

PART 3: SCOPE OF WORK

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C3.1: PURCHASER’S GOODS INFORMATION

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1 Overview and purpose of the goods and services

The goods must be delivered as per the Purchase Order.

Eskom Holdings SOC Limited - Arnot Power Station will only accept deliveries as stipulated in the purchase order during office hours not later than 16:00 from Monday to Thursday and not later than 12:00 on Fridays. No wrong deliveries will be accepted and must be collected by the supplier. Quality and quantity will be assessed on each delivery. The *Supplier* will deliver the agreed quantity i.e., nothing less or more.

Non-deliveries will be a breach of contract conditions and will result in issuing Non-Conformance Report and terminating contract with immediate effect

2 Specification and description of the goods

ITEM NO	MATERIAL	DESCRIPTION	QTY	UNIT
1	0147772	TRANSMITTER, PRESSURE: RANGE: 0-23.4 KPA; OUTPUT: 4-20 MA; SUPPLY: 21.6-32 VDC; CONNECTION: 1/2 IN; ELECTRICAL CONNECTION: 2 WIRE/BLIND PLUG; BODY MATERIAL: ALUMINIUM; DIAPHRAGM MATERIAL: HASTELLOY C276; TYPE: MEASURE; MOUNT: PIPE; SPECIFICATION: GS 01C25F01-01E; ENCLOSURE: IP55; SUPPL P/N: EJX530A-EAS8N-019EF ; DIAL INDICATION 0 - 100 PCT, OUTPUT SIGNAL WITH DIGITAL COMMUNICATION (HART PROTOCOL), MEASUREMENT SPAN(CAPSULE) 8 TO 200 KPA, WETTED PARTS: PROCESS CONNECTION 316L SST#, DIN 16 288, AMPLIFIER HOUSING CAST ALLUMINIUM ALLOY, ELECTRICAL CONNECTION M20 FEMALE, INTEGRAL INDICATOR DIGITAL WITH THE RANGE SETTING SWITCH, MOUNTING BRACKET 304 SST 2 INCH; POINT CALIBRATION CERTIFICATE REQUIRED	20	EA
2	0147783	TRANSMITTER, DIFFERENTIAL PRESSURE: RANGE: 0.5-100 KPA; OUTPUT: 4-20 MA; WORKING PRESSURE: 100 KPA; APPLICATION: BOILER/TURBINE; TYPE: COMMISSIONING SPARES/TEST EQUIPMENT; MOUNT: BASE; SUPPL P/N: EJX110A-JMS4G-919EB/KU22/JH01 ; MODEL NO: EJX110A-JMS4G-919EB/KU22; CONNECTION: FLANGE; SUPPLY: 24 VOLT DIRECT CURRENT	30	EA
3	0147975	TRANSMITTER: TYPE: INPUT/OUTPUT SIGNAL; RANGE: 4-20 MA; OUTPUT: 20-100 KPA; SUPPLY: 24 VDC; SUPPL P/N: V18311-3621101; MODEL NO: TEIP2-EX	66	EA
4	0148885	TRANSMITTER, DIFFERENTIAL PRESSURE: RANGE: 0-40 KPA; OUTPUT: 4-20 MA; SUPPLY: 24 VDC; WORKING PRESSURE: 0-24.9 KPA; CONNECTION: 1/4 IN-18NPT; ELECTRICAL CONNECTION: PLUG HAN 8U; APPLICATION: SPRAY WATER FLOW; TYPE: PRESSURE; MOUNT: BRACKET; SUPPL P/N: FKCW44V4-LKBYY-AA-G; LINEAR PN 40MPA, EQUIVALENT TO 0-12.5KG/SEC, VERSION S 1.4404, CAP O-RINGS BUNA, FILLING LIQUID SILICON OIL, CONNECTION TOP AND BOTTOM LOCAL INDICATOR 0-12.5KG/S QUADR, ELEC DAMPING ELEMENT 3S, SPRAYWATER FLOW, USE ORIGINAL PACKING IN STORAGE	20	EA
5	0155183	TRANSDUCER: TYPE: TEMPERATURE; INPUT: 0-400 DEG C; OUTPUT: 0-10 MA; POWER SOURCE: 24 VDC; SUPPL P/N: 753-829 TEU 700MB; REFERENCE NO: 753-829; SINEAX PT100DIN	25	

