1.7	NRE-Absolute Pressure Transmitters	No's	85	3792.69	322,378.65	18.00
1.8	NRE-Excess (gauge) Pressure Transmitters	No's	1307	3792.69	4,957,045.83	18.00
1.9	NRE-Vacuum (Negative) Pressure Transmitters	No's	9	3943.17	35,488.53	18.00
1.10	NRE-Vacuum and Excessive (negative and positive) pressure Transmitters	No's	35	3943.17	138,010.95	18.00
1.11	NRE-Differential Pressure Transmitters	No's	686	3792.69	2,601,785.34	18.00
1.12	NRE(SW)-Excess (gauge) Pressure Transmitters	No's	68	3285.81	223,435.08	18.00
1.13	NRE(SW)-Vacuum (Negative) Pressure Transmitters	No's	71	3285.81	233,292.51	18.00
1.14	NRE(SW)-Differential Pressure Transmitters	No's	42	3792.69	159,292.98	18.00
1.15	Temperature Transmitter	No's	47	3285.81	154,433.07	18.00
1.16	Vibration Transmitter	No's	16	3285.81	52,572.96	18.00
2	Temperature gauges, Temperature gauge cum switches, Temperature Indicating switches, Thermocouples and RTDs, Dew point transmitter, Relative Humidity transmitter					
2.1	Temperature Gauges - Bimetallic type	No's	733	2087.91	1,530,438.03	18.00
2.2	Temperature Indicating Switches - Gas filled type	No's	102	2087.91	212,966.82	18.00
2.3	Resistance Temperature Detector (RTD)	No's	2775	2357.19	6,541,205.25	18.00
2.4	Dew point transmitter	No's	5	2804.67	14,023.35	18.00
2.5	Relative humidity transmitter (Temperature compensated)	No's	50	3816.45	190,822.50	18.00
3	Pressure gauges, Diaphragm type pressure gauges, Pressure gauge cum switches, Differential pressure gauges, Differential pressure gauge cum switches, Indicating pressure switches, Pressure switches and Differential pressure switches, Flow switch					



Template Name: E1 - Detailed Schedule of Quantities & Rates For Erection of Supply Items (S1, S2 & S4)
(Reference Specification: 101.KK56.0.0.TH.TS.PR001)

M/s Electronics Corporation of India Ltd						
Item No.	Description of Item/Scope of works	Unit of Measure	Total Quantity for KKNPP-Unit 5&6 (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)	Rate of GST included in Total Price in percentage (%) (D)
3.1	Pressure Gauge (SS-316 Bourdon)	No's	1382	1908.72	2,637,851.04	18.00
3.2	Pressure Gauge (Monel Bourdon)	No's	198	1908.72	377,926.56	18.00
3.3	Pressure Gauge and Differential Pressure gauge (Diaphragm)	No's	43	2357.19	101,359.17	18.00
3.4	Indicating Pressure Switches	No's	22	1908.72	41,991.84	18.00
3.5	Pressure Switches and Differential Pressure Switches	No's	844	1908.72	1,610,959.68	18.00
3.6	Diaphragm seal and Bourdon type Pressure Gauge	No's	85	1908.72	162,241.20	18.00
3.7	Flow switch	No's	24	2468.07	59,233.68	18.00
4	Level transmitters of Ultrasonic, displacer and radar type , Level switches of capacitance , conductivity, Ultrasonic and magnetic float type, Level indicators cum switches, Ultrasonic flow cum level, Submersible level transmitter cum switch					
4.1	Ultrasonic Level Transmitter	No's	24	3792.69	91,024.56	18.00
4.2	Ultrasonic contact type level switch	No's	11	3792.69	41,719.59	18.00
4.3	Non Contact Type Level Cum Flow Meter	No's	36	3792.69	136,536.84	18.00
4.4	Submersible type level transmitter	No's	84	3792.69	318,585.96	18.00
4.5	Radar level transmitter (Non guided Radiation / non contact type)	No's	120	3792.69	455,122.80	18.00
4.6	Displacer type level transmitter	No's	14	3208.59	44,920.26	18.00
4.7	Capacitance type level Switch	No's	232	3285.81	762,307.92	18.00
4.8	Conductivity type level switch	No's	786	1863.18	1,464,459.48	18.00
4.9	Float operated magnetic level switch	No's	15	1863.18	27,947.70	18.00
4.10	Float and Dial type level gauge	No's	8	1863.18	14,905.44	18.00
4.11	Float and board type level indicator	No's	5	1863.18	9,315.90	18.00
4.12	Transparent flat level gauge	No's	11	3285.81	36,143.91	18.00
5	Ultrasonic flow meter , Thermal mass flow meter , Rota meters, Thermal dispersion flow switches, Analyzers					
5.1	Ultrasonic flow meter	No's	6	2760.12	16,560.72	18.00
5.2	Thermal mass flow meter	No's	81	2804.67	227,178.27	18.00
5.3	Air Flow Switch	No's	18	2760.12	49,682.16	18.00
5.4	Rota meters	No's	19	3635.28	69,070.32	18.00
5.5	Analyzers					

Purchase order No.: CMM/EIC/91-00-3-3653/PO/59		ANNEXURE-AI	
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Template Name: E1 - Detailed Schedule of Quantities & Rates For Erection of Supply Items (S1, S2 & S4)			
(Reference Specification: 101.KK56.0.0.TH.TS.PR001)			

M/s Electronics Corporation of India Ltd							
Item No.	Description of Item/Scope of works	Unit of Measure	Total Quantity for KKNPP-Unit 5&6 (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)	Rate of GST included in Total Price in percentage (%)	
5.5.1	PH Analyzer	No's	7	6571.62	46,001.34	18.00	
5.5.2	Conductivity Analyser	No's	8	6571.62	52,572.96	18.00	
5.5.3	Silica Analyzer	No's	2	6571.62	13,143.24	18.00	
5.5.4	Density Indicator	No's	3	6571.62	19,714.86	18.00	
5.5.5	Hardness Analyzer	No's	5	6571.62	32,858.10	18.00	
B	INSTRUMENTS INSTALLATION						
6	Shifting to Site location, installation and documentation of following instrumentation : Electronic Pressure transmitters on Instrument Support Stands (ISS) including installation of orifice for Differential Pressure Transmitters	No's	5941	3141.27	18,662,283.07	18.00	
7	Thermo wells	No's	2575	1459.26	3,757,594.50	18.00	
8	Resistance Temperature Detector (RTD)	No's	2487	2468.07	6,138,090.09	18.00	
9	Level probes in existing sensor guide tubes of fuel pool (Only Primary transducers erection considered in this item whereas the secondary converter installation covered in separate item in this BOQ)	No's	40	1389.96	55,598.40	18.00	
10	Level sensors for tanks, floor drains, sumps, Level transmitters of Ultrasonic, displacer and radar type , Level switches of capacitance , conductivity, Ultrasonic and magnetic float type, Level indicators cum switches, Non Contact Type Level cum Flow Meter , Submersible level transmitter cum switch (Only Primary transducers erection considered in this item whereas the secondary converter installation covered in separate item in this BOQ)						
10.1	Single point Conductivity type level switch (Rigid and Flexible Electrode)	No's	616	2220.57	1,367,871.12	18.00	
10.2	Three point Conductivity type level switch (Rigid Electrode)	No's	48	2581.92	123,932.16	18.00	
10.3	Three point conductivity type level switch - Flexible electrode	No's	3	2220.57	6,661.71	18.00	
10.4	Four point conductivity type level switch - Flexible electrode	Deleted					
10.5	Capacitance type level Switch	No's	211	2626.47	554,185.17	18.00	
10.6	Ultrasonic Level Transmitter	No's	20	3366.99	67,339.80	18.00	
10.7	Ultrasonic contact type level switch	No's	7	3366.99	23,568.93	18.00	
10.8	Submersible type level transmitter	No's	70	2918.52	204,296.40	18.00	
10.9	Radar level transmitter	No's	104	3816.45	396,910.80	18.00	
10.10	Displacer type level transmitter	No's	12	2357.19	28,286.28	18.00	
10.11	Float operated magnetic level switch	No's	13	3187.80	41,441.40	18.00	



Purchase order No.: CMM/EIC/91-00-3-3653/PO/59							ANNEXURE -A I
Template Name: E1 - Detailed Schedule of Quantities & Rates For Erection of Supply Items (S1, S2 & S4) (Reference Specification: 101.KK56.0.0.TH.TS.PR0001)							
M/s Electronics Corporation of India Ltd							
Item No.	Description of Item/Scope of works	Unit of Measure ment	Total Quantity for KKNPP-Unit 5&6 (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)	Rate of GST included in Total Price in percentage (%) (D)	
10.12	Non Contact Type Level Cum Flow Meter	No's	30	3433.32	102,999.60	18.00	
10.13	Float and dial type level gauge	No's	7	3635.28	25,446.96	18.00	
10.14	Float and board type level indicator	No's	4	3635.28	14,541.12	18.00	
10.15	Transparent flat level gauge	No's	10	3816.45	38,164.50	18.00	
11	Temperature gauges, Temperature gauge cum switches, Temperature Indicating switches, Dew point transmitter, Relative Humidity transmitter, Pressure gauges, Diaphragm type pressure gauges, Pressure gauge cum switches, Differential pressure gauges, Differential pressure gauge cum switches, Indicating pressure switches, Pressure switches and Differential pressure switches mounted on already installed pipe lines / equipment /field instrumentation racks / supports.						
11.1	Temperature gauges	No's	666	2447.28	1,629,888.48	18.00	
11.2	Indicating Temperature Switches	No's	92	2447.28	225,149.76	18.00	
11.3	Dew point transmitter	No's	4	3881.79	15,527.16	18.00	
11.4	Relative Humidity transmitter	No's	45	4074.84	183,367.80	18.00	
11.5	Pressure gauges and Differential Pressure gauges	No's	1551	2132.46	3,307,445.46	18.00	
11.6	Indicating Pressure Switches	No's	20	2670.03	53,400.60	18.00	
11.7	Pressure Switches and Differential Pressure Switches	No's	766	2760.12	2,114,251.92	18.00	
11.8	Flow switch	No's	21	3366.99	70,706.79	18.00	
12	Ultrasonic flow meter, Thermal mass flow meter, Rota meters, Air flow switches, (Only Primary transducers erection considered in this item whereas the secondary converter installation covered in separate item in this BOQ)						
12.1	Ultrasonic flow meter	No's	4	3816.45	15,265.80	18.00	
12.2	Thermal mass flow meter	No's	73	2804.67	204,740.91	18.00	
12.3	Air flow switch	No's	16	3387.78	54,204.48	18.00	
12.4	Rota meters	No's	17	2310.66	39,281.22	18.00	
13	Temperature transmitters	No's	42	2670.03	112,141.26	18.00	
14	Pitot tube	No's	8	2804.67	22,437.36	18.00	
15	Vibration Transmitter	No's	14	3816.45	53,430.30	18.00	
16	Analysers						
16.1	PH analyser	No's	6	4263.93	25,583.58	18.00	



Purchase order No.: CMM/EIC/91-00-3-3653/PO/S9							ANNEXURE -A1
Template Name: E1 - Detailed Schedule of Quantities & Rates For Erection of Supply Items (S1, S2 & S4) (Reference Specification: I01.KK56.0.0.TII.TS.PR001)							
M/s Electronics Corporation of India Ltd							
Item No.	Description of Item/Scope of works	Unit of Measure	Total Quantity for KKNPP-Unit 5&6 (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)	Rate of GST included in Total Price in percentage (%) (D)	
16.2	Conductivity Analyser	No's	7	4263.93	29,847.51	18.00	
16.3	Silica Analyser	No's	1	4263.93	4,263.93	18.00	
16.4	Density indicator	No's	2	4263.93	8,527.86	18.00	
16.5	Hardness Analyser	No's	4	4263.93	17,055.72	18.00	
C	JUNCTION BOXES INSTALLATION						
17	Installation of following Junction Boxes on brackets / supports either by welding with embedded parts (EP) or by anchoring using HILTI anchor fasteners. All required accessories like fastening hardware's (bolts/nuts/washers) and consumables are in the scope of the contractor. (Fabrication and supply of local supports/brackets and also the supply of anchor fasteners are covered under separate items in this BOQ).						
17.1	Small Junction Boxes up to 20 terminal capacity	No's	4110	3285.81	13,504,679.10	18.00	
17.2	Junction boxes of 20 to 100 terminal capacity	No's	7691	5782.59	44,473,899.69	18.00	
17.3	Junction boxes of 100 to 200 terminal capacity	No's	60	6571.62	394,297.20	18.00	
D	LOCAL CONTROL PANELS INSTALLATION						
18	Installation of Local Control Panels / Wall mounted General Units with brackets/support frames either by welding to existing EPs or by anchoring using HILTI anchor fasteners on wall /floor suiting to site conditions. (GU includes electronic devices in enclosures, compensation device for Thermocouples, secondary converters for limit switches of check valves / manual valves, secondary converters for level/flow/dew point sensors etc.) . All required accessories and consumables including shims, fastening hardware's excluding Anchor fasteners in the scope of the contractor. (Fabrication and supply of local supports / frames /brackets and also the supply of anchor fasteners are covered under separate items in this BOQ).						
18.1	Wall mounted General Units (electronic devices in enclosures, compensation device for Thermocouples, secondary converters for limit switches of check valves/manual valves, secondary converters for level/dew point/flow, Signal conditioning units etc.) in the weight range up to 30 Kgs approx.						
18.1.1	Secondary converter for capacitance type level switch	No's	211	3943.17	832,008.87	18.00	
18.1.2	Secondary converter for conductivity type level switch	No's	711	3943.17	2,803,593.87	18.00	
18.1.3	Secondary converter for dew point transmitter	No's	4	3943.17	15,772.68	18.00	
18.1.4	Secondary converter for thermal mass flow meter	No's	73	3943.17	287,851.41	18.00	
18.1.5	Secondary converter for ultrasonic flow meter	No's	4	3943.17	15,772.68	18.00	
18.1.6	Secondary converter for Non contact type level cum flow meter	No's	30	3943.17	118,295.10	18.00	



Template Name: E1 - Detailed Schedule of Quantities & Rates For Erection of Supply Items (S1, S2 & S4)
(Reference Specification: 101.KK56.0.0.TH.TS.PR001)

M/s Electronics Corporation of India Ltd						
Item No.	Description of Item/Scope of works	Unit of Measure	Total Quantity for KKNPP-Unit 5&6 (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)	Rate of GST included in Total Price in percentage (%) (D)
18.1.7	Compensating junction box	No's	40	7885.35	315,414.00	18.00
18.1.8	Push Button Control Station	No's	1128	3943.17	4,447,895.76	18.00
18.1.9	Special grounding junction box	No's	54	3943.17	212,931.18	18.00
18.2	Local Control Panels/ Control boards / Local Push button stations mounted on wall.	No's	251	18924.84	4,750,134.84	18.00
18.3	Local Control Panels/ Control boards/PLC based control system mounted on floor .	No's	212	18924.84	4,012,066.08	18.00
18.4	PLC based control system	Set	11	18924.84	208,173.24	18.00
E	LIGHT CHANNELS & GI CONDUITS LAYING					
19	Installation of following sizes of MS hot-dip galvanized perforated light channels along with the supply of all required accessories such as fastening hardware's (bolts/nuts/washers), anchor fasteners and all other consumables required for completing the laying including supply and installation of suitable pre fabricated supports either by welding or anchoring.					
	(This item shall be considered for 'Erection of supply items', 'Erection of systems' and 'Erection of Free Issue material' works.)					
19.1	20x50x20x2 mm thick light channel	Mtrs	21250	395.01	8,393,962.50	18.00
19.2	20x90x20x2 mm thick light channel	Mtrs	40000	525.69	21,027,600.00	18.00
19.3	20x125x20x2 mm thick light channel	Mtrs	21000	591.03	12,411,630.00	18.00
19.4	40x150x40x2 mm thick light channel	Mtrs	15000	657.36	9,860,400.00	18.00
19.5	40x200x40x2 mm thick light channel	Mtrs	8000	789.03	6,312,240.00	18.00
20	Installation of following sizes of MS Epoxy coated perforated light channels (epoxy paint vellum shade and total thickness of paint film as stipulated in respective technical specification) with all required accessories such as fastening hardware's (bolts/nuts/washers), anchor fasteners and all other consumables required for completing the laying including supply and installation of suitable pre fabricated supports either by welding or anchoring.					
	(This item shall be considered for 'Erection of supply items', 'Erection of systems' and 'Erection of Free Issue material' works.)					
20.1	20x50x20x2 mm thick light channel	Mtrs	14000	395.01	5,530,140.00	18.00
20.2	20x90x20x2 mm thick light channel	Mtrs	19000	525.69	9,988,110.00	18.00
20.3	20x125x20x2 mm thick light channel	Mtrs	4000	591.03	2,364,120.00	18.00
20.4	40x150x40x2 mm thick light channel	Mtrs	4000	657.36	2,629,440.00	18.00



Template Name: E1 - Detailed Schedule of Quantities & Rates For Erection of Supply Items (S1, S2 & S4)
(Reference Specification: 101.KK56.0.0.TH.TS.PR001)

M/s Electronics Corporation of India Ltd						
Item No.	Description of Item/Scope of works	Unit of Measurement	Total Quantity for KKNPP-Unit S&S (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)	Rate of GST included in Total Price in percentage (%) (D)
20.5	40x200x40x2 mm thick light channel	Mtrs	8000	789.03	6,312,240.00	18.00
21	Installation of following sizes of MS Epoxy coated NON perforated light channels with COVERS (epoxy paint velum shade and total thickness of paint film shall be as stipulated in respective technical specification) with all required accessories such as fastening hardware's (bolts/nuts/washers), anchor fasteners and all other consumables required for completing the laying including supply and installation of suitable pre fabricated supports either by welding or anchoring. (This item shall be considered for 'Erection of Free Issue material works'.)					
21.1	20x50x20x1.2 mm thick light channel	Mtrs	2000	395.01	790,020.00	18.00
21.2	20x90x30x1.2 mm thick light channel	Mtrs	3000	525.69	1,577,070.00	18.00
21.3	40x150x40x1.2 mm thick light channel	Mtrs	5000	637.36	3,286,800.00	18.00
22	Installation of sizes up to 32mm of hot dipped galvanized GI Rigid conduit, including installation of conduit accessories such as 2/3/4 way pull boxes, couplers, bends, elbows with saddles, clamps, nylon/lead plugs, screws and other accessories required for completing the job are included in the scope of this item, laying done as per specifications and drawings or as per the approved procedure.	Mtrs	10000	395.01	3,950,100.00	18.00
23	Fabrication and installation of sizes up to 32mm of hot dipped galvanized GI Flexible conduit, including installation of conduit accessories such as with Saddles, clamps, nylon/lead plugs, screws and other accessories required for completing the job are included in the scope of this item, laying done as per specifications and drawings as per the approved procedure. (This item shall be considered for both Schedule-II and Schedule-IV works.)	Mtrs	5000	315.81	1,579,050.00	18.00
F	CONTROL CABLES LAYING & GLANDING					
24.1	Laying of different types of field control cables up to 40mm size on already installed cable trays / light channels / through conduits including supply of all consumables such as anodized aluminium rectangular tags, clamps, nylon cable ties, all other hardware's and consumables required for completing the job are included in the scope of this item. (This item shall be considered for both 'Erection of supply items' and 'Erection of Free Issue Material' works.)					
24.1.1	For sizes up to 14 mm OD (on cable metal tray/light channel) and integral cables supplied along with instruments	Mtrs	600000	92.07	55,242,000.00	18.00
24.1.2	For sizes above 14 mm OD up to 28 mm OD (on cable metal tray/light channel)	Mtrs	3070000	121.77	373,833,900.00	18.00
24.1.3	For sizes above 28 mm OD up to 40 mm OD (on cable metal tray/light channel)	Mtrs	2000000	179.19	358,380,000.00	18.00

Purchase order No.: CMM/EIC/91-00-3-3653/PO/59	
ANNEXURE -A-I	

Template Name: E1 - Detailed Schedule of Quantities & Rates For Erection of Supply Items (S1, S2 & S4)
(Reference Specification: 101.KK56.0.0.TH.TS.PR001)

M/s Electronics Corporation of India Ltd						
Item No.	Description of Item/Scope of works	Unit of Measurement	Total Quantity for KKNPP-Unit S&S (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)	Rate of GST included in Total Price in percentage (%) (D)
24.2	Clanding of cables up to 40mm size on equipment, panels/cabinets/junction Boxes including supply of suitable consumables such as anodized aluminium rectangular tags, nylon cable ties required for completing the job are included in the scope.					
	(This item shall be considered for both 'Erection of supply items' and 'Erection of Free Issue Material' works.)					
24.2.1	For sizes up to 14 mm OD	No's	50000	290.07	14,503,500.00	18.00
24.2.2	For sizes above 14 mm OD up to 28 mm OD	No's	70000	486.09	34,026,300.00	18.00
24.2.3	For sizes above 28 mm OD up to 40 mm OD	No's	30000	584.10	17,523,000.00	18.00
G	TERMINATION OF CONTROL CABLES					
25	Termination of cores of all types of control cables including supply of suitable consumables like various types of lugs, 2%-5% silver solder wire as per requirement, heat shrinkable boot sleeves for cable boot sealing, wire sleeve suitable for thermal printing including printing of wire numbers for completing the job are included in the scope. The scope also includes the end to end core continuity of cable prior to cable termination.					
	(This item shall be considered for both 'Erection of supply items' and 'Erection of Free Issue Material' works.)					
25.1	Screwed / Cage Clamp Terminations	No's	1800000	84.15	151,470,000.00	18.00
25.2	Soldered Terminations	No's	200000	117.81	23,562,000.00	18.00
25.3	Maxi termi point Terminations	No's	400000	131.67	52,668,000.00	18.00
25.4	Special connectorization like BNC etc. (For one no. of solder termination)	No's	5000	131.67	658,350.00	18.00
25.5	RJ-45 Connectorization	No's	2000	131.67	263,340.00	18.00
H	TERMINATION OF OPTICAL FIBRE CABLE					
26.1	Scope includes all the termination works such as provision of splicing boxes, splicing of OFC cables, preparation for fusing, fusing of cables, measurement of attenuation / loss after joining, continuity checking, The scope of works also include qualification of the jointer, arrangement of suitable electrodes, fusing machines, loss measurement instruments, and any other special tools and tackles required for the successful completion of the works.	No's (per core)	6000	1314.72	7,888,320.00	18.00



Purchase order No.: CMM/EIC/91-00-3-3653/PO/59						
ANNEXURE -VI						
Template Name: E1 - Detailed Schedule of Quantities & Rates For Erection of Supply Items (S1, S2 & S4) (Reference Specification: 101.KK56.0.0.TH.TS.PR001)						
M/s Electronics Corporation of India Ltd						
Item No.	Description of Item/Scope of works	Unit of Measure	Total Quantity for KKNPP-Unit S&G (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)	Rate of GST included in Total Price in percentage (%) (D)
26.2	Scope includes all the termination works such as provision of splicing boxes, splicing of OFC cables, preparation for fusing, fusing of cables, measurement of attenuation / loss after joining, continuity checking. The scope of works include qualification of the jointer, arrangement of suitable electrodes, fusing machines, loss measurement instruments, and any other special tools and tackles required for the successful completion of the works and also include supply of suitable LIU - Light Interfacing Unit Boxes required for the works, pigtail couplers etc.	No's (per core)	12000	3417.48	41,009,760.00	18.00
1	HYDROGEN LEAK DETECTION SYSTEM					
27	Receipt, material handling, shifting to location and installation by anchoring or welding for the following equipment/ items as per the manufacturer instruction or as per drawing and/or as per approved procedure.					
27.1	Hydrogen sensors	No's	48	6571.62	315,437.76	18.00
27.2	Signal Conditioning Unit (SCU) along with wall mounted panel and mounting accessories	No's	48	3943.17	189,272.16	18.00
J	STRUCTURAL FABRICATION JOBS Fabrication of ISA, ISMC, ISMB of MS E250 Grade A of IS 2062-2011 and plates of MS E250 Grade BR of IS 2062-2011 for : (1) Supports, clamps and brackets for instruments /Sensors (2) support frames or base frames for panels /cabinets / junction boxes. (3) Installation of embedded plates and (4) light channel supports Erection shall be part of item in this BOQ for which it has been fabricated. The work scope includes Grit blasting , primer application and painting . Grit blasting using steel grits as per SSPC-PC-10 or Sa 2-1/2 of SIS-05-5900 ISO 8501/1988 with suitable surface profile. Supply and application of primers and epoxy, enamel paint as specified in drawing/specification from NPCIL approved vendor, including supply of consumable, performing DFT inspection, preparation of report is scope of contractor Completion of work includes receipt of material, transportation , handling , arrangement of manpower & machinery, tools & tackles, supply of electrodes & filler wires, nuts bolts & washers , consumables , preparation & submission of reports and checklist for erection .This work will be executed as per working documentation ,specification and approved procedure.	Kgs	100000	197.01	19,701,000.00	18.00
28	(This item shall be considered for 'Erection of supply items', Erection of systems' and 'Erection of Free Issue material' works.) Fabrication and erection of ISA , ISMC , ISMB of MS E250 Grade A IS 2062-2011 and plates of MS E250 Grade BR IS 2062-2011 for base plates for the following:					



Template Name: E1 - Detailed Schedule of Quantities & Rates For Erection of Supply Items (S1, S2 & S4)
(Reference Specification: 101.KK56.0.0.TH.TS.PR001)

M/s Electronics Corporation of India Ltd						
Item No.	Description of Item/Scope of works	Unit of Measure ment	Total Quantity for KKNPP-Unit 5&6 (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)	Rate of GST included in Total Price in percentage (%) (D)
29	1) Impulse tube supports including installation of perforated channels, Z shape and strips supplied under light channel support for pulse tubing, base plates for instruments support stand & wherever stand for these instruments /sensors are to be fabricated at site and providing extension of structural supports on wall, ceiling, floors or on existing structural supports wherever impulse tube support cannot be erected directly on the available spaces for impulse tube laying. 2) Protective covers and supporting structures, covering of CPSEE cables, its connecting boxes (KS-2 & KS-3), sensor cables with integral connectors up to the connecting boxes, high excitation cables exposed around reactor cavity and NFME equipment works. The work scope includes Grit blasting, primer application and painting. Grit blasting using steel grits as per SSPC-PC-10 or Sa 2-1/2 of SIS-05-5900 ISO 8501/1988 with suitable surface profile. Supply and application of primers and epoxy, enamel paint as specified in drawing/specification from NPCIL approved vendor, including supply of consumable, performing DFT inspection, preparation of report is scope of contractor. Completion of work includes receipt of material, transportation, handling, arrangement of manpower & machinery, tools & tackles, supply of electrodes & filler wires, consumables, installation of anchor fasteners preparation & submission of reports and checklist for erection. This work will be executed as per working documentation, specification and approved procedure Supply of anchor fastener as a separate item in this BOQ. (This item shall be considered for 'Erection of supply items', Erection of systems' and 'Erection of Free Issue material' works.)	Kgs	300000	197.01	59,103,000.00	18.00
30	Fabrication and Erection of 0.1mm thick Mu metal cover sheets on exposed I&C channels, covering of CPSEE cables, its connecting boxes (KS-2 & KS-3), sensor cables with integral connectors up to the connecting boxes, high excitation cables exposed around reactor cavity and NFME equipment. This work includes cutting, drilling, handling, shifting of material, installation of anchor fasteners etc. as per working documentation and site requirement. Supply of nuts, bolts, washers and consumables for erection is the scope of contractor. This work will be executed as per working documentation, specification and approved procedure. Supply of anchor fastener are included as a separate item in the BOQ. (This item shall be considered for 'Erection of supply items', Erection of systems' and 'Erection of Free Issue material' works.)	Kgs	100	294.03	29,403.00	18.00
31	Fabrication and erection of SS 304, SS 304L & SS 321 sections for the fabrication of (1)base plates for mounting of Instrument support stand, (2) supports for sensors, (3)hardware fittings - reducer, nipples, glands and (4)any other special fitting required during erection. This work includes cutting, welding, drilling, handling, shifting of material, etc. as per working documentation and site requirement. Supply of nuts, bolts, washers, weld electrodes, filler wires and consumables for erection is the scope of contractor. This work will execute as per working documentation, specification and approved procedure. Supply of anchor fastener included as a separate item in the BOQ. (This item shall be considered for 'Erection of supply items', Erection of systems' and 'Erection of Free Issue material' works.)	Kgs	25000	598.95	14,973,750.00	18.00

Template Name: E1 - Detailed Schedule of Quantities & Rates For Erection of Supply Items (S1, S2 & S4)
(Reference Specification: 101.KK56.0.0.TH.TS.PR001)

M/s Electronics Corporation of India Ltd						
Item No.	Description of Item/Scope of works	Unit of Measure ment	Total Quantity for KKNPP-Unit 5&6 (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)	Rate of GST included in Total Price in percentage (%) (D)
32	Hydro test of Bellow valves, Gland valves or any type of isolation valves up to 15NB with its equivalent medium of the system where it used. Completion of work includes receipt of material, transportation, handling, arrangement of manpower & valve test set up benches, pumps, gauges, blanks, etc., necessary to carry out the testing of the valves maximum up to 25 MPa, tools & tackles, consumables, preparation & submission of reports and checklist. This work will be executed as per working documentation, specification and approved procedure	No's	14406	2628.45	37,865,450.70	18.00
33	Fabrication and erection of impulse tube supports of stainless steel Grade -321; for (1) perforated channels (45X30X2 mm and 60X32X2.5 mm) (2) perforated angle (36X36X2 mm) (3) perforated Z-profiles (40X32X2 mm) (4) perforated strip (30X2 mm) or any kind of profiles and erection on SS liners / concrete floors/ walls without liners, already available structural supports by welding or anchoring. The work scope includes welding of MS base plate fabricated under separate item in this BOQ to this SS perforated supports using GTAW -TIG welding and installation of anchor fasteners. Completion of work includes receipt of material, transportation, handling, arrangement of manpower & machinery, tools & tackles, in supply of electrodes & filler wires, consumables, preparation & submission of reports and checklist. This work will be executed as per working documentation, specification and approved procedure Supply of anchor fastener included as a separate item in this BOQ. (This item shall be considered for Erection of FIM works.)	Kgs	120000	328.68	39,441,600.00	18.00
34	Fabrication and installation of GI sheet of thickness 1 mm. or as per required thickness and gsm for C&I works as directed by Engineer in charge. Structural Supports are covered under separate item.	kgs	30000	328.68	9,860,400.00	18.00
35	Installation of Anchor fasteners of Make-HIL.TI					
35.1	HSL 4G M8 d12x107 /20	No's	90000	131.67	11,850,300.00	18.00
35.2	HSL 4G M8 d12x127 40/20	No's	25000	131.67	3,291,750.00	18.00
35.3	HSL 4G M16 d24x175 /25	No's	20000	197.01	3,940,200.00	18.00
35.4	HSL 4G M20 d28x205 /30	No's	5000	241.56	1,207,800.00	18.00
35.5	HST3 M8x75/10	No's	45000	104.94	4,722,300.00	18.00
35.6	HST3 M10X90 30/10	No's	1500	104.94	157,410.00	18.00
35.7	HDAT -20 M10 X100 /20	No's	200	170.28	34,056.00	18.00
35.8	HSL 4G M10 d / 20	No's	10000	131.67	1,316,700.00	18.00
35.9	HSL 4G M12 d / 25	No's	10000	197.01	1,970,100.00	18.00
36	Installation of GI pipes of diameter 50-125 mm as per requirement for cable laying laying (separate item for laying and fixing with accessories of GI pipes in Sch. E1)					

Template Name: E1 - Detailed Schedule of Quantities & Rates For Erection of Supply Items (S1, S2 & S4)
(Reference Specification: 101.KK56.0.0.TH.TS.PR001)

M/s Electronics Corporation of India Ltd						
Item No.	Description of Item/Scope of works	Unit of Measure ment	Total Quantity for KKNPP-Unit 5&6 (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)	Rate of GST included in Total Price in percentage (%) (D)
36.1	50 mm	mtrs	5000	328.68	1,643,400.00	18.00
36.2	65 mm	mtrs	3000	395.01	1,185,030.00	18.00
36.3	80 mm	mtrs	2000	452.43	904,860.00	18.00
36.4	100 mm	mtrs	5000	473.22	2,366,100.00	18.00
36.5	125 mm	mtrs	1000	514.80	514,800.00	18.00
37	Installation of tinned metallic (brass / stainless steel) cable glands of various sizes as per NPCIL requirement which are not covered in the scope of supply items					
37.1	Up to 16 mm dia	No's	4000	441.54	1,766,160.00	18.00
37.2	17 mm to 32 mm	No's	2500	494.01	1,235,025.00	18.00
37.3	33 mm to 50 mm	No's	1500	520.74	781,110.00	18.00
K	EARTHING					
38	Erection of Galvanised Iron (GI) earth flat/strip, Grade Quality A - IS 2062 of sizes upto 25x4mm on wall/floor/ceiling, fixing by HILTI anchor fasteners, welding to the nearest earth Pads/Conductor, providing 2-3 tapped holes with bolts, nuts near to the instrumentation devices and applying touch up paint on the welded area, including supply of GI earth flat/strip, paint etc for earthing connection of instrumentation items as per the requirement of working documents and approved procedures .The supply of anchor fasteners are covered under separate items in the BOQ .	Mtrs	14000	237.60	3,326,400.00	18.00
	(This item shall be considered for 'Erection of supply items', Erection of systems' and 'Erection of Free Issue material' works.)					
39	Laying of following sizes of copper wire cables, end termination with lugs and connection to the Instrument/IB/Panel/Light channels including supply of earthing cable, suitable lugs, nut bolt washer and other hardware for earthing connection of instrumentation items including tapping holes on the earth flat laid above as per the requirement of working documentation and approved procedures .					
	(This item shall be considered for 'Erection of supply items', Erection of systems' and 'Erection of Free Issue material' works.)					
39.1	1.5 Sq.mm multi stranded wire cable ,green color	Mtrs	30000	65.34	1,960,200.00	18.00
39.2	2.5-4 Sq.mm multi stranded wire cable,green color	Mtrs	65000	73.26	4,761,900.00	18.00
39.3	4 Sq.mm single core wire cable,green color	Mtrs	10000	73.26	732,600.00	18.00
39.4	16- 25 Sq.mm multi stranded cable, yellow with green band	Mtrs	14000	95.04	1,330,560.00	18.00
39.5	Screwed termination of earthing cables of size above 4 sq.mm up to 16 sq.mm.	No's	70000	104.94	7,345,800.00	18.00



Template Name: E1 - Detailed Schedule of Quantities & Rates For Erection of Supply Items (S1, S2 & S4)
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M/s Electronics Corporation of India Ltd

Item No.	Description of Item/Scope of works	Unit of Measurement	Total Quantity for KKNPP-Unit 5&6 (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)	Rate of GST included in Total Price in percentage (%) (D)
L	IMPULSE TUBING					
40	Laying of impulse tubes of following sizes of Stainless Steel /Titanium tube for main process systems from main pipeline take off point /sampling point up to field instrument/ instrument support stands / instrument support stand drain point . The work includes fabrication of tube to the required length, laying the tube on the installed support, clamping of tubes using suitable clamps to supports .installation of all in-line impulse line components : isolation valves, isolators, stubs, reducers, condensing pots ,equal passage pipes . Supply of impulse tube clamping brackets, one tab brackets, nut, bolts, washers & branch pipe for clamping the tubes in fixed, sliding and movable positions is covered under supply items in the scope of contractor. Completion of work includes receipt of material ,transportation , handling , storage , cleaning of tubes, end capping , supply of 4D tube benders , arrangement of manpower & machinery, tools & tackles and consumables , preparation & submission of reports and checklist for erection . This work will be executed as per working documentation, specification and approved procedure. Supply of all inline components (valves, fittings, condensing pot - levelling separation vessel etc.) excluding the isolators are covered under supply items in the scope of contractor.					
40.1	Tubes up to 15 mm OD size with wall thickness up to 2.5 mm	Mtrs	230000	920.70	211,761,000.00	18.00
40.2	Tubes above 15 mm to 20 mm OD size with wall thickness up to 2.5 mm	Mtrs	8000	1051.38	8,411,040.00	18.00
40.3	Tubes above 20 mm OD up to and including 38 mm OD size with wall thickness up to 3 mm at higher elevations upto 100 mtrs.	Mtrs	800	1367.19	1,093,752.00	18.00
41	Automatic orbital tube welding of Stainless Steel SS-321 impulse tubes up to 15mm OD size with wall thickness up to 2.5 mm and all line components using Automatic orbital tube welding machine .The works involving, cutting, edge preparation and butt welding of isolation valves, isolators, stubs, reducers, condensing pots, equal passage pipes and nipples also connection on main sampling points/sampling points and instrument support stands/ without filler wires using GTAW TIG process . Completion of work includes receipt of material ,transportation , handling , storage , cleaning of tubes ,supply of high purity 99.999% argon gas, arrangement of automatic orbital welding machine, tube squaring machines , welding electrodes arrangement of manpower & machinery, tools & tackles, consumables , preparation & submission of reports and checklist . This work will be executed as per working documentation ,specification and approved procedure .	No s	55000	789.03	43,396,650.00	18.00

Template Name: E1 - Detailed Schedule of Quantities & Rates For Erection of Supply Items (S1, S2 & S4)
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M/s Electronics Corporation of India Ltd