6	0157768	TRANSDUCER:COMPUTER;I/P 0-1 A AC;220 VAC	50	EA
7	0172812	TRANSMITTER, PRESSURE: RANGE: 0-25 MPA; OUTPUT: 4-20 MA; SUPPL P/N: 624GW210211A111; PROGRAMMABLE 600 T	50	EA
8	0172813	TRANSMITTER, PRESSURE: RANGE: 0-1600 KPA; OUTPUT: 4-20 MA; SUPPLY: 24 V; CONNECTION: 1/2 IN-BSPP; SUPPL P/N: 266GSHUKTNB1L1B6I1; PROGRAMMABLE 600 T	60	EA
9	0172815	TRANSMITTER, PRESSURE: RANGE: 0-250 KPA; OUTPUT: 4-20 MA; CONNECTION: VALVE MANIFOLD; SUPPL P/N: 621GC2H1A11A111; PROGRAMMABLE 600 T	30	EA
10	0172816	TRANSMITTER, PRESSURE: RANGE: 0-40 BAR; OUTPUT: 4-20 MA; SUPPLY: 11.5-45 VDC; CONNECTION: 1/2 IN FEMALE; SUPPL P/N: 1593 6T 692; ASD 800; MAT HAST C/1.4404/1K, MIN SPAN 1.334 BAR	20	EA
11	0172827	TRANSMITTER, DIFFERENTIAL PRESSURE: RANGE: 0-250 KPA; OUTPUT: 4- 20 MA; SUPPLY: 11-42 VDC; WORKING PRESSURE: STATIC 42 MPA; CONNECTION: SS 1/4 IN-BSPT, 12 MM PIPE MALE CONNNECTOR FITTING; APPLICATION: DP H2 SEAL OIL; TYPE: DIFFERENTIAL PRESSURE TRANSMITTER; MOUNT: BRACKET ON VERTICAL PIPE; SUPPL P/N: 622DR2H3A11A111; 600 T SERIES	25	EA
12	0172842	TRANSMITTER, DIFFERENTIAL PRESSURE: RANGE: 0-40 BAR; OUTPUT: 4- 20 MA; SUPPLY: 11.5-48 VDC; WORKING PRESSURE: 0-2400 KPA; CONNECTION: 1/4 IN-FNPT X 12 MM PIPE IN; APPLICATION: FEED/STEAM FLOW; TYPE: DIFFERENTIAL PRESSURE; MOUNT: BRACKET; SUPPL P/N: ASK 800; 15963T027165/621DF/621DF2H1A11A111; 600T SERIES, COMPLETE WITH DIGITAL DISPLAY	25	EA
13	0172844	TRANSMITTER, DIFFERENTIAL PRESSURE: RANGE: 0-1600 KPA; OUTPUT: 4-20 MA; SUPPLY: 24 VDC; WORKING PRESSURE: 210 BAR; CONNECTION: NPT 1/4 IN; SUPPL P/N: 621DE2H1A11A111	60	EA
14	0172845	TRANSMITTER, DIFFERENTIAL PRESSURE: RANGE: 0-160 KPA; OUTPUT: 4- 20 MA; SUPPLY: 24 VDC; WORKING PRESSURE: 210 BAR; 21 MPA; 3045 PSI; CONNECTION: 1/4 IN-18NPT; DIAPHRAGM MATERIAL: SS/SILICON OIL; BODY MATERIAL: AL ALLOY; MOUNT: BRACKET; SUPPL P/N: 621DD2HIA11A111; MODEL NO: 264DS.H.S.S.A.2.B.1.V1.D1.B1; SPAN LIMITS/STATIC 1.6 AND 160KPA/16 AND 1600MBAR/6.4 AND 642 IN H2O, DIAPHRAGM MATERIAL GRADE AISI 316L, PROCESS FLANGES/ADAPTERS AISI 316L SS/HORISONTAL, DIRECT MATERIAL, CONNECTION BOLTS/GASKETS AISI 316 SS/PTFE, BARREL VERSION/M20 X 1.5, ELECTRICAL CONNECTION DRAIN/VENT VALVE MATERIAL AND POSITION AISI 316L SS/ON PROCESS AXIS, MOUNTING BRACKET FOR PIPE MOUNTING/CS	40	EA
15	0172847	TRANSMITTER, DIFFERENTIAL PRESSURE: RANGE: 0-10 KPA; OUTPUT: 4- 20 MA; SUPPLY: 24 VDC; WORKING PRESSURE: 10 KPA; CONNECTION: BSP 1/4 IN; APPLICATION: DIFFERENTIAL PRESSURE; TYPE: DIFFERENTIAL PRESSURE; MOUNT: BRACKET; ABB ONLY TO BE SUPPLIED	40	EA
16	0172848	TRANSMITTER, PRESSURE: RANGE: 0-6 KPA; OUTPUT: 4-20 MA; SUPPLY: 24 VDC; CONNECTION: 1/2 IN; ABB ONLY TO BE SUPPLIED	20	EA
17	0175736	TRANSDUCER: TYPE: ACCELEROMETER; INPUT: 9.7-10.7; OUTPUT: 10-14 VDC; POWER SOURCE: 18-30 VDC; APPLICATION: SPEED; MODEL NO: CMSS-2100; TOP EXIT C5015, TWO PIN CONNECTOR, 1/4 INCH 2B AND M8 MOUNTING STUDS	15	EA