Item No.	Description of Item/Scope of works	Unit of Measure	Total Quantity for KKNPP-Unit 5&6 (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)	Rate of GST included in Total Price in percentage (%) (D)
42	Manual tube welding of following Stainless Steel SS321 impulse tubes and all line components .The works involving, cutting, edge preparation of tubes, isolation valves, stubs, reducers, condensing pots, equal passage pipes and nipples and also connection on main sampling points and instrument support stands with filler wires using GTAW TIG process .Completion of work includes receipt of material ,transportation , handling , storage , cleaning of tubes ,supply of high purity 99.999% argon gas, arrangement of welding machine, tube squaring machines , welding electrodes filler wires ,arrangement of manpower & machinery, tools & tackles , consumables , preparation & submission of reports and checklist . This work will be executed as per working documentation, specification and approved procedure.					
42.1	Tubes up to 15 mm OD size with wall thickness up to 2.5 mm	No of joints	50000	657.36	32,868,000.00	18.00
42.2	Tubes above 15mm to 20 mm OD size with wall thickness up to 2.5 mm	No of joints	1000	1183.05	1,183,050.00	18.00
42.3	Tubes above 20mm OD upto 38 mm OD size with wall thickness upto 3 mm at higher elevations up to 100 mtrs	No of joints	300	1524.60	457,380.00	18.00
43	Manual welding of Titanium tubes of impulse tubes up to 20mm OD size with wall thickness up to 2.5 mm and all line components using tube welding machine .The works involving, cutting, edge preparation and welding of titanium tubes , isolation valves, isolators, stubs, reducers, condensing pots, equal passage pipes and nipples also connection on main sampling points and instrument support stands with filler wires using GTAW TIG process .Completion of work includes receipt of material ,transportation , handling , storage , cleaning of tubes ,supply of high purity 99.999% argon gas, arrangement of welding machine, tube squaring machines , welding electrodes ,arrangement of manpower & machinery, tools & tackles, consumables , preparation & submission of reports and checklist . This work will be executed as per working documentation ,specification and approved procedure .	No of joints	3500	1183.05	4,140,675.00	18.00
44	Installation of instrument Support Stands (ISS) on SS liners / CS liners by welding or anchoring .This work involves welding or anchoring of MS base plate fabricated under separate item in this BOQ to liner or with out liners on floors or walls and welding this SS instrument Support Stands to MS Base plate using GTAW -TIG welding. The work involves erection of stand at designed position/layers, erection of accessories, its alignment, fit up and inspection. Completion of work includes receipt of material, transportation, handling, arrangement of manpower & machinery, tools & tackles, supply of electrodes & filler wires, consumables, preparation & submission of reports and checklist. This work will be executed as per working documentation, specification and approved procedure Supply & fabrication of base plate is included as a separate item in this BOQ	No's	3100	2891.79	8,964,549.00	18.00



Template Name: E1 - Detailed Schedule of Quantities & Rates For Erection of Supply Items (S1, S2 & S4)
(Reference Specification: 101.KK56.0.0.TH.TS.PR001)

M/s Electronics Corporation of India Ltd

Item No.	Description of Item/Scope of works	Unit of Measurement	Total Quantity for KKNPP-Unit 5&6 (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)	Rate of GST included in Total Price in percentage (%) (D)
45	Gland seals for impulse tubes Installation work involves welding of tube glands on EP using GTAW -TIG process on either side of wall / floor penetration for routing of 14x2 mm and 18X 2.5 mm impulse tubes, cleaning of penetrating marking, installation of assembly consists of carbon steel gland socket and coupling nut, stainless steel centering washers, gland packing cord 6mm poly tetra fluoro-ethylene 4 and plugging of spare penetrations using plugs . Completion of work includes receipt of material, transportation, handling, arrangement of manpower & machinery, tools & tackles, supply of electrodes & filler wires, consumables, preparation & submission of reports and checklist. This work will be executed as per working documentation, specification and approved procedure .Surface preparation and painting of EP and Glands are included as a separate item in this BOQ.	No's	18000	657.36	11,832,480.00	18.00
46	Hydro test of Isolators or any type of isolation valves up to 15NB with its equivalent medium of the system where it used. Completion of work includes receipt of material, transportation, handling, arrangement of manpower & valve test set up benches, pumps, gauges, blanks, etc., necessary to carry out the testing of the valves maximum up to 25 MPa, tools & tackles, consumables, preparation & submission of reports and checklist. This work will be executed as per working documentation, specification and approved procedure.	No's	750	1314.72	986,040.00	18.00
47	Erection of motorized bellow seal valves up to 15 NB inside reactor building and reactor annular space connected in line with 18x2 mm impulse tube. The work involve erection of base supports, aligning, and bolting to base plates .Completion of work includes receipt of material ,transportation , handling , arrangement of manpower & machinery, tools & tackles, supply of electrodes & filler wires, consumables , preparation & submission of reports and checklist . This work will be executed as per working documentation, specification and approved procedure Supply & fabrication of base plate is included as a separate item in this BOQ.	No's	30	5782.59	173,477.70	18.00
48	Hydro testing of impulse tube loop with equivalent medium of the system .Loops consisting of instrument, impulse tube and all intervening components from sampling point on the main pipeline to the instrument support stand along with Instrument drain line. Completion of work includes arrangement of manpower, equivalent medium for testing water or oil, test set up , pumps, gauges, blanks, etc., necessary to carry out the testing maximum up to 25 MPa , tools & tackles, consumables , preparation & submission of reports and checklist. This work will be executed as per working documentation , specification and approved procedure .	No's	9000	1314.72	11,832,480.00	18.00
49	DPT (Die Penetrate Testing) work include Identification of the weld joints, making scaffolding arrangement, shifting the DPT consumable to location, pre cleaning & post cleaning of joints and conducting examination of the weld joint qualified level II manpower . Carry out DPT including the supply of all consumables, manpower, tools and tackles and submission of reports. The work shall be executed as per working documents, specification and approved procedures.	Running meters	2000	722.70	1,445,400.00	18.00



Template Name: E1 - Detailed Schedule of Quantities & Rates For Erection of Supply Items (S1, S2 & S4)
(Reference Specification: 101.KK56.0.0.TH.TS.PR001)

M/s Electronics Corporation of India Ltd						
Item No.	Description of Item/Scope of works	Unit of Measurement	Total Quantity for KKNPP-Unit 5&6 (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)	Rate of GST included in Total Price in percentage (%) (D)
50	Radio Graphic Testing -Identification of the weld joints, making scaffolding arrangement, shifting the radiographic cameras and its accessories to location and conducting radiographic examination of the weld joint with 'I' distance technique (Providing all arrangements like radiography cameras, radiographic sources, storing facilities for RT sources as per standards dark room and other processing facilities for processing films etc are in the scope of the contractor) for impulse pipe Sizes up to 14 mm OD and submission of reports	No of joints	85000	3919.41	333,149,850.00	18.00
51	VBT (Vacuum Box Testing) for CS/SS transition plate welded to liner for supports. The work includes, Identification of the weld joints, shifting the VBT equipment to location, pre cleaning & post cleaning of joints and conducting examination of the weld joint by qualified level II manpower Carry out VBT including the supply of all consumables, manpower, tools and tackles and submission of reports. The work shall be executed as per working documents, specification and approved procedures.	Running meters	4500	1572.12	7,074,540.00	18.00
Total (in INR)					2,305,565,115.48	

[Signature]

(Pankaj Trivedi)
General Manager, C&MM
For & on behalf of Nuclear Power Corporation of India Limited
(The Purchaser)



Template Name: E2 - Erection schedule of Systems (S3)
(Reference Specification: I01.KK56.0.0.TH.TS.PR001)

M/s Electronics Corporation of India Ltd

Item No.	Description of Item/Scope of works	Unit of Measurement	Total Quantity for KKNPP-Unit 5&6 (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)	Rate of GST included in Total Price in percentage (%) (D)
1	Following equipment of Containment Monitoring System installation as per the manufacturer instruction / as per drawing and/or as per approved procedure. Supply of anchor fasteners covered under separate item in the BOQ.					
1.1	Installation of Multiplexing Junction Boxes (MJB)	No's	8	10513.80	84,110.40	18.00
1.2	Installation of Multiple Programmable Terminal (MPT)	No's	2	13142.25	26,284.50	18.00
1.3	Installation of Control panel/Work stations	No's	2	20239.56	40,479.12	18.00
2	Laying of different types of field control cables up to 40mm size on already installed cable trays / light channels / through conduits including supply of all consumables such as anodized aluminium rectangular tags, clamps , nylon cable ties , all other hardware's and consumables required for completing the job are included in the scope of this item.				.00	
2.1	For sizes up to 20 mm OD (on cable metal tray/light channel)	Mtrs	7000	104.94	7,34,580.00	18.00
2.2	For sizes above 20 mm OD up to 40 mm OD (on cable metal tray/light channel)	Mtrs	3200	179.19	5,73,408.00	18.00
3	Glanding of cables up to 40mm size on equipment, panels/cabinets/junction Boxes including supply of suitable consumables such as anodized aluminium rectangular tags, nylon cable ties required for completing the job are included in the scope.				.00	
3.1	For sizes up to 14 mm OD	No's	50	290.07	14,503.50	18.00
3.2	For sizes above 14 mm OD up to 28 mm OD	No's	100	499.95	49,995.00	18.00
3.3	For sizes above 28 mm OD up to 40 mm OD	No's	100	578.16	57,816.00	18.00
4	Termination of cores of all types of control cables including supply of suitable consumables like various types of lugs, 2%-5% silver solder wire as per requirement, heat shrinkable boot sleeves for cable boot sealing, wire sleeve suitable for thermal printing including printing of wire numbers for completing the job are included in the scope.				.00	
4.1	Screwed / Cage Clamp Terminations	No's	5000	92.07	4,60,350.00	18.00
4.2	Soldered Terminations	No's	5000	131.67	6,58,350.00	18.00
	Note: Please note that Supply & Erection of Light channel, Conduits, Anchor fasteners, Structural steel, Earthing strip and Fabrication works pertaining to Containment Monitoring System are considered in 'Supply Works' & Erection of supply items works'.				.00	

Purchase order No.: CMM/EIC/91-00-3-3653/PO/59		ANNEXURE -A2
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Template Name: E2 - Erection schedule of Systems (S3) (Reference Specification: I01.KK56.0.0.TH.TS.PR0001)	
M/s Electronics Corporation of India Ltd	

Item No.	Description of Item/Scope of works	Unit of Measure ment	Total Quantity for KKNPP- Unit 5&6 (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)	Rate of GST included in Total Price in percentage (%) (D)
A1	Sea Water Temperature Monitoring System (SW-TMS)				.00	
A1.1	Installation of Submersible type temperature and pressure sensor (located in the same housing) along with sensor cable upto instrument JB	No's	12	5256.90	63,082.80	18.00
A1.2	Installation of Perforated protective pipe with diameter 150mm made up of titanium (minimum length 12mtr) (3mm thickness)	No's	12	7885.35	94,624.20	18.00
A1.3	Installation of Instrument JB MOC-FRP IP 67	No's	12	1314.72	15,776.64	18.00
A1.4	Installation of Data Aquasition and processing unit	No's	2	9200.07	18,400.14	18.00
A1.5	Laying of Trunk cable 0.75sqmm X 6 core (including glanding and termination)	Meter	4000	92.07	3,68,280.00	18.00
A1.6	PC based workstation for local data logging and acquisition System with modem and all required license and software suitable for Storing, Logging, Reporting, Printing data with UPS and interconnecting singal and power cable.	No's	2	13142.25	26,284.50	18.00
B	AUTOMATIC FIRE PROTECTION SYSTEM (AFPS)				.00	
5	Installation of Master Controller, Fire fighting controller (floor mounted), relay cabinted (floor mounted) and Gateway either by welding to EPs or by anchoring (Wherever EPs are not available) including mounting of various loose modules/devices supplied with the panels. The scope also includes fabrication and provision of shims for panel alignment and intercoupling of panels wherever required including supply of all accessories, consumables, welding materials etc. Supply of anchor fasteners covered under separate item in the BOQ.	No's	32	23656.05	7,56,993.60	18.00
6	Installation of Wall mounted Units (Fire alarm and fire fighting controllers, relay cabinets, Remote start up devices,) including installation of brackets/supports either by welding to existing EP or by anchoring using Hilti / Fischer anchors. All required accessories like shims, fastening hardwares and consumables etc are in the scope of the contractor but excluding supply of anchor fasteners. Supply of anchor fasteners included as a separate item in BOQ.	No's	197	7885.35	15,53,413.95	18.00
7	Installation of different types of fire detectors such as smoke/ heat/ combination/ Beam/ Flame/ conventional zone module/ output module/ Manual Call Points etc with respective base units up to an Elevation up to 6 meter in height as per the technical specification and working documentation. All accessories required for completing the job are included in the scope of this item.	No's	13200	1708.74	2,25,55,368.00	18.00
8	Installation of different types of fire detectors such as smoke/ heat/ combination/ Beam/ Flame/ conventional zone module/ output module etc with respective base units up to an Elevation more than 6 meter in height as per the technical specification and working documentation. All accessories required for completing the job are included in the scope of this item.	No's	500	1972.08	9,86,040.00	18.00



Purchase order No.: CMM/EIC/91-00-3-3653/PO/59							ANNEXURE -A2
Template Name: E2 - Erection schedule of Systems (S3) (Reference Specification: I01.KK56.0.0.TH.TS.PR001)							
M/s Electronics Corporation of India Ltd							
Item No.	Description of Item/Scope of works	Unit of Measurement	Total Quantity for KKNPP- Unit 5&6 (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)	Rate of GST included in Total Price in percentage (%) (D)	
9	Installation of Fire Alarm (FA) audio visual Messenger /Fire Alarm (FA) light Annunciator on wall as per the technical specification and working documentation including the supply of all accessories required for completing the job.	No's	1420	1577.07	22,39,439.40	18.00	
10	Installation of Door limit switch on the door/Pressure Switch at the down stream of water fire fighting valve as per the technical specification and working documentation. All accessories required for completing the job are included in the scope of this item.	No's	700	1629.54	11,40,678.00	18.00	
	INSTALLATION OF JUNCTION BOXES				.00		
11	Installation of following Junction Boxes on brackets / supports either by welding with embedded parts (EP) or by anchoring using HILTI anchor fasteners. All required accessories like fastening hardware's (bolts/nuts/washers) and consumables are in the scope of the contractor. (Fabrication and supply of local supports/brackets and also the supply of anchor fasteners are covered under separate items in this BOQ) .				.00		
11.1	AFPS Junction Boxes upto 20 terminal capacity	No's	1930	1840.41	35,51,991.30	18.00	
11.2	AFPS Junction boxes of terminal capacity above 20 and up to 100 including door junction boxes	No's	240	1892.88	4,54,291.20	18.00	
11.3	AFPS Junction boxes of terminal capacity above 100 and up to 300	No's	10	1972.08	19,720.80	18.00	
	CONTROL CABLES LAYING				.00		
12	Laying of different types of net control carries up to 40mm size on already installed cable trays / rigid channels / through conduits /on walls/ceiling including supply of all consumables such as anodized aluminium rectangular tags, clamps, nylon cable ties , all other hardware and consumables required for completing the job are included in the scope of this item.				.00		
12.1	For sizes up to 14 mm OD (on cable tray/light channel/through conduit/on walls/ceiling)	Mtrs	250000	92.07	2,30,17,500.00	18.00	
12.2	For sizes above 14 mm OD upto 28 mm OD (on cable tray/light channel/through conduit/on walls/ceiling)	Mtrs	150000	117.81	1,76,71,500.00	18.00	
12.3	For sizes above 28 mm OD upto 40 mm OD (on cable tray/light channel/through conduit/on walls/ceiling)	Mtrs	20000	123.75	24,75,000.00	18.00	
	CABLE GLANDING				.00		
13	Glanding of following sizes of cables (including Fibre optic) of different types on Panels/Cabinets/Junction Boxes including supply of suitable consumables such as anodized aluminium rectangular tags, nylon cable ties required for completing the job are included in the scope. Supply of suitable cable glands, reducers/adaptors etc are include as a separate item in the supply BOQ.				.00		
13.1	For sizes upto 14 mm OD	No's	8000	79.20	6,33,600.00	18.00	
13.2	For sizes above 14 mm OD upto 28 mm OD	No's	18000	84.15	15,14,700.00	18.00	
13.3	For sizes above 28 mm OD upto 40 mm OD	No's	500	90.09	45,045.00	18.00	



Purchase order No.: CMM/EIC/91-00-3-3653/PO/59						
ANNEXURE -A2						
Template Name: E2 - Erection schedule of Systems (S3) (Reference Specification: I01.KK56.0.0.TH.TS.PR001)						
M/s Electronics Corporation of India Ltd						
Item No.	Description of Item/Scope of works	Unit of Measurement	Total Quantity for KKNPP - Unit 5&6 (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)	Rate of GST included in Total Price in percentage (%) (D)
	TERMINATION				.00	
14	Termination of wires of all types of AFPS cables including supply of consumables like various types of lugs, 2%-5% silver solder wire as per requirement, Heat shrinkable boot sleeves for cable boot sealing, wire sleeve suitable for thermal printing including printing of wire numbers for completing the job are included in the scope.				.00	
14.1	Screwed / Cage Clamp Terminations	No's	300000	79.20	2,37,60,000.00	18.00
14.2	Soldered Terminations	No's	75000	92.07	69,05,250.00	18.00
14.3	RJ-45 Connectorisation	No's	2000	104.94	2,09,880.00	18.00
	TERMINATION OF OPTICAL FIBRE CABLE				.00	
15	Scope includes all the termination works such as provision of splicing boxes, splicing of OFC cables, preparation for fusing, fusing of cables, measurement of attenuation / loss after joining, continuity checking, The scope of works include qualification of the jointer, arrangement of suitable electrodes, fusing machines, loss measurement instruments, and any other special tools and tackles required for the successful completion of the works and also include supply of suitable LIU - Light Interfacing Unit Boxes required for the works, pigtail couplers etc. Note: Please note that Supply & Erection of Light channel, Conduits, Anchor fasteners, Structural steel, Earthing strip and Fabrication works pertaining to Automated Fire Protection System (AFPS) are considered in 'Supply Works' & Erection of supply items works.	No's (per core)	1000	1314.72	13,14,720.00	18.00
C	COMMUNICATION SYSTEM				.00	
	Common station Telephone system (CYA)				.00	
16	Installation of Automatic telephone exchange Panels, MDF including UPS and work station etc. either by welding to EPs or by anchoring (Wherever EPs are not available) including mounting of various loose modules/devices supplied with the panels. The scope also includes fabrication and provision of shims for panel alignment and intercoupling of panels wherever required including supply of all accessories, consumables, welding materials etc. Supply of anchor fasteners covered under separate item in the BOQ.	No's	10	23656.05	2,36,560.50	18.00
17	Installation of telephone including telephone stand (FRP), RJ11 socket/RJ45 socket. All accessories required for completing the job are included in the scope of this item.	No's	1762	1708.74	30,10,799.88	18.00
	Operative Telephone system (CYB)				.00	