18	0183051	TRANSMITTER, PRESSURE: RANGE: 0-60 MPA; OUTPUT: 4-20 MA; SUPPLY: 10-40 VDC; CONNECTION: 1/2 IN-NPT; SUPPL P/N: ASD 800; 1030-054-170-070-023-044-244-142-Z2E; 15936A.1030-054-170-070-023-044-244-142-Z2E	30	EA
19	0189602	TRANSDUCER: TYPE: PHASE REFERENCE PROBE; INPUT: 10-90 MILS; OUTPUT: 200 MV/MIL; APPLICATION: MAIN TURBINE; SUPPL P/N: CMSS65-072-00-12-10; 5MM EDDY CURRENT PROBE INTRINSIC SAFE, 1 METER	60	EA
20	0189603	TRANSDUCER: TYPE: DISPLACEMENT PROBE DRIVER; INPUT: 15-160 MILS; OUTPUT: 100 MV/MIL; POWER SOURCE: -24 TO -30 VDC; SUPPL P/N: CMSS 785-21; MAIN TURBINE EXTENDED RANGE, 8 MM EDDY CURRENT 10 METER EXTENDED RANGE	25	EA
21	0189607	TRANSDUCER: TYPE: VIBRATION RELATIVE SENSOR; INPUT: 10-100MILS; OUTPUT: 200 MV/MIL; POWER SOURCE: 24 V; SUPPL P/N: CMSS 78-LM2-00-12-10; MAIN TURBINE SHAFT RELATIVE VIBRATION SENSOR, 8 MM EDDY CURRENT PROBE 1 METER	60	EA
22	0189610	TRANSDUCER: TYPE: VIBRATION SENSOR; INPUT: 10-100; OUTPUT: 200 MV/MIL; POWER SOURCE: 24 V; SUPPL P/N: CMSS 78-LM2-00-12-10-EX; 8 MM EDDY CURRENT PROBE INTRINSIC SAFE 1 METER, FOR USE WITH MAIN TURBINE VIBRATION SYSTEM	60	EA
23	0222147	TRANSMITTER, TEMPERATURE: RANGE: -250 TO 1370 DEG C; OUTPUT: 4-20 MA; SUPPLY: 6.5-30 VDC; TYPE: PROGRAMMABLE; SUPPL P/N: 2211; USED ON ALL TEMPERATURE LOOPS; FLEXTOP	300	EA
24	0222148	TRANSMITTER, TEMPERATURE: RANGE: -250 TO 1370 DEG C; OUTPUT: 4-20 MA; SUPPLY: 6.5-28 VDC; SUPPL P/N: FLEXTMP ISO; PROGRAMMABLE, FOR BOILER AND TURBINE WHITE METAL LOOPS	300	EA
25	0222844	TRANSMITTER, DIFFERENTIAL PRESSURE: RANGE: 0.1-10 KPA; OUTPUT: 4-20 MA; WORKING PRESSURE: 16 MPA; DIAPHRAGM MATERIAL: SS GR F316L; BODY MATERIAL: ALUMINIUM; ELECTRICAL CONNECTION: M20 FEMALE; APPLICATION: BOILER; TYPE: MEASURE; SPECIFICATION: GS 01C25B01-01E; MOUNT: FLAT SS 304, HORIZONTAL PIPE 2 IN; ENCLOSURE: IP55; MANUF P/N: EJX110A-JLH4G-919EB/KU22/JH01; ELECTRICAL CONNECTION 2 WIRE WITH BLIND PLUG, OUTPUT SIGNAL WITH DIGITAL COMMUNICATION (HART PROTOCOL), PROCESS CONNECTION CONNECTOR, BOLTS AND NUTS SS 316L, INSTALLATION HORIZONTAL PIPING AND LEFT SIDE HIGH PRESSURE, AMPLIFIER HOUSING, CAST ALLUMINIUM ALLOY, INTEGRAL INDICATOR DIGITAL WITH THE RANGE SETTING SWITCH, WETTED PARTS: COVER FLANGE AND PROCESS CONNECTOR ASTM CF-8M, CAPSULE HASTELLOY C-276, CAPSULE GASET TEFLON COATED SS 316L, DRAIN/VENT PLUG SS 316, PROCESS CONNECTOR; 7 POINT CALIBRATION CERTIFICATE REQUIRED; CONNECTION: 1/2 IN-FNPT; SUPPLY: 24 VOLT DIRECT CURRENT	30	EA
26	0222845	TRANSMITTER, DIFFERENTIAL PRESSURE: RANGE: 2.5-500 KPA; OUTPUT: 4-20 MA; WORKING PRESSURE: 25 MPA; DIAPHRAGM MATERIAL: SS GR F316L; BODY MATERIAL: ALUMINIUM; ELECTRICAL CONNECTION: 2 WIRE WITH BLIND PLUG; APPLICATION: C&I; TYPE: MEASURE; SPECIFICATION: GS 01C25B01-01E; MOUNT: PIPE; CAPILLARY LENGTH: NONE; ENCLOSURE: IP55; MANUF P/N: EJX110A-JHS4G-919EB/KU22/JH01; OUTPUT SIGNAL WITH DIGITAL COMMUNICATION (HART PROTOCOL), MEASUREMENT SPAN(CAPSULE) 2.5 TO 500 KPA, BOLTS AND NUTS 316L	20	EA