Purchase order No.: CMM/EIC/91-00-3-3653/PO/59						
ANNEXURE -A2						
Template Name: E2 - Erection schedule of Systems (S3) (Reference Specification: 101.KK56.0.0.TIL.TS.PR001)						
M/s Electronics Corporation of India Ltd						
Item No.	Description of Item/Scope of works	Unit of Measurement	Total Quantity for KKNPP- Unit S&6 (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)	Rate of GST included in Total Price in percentage (%) (D)
18	Installation of Automatic telephone exchange Panels including UPS with battery and work station etc. either by welding to EPs or by anchoring (Wherever EPs are not available) including mounting of various loose modules/devices supplied with the panels. The scope also includes fabrication and provision of shims for panel alignment and intercoupling of panels wherever required including supply of all accessories, consumables, welding materials etc. Supply of anchor fasteners covered under separate item in the BOQ.	No's	9	23656.05	2,12,904.45	18.00
19	Installation of telephone including telephone stand (FRP), RJ11 socket/RJ45 socket. All accessories required for completing the job are included in the scope of this item.	No's	290	1708.74	4,95,534.60	18.00
20	Installation of Operator Consoles including Power supply adapter, RJ 11 socket, All accessories required for completing the job are included in the scope of this item	No's	25	1972.08	49,302.00	18.00
	Duplex loud speaking communication system (CYC)				.00	
21	Installation of central controllers Panels which including UPS with battery, Switch, Power supply modules and work station etc. either by welding to EPs or by anchoring (Wherever EPs are not available) including mounting of various loose modules/devices supplied with the panels. The scope also includes fabrication and provision of shims for panel alignment and intercoupling of panels wherever required including supply of all accessories, consumables, welding materials etc. Supply of anchor fasteners covered under separate item in the BOQ.	No's	8	23656.05	1,89,248.40	18.00
22	Installation of Field call station including external speakers and External flash light(whenever required as per wd) . All accessories required for completing the job are included in the scope of this item	No's	224	1708.74	3,82,757.76	18.00
23	Installation of Operator Consoles including Power supply adapter, RJ 11 socket/ RJ 45 socket. All accessories required for completing the job are included in the scope of this item	No's	17	1972.08	33,525.36	18.00
	Command Search/ Annunciation system (CYH)				.00	
24	Installation of Panel which includes UPS with battery, power supply modules, ethernet switch, amplifiers etc either by welding to EPs or by anchoring (Wherever EPs are not available) including mounting of various loose modules/devices supplied with the panels. The scope also includes fabrication and provision of shims for panel alignment and intercoupling of panels wherever required including supply of all accessories, consumables, welding materials etc. Supply of anchor fasteners covered under separate item in the BOQ	No's	14	23656.05	3,31,184.70	18.00
25	Installation of different types of speakers as per the technical specification and working documentation. All accessories required for completing the job including universal branch box for each speakers are included in the scope of this item.	No's	1420	1708.74	24,26,410.80	18.00
26	Installation of consoles along with console sockets, power supply adapter as per the technical specification and working documentation including the supply of all accessories required for completing the job.	No's	14	1972.08	27,609.12	18.00
	Common Time System (CYG)				.00	



Purchase order No.: CMM/EIC/91-00-3-3653/PO/59						
ANNEXURE -A2						
Template Name: E2 - Erection schedule of Systems (S3) (Reference Specification: I01.KK56.0.0.TH.TS.PR0001)						
M/s Electronics Corporation of India Ltd						
Item No.	Description of Item/Scope of works	Unit of Measurement	Total Quantity for KKNPP-Unit 5&6 (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)	Rate of GST included in Total Price in percentage (%) (D)
27	Installation of panel includes GPS receiver, master clock station, UPS, Power supply modules, and workstation either by welding to EPs or by anchoring (Wherever EPs are not available) including mounting of various loose modules/devices supplied with the panels. The scope also includes fabrication and provision of shims for panel alignment and intercoupling of panels wherever required including supply of all accessories, consumables, welding materials etc. Supply of anchor fasteners covered under separate item in the BOQ.	No's	1	19980.18	19,980.18	18.00
28	Installation of GPS receiver antenna including installation of brackets/supports either by welding to existing EP or by anchoring using Hilti / Fischer anchors. All required accessories like shims, fastening hardwares and consumables etc are in the scope of the contractor but excluding supply of anchor fasteners. Supply of anchor fasteners included as a separate item in BOQ.	No's	2	15770.70	31,541.40	18.00
29	Installation of Wall mounted Units (Signal Distributor) including installation of brackets/supports either by welding to existing EP or by anchoring using Hilti / Fischer anchors. All required accessories like shims, fastening hardwares and consumables etc are in the scope of the contractor but excluding supply of anchor fasteners. Supply of anchor fasteners included as a separate item in BOQ.	No's	2	16296.39	32,592.78	18.00
30	Installation of different types of clocks (alphanumeric displays, digital clock), as per the technical specification and working documentation. All accessories including universal box with power socket etc required for completing the job are included in the scope of this item	No's	207	1577.07	3,26,453.49	18.00
	Recording System (CYL)				.00	
31	Installation of Recorder panel including workstation, UPS with battery cabinet, power supply, network switch etc either by welding to EPs or by anchoring (Wherever EPs are not available) including mounting of various loose modules/devices supplied with the panels. The scope also includes fabrication and provision of shims for panel alignment and intercoupling of panels wherever required including supply of all accessories, consumables, welding materials etc. Supply of anchor fasteners covered under separate item in the BOQ.	No's	4	18924.84	75,699.36	18.00
32	Installation of Microphone as per the technical specification and working documentation. All accessories required for completing the job are included in the scope of this item	No's	16	3917.43	62,678.88	18.00
	Industrial TV system (CYP)				.00	



Purchase order No.: CMM/EIC/91-00-3-3653/PO/59						
ANNEXURE -A2						
Template Name: E2 - Erection schedule of Systems (S3) (Reference Specification: I01.KK56.0.0.TIL.TS.PR001)						
M/s Electronics Corporation of India Ltd						
Item No.	Description of Item/Scope of works	Unit of Measure	Total Quantity for KKNPP- Unit 5&6 (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)	Rate of GST included in Total Price in percentage (%) (D)
33	Installation of Panel, work station which includes UPS with battery, power supply, ethernet switch, Camera control unit, Video recorder, monitor etc. either by welding to EPs or by anchoring (Wherever EPs are not available) including mounting of various loose modules/devices supplied with the panels. The scope also includes fabrication and provision of shims for panel alignment and intercoupling of panels wherever required including supply of all accessories, consumables, welding materials etc. Supply of anchor fasteners covered under separate item in the BOQ.	No's	12	23130.36	2,77,564.32	18.00
34	Installation of transmitters (Camera, Pan and Tilt unit, Lighting unit) including installation of brackets/supports either by welding to existing EP or by anchoring using Hilti / Fischer anchors. All required accessories like shims, fastening hardwares and consumables etc are in the scope of the contractor but excluding supply of anchor fasteners. Supply of anchor fasteners included as a separate item in BOQ.	No's	40	6571.62	2,62,864.80	18.00
Standby Inplant Radio Communication System (CYS)						
35	Installation of Panel including Repeater, UPS with battery, Power supply, Divider etc either by welding to EPs or by anchoring (Wherever EPs are not available) including mounting of various loose modules/devices supplied with the panels. The scope also includes fabrication and provision of shims for panel alignment and intercoupling of panels wherever required including supply of all accessories, consumables, welding materials etc. Supply of anchor fasteners covered under separate item in the BOQ.	No's	4	23130.36	92,521.44	18.00
36	Installation of Antenna including installation of brackets/supports either by welding to existing EP or by anchoring using Hilti / Fischer anchors. All required accessories like shims, fastening hardwares and consumables etc are in the scope of the contractor but excluding supply of anchor fasteners. Supply of anchor fasteners included as a separate item in BOQ.	No's	20	11828.52	2,36,570.40	18.00
37	Installation of Antenna in the stack (approximate height 90mtrs) including installation of brackets/supports either by welding to existing EP or by anchoring using Hilti / Fischer anchors. All required accessories like shims, fastening hardwares and consumables etc are in the scope of the contractor but excluding supply of anchor fasteners. Supply of anchor fasteners included as a separate item in BOQ.	No's	2	39426.75	78,853.50	18.00
38	Installation of Stationary radio station including Power supply as per the technical specification and working documentation. All accessories required for completing the job are included in the scope of this item	No's	10	131.67	1,316.70	18.00
INSTALLATION OF JUNCTION BOXES						
					.00	

Purchase order No.: CMM/EIC/91-00-3-3653/PO/59						
ANNEXURE -A2						
Template Name: E2 - Erection schedule of Systems (S3) (Reference Specification: I01.KK56.0.0.TH.TS.PR0001)						
M/s Electronics Corporation of India Ltd						
Item No.	Description of Item/Scope of works	Unit of Measurement	Total Quantity for KKNPP-Unit 5&6 (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)	Rate of GST included in Total Price in percentage (%) (D)
39	Installation of following Junction Boxes on brackets / supports either by welding with embedded parts (EP) or by anchoring using HILTI anchor fasteners. All required accessories like fastening hardware's (bolts/nuts/washers) and consumables are in the scope of the contractor. (Fabrication and supply of local supports/brackets and also the supply of anchor fasteners are covered under separate items in this BOQ).					
39.1	Junction Boxes upto 20 terminal/pair capacity	No's	3500	1972.08	69,02,280.00	18.00
39.2	Junction boxes of terminal/pair capacity above 20 and up to 100 including door junction boxes	No's	160	1972.08	3,15,532.80	18.00
39.3	Junction boxes of terminal/pair capacity above 100 and upto 300	No's	10	1972.08	19,720.80	18.00
	TERMINATION					
40	Termination of cores of all types of communication sbles including supply of suitable consumables like termination kit, patch cords, various types of lugs, 2%-5% silver solder wire as per requirement, heat shrinkable boot sleeves for cable boot sealing, wire sleeve suitable for thermal printing including printing of wire numbers for completing the job are included in the scope.					
40.1	Screwed / Cage Clamp /krone/terminations	No's	180000	92.07	1,65,72,600.00	18.00
40.2	Soldered Terminations	No's	14000	104.94	14,69,160.00	18.00
40.3	RJ-45 Connectorisation	No's	800	117.81	94,248.00	18.00
	TERMINATION OF OPTICAL FIBRE CABLE					
41	Scope includes all the termination works such as provision of splicing boxes, splicing of OFC cables, preparation for fusing, fusing of cables, measurement of attenuation / loss after joining, continuity checking, The scope of works include qualification of the jointer, arrangement of suitable electrodes, fusing machines, loss measurement instruments, and any other special tools and tackles required for the successful completion of the works and also include supply of suitable LIU - Light Interfacing Unit Boxes required for the works, pigtail couplers etc.	No's (per core)	500	1577.07	7,88,535.00	18.00
	CABLE GLANDING					
42	Glanding of following sizes of cables (including Fibre optic) of different types on Panels/Cabinets/Junction Boxes including supply of suitable consumables such as anodized aluminium rectangular tags, nylon cable ties required for completing the job are included in the scope. Supply of suitable cable glands, reducers/adaptors etc are include as a separate item in the supply BOQ.					
42.1	For sizes upto 14 mm OD	No's	2600	79.20	2,05,920.00	18.00
42.2	For sizes above 14 mm OD upto 28 mm OD	No's	6200	84.15	5,21,730.00	18.00



Purchase order No.: CMM/EIC/91-00-3-3653/PO/59							ANNEXURE -A2
Template Name: E2 - Erection schedule of Systems (S3) (Reference Specification: I01.KK56.0.0.TH.TS.PR001)							
M/s Electronics Corporation of India Ltd							
Item No.	Description of Item/Scope of works	Unit of Measure ment	Total Quantity for KKNPP- Unit 5&6 (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)	Rate of GST included in Total Price in percentage (%) (D)	
42.3	For sizes above 28 mm OD upto 40 mm OD CABLES LAYING,JOINTING & EXCAVATION	No 's	200	90.09	18,018.00	18.00	
43	Laying of different types of field control cables up to 40mm size on already installed cable trays / light channels / through conduits /walls/ceiling including supply of all consumables such as anodized aluminium rectangular tags, clamps , nylon cable ties , all other hardwares and consumables required for completing the job are included in the scope of this item.				.00		
43.1	For sizes up to 14 mm OD (on cable tray/light channel/through conduit/walls/ceiling)	Mtrs	450000	92.07	4,14,31,500.00	18.00	
43.2	For sizes above 14 mm OD upto 28 mm OD (on cable tray/light channel/through conduit/walls/ceiling)	Mtrs	450000	110.88	4,98,96,000.00	18.00	
43.3	For sizes above 28 mm OD upto 40 mm OD (on cable tray/light channel/through conduit/walls/ceiling)	Mtrs	20000	115.83	23,16,600.00	18.00	
44	Excavation of different sizes of trenches in any type of soil and placement of sand below and above the cable in the excavated trench and placement of bricks on top and sides of cable in the excavated trench and refilling the trench with excavated soil and levelling after cable laying. The scope includes supply of good quality soil and bricks of size 225mm x 115mm x 75mm and cable markers	Cu M	2000	1708.74	34,17,480.00	18.00	
45	Jointing of telephone cables upto 20 pairs including supply of suitable joint kits, heat shrinkable wire sleeve and other consumables required for completing the job are included in the scope of this item.	No 's	50	3811.50	1,90,575.00	18.00	
	Note: Please note that Supply & Erection of Light channel, Conduits, Anchor fasteners, Structural steel, Earthing flat / cable and Fabrication works pertaining to Communication system are considered in 'Supply items' or 'Erection of supply items works'.						
Total (in INR)					24,71,45,830.47		

Pankaj Trivedi
(Pankaj Trivedi)

General Manager, C&MM

For & on behalf of Nuclear Power Corporation of India Limited
(The Purchaser)



Template Name: E3 - Erection schedule of Free Issue Materials
(Reference Specification: I01.KK56.0.0.TH.TS.PR001)

M/s Electronics Corporation of India Ltd

Item No.	Description of Item/Scope of works	Unit of Measurement	Total Quantity for KKNPP- Unit 5&6 (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)	Rate of GST included in Total Price in percentage (%) (D)
	ERECTION SCHEDULE OF FREE ISSUE MATERIALS					
	INSTRUMENTS CALIBRATION					
A	Receipt from stores, inspection, testing, response check/ calibration, documentation, preservation till its actual installation at site for the following Instruments :					
1	Electronic Pressure transmitters	No's	120	3285.81	3,94,297.20	18.00
2	Temperature gauges, Temperature gauge cum switches, Temperature Indicating switches, Thermocouples and RTDs, Dew point transmitter, Relative Humidity transmitter	No's	860	2132.46	18,33,915.60	18.00
3	Pressure gauges, Diaphragm type pressure gauges, Pressure gauge cum switches, Differential pressure gauges, Differential pressure gauge cum switches, Indicating pressure switches, Pressure switches and Differential pressure switches	No's	50	2132.46	1,06,623.00	18.00
4	Level transmitters of Ultrasonic, displacer and radar type , Level switches of capacitance , conductivity, Ultrasonic and magnetic float type, Level indicators cum switches, Ultrasonic flow cum level , Submersible level transmitter cum switch	No's	50	3703.59	1,85,179.50	18.00
5	Ultrasonic flow meter , Thermal mass flow meter , Rota meters, Thermal dispersion flow switches	No's	300	3703.59	11,11,077.00	18.00
B	INSTRUMENTS INSTALLATION					
6	Electronic Pressure transmitters on Instrument Support Stands (ISS)	No's	120	3141.27	3,76,952.40	18.00
7	Thermocouples (TC) /Thermoelectric transducer & Resistance Temperature Detector (RTD)/Resistance platinum thermal converter	No's	360	2628.45	9,46,242.00	18.00
8	Level probes in existing sensor guide tubes of core catcher, temperature elements through guide tubes of core catcher, temperature element through guide tube of fuel pool, dirty water sump	No's	40	2628.45	1,05,138.00	18.00
9	Level equipment :- Level sensors for tanks, floor drains, sumps, Level transmitters of Ultrasonic, displacer and radar type , Level switches of capacitance , conductivity, Ultrasonic and magnetic float type, Level indicators cum switches, Ultrasonic flow cum level , Submersible level transmitter cum switch	No's	50	4205.52	2,10,276.00	18.00
10	Temperature & Pressure equipment:- Temperature gauges, Temperature gauge cum switches, Temperature Indicating switches, Dew point transmitter, Relative Humidity transmitter, Thermometer , Bimetallic Indicating Thermometer, Pressure gauges, Diaphragm type pressure gauges, Pressure gauge cum switches, Differential pressure gauges, Differential pressure gauge cum switches, Indicating pressure switches, Pressure switches and Differential pressure switches mounted on already installed pipe lines/equipment/field instrumentation racks / supports	No's	550	3285.81	18,07,195.50	18.00
11	Flow equipment:- Ultrasonic flow meter , Thermal mass flow meter , Rota meters, Thermal dispersion flow switches	No's	300	5498.46	16,49,538.00	18.00

Purchase order No.: CMM/EIC/91-00-3-3653/PO/59						
ANNEXURE -A3						
Template Name: E3 - Erection schedule of Free Issue Materials (Reference Specification: I01.KK56.0.0.TH.TS.PR001)						
M/s Electronics Corporation of India Ltd						
Item No.	Description of Item/Scope of works	Unit of Measurement	Total Quantity for KKNPP- Unit 5&6 (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)	Rate of GST included in Total Price in percentage (%) (D)
12	Analytical instruments- pH-meter, Boron analyzer, Ionometering analyzer for liquids, Stationary automatic oxygen meter, Hydrogen gas analyzer, Oxygen gas analyzer, Acoustic / Conductivity type level gauges / switches, Oxygen sensor, Hydrogen meter, Moisture meters etc. on already installed pipe lines / field instrumentation racks including installation of necessary locally fabricated supports.(Fabrication and supply of local supports and also the supply of anchor fasteners are covered under separate items in this BOQ)	Set	350	11828.52	41,39,982.00	18.00
13	Seismic sensor threaded with bolts/nuts on the support plate where the plate is to be embedded in to the concrete pedestal and installation of secondary unit on the wall by anchoring.(Fabrication and supply of support plate and supply of anchor fasteners are covered under separate item in the BOQ) .	No's	21	7885.35	1,65,592.35	18.00
C	INSTRUMENT JUNCTION BOXES INSTALLATION					
14	Installation of following Junction Boxes on brackets / supports either by welding with embedded parts (EP) or by anchoring using HILTI anchor fasteners. All required accessories like fastening hardware's (bolts/nuts/washers) and consumables are in the scope of the contractor. (Fabrication and supply of local supports/brackets and also the supply of anchor fasteners are covered under separate items in this BOQ)					
14.1	Small Junction Boxes up to 20 terminal capacity	No's	100	3366.99	3,36,699.00	18.00
14.2	Junction boxes of 20 to 100 terminal capacity	No's	100	4678.74	4,67,874.00	18.00
14.3	Junction boxes of 100 to 200 terminal capacity	No's	50	5204.43	2,60,221.50	18.00
14.4	Junction boxes for Control valves/Pulse Safety Devices	No's	2500	3943.17	98,57,925.00	18.00
D	LOCAL CONTROL PANELS INSTALLATION					
15	Installation of Local Control Panels / Wall mounted General Units with brackets/support frames either by welding to existing EPs or by anchoring using HILTI anchor fasteners on wall /floor suiting to site conditions. (All required accessories like shims, fastening hardware's and consumables are in the scope of the contractor but excluding supply of anchor fasteners. Fabrication and supply of local supports/brackets and also the supply of anchor fasteners are covered under separate items in this BOQ.)					
15.1	Wall mounted General Units (electronic devices in enclosures, compensation device for Thermocouples, Secondary converters for limit switches of check valves/manual valves, Secondary converters for level, Signal conditioning units, Conversion unit, Converter boxes, Amplifying units etc.) in the weight range up to 30 Kgs	No's	300	6571.62	19,71,486.00	18.00
15.2	Local Control Panels/ Control boards mounted on wall	No's	100	18136.80	18,13,680.00	18.00



Purchase order No.: CMM/EIC/91-00-3-3653/PO/S9						
ANNEXURE-A3						
Template Name: E-3 - Erection schedule of Free Issue Materials (Reference Specification: 101.KK56.0.0.TH.TS.PR001)						
M/s Electronics Corporation of India Ltd						
Item No.	Description of Item/Scope of works	Unit of Measurement	Total Quantity for KKNPP- Unit 5&6 (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)	Rate of GST included in Total Price in percentage (%) (D)
15.3	Local Control Panels/ Control boards mounted on floor	No's	320	20765.25	66,44,880.00	18.00
E	CONTROL CENTRE INSTRUMENTATION					
16	Installation of Main / Supplementary Control Room (MCR / SCR) Control Panels of size 1300X 800X 2300 mm either by welding to EPs or by anchoring (wherever EPs are not available) including mounting of various loose modules/devices supplied along with the panels. The scope also includes provision of shims for panel alignment and intercoupling of panels wherever required including supply of all accessories, consumables, fastening hardware's like nuts/bolts/washers,welding consumables etc. (Fabrication and supply of local supports/frames/brackets and the supply of anchor fasteners are covered under separate items in the BOQ).	No's	80	26258.76	21,00,700.80	18.00
17	Installation of Filler panels in Main / Supplementary Control Room (MCR / SCR), mounted between the main Control Panels either by welding to EPs or by anchoring (wherever EPs are not available). The scope also includes provision of shims for panel alignment and intercoupling of panels wherever required including supply of all accessories, consumables, fastening hardware's like nuts/bolts/washers , welding consumables etc. (Fabrication and supply of local supports/frames/brackets and the supply of anchor fasteners are covered under separate items in the BOQ).	No's	8	21001.86	1,68,014.88	18.00
18	Installation Control Panels / Cabinets / Software-Hardware Complexes (SHC) of various Control systems either by welding to existing EPs or by anchoring including mounting of various loose modules/devices supplied along with the panels. The scope also includes fabrication and provision of shims for panel alignment and intercoupling of panels wherever required and also the supply of all accessories, consumables, fastening hardware's like nuts/bolts/washers,welding consumables etc (Fabrication and supply of local supports/frames/brackets and the supply of anchor fasteners are covered under separate items in the BOQ).	No's	2200	9200.07	2,02,40,154.00	18.00
19	Installation Converter Transformers in CPS-EE equipment room floor either by welding to existing EPs or by anchoring. The scope also includes fabrication and provision of shims for transformer alignment and supply of all accessories, consumables, fastening hardware's like nuts/bolts/washers , welding consumables etc. (Fabrication and supply of local supports/frames/brackets and the supply of anchor fasteners are covered under separate items in the BOQ).	No's	84	6571.62	5,52,016.08	18.00



Template Name: E3 - Erection schedule of Free Issue Materials
(Reference Specification: I01.KK56.0.0.TH.TS.PR001)

M/s Electronics Corporation of India Ltd

Item No.	Description of Item/Scope of works	Unit of Measurement	Total Quantity for KKNPP- Unit 5&6 (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)	Rate of GST included in Total Price in percentage (%) (D)
20	Installation of Work Stations/Operator Consoles in various Control Rooms either by welding to EPs or by anchoring including mounting of various loose modules/devices supplied along with the workstations. The scope also includes fabrication and provision of shims for panel alignment and intercoupling of panels wherever required and also the supply of all accessories, consumables, fastening hardware's like nuts/bolts/washers, welding consumables etc. (Fabrication and supply of local supports/frames/brackets and the supply of anchor fasteners are covered under separate items in the BOQ).	No's	55	13142.25	7,22,823.75	18.00
F	OTHER PACKAGE INSTRUMENTATION ITEMS INSTALLATION					
21	Receipt from CMM stores/other package contractors and installation of following Condition monitoring instruments supplied along with mechanical equipment / other systems such as Pumps / Motors / Doors and Air locks / various cranes etc. as per the installation manual or as per manufacturer instructions and/or as per the approved procedures. All required accessories like fastening hardware's (bolts/nuts/washers) and consumables are in the scope of the contractor. (Fabrication and supply of local supports/brackets and also the supply of anchor fasteners are covered under separate items in the BOQ).					
21.1	Vibration/Speed/Displacement /Accelerometer sensors	No's	300	3816.45	11,44,935.00	18.00
21.2	Water leak detectors secondary unit	No's	60	3816.45	2,28,987.00	18.00
21.3	Axial phase shift sensor and secondary unit	No's	40	3816.45	1,52,658.00	18.00
21.4	Hydraulic Snubber displacement sensors	No's	166	3816.45	6,33,530.70	18.00
21.5	Pressure/Temperature/Level sensors	No's	1500	3549.15	53,23,725.00	18.00
21.6	Door related- Limit switches /Electro magnetic lock/Speaker/ Light	No's	1200	3549.15	42,58,980.00	18.00
21.7	Junction Boxes	No's	1500	4443.12	66,64,680.00	18.00
21.8	Local Control Panels/Control Boards	No's	200	2497.77	4,99,554.00	18.00
G	CONTROL PROTECTION SYSTEM ELECTRICAL EQUIPMENT (CPS EE)					
22	ConnectORIZATION of CPS-EE cables including supply of all accessories such as copper bush, straight back shell with cover, ferrules made of phosphor bronze, high temperature solder wire, rosin flux, isopropyl alcohol, silicon tube, connector, sealing gasket, M6 screws, M6 special washers etc. for completing the job are included in the scope. . After installation, end to end core continuity also to be checked and ensured including rectification of deficiencies is under the scope excluding the cable laying. (1 Set means for connectors for 1 reactor unit which has 242 connectors, 121 no's of 7 pin and 121 no's of 24 pin).	Set	2	144564.75	2,89,129.50	18.00
H	MONITORING CONTROL AND DIAGNOSTIC SYSTEM (MCDS)					



Purchase order No.: CMM/EIC/91-00-3-3653/PO/59						
ANNEXURE -A3						
Template Name: E3 - Erection schedule of Free Issue Materials (Reference Specification: I01.KK56.0.0.TH.TS.PR001)						
M/s Electronics Corporation of India Ltd						
Item No.	Description of Item/Scope of works	Unit of Measurement	Total Quantity for KKNPP- Unit 5&6 (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)	Rate of GST included in Total Price in percentage (%) (D)
23	Installation of Monitoring Control Diagnostic System (MCDS) Sensors on main coolant pipelines /equipment including assembly and installation of brackets / supports provided along with the sensors as per the working documentation or manufacturer instruction and /or as per the approved procedure. (Removal / re installation of insulation for sensor installation if required and erection of scaffolding are also covered in this item scope). The supply of anchor fasteners is covered under separate items in this BOQ.					
23.1	Vibration monitoring system sensor of type I6IP-02	Set	24	5256.90	1,26,165.60	18.00
23.2	Vibration monitoring system sensor of type DAP08P	No's	8	5256.90	42,055.20	18.00
23.3	Loose part monitoring system sensor of type IM-1 impact hammer	No's	8	5256.90	42,055.20	18.00
23.4	Loose part monitoring system sensor of type AP63B-01 with magnetic locks	No's	40	5256.90	2,10,276.00	18.00
23.5	Acoustic Leak Monitoring sensors of type GT-400	No's	250	5256.90	13,14,225.00	18.00
23.6	Humidity Leak Monitoring Remote probe sensors of type CKTB-3B	No's	290	5256.90	15,24,501.00	18.00
23.7	Pressure fluctuation detector of type DPD-814	No's	26	5256.90	1,36,679.40	18.00
23.8	Junction Boxes and Measuring charge converter	No's	600	4443.12	26,65,872.00	18.00
I	COMMISSIONING MEASUREMENT SYSTEM					
24	Following Commissioning Measurement System I&C items receipt, material handling, shifting to location and installation without anchoring or welding including cable termination as per the manufacturer instruction or as per drawing and/or as per approved procedure. (Fabrication and supply of local supports/frames/brackets and the supply of anchor fasteners are covered under separate items in the BOQ)					
24.1	CMS Control Cabinets	No's	25	8411.04	2,10,276.00	18.00
24.2	CMS Junction Boxes /Converters	No's	130	7885.35	10,25,095.50	18.00
24.3	CMS Cables laying	Mtrs	60000	117.81	70,68,600.00	18.00
24.4	CMS PC's with Tables	No's	40	7885.35	3,15,414.00	18.00
25	Reconfiguration of above CMS I&C items in phases, shifting to other unit/location and storing as per manufacturer's instruction or as per drawing and/or as per approved procedure.					
25.1	CMS Control Cabinets	No's	12	9200.07	1,10,400.84	18.00
25.2	CMS Junction Boxes /Converters	No's	65	7885.35	5,12,547.75	18.00
25.3	CMS PC's with Tables	No's	22	7885.35	1,73,477.70	18.00
25.4	CMS Cables laying	Mtrs	30000	117.81	35,34,300.00	18.00
J	IAEA SURVEILLANCE SYSTEM					



Purchase order No.: CMM/EIC/91-00-3-3653/PO/59						
ANNEXURE -A3						
Template Name: E3 - Erection schedule of Free Issue Materials (Reference Specification: I01.KK56.0.0.FH.TS.PR001)						
M/s Electronics Corporation of India Ltd						
Item No.	Description of Item/Scope of works	Unit of Measurement	Total Quantity for KKNPP- Unit 5&6 (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)	Rate of GST included in Total Price in percentage (%) (D)
26	Receipt, material handling, shifting to location and installation by anchoring or welding for the following IAEA I&C items as per the manufacturer instruction or as per approved procedure. (Equipment being supplied by IAEA, Vienna, Austria)					
26.1	IAEA Server Rack	No's	6	15770.70	94,624.20	18.00
26.2	IAEA Junction boxes	No's	2	13142.25	26,284.50	18.00
26.3	IAEA LED light/camera with mounting units	No's	10	9200.07	92,000.70	18.00
K	NEUTRON FLUX MONITORING SYSTEM					
27						
Total (in INR)					9,92,18,002.95	

Pankaj Trivedi

(Pankaj Trivedi)
General Manager, C&MM
For & on behalf of Nuclear Power Corporation of India Limited
(The Purchaser)



Template Name:E4 - Erection schedule of Miscellaneous Items
(Reference Specification: I01.KK56.0.0.TH.TS.PR001)

M/s Electronics Corporation of India Ltd

Item No.	Description of Item/Scope of works	Unit of Measure	Total Quantity for KKNPP- Unit S&6 (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)
	MISCELLANEOUS ITEMS WORKS				
A	PROCESS INSTRUMENTATION RELATED WORKS				
1	Dismantling and removing (in whole or in part) the existing following item together with salvaging, cleaning, handling and storing of all usable or valuable parts and materials, and disposing of non salvageable materials and debris due to site exigencies, damages after installation, interferences, modifications cum engineering/design/ drawing / field changes and/or addition/deletion of systems etc. during the period of construction.				
1.1	Removal of screw Termination	No's	100000	52.47	52,47,000.00
1.2	Removal of soldering	No's	20000	65.34	13,06,800.00
1.3	Removal of field light channels of any size	Mtrs	20000	197.01	39,40,200.00
1.4	Removal of flexible/rigid conduits	Mtrs	500	197.01	98,505.00
1.5	Removal of field cables	Mtrs	50000	104.94	52,47,000.00
1.6	Removal of pressure/temperature/level/flow instruments/transmitters	No's	1000	1572.12	15,72,120.00
1.7	Removal of Junction boxes	No's	200	1972.08	3,94,416.00
1.8	Removal of control panels/cabinets/control boards/work stations	No's	100	18000.00	18,00,000.00
1.9	Removal of fire detectors	No's	100	1300.00	1,30,000.00
1.10	Removal of fire controllers	No's	30	2628.45	78,853.50
1.11	Removal of speakers	No's	100	1446.39	1,44,639.00
1.12	Removal of impulse tubing	Mtrs	10000	237.60	23,76,000.00
2	Re-Installation of Instrumentation			0	
2.1	Electronic Pressure transmitters on Instrument Support Stands (ISS)	No's	100	1900.00	1,90,000.00
2.2	Resistance Temperature Detector (RTD) / Thermo couples (TC)	No's	200	1700.00	3,40,000.00
2.3	Level instruments	No's	50	2071.08	1,03,554.00
2.4	Temperature and Pressure instruments	No's	200	1765.17	3,53,034.00
2.5	Flow instruments	No's	20	3087.22	61,744.32
2.6	Analytical instruments	No's	20	3279.42	65,588.40
2.7	Junction boxes	No's	200	3285.81	6,57,162.00

Template Name:E4 - Erection schedule of Miscellaneous Items
(Reference Specification: I01.KK56.0.0.TH.TS.PR001)

M/s Electronics Corporation of India Ltd

Item No.	Description of Item/Scope of works	Unit of Measure ment	Total Quantity for KKNPP- Unit 5&6 (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)
2.8	Control panels/Control boards	No's	200	26022.15	52,04,430.00
B	CIVIL RELATED WORKS				
3	DRILLING/CHIPPING				
	Drilling of holes upto Dia 200 mm of various depths in reinforced concrete walls / slabs. The scope of the work includes identification and marking of holes, core cutting and finishing of the edges of the holes and the area near by where the surface is damaged, with cement mortar. All the tools, tackles and machinery required for the works as well as the cement mortar required for finishing are in the scope of the job including arrangement and shifting of machineries and consumables required for completion of the job. Job also includes removal and disposal of debris and cleaning the area. The maximum height at which the job need to be done will be 4 Mtrs (Unit of measurement is mm-mtr ,i.e.,mm dia of hole and meter depth of hole).				
3.1	Concrete core drilling up to Dia 100 mm	mm-met	40000	480.00	1,92,00,000.00
3.2	Concrete core drilling from Dia > 100 mm up to 150 mm	mm-met	20000	645.00	1,29,00,000.00
3.3	Concrete core drilling from Dia > 150 mm	mm-met	10000	787.05	78,70,500.00
3.3	Chipping out upto 100 mm sizes of portion from concrete of all grades with concrete chipping power tools. This includes supply of skilled manpower and the requirement of tools for carrying out the job.	Sq.M	5000	3283.83	1,64,19,150.00
C	EP RECTIFICATION				
4	Rectification of Embedded plates (EP) provided in the finished cement / concrete floor / wall.				
4.1	Rectification of Embedded plates (EP) provided in the finished cement/concrete floor/ wall, of any length upto 200 mm width having undulations above +/- 5 mm to +/- 10mm height/ depth, which needs to be corrected to bring the EP to the required level / height / depth for installation any kind of equipment / panel . The scope also includes cleaning / removal of extra concrete over the EP, grinding of EP, making the EP suitable / good by placing of fabricated steel supports including cutting, grinding, drilling, welding, painting etc., restoring to the original finish including supply of all civil finishing consumables.	Mtrs	5000	1261.26	63,06,300.00
4.2	Rectification of Embedded plates (EP) provided in the finished cement/concrete floor / wall, of any length upto 200 mm width having undulations above +/- 10mm to +/- 25 mm of height/depth, which needs to be corrected to bring the EP to the required level / height / depth for installation any kind of equipment / panel. The scope also includes cleaning / removal of extra concrete over the EP, grinding of EP, making the EP suitable / good by placing of fabricated steel supports including cutting, grinding, drilling, welding, painting etc., restoring to the original finish including supply of all civil finishing consumables.	Mtrs	2000	1446.39	28,92,780.00
D	SCAFFOLDING				
5	ERECTION/DISMANTLING OF SCAFFOLDING				



Template Name:E4 - Erection schedule of Miscellaneous Items
(Reference Specification: I01.KK56.0.0.TH.TS.PR001)

M/s Electronics Corporation of India Ltd

Item No.	Description of Item/Scope of works	Unit of Measure ment	Total Quantity for KKNPP- Unit 5&6 (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)
5.1	Erection/dismantling of scaffolding using standard MS pipes, cross supports, tied with MS clamps for making approach/working platforms for safely carrying out the C&I installation works, cabling and light channel erection jobs, as and when required including providing necessary safety belts to workers, for erection and de-erection of scaffolding after completion of job including de-erection of scaffolding, cost of transportation, labour, MS pipes, safety belts, safetynets etc. Materials required for the scaffolding viz. MS pipes, clamps, base plate, platforms, ladders etc shall be provided by the contractor at his own cost. (This item is the scaffolding requirements of NPCIL other than the work covered under contractor scope specific to erection of BOQ items.)	Cu M	30000	789.03	2,36,70,900.00
5.2	Erection/dismantling of scaffolding using standard Aluminium scaffolding, cross supports, tied with clamps for making approach/working platforms for safely carrying out the C&I installation works, cabling and light channel erection jobs, as and when required including providing necessary safety belts to workers, for erection and de-erection of scaffolding after completion of job including de-erection of scaffolding, cost of transportation, labour, aluminium pipes, safety belts, safetynets etc as per approved work procedure. Materials required for the scaffolding viz. pipes, clamps, base plate, platforms, ladders etc shall be provided by the contractor at his own cost. (This item is the scaffolding requirements of NPCIL other than the work covered under contractor scope specific to erection of BOQ items.)	Cu M	20000	841.50	1,68,30,000.00
5.3	Rent for the scaffolding erected as per the above item. Number of days for rent will be considered from next day of completion of erection of scaffolding till issue of clearance from NPCIL.	Cu M /day	100000	144.54	1,44,54,000.00
E	PAINTING OF TAGS				
6	Painting of tag nos. for loud speakers, pull boxes, panels, IBs, cameras, equipment etc. comprising of 10 to 15 alphanumeric characters of size around 40 -50 mm.	No's	100000	226.71	2,26,71,000.00
F	LAYING OF PVC MAT				
7.1	Providing and Laying of 2 mm thick PVC mat on the floor by spreading, cutting to the required floor size, edge finishing and compacting on the control room floor area. Supply of PVC mat along with all accessories and consummables are in the scope of contractor.	Sq.M	10000	486.09	48,60,900.00
7.2	Providing and Laying of 2 mm thick PVC Insulation mat for 1.1 kV grade on the floor by spreading, cutting to the required floor size, edge finishing and compacting on the control room floor area. Supply of PVC insulation mat along with all accessories and consummables are in the scope of contractor.	Sq.M	5000	657.36	32,86,800.00
7.3	Providing and Laying of 3 mm thick PVC Insulation mat for 15 kV grade on the floor for 6 kV switchgear by spreading, cutting to the required floor size, edge finishing and compacting on the control room floor area. Supply of PVC insulation mat along with all accessories and consummables are in the scope of contractor.	Sq.M	3000	920.70	27,62,100.00
G	HOUSE KEEPING				



**Template Name:E4 - Erection schedule of Miscellaneous Items
(Reference Specification: 101.KK56.0.0.TH.TS.PR001)**

M/s Electronics Corporation of India Ltd

Item No.	Description of Item/Scope of works	Unit of Measure ment	Total Quantity for KKNPP- Unit 5&6 (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)
8	Up keeping of Control Panel Rooms including daily cleaning (sweeping & mopping) of floors and equipment by means of supplying industrial vacuum cleaners, other cleaning aids, dust collection bins, tools & tackles, consumables etc and disposal of waste materials to waste collection boxes at designated places by providing proper manpower with uniforms as per approved house keeping procedures . (UOM is Operation Day , OneOperation day means deployment of 1 manpower performing the above tasks 9 hrs in a day including the lunch hours.)	Operation Day	20000	3943.17	7,88,63,400.00
H	CONSTRUCTION ERECTION ASSISTANCE FOR C&I WORKS				
9	Impulse tube condition monitoring includes preparation of Impulse Tubing 3D drawing based upon instrumentation drawings and site survey for Isometric Progress Monitoring , slope checking and its correction during erection and actual sensor reading , , expansion monitoring and inspections / examination for evidence of external corrosion, loosening of threaded fastenings and deterioration of anchor, clamps and supports as per expansion and temperature of sytem , impulse tube loop checking and identification , verify the measurement of each sensor to fulfill its purpose and specified requirements, integrity checking of complete impulse line loop and preparation of documentation base upon available drawing for Analyze the erection activity, deviation from drawings and specification, propose schedule of completion and suggest improvements during the course of work .	No's	2000	5256.90	1,05,13,800.00
10	Providing specialised manpower assistance for preparatory works which are not covered within the scope of works against the Items in this package, but are required and essential for timely completion of C&I erection works at Site to meet the Project schedule. The detailed listing of the requirements are given below: 1) Preparation of documents and submission to NPCIL which includes Terminal lists preparation for Control cabinets/panels/Junction boxes/Hermetic Cable Penetrations, WD review and preparation & verification of terminal lists with cable logs, Identification of end to end documents and drawings for I&C equipment, Verification of documents with Site conditions, identification of deficiency of installation documents if any and report generation, Preparation of as built drawings ,preparation of various checklist, procedures and construction completion certificates etc., 2) Identification of instrument wiring loop, integrity verification, control function checking, document generation and submission to NPCIL which includes control cabinet erection checks and control facades verification with approved documents, Control circuit integrity checks as per WD which includes IR checks ,core continuity checks from sensors/primary elements to Junction boxes, from junction boxes to panel, interpanel cable core continuity checks, instrument loop response check from instrument to cabinets, control panel etc. (UOM is Operation Day , One Operation day means deployment of 1 manpower performing the above mentioned tasks 9 hrs in a day including the lunch hours.)				