		SST STAINLESS STEEL, INSTALLATION HORIZONTAL PIPING AND LEFT SIDE HIGH PRESSURE, AMPLIFIER HOUSING CAST ALUMINIUM ALLOY, ELECTRICAL CONNECTION M20 FEMALE, INTEGRAL INDICATOR DIGITAL WITH THE RANGE SETTING SWITCH, MOUNTING BRACKET 304 SST 2 INCH PIPE - FLAT TYPE FOR HORIZONTAL PIPING, WETTED PARTS:- COVER FLANGE AND PROCESS CONNECTOR ASTM CF-6M, CAPSULE HASTELLOY C-276, CAPSULE GASKET TEFLON COATED 316L SST, DRAIN/VENT PLUG 316 SST; 7 POINT CALIBRATION CERTIFICATE REQUIRED; CONNECTION: 1/2 IN-FNPT; SUPPLY: 24 VOLT DIRECT CURRENT		
27	0222846	TRANSMITTER, PRESSURE: RANGE: 0.4-20 BAR; OUTPUT: 4-20 MA; SUPPLY: 24 VDC; CONNECTION: G1/2; ELECTRICAL CONNECTION: 2 WIRE/BLIND PLUG; BODY MATERIAL: ALUMINIUM; DIAPHRAGM MATERIAL: HASTELLOY C276; TYPE: MEASURE; MOUNT: PIPE; SPECIFICATION: GS 01C25F01-01E; ENCLOSURE: IP55; MANUF P/N: EJX530A-JBS8N-019EL/KU22/JH01; OUTPUT WITH DIGITAL COMMUNICATION (HART PROTOCOL), MEASUREMENT SPAN(CAPSULE 0.04 TO 2 MPA, WETTED PARTS MATERIAL: PROCESS CONNECTION 316L SST#, AMPLIFIER HOUSING CAST ALLUMINIUM ALLOY, ELECTRICAL CONNECTION M20 FEMALE, INTEGRAL INDICATOR DIGITAL WITH THE RANGE SETTING SWITCH, MOUNTING BRACKET 304 SST 2 INCH, PROCESS CONNECTION DIN 16 288. EJX530A-JBS8N-019EL/KU22	15	EA
28	0222847	TRANSMITTER, PRESSURE: RANGE: 2-100 BAR; OUTPUT: 4-20 MA; SUPPLY: 24 VDC; CONNECTION: G1/2; ELECTRICAL CONNECTION: 2 WIRE/BLIND PLUG; BODY MATERIAL: ALUMINIUM; DIAPHRAGM MATERIAL: HASTELLOY C276; TYPE: MEASURE; MOUNT: PIPE; SPECIFICATION: GS 01C25F01-01E; ENCLOSURE: IP55; SUPPL P/N: EJX530A-JCS8N-019EL; WITH DIGITAL COMMUNICATION HART PROTOCOL; MEASUREMENT SPAN CAPSULE 0.2 TO 10 MPA; WETTED PARTS: PROCESS CONNECTION 316 SS; PROCESS CONNECTION DIN 16 288; AMPLIFIER HOUSING, CAST ALLUMINIUM ALLOY; ELECTRICAL CONNECTION M20 FEMALE; INTEGRAL INDICATOR DIGITAL WITH THE RANGE SETTING SWITCH; MOUNTING BRACKET 304 SST 2 IN	15	EA
29	0222849	TRANSMITTER, DIFFERENTIAL PRESSURE: RANGE: 0-140 KPA; OUTPUT: 4-20 MA; WORKING PRESSURE: 25 MPA; APPLICATION: COLLECTING VESSEL; TYPE: MEASURE; MOUNT: BRACKET; MANUF P/N: EJA110A-JVS4B-919EB/KU22/JH01; 7 POINT CALIBRATION CERTIFICATE REQUIRED; CONNECTION: 1/2 IN-FNPT; SUPPLY: 24 VOLT DIRECT CURRENT	20	EA
30	0233362	TRANSMITTER, PRESSURE: RANGE: -100 TO 200 KPA; OUTPUT: 4-20 MA; SUPPLY: 10.5-42 VDC; CONNECTION: 1/2 IN-BSP; ELECTRICAL CONNECTION: 2 WIRE; MANUF P/N: EJX510A-JAS8N-019EL/KU22/JH01; ABSOLUTE, GALVANICALLY ISOLATED SUPPLY, OUTPUT 0-41KPA CALIBRATED;7 POINT CALIBRATION CERTIFICATE REQUIRED	15	EA
31	0240204	TRANSDUCER: TYPE: MICROPHONE; INPUT: 4-20 MA; OUTPUT: 4-20 MA; POWER SOURCE: 24 VDC; SUPPL P/N: EA81-001-000; SIZE 45 MM DIA X 70 MM LG; WITH SS; FOR THE BOILER TUBE LEAK DETECTION SYSTEM; PROCON T96	100	EA
32	0248232	TRANSMITTER, DIFFERENTIAL PRESSURE: RANGE: 0.27-16 KPA; OUTPUT: 4-20 MA; WORKING PRESSURE: 16 KPA; CONNECTION: 1/4 IN-FNPT;	15	EA

		DIAPHRAGM MATERIAL: SS GR 316L; BODY MATERIAL: AL ALLOY; APPLICATION: COAL FEEDER; TYPE: AIR SEAL, FAN ORIFICE; CLASSIFICATION: 264DS; MOUNT: BACKING PLATE; MANUF P/N: 74506.MOD1		
33	0251129	TRANSMITTER: TYPE: BURNER TILTS; RANGE: 0-60 DEG; OUTPUT: 4-20 MA; SUPPLY: 24 VDC; APPLICATION: ANALOG MEASUREMENT OF ROTATIONAL ANGLES; SUPPL P/N: TGM5 04080149; IT TRANSFORMS THE ANGULAR POSITION INTO LOAD INDEPENDENT	40	EA
34	0251946	TRANSMITTER, DIFFERENTIAL PRESSURE: RANGE: 0-100 KPA; SUPPLY: 24 V; APPLICATION: BAG FILTER ENCLOSURE; ENCLOSURE: IP65	20	EA
35	0253720	TRANSMITTER, LEVEL: RANGE: -40 TO 40 KPA; OUTPUT: 4-20 MA; SUPPLY: 10.5-30 VDC; CONNECTION: 1/2 IN-NPT; WORKING PRESSURE: 65 KPA; APPLICATION: SLURRY TANK; MANUF P/N: 264DSFSSA2B1	75	EA
36	0254144	TRANSMITTER, PRESSURE: RANGE: 0-33 KPA; OUTPUT: 4-20 MA; SUPPLY: 10-24 V; CONNECTION: FLANGE; TYPE: FUEL OIL; APPLICATION: MAINTAINING VALVE; MANUF P/N: 26 4HSSQHBB1L1	20	EA
37	0553097	TRANSMITTER, LEVEL: RANGE: 0-100 PCT; OUTPUT: 0-75 M; SUPPLY: 4-20 MA; WORKING PRESSURE: -1 TO 160 BAR; TYPE: GUIDED RADAR; BODY MATERIAL: SS 316; DIAPHRAGM MATERIAL: STAINLESS STEEL; ELECTRICAL CONNECTION: 2 WIRE; APPLICATION: BULK SOLIDS; MOUNT: VERTICAL; ENCLOSURE: IP68; MANUF P/N: FMP57-AAACCALCA4AFJ+LA; THIS IS THE GUIDED FMP57 RADAR BY E&H THAT IS USED AT THE SEDIMENTATION SOUTH PLANT TO MEASURE LIME LEVEL; SILO IS 8M IN HEIGHT WITH A MEASURING RANGE OF 0-7.5M HEIGHT; CONNECTION: FLANGE	50	EA