Purchase order No.: CMM/EIC/91-00-3-3653/PO/59					
ANNEXURE -A4					
Template Name:E4 - Erection schedule of Miscellaneous Items (Reference Specification: I01.KKS6.0.0.TH.TS.PR001)					
M/s Electronics Corporation of India Ltd					
Item No.	Description of Item/Scope of works	Unit of Measure	Total Quantity for KKNPP-Unit 5&6 (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)
10.1	Engineers performing the above mentioned tasks	Operation day	4800	7359.66	3,53,26,268.00
10.2	Supervisors performing the above mentioned tasks	Operation day	4800	6571.62	3,15,43,776.00
10.3	Highly skilled performing the above mentioned tasks	Operation day	4800	5256.90	2,52,33,120.00
10.4	Skilled/Clerical performing the above mentioned tasks	Operation day	2400	3943.17	94,63,608.00
10.5	Semi skilled performing the above mentioned tasks	Operation day	2400	3154.14	75,69,936.00
10.6	Unskilled performing the above mentioned tasks	Operation day	2400	2628.45	63,08,280.00
Total (in INR)					38,82,57,764.22

Pankaj Tripathi

(Pankaj Tripathi)
General Manager, C&MM
For & on behalf of Nuclear Power Corporation of India Limited
(The Purchaser)



Template Name: F- Detailed Schedule Of Quantities & Rates For Commissioning
(Reference Specification: 101.KK56.0.0.TH.TS.PR001)

M/s Electronics Corporation of India Ltd									
S.No.	Item description	Specification reference	Unit of Measure	Total Quantity for Unit 5	Total Quantity for Unit 6	Total Quantity for Unit 5&6 (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)	Rate of GST included in Total Price in percentage (%)
1	Communication System								
1.1	Commissioning of the CYC system	102.KK56.0.0.SS.TS.PR002	Set	1	1	2	3873573.00	77,47,146.00	18.00
1.2	Commissioning of the CYH system		Set	1	1	2	3873573.00	77,47,146.00	18.00
1.3	Commissioning of the CYA system		Set	1	1	2	3873573.00	77,47,146.00	18.00
1.4	Commissioning of the CYB system		Set	1	1	2	3873573.00	77,47,146.00	18.00
1.5	Commissioning of the CYG system		Set	1	1	2	3873573.00	77,47,146.00	18.00
1.6	Commissioning of the CYL system		Set	1	1	2	3873573.00	77,47,146.00	18.00
1.7	Commissioning of the CYS system	102.KK56.0.0.SS.TS.PR001	Set	1	1	2	3873574.00	77,47,148.00	18.00
1.8	Commissioning of the CYP system		Set	1	1	2	5841000.00	1,16,82,000.00	18.00
2	Automatic Fire Protection System								
2.1	Commissioning of the Automatic Fire Protection System	102.KK56.0.0.PA.TS.PR001	Set	1	1	2	18067399.00	3,61,34,798.00	18.00
3	Containment Monitoring System								
3.1	Commissioning of Containment Monitoring System	102.KK56.UJA.JMY.AS.TS.PR001	Set	1	1	2	8418925.41	1,68,37,850.82	18.00
4	Sea water temperature monitoring system								
4.1	Commissioning of Sea water temperature monitoring system	102.KK56.0.0.TW.TS.PR001	Set	1	1	2	405089.75	8,10,179.50	18.00
5	PLC based control system								
5.1	UGD	102.KK56.0.0.AT.TS.PR001	Set	1	1	2	2319342.00	46,38,684.00	18.00
5.2	UEJ		Set	1	1	2	2319342.00	46,38,684.00	18.00
5.3	UQR		Set	1	1	2	2319342.00	46,38,684.00	18.00
5.4	UKU		Set	1	1	2	2319342.00	46,38,684.00	18.00
5.5	UYB		Set	1	1	2	2319342.00	46,38,684.00	18.00
5.6	UGF		Set	1	1	2	2319342.00	46,38,684.00	18.00
5.7	UTF		Set	1	1	2	2319342.00	46,38,684.00	18.00

Template Name: F- Detailed Schedule Of Quantities & Rates For Commissioning
(Reference Specification: I01.KK56.0.0.TIL.TS.PR001)

M/s Electronics Corporation of India Ltd

S.No.	Item description	Specification reference	Unit of Measurement	Total Quantity for Unit 5	Total Quantity for Unit 6	Total Quantity for Unit 5&6 (A)	Unit Price (Inclusive of GST and all other Indirect Taxes) in INR (B)	Total Price (Inclusive of GST and all other Indirect Taxes) in INR (C=A*B)	Rate of GST included in Total Price in percentage (%)
5.8	UAB		Set	1	1	2	2319342.00	46,38,684.00	18.00
5.9	UAC		Set	1	1	2	2319342.00	46,38,684.00	18.00
5.10	UAD		Set	1	1	2	2319342.00	46,38,684.00	18.00
5.11	UBG		Set	1	1	2	2319342.00	46,38,684.00	18.00
Total (in INR)								17,07,20,376.32	



(Pankaj Trivedi)

General Manager, C&MM

For & on behalf of Nuclear Power Corporation of India Limited
(The Purchaser)



SECTION-B: COMMERCIAL TERMS AND CONDITIONS

BASIS OF PRICE, STATUTORY LEVIES, DELIVERY SCHEDULE, TERMS OF PAYMENT ETC.

1.0 PRICES

1.1 The Prices stipulated in Section-A of the Purchase Order is on DAP basis for Erection & Commissioning of entire C&I Equipment per Section-A (Including those items issued as 'Free issue Material' (FIM) and sourced from Russia Federation /ASE at KKNPP 5&6 Site) inclusive of storage, handling, loading/unloading, transportation at site & storage-cum-erection insurance charges, GST and any other taxes.

1.2 In case the contractor brings in some items in excess of the quantities/items mentioned in the BOQ to meet the exigencies of the Site works, all such excess items if left over after the execution of the contract, are allowed to be taken back by the contractor.

1.3 PRICE ADJUSTMENT:

1.3.1 The Prices stipulated in Section-A for will be subjected to Price Adjustment as per formula and other provisions contained in GCC/EPC-3/Rev.4 Clause No. 5.4, SCC and Annexure-2 of this Purchase Order, without any ceiling.

1.3.2 Weightage of different price components (Fixed/labour) and base indices as applicable to various categories of items, for arriving at Price Adjustment amount are also indicated in the Annexure.

1.3.3 The Provision of Price Adjustment shall be as per original PO terms, regulated on the basis of the indices as applicable as per PO terms on the original CDD (Milestone date) of despatch or on actual delivery date, whichever is earlier

2.0 STATUTORY LEVIES:

2.1 GOODS & SERVICE TAX (GST) :

2.1.1 GST @ 18 % (9% CGST + 9% SGST) included in the DAP prices. Purchaser will not be liable to pay any increase in GST, if Services are delayed beyond the contractual delivery period.

2.1.2 GST shall be indicated separately in your invoice.

2.1.3 While claiming the GST supplier shall submit a certificate as per Annexure-F enclosed.

2.1.4 ECIL GSTIN registration No. : 36AAACE4809L1ZJ.



- 2.1.5 In case of increase in existing taxes/ duties and any other new indirect taxes / cess, if levied by Government during the contractual delivery period, the same shall be reimbursed / paid by the Purchaser, as the case may be, at actual against documentary evidence. This provision shall not apply to changes in Personal Income tax or Corporate Income tax or to changes in non-Indian Taxes.
- 2.1.6 For extension in the contractual delivery period for the reasons attributable to the Purchaser and/or Force Majeure, increase in existing taxes & duties, if any, and new tax component introduced in the extended period shall be reimbursed to the Contractor subject to the submissions of necessary documentary evidence. No increase / new tax shall be payable during the delay period due to reasons attributable to the Contractor
- 2.1.7 GST on Liquidated Damages (LD), as applicable, shall be to the account of the Contractor and shall be recovered from payments due to the Contractor.
- 2.1.8 GST as per Purchase Order or as paid by the contractor, which ever is lower will be reimbursed by NPCIL limiting to the rate prevailing within Contractual Delivery Date.

2.2 Direct Tax:- Tax Deduction at Source

- 2.2.1 The Purchaser shall have the right to withhold taxes on income, excess profits, royalty and other taxes from payments due to Contractor under this Contract to the extent that such withholding may be required by the government of India or any relevant authority thereof or by the government of any other country, and payment by the Purchaser to the respective governmental office of the amount of money so withheld will relieve the Purchaser from any further obligation to Contractor with respect to the amount so withheld.
- 2.2.2 The Purchaser shall, at the time of its payments due to the contractor, withhold the necessary taxes at such rate as is required by any Government Authority, unless and to the extent that the Contractor shall produce to the Purchaser any certificate issued by a Government Authority (having authority to issue such certificate) entitling the Contractor to receive the payments under the Contract for a prescribed period without deduction of any tax or deduction at a lower rate.
- 2.2.3 The Purchaser shall provide the necessary withholding tax certificates to the Contractor within the time stipulated by the relevant law to enable the contractor to file the same with the Government Authority as a proof of payment of such taxes.
- 2.2.4 All taxes levied on Contractor's corporate income or profits shall be for the account of Contractor and shall not be reimbursed by the Purchaser. Contractor shall also be responsible for payment of income taxes of its personnel levied in India or elsewhere



- 2.2.5 Contractor PAN No. AAACE4809L.
- 2.2.6 TCS as applicable, shall be collected by the contractor within the due date. TCS returns shall be filed by the contractor within the due date under NPCIL's PAN. Necessary information regarding the details of TCS deposited and return filed shall be provided by the contractor to the Purchaser (NPCIL) Paying authority.

3.0 SITE WORK

- 3.1 Erection of entire C&I works as per Section-A shall be carried out at Kudankulam Nuclear Power Project, Kudankulam-5&6 P.O Radhapuram Taluka, Tirunelveli Distt., Tamilnadu – 627 106.
- 3.2 The Contractor shall prepare and submit all erection procedures, drawings, quality plan as specified in the tender specification for approval to:

Chief Construction Engineer

Kudankulam Nuclear Power Project 5&6,
Kudankulam P.O Radhapuram Taluk,
Tirunelveli Distt., Tamilnadu – 627 106.

- 3.3 All works covered under this purchase order shall be subject to overall supervision of Chief Construction Engineer, Kudankulam Nuclear Power Project -3&4 or his authorized representative, as contained in GCC/EPC-3/Rev.4 and SCC applicable for erection and commissioning.
- 3.4 The contractor shall complete the entire package as per the schedule given in the Purchase Order.
- 3.5 Contractor shall maintain proper Industrial Safety, House keeping & Preservation as per Project Instruction as specified in SCC.
- 3.6 The Contractor shall follow the guidelines/procedure as per GCC/EPC-3/Rev.4 of the Tender document for movement of manpower & vehicles in Plant premises and to maintain Security at Site.
- 3.7 Dewatering of all work areas including tunnels, trenches during execution of work shall be done by the package contractor till the system is handed over.
- 3.8 Making/rectifications of openings on wall for pipe/cable penetrations, wherever not provided /not suitable, shall be carried out by package contractor and these openings shall be made good after finishing the work. All openings in buildings including tunnels and trenches shall be sealed as per sketch prepared by the contractor and approved by the Purchaser.

4.0 SUBMISSION OF DRAWINGS, PROCEDURES/DOCUMENTS

- 4.1 The contractor shall prepare and submit all drawings, documents, Quality Assurance Plan, Data Sheets, Procedure etc. as specified in the tender specification for approval of NPCIL to :



Chief Construction Engineer
Kudankulam Nuclear Power Project 5&6,
Kudankulam P.O Radhapuram Taluka,
Tirunelveli Distt., Tamilnadu – 627 106

- 4.2 Please note that approved drawings / documents / quality assurance plan shall be part of this contract.

5.0 QUALITY SURVEILLANCE

- 5.1 It is the responsibility of the Contractor to ensure compliance with the quality assurance requirement stipulated in the Tender document during erection, testing and commissioning. For this purpose, Contractor shall have appropriate quality assurance organisation and depute personnel with requisite qualification to carry out inspection /quality surveillance for the entire work carried out at site during erection, testing and commissioning.
- 5.2 All works covered by this purchase order shall be subject to Quality Surveillance by Executive Director, Quality Assurance or his authorised representative. The contractor shall provide all required assistance for this purpose. Purchaser reserves the right to carryout auditing of the activities of the contractor/subcontractors at their works/premises.
- 5.3 Contractor shall carry out all inspection and tests as specified in the Tender specification in a manner satisfactory to the Executive Director, Quality Assurance or his authorised representative and Test Certificate shall be furnished.
- 5.4 The equipment shall be despatched only after the inspection is carried out by the Executive Director, Quality Assurance or his authorised representative and Shipping Release duly signed in ink with NPC logo, shall be obtained in writing.
- 5.5 Where the consignments are despatched / delivered after inspection by the Executive Director, Quality Assurance or his authorised representative a copy of Shipping Release issued by him shall invariably, be enclosed with the delivery challan and other shipping documents (LR/RR etc.) accompanying the consignment.
- 5.6 E-mail ID for Quality Assurance Office : edqa@npcil.co.in Ph No. 022-25995030.

6.0 CONTRACTUAL DELIVERY SCHEDULE :

- 6.1 The entire scope covering Engineering, Procurement and Construction of Control & Instrumentation Package (CIP) for KKNPP-5&6 Project plus the erection, commissioning, and handing over the complete facilities covered under this Purchase order shall be completed within **42 months (as detailed in clause no. 6.2)** from the date of placement of this Purchase order i.e on or before

13 0 JUN 2029



6.2 Erection and Commissioning activities shall be completed by 27 months for KKNPP Unit-5 and 36 months for KKNPP Unit-6 from the date of issuance of Purchase Order. Further 6 months i.e. $36 + 6 = 42$ months is stipulated for carrying out the changes arising out of WD revisions, DCNs, FCNs at the end of the commissioning and miscellaneous works for KKNPP Units-5&6.

6.3 In case the Contractor fails to apply and secure extension of contractual delivery schedule indicated in Sr. no. 6.2 above before handing over of the facilities, acceptance of facility by the Purchaser will in no way prejudice the right of the Purchaser to levy liquidated damages for delays nor will it entitle contractor for payment of additional statutory levies that comes into force after the expiry of the contractual delivery schedule.

7.0 DEFECT LIABILITY PERIOD

7.1 Items/Equipment/System

7.1.1 The defect liability period shall be 18 months from the date of completion of facilities (satisfactory erection and pre-commissioning) or 12 months from the date of Operational Acceptance of Facilities (Commissioning), whichever occurs first, for each reactor unit as per clause no. 6.4 of GCC.

8.0 PERFORMANCE SECURITY BOND (SECURITY DEPOSIT CUM PERFORMANCE BOND)

8.1 The contractor shall furnish a Performance Security Bond, as detailed below, for 10% of the purchase order value covering the total scope of work i.e, **Supply, Testing, Erection and Commissioning** under PO No. CMM/EIC/91-00-3-3653/PO/58 for Supply and PO No. CMM/EIC/91-00-3-3653/PO/59 for Erection & Commissioning contract in the form of a Bank guarantee as per prescribed format within 30 days from the date of issue of this purchase order and it shall be valid till satisfactory completion of defect liability period plus a grace period of 3 Months.

Sr. No.	Description	Value of Performance Security Deposit	Valid upto
1.0	Control & Instrumentation Package for KKNPP 5&6	₹ 135,54,08,023/- (Rupees One Hundred Thirty Five Crore Fifty Four Lakh Eight Thousand and Twenty Three Only)	31 DEC 2030 Plus Three Months Grace Period.

8.3 All Bank Guarantee for acceptance shall be submitted strictly as per format enclosed to this office for acceptance in a sealed envelope under covering letter quoting our full purchase order reference number and supplier's name.



Sr. Manager (C&MM),
Directorate of Contracts & Materials Management,
Nuclear Power Corporation of India Limited,
EIC Section, Nabhikiya Urja Bhavan, Block No.E-0,
Anushaktinagar, Mumbai-400094.

- 8.4 Reduction in Bank Guarantee values of advances mentioned under clause no. 9.1.1 shall be allowed upon the pro-rata supplies once in six months.

9.0 TERMS OF PAYMENT:

9.1 ERECTION SERVICES :

- 9.1.1 **10% (5% for Phase-I and 5% for Phase-II) as advance including applicable taxes and duties** towards site mobilization, on certification by Chief Construction Engineer (CCE) of KKNPP-5&6 or his authorized representative against submission of equivalent bank guarantee and performance security bond shall be released as below:

- 9.1.1(a) **5% as advance including applicable taxes and duties, if any, towards site mobilization on completion of Phase-I facilities and on submission of following documents:**

- i. Unconditional order acceptance
- ii. Advance bank guarantee for equivalent amount valid till the completion of the contract plus a claim period of three months
- iii. Performance security bond
- iv. A certificate from Chief Construction Engineer (CCE) of KKNPP-5&6 or his authorized representative stating that contractor has satisfactorily completed Phase-I facilities (as listed below) in all respect and payment can be released.
- v. Certificate as per Annexure-F regarding GST

Phase-I facilities include arrangement of following:

- a) Office building of adequate capacity for staff with facilities for sitting, document storage, drawing /drafting, computers, training hall, first aid facilities etc.
- b) Closed, Semi closed and open storage facilities with appropriate storage platforms with identified locations for non-conformance items.
- c) Labour camp with sanitation, water & electrical lighting arrangements
- d) General fabrication shops for Carbon steel/Alloy steel & structural works with required material handling facilities, as applicable.
- e) Water storage of adequate capacity.
- f) Approach roads to various facilities.
- g) Deployment of key manpower like Resident manager, Planning engineer, Safety engineer, etc.



- h) Submission of detailed schedule covering site mobilization, deployment of manpower, machineries, tools and tackles etc. in consultation with NPCIL.
- i) Deployment of plant, machinery and manpower required for the commencement of work as per agreed resource deployment schedule.
- j) Construction of labor lunch shed / canteen and sanitation facility with regular maintenance arrangement at site.
- k) Any other facilities as per approved mobilization plan, as applicable.

9.1.1(b) Balance **5 % as advance** including applicable taxes and duties, if any, towards site mobilization on completion of Phase-II facilities and on submission of following documents:

- i. Advance bank guarantee for equivalent amount valid till the completion of the contract plus a claim period of three months
- ii. Performance security bond
- iii. A certificate form Chief Construction Engineer (CCE) or his authorized representative stating that contractor has satisfactorily completed Phase-II facilities (as listed below) in all respect and payment can be released.
- iv. Certificate as per Annexure-F regarding GST

Phase-II facilities include arrangement of following:

- a) Testing & calibration lab for instrumentation items.
- b) Deployment of QA Engineer, Safety supervisors & their Training/qualification.
- c) Submission and approval of QA Manuals and QAP for erection.
- d) Submission and approval of welding procedures, NDT procedures, testing procedure and erection procedures, as applicable
- e) Qualification of electricians, welders, fitters, riggers, erection supervisors, QA supervisors, NDT operators and other personnel required for initial phase of works / starting fabrication cum erection work, as applicable
- f) Demonstration of Integrated Computerized Progress Monitoring system for Site Related activities
- g) Other balance facilities as per approved mobilization plan and commencement of works, as applicable.

9.1.2 **66% including applicable taxes and duties & 100% of price adjustment** if any, on pro-rata basis for completion of 'Erection Services' as given in schedule of quantities and rates (SOQR) for Erection services respectively and on submission of following documents:

- i. A certificate form Chief Construction Engineer (CCE) of KKNPP-5&6 or his authorized representative confirming the completeness of Erection services and payment can be released.
- ii. Authenticate copies of indices pertaining to applicable end dates for arriving at price component due to price adjustment
- iii. Certificate as per Annexure-F regarding GST



- 9.1.3 **2% including applicable taxes and duties on pro-rata basis subject to recovery as per Annexure-‘A-I’ to SCC on ‘Project Instructions on Industrial Safety at Site for EPC Packages’ / “Contract Conditions for Industrial Safety” appended to GCC and on submission of following documents:**
- i. A Certificate issued by Chief Construction Engineer (CCE) of KKNPP-5&6 or his authorized representative stating that necessary Safety norms has been satisfactorily completed by contractor as detailed in Project Instruction on Industrial Safety and payment can be released.
 - ii. Certificate as per Annexure-F regarding GST
- 9.1.4 **1% including applicable taxes and duties on pro – rata basis subject to recovery as per Annexure – AII to the SCC on ‘Project Instructions for House Keeping at Site’ for EPC Packages and on submission of following:**
- i. Invoice of contractor in triplicate
 - ii. A Certificate issued by Chief Construction Engineer (CCE) of KKNPP-5&6 or his authorized representative stating that ‘Housekeeping’ has been satisfactorily completed by contractor as detailed in Project Instruction on House Keeping and payment can be released.
 - iii. Certificate as per Annexure-F regarding GST
- 9.1.5 **1% including applicable taxes and duties on pro – rata basis subject to recovery as per Annexure – AIII to the SCC on ‘Project Instructions for Preservation at Site’ for EPC Packages and on submission of following:**
- i. A Certificate issued by Chief Construction Engineer (CCE) of KKNPP-5&6 or his authorized representative stating that ‘Preservation’ has been satisfactorily completed by contractor as detailed in Project Instruction on Preservation and payment can be released.
 - ii. Certificate as per Annexure-F regarding GST
- 9.1.6 **7.5% including applicable taxes and duties on ‘completion of Erection & Erection tests’, releasing of the erected equipment’s for Pre-commissioning/Commissioning and issue of Erection Completion Certificate for each reactor unit.**
- i. Erection completion certificate issued and accepted by Chief Construction Engineer (CCE) of KKNPP-5&6 or his authorized representative.
 - ii. Certificate as per Annexure-F regarding GST
- 9.1.7 **7.5% including applicable taxes and duties on handing over of the facilities to the Purchaser and issue and acceptance of Operational Acceptance Certificate as per the format in Annexure-J by Purchaser for each reactor unit and submission of following:**



- i. Operational Acceptance certificate as per Format in Annexure-J issued and accepted by Chief Construction Engineer (CCE) of KKNPP-5&6 or his authorized representative.
- ii. Certificate as per Annexure-F regarding GST

9.1.8 5% including applicable taxes and duties on completion of material accounting for overall package for each reactor unit and on submission of following documents:

- i. Material accounting completion certificate along with account of NPCIL supplied items for erection purpose issued by Chief Construction Engineer (CCE) or his authorized representative stating that material accounting has been completed satisfactorily and proposing recoveries if any towards unaccounted material and also the outstanding recovering towards chargeable issues to the contract and payment can be released.
- ii. Certificate as per Annexure-F regarding GST

In the event of delay in attaining the events pertaining to sub-clause 9.1.6, 9.1.7 and 9.1.8 above for reasons attributable to the Purchaser, the corresponding payments can be released to the Contractor on expiry of Original CDD against Retention Bank Guarantee as per format given in Annexure-C, initially valid for 6 months and subsequently extendable till completion of the corresponding events. In addition to be encashable for failure of the Contractor to fulfil his Contractual obligations covered by the Retention Bank Guarantee, this Bank Guarantee shall also be encashable for the purpose of recovery of LD, if any, pursuant to GCC clause no. 6.2 (Delay in Supply).

9.2 Commissioning Services

9.2.1 76% including applicable taxes and duties & 100% of price adjustment if any, on pro-rata basis for completion of 'Commissioning Services' as detailed in commissioning procedures and on submission of following documents:

- i. A certificate from Chief Construction Engineer (CCE) of KKNPP-5&6 or his authorized representative confirming the completeness of Commissioning services as detailed in commissioning procedures and payment can be released.
- ii. Authenticate copies of indices pertaining to applicable end dates for arriving at price component due to price adjustment
- iii. Certificate as per Annexure-F regarding GST

9.2.2 2% including applicable taxes and duties on pro-rata basis subject to recovery as per Annexure-'A-I' to SCC on 'Project Instructions on Industrial Safety at Site for EPC Packages' / "Contract Conditions for Industrial Safety" appended to GCC and on submission of following documents:

- i. A Certificate issued by Chief Construction Engineer (CCE) of KKNPP-5&6 or his authorized representative stating that necessary Safety norms



has been satisfactorily completed by contractor as detailed in Project Instruction on Industrial Safety and payment can be released.

ii. Certificate as per Annexure-F regarding GST

9.2.3 **1% including applicable taxes and duties** on pro – rata basis subject to recovery as per Annexure – AII to the SCC on ‘Project Instructions for **House Keeping** at Site’ for EPC Packages and on submission of following:

i. A Certificate issued by Chief Construction Engineer (CCE) of KKNPP-5&6 or his authorized representative stating that ‘Housekeeping’ has been satisfactorily completed by contractor as detailed in Project Instruction on House Keeping and payment can be released.

ii. Certificate as per Annexure-F regarding GST

9.2.4 **1% including applicable taxes and duties** on pro – rata basis subject to recovery as per Annexure – AIII to the SCC on ‘Project Instructions for **Preservation** at Site’ for EPC Packages and on submission of following:

i. A Certificate issued by Chief Construction Engineer (CCE) of KKNPP-5&6 or his authorized representative stating that ‘Preservation’ has been satisfactorily completed by contractor as detailed in Project Instruction on Preservation and payment can be released.

ii. Certificate as per Annexure-F regarding GST

9.2.5 **15% including applicable taxes and duties** on handing over of the facilities to the Purchaser and issue and acceptance of Operational Acceptance Certificate as per the format in Annexure-J by Purchaser for each reactor unit and submission of following:

i. Operational Acceptance certificate as per Format in Annexure-J issued and accepted by Chief Construction Engineer (CCE) of KKNPP-5&6 or his authorized representative.

ii. Certificate as per Annexure-F regarding GST

9.2.6 **5% including applicable taxes and duties** on completion of material accounting for overall package for each reactor unit and on submission of following documents:

i. Material accounting completion certificate issued by Chief Construction Engineer (CCE) or his authorized representative stating that material accounting has been completed satisfactorily and proposing recoveries if any towards unaccounted material and also the outstanding recovering towards chargeable issues to the contract and payment can be released.

ii. Certificate as per Annexure-F regarding GST



In the event of delay in attaining the events pertaining to sub-clause 9.2.5 and 9.2.6 above for reasons attributable to the Purchaser, the corresponding payments can be released to the Contractor on expiry of Original CDD against Retention Bank Guarantee as per format given in Annexure-C, initially valid for 6 months and subsequently extendable till completion of the corresponding events. In addition to be encashable for failure of the Contractor to fulfil his Contractual obligations covered by the Retention Bank Guarantee, this Bank Guarantee shall also be encashable for the purpose of recovery of LD, if any, pursuant to GCC clause no. 6.2 (Delay in Supply).

- 9.2.7 Charges towards BOCW cess on Erection and Commissioning (presently @1%) if made applicable later, shall be reimbursed based on the submission of supporting documents by the contractor.

Note :

1. The advance payments will be interest bearing at the applicable rate as notified by NPCIL on first of April each year. The rate of interest applicable for financial year FY 2023-24 is 10.97% p.a., the rate of interest for the financial year FY 2024-25 is 11.13% and the rate of interest for the financial year FY 2025-26 is 10.14%. Upon completion of the activity/ milestone, payment will be released after adjusting advance payments and interest accrued. Unless otherwise stipulated, interest shall be calculated on advances from date of release until the preceding day of recovery of the bills.
2. In case contractor does not draw advance/stage payment (non-availed advance) against Erection & Commissioning (E&C) as per payment terms and raise Invoice for Running Account bill for E&C, then the following shall be applicable:
 - a) The non-availed advance/stage payments shall also be released along with stage payments for Erection & Commissioning, on pro rata basis without any bank guarantee on certification from Chief Construction Engineer (CCE) or his authorized representative along with RA Bills raised on completion of corresponding erection or commissioning services, as applicable.

10.0 MODE OF PAYMENT

- 10.1 The payments in Indian Rupees, as applicable, will be released directly by the Purchaser to the Contractor as per the terms of payment against submission of necessary documents.
- 10.2 The contractor shall provide their bank details for release of payment.

11.0 PAYING AUTHORITY

- 11.1 All Invoices / Bills for payment shall be addressed to Bill to : Place of delivery with GST No and HSN/SAC Code and ship to : Place of delivery with GST No. However, all invoices/ bills and other documents for payments alongwith Bank details for e-payment through RTGS/NEFT shall be submitted to:



Manager (F&A),
Kudankulam Nuclear Power Project,
Kudankulam P.O Radhapuram
Taluk, Tirunelveli Distt., Tamilnadu – 627 106.

12.0 HANDLING / STORAGE AT SITE DURING ERECTION AND PRE-COMMISSIONING

12.1 Unloading at site shall be done by the contractor at his own cost. However, contractor shall intimate the consignee the following details by fax in advance:

- (i) Carrier's Name
- (i) Truck No.
- (ii) Lorry Receipt No. and date.
- (iii) Approx. time of arrival of truck at site.
- (iv) No. of packages and dimensions and weight of each package etc.

13.0 LIQUIDATED DAMAGES

13.1 In the event of delay in completion of facilities as detailed in Clause no. 6.0 above, Liquidated damages will be levied at the rate of 0.25% of the total value of purchase order per week or part thereof subject to a maximum of 5% of the total value of purchase order.

13.2 GST as applicable shall be levied on Liquidated damages.

14.0 INSURANCE COVER

The contractor shall, take out and maintain in effect the following Insurance based on reinstatement value during the performance of the contract and the Purchaser shall be named as co-insured under all insurance policies. All Insurer's rights of subrogation against co-insured shall be waived. In the Insurance Policies mentioned below except for Third Party Liability Insurance and Automobile insurance, the purchaser shall be named as LOSS PAYEE in this Insurance Policy.

14.1 Storage-cum Erection Insurance policy/ Contractor's All Risk Insurance Policy.

14.1.1 Insurance should cover physical loss or damage to the facilities at site against all risk including Terrorism occurring prior to the completion and handling over of facilities.

14.1.2 Third Party Liability Insurance

14.1.2.1 Covering bodily injury or death suffered by 3rd parties (including purchaser's personnel) and loss or damage to the property occurring in connection with the supply and installation of the facilities.



14.1.3 Workmen's compensation for Contractor's workmen

- 14.1.3.1 In accordance with the applicable statutory requirement.
- 14.1.3.2 The phrase "Purchaser's interest is protected" shall be endorsed in the Policy.

14.1.4 Automobile Liability Insurance

- 14.1.4.1 Covering use of all vehicles used by Contractor or its sub-contractor (whether or not owned by them) in connection with the execution of the contract.

14.1.5 Additional Insurance

- 14.1.5.1 Any other insurance that may become applicable during execution of the contract shall be arranged by the contractor at his own cost.

15.0 SUB-CONTRACT

- 15.1 The supplier shall not sub-contract any or all of the work without written consent of the Purchaser. The Contractor shall be solely responsible to the Purchaser for all work including that of the sub-contractor, if allowed by the Purchaser.

16.0 FACILITIES FOR ERECTION, TESTING & PRE-COMMISSIONING

- 16.1 The purchaser shall at his discretion and for the duration of the Contract, make available land at site for storage, temporary office & workshop to the contractor till the completion of erection & testing. Further, other facilities as stipulated in the tender specification will be provided by the Purchaser.
- 16.2 Power and water required for construction at site will be provided on chargeable basis.

17.0 LIABILITY UNDER THE WORKMEN'S COMPENSATION ACT

- 17.1 The contractor shall at all times, indemnify the purchaser against any claims which may be under the Workmen's Compensation Act 1923 or any statutory modification thereof or otherwise for or in respect of any damages or compensation payable in consequences of any accident or injury sustained by any worker or other person in the employment of the contractor.

18.0 PROGRESS REPORTING

- 18.1 Format for monthly progress monitoring is to be finalized and updated time-to-time. The report shall comprise Executive Summary, Physical and Financial Progress, S-Curves, activity based progress, cost and schedule variances if any, plan for corrective actions, Three monthly rolling plan of activities, Resource position, etc.



18.2 The Contractor shall submit the Progress Report in an acceptable format to

Chief Construction Engineer,
Nuclear Power Corporation of India Limited,
Kudankulam Nuclear Power Project,
Kudankulam P.O Radhapuram
Taluk, Tirunelveli Distt., Tamilnadu – 627 106.

on monthly basis for monitoring the progress of work with a copy to General Manager(CMM), Directorate of C&MM, NPCIL, Mumbai for information alongwith monthly progress report.

18.3 **HINDRANCES :**

The contractor shall is require to maintain two **hindrance** register in the format as per Annexure B-II of SCC for regular monitoring of the progress, hindrance in the work and resolution of them.

- a. Design & engineering (engineering drawings & documents), Procurement and supply related issues (Given in GCC) and
- b. Site work related issues including site front release & construction drawing release in the office of the designated engineer at site separately immediately after receipt of Purchase Order from PURCHASER.

19.0 **POST ORDER CORRESPONDENCE**

19.1 All Correspondence regarding Technical matters in respect of this order shall henceforth be addressed to :

Chief Construction Engineer,
Nuclear Power Corporation of India Limited,
Kudankulam Nuclear Power Project,
Kudankulam P.O Radhapuram
Taluk, Tirunelveli Distt., Tamilnadu – 627 106.

with a copy to **General Manager**, Directorate of Contracts & Materials Management, Nuclear Power Corpn. of India Ltd., Entrance Block, Ground Floor, Nabhikiya Urja Bhavan, Anushakti Nagar, Mumbai-400 094.

19.2 All Correspondence regarding Commercial matters in respect of this order shall henceforth be addressed to:

General Manager (C&MM),
Directorate of Contracts & Materials Management,
Nuclear Power Corpn. of India Ltd.,
Nabhikiya Urja Bhavan,
A-'O' Block, Ground Floor,
Anushaktinagar, Mumbai-400094.



20.0 **SECRECY CLAUSE**

20.1 The purchase order shall be governed by Confidentiality clause no.1.10 of General Conditions of Contract, i.e., GCC/EPC-3/Rev.4

20.2 The design, drawings, specifications and other details furnished to the Contractor by the Purchaser towards manufacture of equipment are to be treated as secret and shall not be divulged to any third party. The Contractor, therefore, bind himself, his successor, his executors, administrators, employees and the permitted assignees or such other persons, agents directly or indirectly concerned with the works / supply to the secret nature of design, drawings, specifications etc.

21.0 **SETTLEMENT OF DISPUTE**

21.1 Settlement of dispute will be governed as per Clause no. 22 of GCC/EPC-3 Rev.4 and SCC clause no. 89.

22.0 **CHANGES IN SCOPE/ NEW ITEM**

22.1 After issue of Purchase Order, if any change in the facilities or scope of work results in requirement of additional items/additional quantities and/or extra work at site, the same shall fall under the scope of the contractor. The contractor shall be compensated for the same in accordance with GCC Clause No.19 (Change in the Facilities).

23.0 **CHARGEABLE ISSUES TO CONTRACTOR**

Charges to be levied on the Contractor for the services / facilities provided by the Purchase as per GCC/EPC-3/R-4 & SCC.

- a) In respect of any land allotted to the Contractor for purpose of or in connection with the contract, rental charges as provided, shall be imposed by Engg.-In-Charge as per GCC/EPC-3/R-4 and SCC.
- b) Departmental Water supply charges shall be as per Clause No. 11 of GCC/EPC-3/R-4 and SCC.
- c) Construction / Domestic Power supply charges shall be as per Clause. No. 11 of GCC//EPC-3/R-4 and SCC.

In addition to above, if any other facilities/services provided by the NPCIL, the same shall be governed as per GCC / SCC.

24.0 **MATERIAL ACCOUNTING**

24.1 Material accounting shall be carried out as per Clause 15.5 of GCC for Erection and Commissioning. The contractor shall account for all the material either supplied/procured by him or issued as NPCIL supplied items for erection purpose /on chargeable basis by the Purchaser.



25.0 TERMS AND CONDITIONS OF THE CONTRACT

25.1 This Purchase Order will be governed by the Terms and conditions contained in the Tender Document and documents as detailed below:

- a) Purchase Order.
- b) Special Conditions of Contract (SCC).
- c) General Conditions of the contract, GCC/EPC-3/Rev.4
Tender (including technical specifications, drawings, etc.) document, other than Sr. No. (b) &(c)

25.2 In case of any contradiction between GCC and SCC, SCC shall prevail over GCC.

(Pankaj Trivedi)

General Manager (C& MM)

For and On behalf of Nuclear Power Corporation of India Limited
(The Purchaser)



PRICE ADJUSTMENT FORMULA

PRICE ADJUSTMENT FOR ERECTION & COMMISSIONING

1. PRICE ADJUSTMENT FOR ERECTION & COMMISSIONING PORTION

1.1. Erection & Commissioning Services:

The formula for calculation of the monthly price variation of the cost of erection portion of the works is indicated and explained below:

$$E_1 = E_0 (0.25 + \frac{0.75F_1}{F_0})$$

Where,

E_1 = Adjusted erection and commissioning price of each invoice.