38	0562911	TRANSDUCER: TYPE: CURRENT TO CURRENT; INPUT: 4-20 MA; OUTPUT: 4-20 MA; POWER SOURCE: 95-265 VAC; APPLICATION: STACK; MANUF P/N: TIMO18-MK2; IP40; ONE SIGNAL INPUT; SPLITS 4-20 MA TO THREE OUTPUTS; TRIPPLE LOOP SPLITTER	10	EA
39	0564191	TRANSMITTER, PRESSURE: RANGE: 0-800 KPA; OUTPUT: 4-20 MA; SUPPLY: 10.5-42 V; CONNECTION: 1/2 IN-NPT; BODY MATERIAL: AL ALLOY; DIAPHRAGM MATERIAL: SS GR 316L; TYPE: ABSOLUTE; APPLICATION: STATION DE-SLUDGE SYSTEM; MOUNT: PIPE; ENCLOSURE: IP65; MANUF P/N: 266GSH.D.K.P.N.B.1.L1; AMBIENT TEMPERATURE: -40 TO 85 DEG C; PROCESS TEMPERATURE: -50 TO 121 DEG C	20	EA
40	0565834	TRANSMITTER, DIFFERENTIAL PRESSURE: RANGE: 0-150 KPA; OUTPUT: 4-20 MA; SUPPLY: 10.5-42 VDC; WORKING PRESSURE: -160 TO 160 KPA; CONNECTION: 1/4 IN; DIAPHRAGM MATERIAL: SS GR 316L; BODY MATERIAL: AL ALLOY; APPLICATION: CATION RESIN; TYPE: MEASURING; MOUNT: PIPE; ENCLOSURE: IP68; MANUF P/N: 266DSH.H.S.S.Q.2.B.1.V2.L1; AMBIENT TEMPERATURE: -40 TO 85 DEG C; PROCESS TEMPERATURE: -40 TO 121 DEG C; URW: -0.15%; WET AND DUST LADEN ATMOSPHERE	10	EA
41	0565835	TRANSMITTER, LEVEL: RANGE: 0-8 M; OUTPUT: 4-20 MA; SUPPLY: 14-36 VDC; CONNECTION: THD G2 A; NPT 2 IN; WORKING PRESSURE: -0.2 TO 2 BAR; TYPE: ULTRASONIC; DIAPHRAGM MATERIAL: PVDF; ELECTRICAL CONNECTION: 2 WIRE; APPLICATION: COOLING TOWERS; MOUNT: FLANGE; ENCLOSURE: IP68; MANUF P/N: SN62.XXAGHKMAX; PROCESS TEMPERATURE: -40 TO 80 DEG C	40	EA
42	0567228	TRANSMITTER, LEVEL: RANGE: 0-15 M; OUTPUT: 4-20 MA; SUPPLY: 115-	40	EA