E_0 = Basic value of work done in the contractual completion period or the actual completion date whichever is earlier.

F = Sources of Indices for Indian Field Labour (F) applicable shall be minimum wage of a skilled labour issued by KKNPP Site authorities.

Note: Subscript '0' will be as prevailing on seven days prior to the date of submission of Part-I and Part-II Bid and Subscript '1' will be as prevailing on the last date of the month previous to the actual date of execution of activities or the minimum wages prevailing on the contractual milestone date for intermediate completion, whichever is earlier.

1.2. In case of delay in erection and commissioning beyond the contractual delivery date (as given in the contract) for reasons attributable to the Purchaser, the price adjustment provision shall continue to be applicable for an additional period equal to the delay caused by the Purchaser. This shall, however, not deemed to be automatic extension of the contractual delivery date.

1.3. In case of activities that are delayed beyond the Contractual Delivery Date (as given in the contract) for reasons attributable to the Contractor or Force Majeure events, the provision of Price Adjustment shall be as per terms of PO, regulated on the basis of the indices as applicable as per PO terms on the original Contractual Delivery Date or the indices as applicable as per PO terms on the actual delivery date, whichever is lower.

1.4. In case completion of an activity is delayed beyond the contractual delivery date (as given in the contract) and the total delayed period can be apportioned



PRICE ADJUSTMENT FORMULA

between delays due to the Purchaser, the Contractor and / or Force Majeure events, Price adjustments for the period of delay caused by the Purchaser will be allowed considering as if this delay due to the Purchaser happened first, immediately after contractual delivery date, irrespective of actual point in time in which such delay by Purchaser occurs.

1.5. The coefficients and indices applicable for price adjustment are as indicated below in 1.6

1.6. **Erection and Commissioning component:**

Sl. No.	Item	Value of Coefficient	Source of indices used	Value of base date indices prevailing on seven days prior to the date of submission of Part-I and Part-II Bid.
1	Fixed portion	0.25	--	
2	Indian Field Labour	F = 0.75	As per Minimum Wages of Skilled Labour, applicable at KKNPP Site, as declared by Site Authorities.	Will be issued later.

(Pankaj Trivedi)

General Manager, C& MM

For and on behalf of Nuclear Power Corporation of India Limited
(The Purchaser)



Annexure-I**Erection Completion Certificate**

No.: NPCIL/.....

Date :

To,

.....
.....

The Erection Completion Certificate is hereby issued for the System or Subsystem or Major component or Facilities as per the details given below;

Sr. No.	Item Description	References / Details
1.	Ref. P.O. No. and Date of issue	
2.	Name of Package	
3.	Name of Contractor	
4.	Ref. contract clauses in respect of issue of Erection Completion Certificate to the contractor;	
5.	Description of the System or Subsystem or Major components or Facilities for which Erection Completion is identified:	
6.	Date of Submission of CCC/STD of the systems / subsystems described in Sr. No. 5.	
7.	Date of Erection Completion of the systems / subsystems described in Sl. No. 5.	
8.	Remarks, if any	

This certificate does not relieve the contractor of its obligation of construction, erection, inspection, commissioning, testing and performance obligations for works under the contract including obligations during the Warranty Period / Performance Guarantee Period, as mentioned in the contract and purchase order, as amended from time to time.

This Erection Completion Certificate is issued to M/s for satisfactory completion of the systems/ sub systems described under Sl. No. 5 in totality.

(.....)
Chief Construction Engineer
For and on behalf of the Purchaser
Nuclear Power Corporation of India Limited

CC: Site- PD/
HQ- C&MM; PROC



(NPCIL Letterhead)

Annexure-J

Operational Acceptance Certificate

No.: NPCIL/.....

Date :

To,

.....
.....

The Operational Acceptance Certificate is hereby issued for the System or Subsystem or Major component or Facilities as per the details given below;

Sr. No.	Item Description	References / Details
1.	Ref. P.O. No. and Date of issue	
2.	Name of Package	
3.	Name of Contractor	
4.	Ref. contract clauses in respect of issue of Operational Acceptance Certificate to the contractor;	
5.	Description of the System or Subsystem or Major components or Facilities for which Operational Acceptance is identified:	
6.	Date of Submission of CCC/STD/History Docket of the systems / subsystems described in Sr. No. 5.	
7.	Date of Operational Acceptance of the systems / subsystems described in Sl. No. 5.	
8.	Remarks, if any	

This certificate does not relieve the contractor of its obligation of construction, erection, commissioning, testing and performance obligations for works under the contract including obligations during the Warranty Period / Performance Guarantee Period as mentioned in the contract and purchase order, as amended time to time.

This Operational Acceptance Certificate is issued to M/s for satisfactory completion of the systems/ sub systems described under Sl. No. 5 in totality.

(.....)

Chief Construction Engineer

For and on behalf of the Purchaser

Nuclear Power Corporation of India Limited

CC: Site- PD/
HQ- C&MM; PROC



ADVANCE PAYMENT

NUCLEAR POWER CORPORATION OF INDIA LIMITED
(Acting through) Executive Director,
Directorate Of Contracts & Materials Management
NUB, Anushaktinagar, Mumbai-400094.

1. WHEREAS on or about the _____ day of 201_
M/s. _____ a Company registered
under the Companies Act 1956 and having its registered office at

(hereinafter referred to as 'The Contractor') entered into an agreement bearing
No. _____ (hereinafter referred to as 'The Contract'),
with Nuclear Power Corporation of India Limited (A Government of India
Enterprise) acting through Director, Contracts & Material Management (hereinafter
referred to as (Purchaser) for _____
(hereinafter referred to as 'The Equipment').
2. AND WHEREAS under the terms & conditions of the contract an amount of Rs.
_____ (Rupees _____ only) representing
_____ per cent advance payment out of a contract value of Rs _____ (Rupees
_____ only) is to be paid by the Purchaser to the
contractor.
3. AND WHEREAS the Purchaser has agreed in pursuance of the said terms and
conditions of the contract to make an advance payment of Rs. _____ (Rupees
_____ only) to the Contractor on the Contractor furnishing
a Bank Guarantee in the manner herein contained.



4. NOW WE, the _____ (Bank) in consideration of the purchaser having agreed to pay to the contractor an advance payment of Rs. _____ (Rupees _____ only) do hereby agree and undertake to indemnify the Purchaser and keep the Purchaser indemnified to the extent of a sum not exceeding the said sum of Rs. _____ (Rupees _____ only) against any damage or loss that may be suffered by the Purchaser by reason of non-fulfilment of any of the terms and conditions of the contract by the contractor.
5. WE, _____ (Bank) do hereby undertake to pay the amount due and payable under this guarantee without any demur merely on a demand from on behalf of Messrs NUCLEAR POWER CORPORATION OF INDIA LTD stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the Purchaser by reason of breach by the said Contractor (s) of any of the terms and conditions contained in the said agreement or by reason of the Contractor(s) 's failure to perform the said agreement. Any such demand made on the bank shall be conclusive as regards the amount due and payable by Bank under this guarantee. However, our liability under this guarantee, shall be restricted to an amount not exceeding Rs. _____ (Rupees _____ only .
6. We undertake to pay to the Purchaser any money so demanded notwithstanding any dispute or disputes raised by the Contractor (s) in any suit or proceeding pending before any Court or Tribunal relating thereto our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be valid discharge of our liability for payment thereunder and the Contractor (s) shall have no claim against us for making such payment.



7. AND WE _____ (Bank) hereby further agree that the decision of the said NUCLEAR POWER CORPORATION OF INDIA LTD., as to whether the Contractor has committed breach of any such terms and conditions of the contract or not and as to the amount of damages or loss assessed by the said NUCLEAR POWER CORPORATION OF INDIA LTD., as damage or loss suffered by the Purchaser on account of such breach would be final and binding on us.
8. AND WE _____ (Bank) further agree with the Purchaser that the Purchaser shall have the fullest liberty without our consent and without affection in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extent time of performance by the said Contractor (s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Purchaser against the said Contractor (s) and to forbear or enforce any of the terms and conditions relating the said agreement and we shall not be relieved form our liability by reason of any such variation or extension being granted to the said contractor (s) or for any forbearance, act or omission on the part of the Purchaser or any indulgence by the Purchaser to the said contractor (s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of relieving us.
9. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor (s).



10. Our guarantee shall remain in force until _____ and unless a claim under the guarantee is lodged with us within three months from that date all rights of the Purchaser under the guarantee shall be forfeited and we shall be relieved and discharged from all liabilities, thereunder.
11. Notwithstanding anything contrary contained in any law for the time being in force or banking practice, this guarantee shall not be assignable or transferable by the beneficiary. Notice or invocation by any person such as assignee, transferee or agent of beneficiary shall not be entertained by the bank. Any invocation of the guarantee can be made only by the beneficiary directly.

Dated the _____ day of _____ 201_

For _____
(Indicate the name of the bank)



PERFORMANCE SECURITY BOND

NUCLEAR POWER CORPORATION OF INDIA LIMITED
(Acting through) Executive Director,
Directorate Of Contracts & Materials Management
NUB, Anushaktinagar, Mumbai-400094.

1. WHEREAS on or about the (Date of the Purchase Order)
M/s. _____ a Company
incorporated under the Companies Act 1956 and having its registered office at _____
(hereinafter referred to as 'The Contractor') entered into an agreement bearing
No. _____ (hereinafter referred to as 'The Contract'),
with Nuclear Power Corporation of India Limited (A Government of India Enterprise)
acting through Director, Contracts & Material Management (hereinafter referred to as
(Purchaser) for supply of _____ (hereinafter
referred to as 'The Equipment').
2. AND WHEREAS under the terms & conditions of the contract, the Contractor shall
furnish Performance Security Bond for an amount of Rs. _____ (Rupees
_____ only) representing 10% of the total value of the
contract in the form of a bank guarantee, in a manner herein contained duly executed
by a scheduled/nationalised bank towards satisfactory performance of the contract and
performance of the equipment and against any loss or damage caused to or suffered or
would be caused to or suffered by the Purchaser by reason of any breach by the said
Contractor(s) of any terms and conditions contained in the said agreement. The
Performance Security Bond shall be valid till satisfactory completion of Defect
Liability Period covering the Warranty/Guarantee period of the equipment as per the
terms & conditions of the said agreement.



3. NOW WE, the _____ (Bank) in consideration of the promises do hereby agree and undertake to pay to the Nuclear Power Corporation of India Limited. (the purchaser) on behalf of the Contractor, the said sum of Rs. _____ (Rupees _____ Only), the amount due and payable under the guarantee without any demur, merely on a demand from the Nuclear Power Corporation of India Limited stating that the amount claimed is due by way of loss or damage caused to, or suffered by, the Purchaser by reason of any breach by the said Contractor of any of the terms and conditions contained in the said agreement or by reason of the contractors failure to perform the said agreement or by reason of unsatisfactory performance of the equipment during the Warranty period. Any such demand, made on the bank, shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. _____ (Rupees _____ only).
4. WE undertake to pay to the Purchaser the said sum of Rs. _____ (Rupees _____ Only), demanded notwithstanding any dispute or disputes raised by the Contractor(s), in any suit on proceedings pending before any Court or Tribunal relating thereto, our liability under this presents being absolute irrevocable and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment thereunder and the Contractor shall have to no claim against us for making such payment.
5. WE HEREBY further agree that the decision of the Nuclear Power Corporation of India Limited as to the amount of damages suffered by the Purchaser by reasons(s) of any breach by the said Contractor or whether the said equipment is giving satisfactory



performance or not during the Warranty Period as per the terms and conditions of the said agreement, shall be final and binding on us.

6. AND WE, the _____ (Bank) do hereby further agree that our liability hereinunder shall not be discharged by virtue of any agreement between the Purchaser and the Contractor whether with or without our knowledge and/or consent and shall remain in full force and effect during the period that would be taken for the performance of the said agreement or by reason of the Purchaser showing any indulgence or forbearance to the Contractor whether as to payment, time for performance, or any other matter whatsoever relating to the contract, which but for this provision, would amount to discharge of the surety under the law.
7. THIS guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor.
8. OUR Guarantee shall remain in force until _____ and unless a claim under the guarantee is lodged with us within three months from the said date, all rights of the Purchaser under the guarantee shall be forfeited and we shall be relieved and discharged from all our liabilities hereunder.
9. Notwithstanding anything contrary contained in any law for the time being in force or banking practice, this guarantee shall not be assignable or transferable by the beneficiary. Notice or invocation by any person such as assignee, transferee or agent of beneficiary shall not be entertained by the bank. Any invocation of the guarantee can be made only by the beneficiary directly.

Dated the _____ day of _____ 201_

For _____

(indicate the Name of bank)



RETENTION BANK GUARANTEE

NUCLEAR POWER CORPORATION OF INDIA LIMITED
(Acting through) Executive Director,
Contracts & Materials Management
Nabhikiya Urja Bhavan,
Anushaktinagar,
Mumbai - 400 094.

1. WHEREAS on or about the _____ day of _____ M/s. _____ a Company registered under the Companies Act 1956 and having its registered office at _____ (hereinafter referred to as 'The Contractor') entered into an agreement bearing No. _____ dtd. _____ (hereinafter referred to as the 'The Contract'), with Nuclear Power Corporation of India Limited (acting through Executive Director, Contracts & Materials Management Group) (hereinafter referred to as the 'The Purchaser') for supply of _____ (hereinafter referred to as 'The Equipment').
2. AND WHEREAS under the terms and conditions of the contract balance 10% payment is to be made against _____ and on the supplier furnishing a retention bank guarantee for Rs. _____ (Rupees _____ only) representing 10% of the contract value in the manner herein contained.
3. NOW WE, (Bank) _____ in consideration of the Purchaser having agreed to pay to the Contractor balance payment of Rs. _____ (Rupees _____ only) do hereby agree and undertake to indemnify the Purchaser and keep the Purchaser indemnified to the extent of a sum not exceeding the said sum of Rs. _____ (Rupees _____ only) against any damage or loss that may be suffered by the Purchaser by reason of non fulfillment of any of the terms and conditions of the contract by the CONTRACTOR.
4. WE, the (Bank) _____, do hereby undertake to pay the amount due and payable under this guarantee without any demur merely on a demand from the EXECUTIVE DIRECTOR, CONTRACTS AND MATERIALS MANAGEMENT on behalf of M/s. NUCLEAR POWER CORPORATION OF INDIA LIMITED stating that the amount claimed is due byway of loss or damage caused to or would be caused to or suffered by the Purchaser by reason of breach by the said Contractor of any of the terms and conditions contained in the said agreement or by reason of the Contractor(s) failure to perform the said agreement. Any such demand made on the bank shall be conclusive as regards the amount due and payable by bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. _____ (Rupees _____ only).



5. We undertake to pay to the Purchaser any money so demanded notwithstanding any dispute or disputes raised by the Contractor(s), in any suit or proceedings pending before any court or tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the Contractor(s) shall have no claim against us for making such payment.
6. AND WE, the (Bank) _____, hereby further agree that the decision of the said EXECUTIVE DIRECTOR, CONTRACTS AND MATERIALS MANAGEMENT GROUP, NUCLEAR POWER CORPORATION OF INDIA LIMITED as to whether the Contractor has committed breach of any such terms and conditions of the contract or not and as to the amount of damages or loss assessed by the said EXECUTIVE DIRECTOR, CONTRACTS AND MATERIALS MANAGEMENT GROUP, NUCLEAR POWER CORPORATION OF INDIA LIMITED as damage or loss suffered by the Purchaser on account of such breach would be final and binding on us.
7. WE, the (Bank) _____, further agree with the Purchaser that the Purchaser shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor from time to time or to postpone for any time or from time to time any of the powers exercisable by the Purchaser against the said Contractor and to forebear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variations or extensions being granted to the said Contractor or for any forbearance, act or omission on the part of the Purchaser or any indulgence by the Purchaser to the said Contractor or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision have effect of relieving us.
8. THIS GUARANTEE will not be discharged due to the change in the constitution of the Bank of the Contractor(s)/Supplier(s).
9. Notwithstanding anything contrary contained in any law for the time being in force or banking practice, this guarantee shall not be assignable or transferable by the beneficiary. Notice or invocation by any person such as assignee, transferee or agent of beneficiary shall not be entertained by the bank. Any invocation of the guarantee can be made only by the beneficiary directly.

NOTWITHSTANDING ANYTHING CONTAINED herein above, our liability under this guarantee is restricted to Rs. _____ (Rupees _____ only). Our guarantee shall remain in force for a period of three months from the date of the bank guarantee i.e. up to _____ and unless a claim under the guarantee is lodged within the above date, all rights of the Purchaser under the guarantee shall be forfeited and we shall be relieved and discharged from all liabilities under this guarantee there under.

Dated the _____ day of _____ 201__

For _____
(Indicate the name of the Bank)

* * *



PO No. _____

Invoice No. & Date: _____

Declaration Form for GST

The Supplier/Contractor while submitting their bill to the Paying Authority shall furnish the following certificates:

Certified that:

- (a) Additional Input Tax Credit under GST availed against invoices submitted here under is Rs. _____.
- (b) Certified that the goods and services on which GST has been charged are not exempted under the GST Act or the rules made there under and the amount charged on account of GST on these goods and services are not more than what is payable under the relevant act or the rules there under.
- (c) Certified that we have taken into account all input tax credits available under GST and have not loaded the same in the basic price while furnishing their bids.
- (d) Certified that in respect of amount of taxes claimed in the bill no claim is pending for refund/or is admissible for refund from any other agency and /or no other tax credit is available in respect of the same. In the event of getting refund in whole or in part of the element of GST claimed from Government, the same shall be passed on the benefit to the Purchaser by remitting the amount equivalent to the amount of refund obtained.
- (e) Certified that the GST charged herein the invoices has been/ shall be deposited within the due date and the Invoice details have been / shall be populated in GSTR1/ANX-1 of the GSTN portal facilitating Input Tax Credit to the Purchaser.
- (f) Certified that we have complied with the Anti-profiteering measure provisions under CGST/SGST/UTGST Acts and passed on commensurate reduction of price to the purchaser.
- (g) Certified that a quarterly statement shall be submitted to NPCIL confirming the payment of GST invoiced on NPCIL along with copy of GST paid Challan.
- (h) Certified that in case of any change in the Invoice which has been accepted by the Purchaser in the IMS portal, the corresponding amendment in the Original Invoice shall be made by the Supplier/Contractor, by raising Debit Note/Credit Note or any other document, as applicable, within the timelines stipulated under the GST Act.

Declaration Form for TDS

The Supplier/Contractor while submitting their bill to the Paying Authority shall furnish the following certificates:

Certified that:

- (a) Whether Provisions of Section 194Q are applicable (For Supply of Goods worth 50 Lakhs p.a.): YES/NO
- (b) We have filed the return of income for the previous year (AY _____) preceding the year in which tax is liable to be deducted, within the prescribed time limit and hence, confirm that applicable rate of TDS is at Normal Rate.
- (c) We have linked the PAN to Aadhar and the PAN is not inoperative (applicable in case of Individuals)

Incomplete information against point (a), (b) & (c) above under Declaration form for TDS, shall be subject to deduction of tax at higher rate as applicable.

Signature of Contractor or their Authorised Representative with company seal.

Signature Not Verified

Digitally signed by KATHALE ADITYA
Date: 2026.01.12 11:52:14 IST
Location: eProcurement System for
Central PSUs