		230 VAC; CONNECTION: 1 IN; WORKING PRESSURE: -0 TO 200 KPA; TYPE: ULTRASONIC; BODY MATERIAL: POLYCARBONATE; APPLICATION: WATER TREATMENT PLANT; MOUNT: FLANGE; ENCLOSURE: IP65; MANUF P/N: LS7400.YO.515.NI.P3.AI.H1-SC2; COUGULANT BULK TANK 1 AND 2		
43	0567417	TRANSMITTER, LEVEL: RANGE: 0-10 M; OUTPUT: 4-20 MA; SUPPLY: 24 VDC; CONNECTION: 2 IN; WORKING PRESSURE: 0 TO 80 KPA; TYPE: ULTRASONIC; BODY MATERIAL: POLYCARBONATE; APPLICATION: WATER TREATMENT PLANT; MOUNT: FLANGE; ENCLOSURE: IP65; MANUF P/N: LST300YOCIOU2B1BF	40	EA
44	0567953	TRANSMITTER, PRESSURE: RANGE: 0-200 KPA; OUTPUT: 4-20 MA; SUPPLY: 24 VDC; CONNECTION: 1/2 IN-NPT; BODY MATERIAL: AL ALLOY; DIAPHRAGM MATERIAL: SS GR 316L; TYPE: MEASURE; MOUNT: BRACKET; ENCLOSURE: IP65; MANUF P/N: 266GSH.L.K.P.N.B.1; AMBIENT TEMPERATURE: -40 TO 85 DEG C; PROCESS TEMPERATURE: -50 TO 121 DEG C < 0.005% URL	15	EA
45	0568412	TRANSMITTER, DIFFERENTIAL PRESSURE: RANGE: 0-5 KPA; OUTPUT: 4-20 MA; SUPPLY: 10.5-42 VDC; WORKING PRESSURE: -16 TO 16 KPA; CONNECTION: 1/4 IN; DIAPHRAGM MATERIAL: SS GR 316L; BODY MATERIAL: AL ALLOY; ELECTRICAL CONNECTION: 4 WIRE; APPLICATION: MIXED BED RESIN TRAP; TYPE: MEASURING; MOUNT: BRACKET; ENCLOSURE: IP68; MANUF P/N: 266DSH.E.S.SQ.2.B.1V2.L1; AMBIENT TEMPERATURE: -40 TO 85 DEG C; PROCESS TEMPERATURE: -40 TO 121 DEG C; -0.15% OF URL; 100% RELATIVE HUMIDITY	30	EA
46	0572146	TRANSMITTER, DIFFERENTIAL PRESSURE: RANGE: 0-30 KPA; OUTPUT: 4-20 MA; SUPPLY: 9-32 VDC; WORKING PRESSURE: 0-60 KPA; CONNECTION: 1/2 IN; DIAPHRAGM MATERIAL: AISI 316 LSS; BODY MATERIAL: ALUMINIUM ALLOY; APPLICATION: WTP CONTROL SYSTEM; TYPE: MEASURE; SPECIFICATION: IEC 61518; MOUNT: BRACKET; ENCLOSURE: IP67; MANUF P/N: 266DSH.G.S.S.Q.2.B.1.V2..L1; AMBIENT TEMPERATURE -40 TO 85 DEGREE CEL; WATER ENVIROMENT	15	EA
47	0572147	TRANSMITTER, DIFFERENTIAL PRESSURE: RANGE: 0-150 KPA; OUTPUT: 4-20 MA; SUPPLY: 9-32 VDC; WORKING PRESSURE: 0-300 KPA; CONNECTION: 1/2 IN; DIAPHRAGM MATERIAL: AISI 316 LSS; BODY MATERIAL: ALUMINIUM ALLOY; APPLICATION: WTP CONTROL SYSTEM; TYPE: MEASURE; SPECIFICATION: IEC 61518; MOUNT: BRACKET; ENCLOSURE: IP67; MANUF P/N: 266DSH.M.S.S.Q.2.B.1.V2..L1; AMBIENT TEMPERATURE -40 TO 85 DEGREE CEL; WATER ENVIROMENT	15	EA
48	0572153	TRANSMITTER, DIFFERENTIAL PRESSURE: RANGE: 0-4 KPA; OUTPUT: 4-20 MA; SUPPLY: 9-32 VDC; WORKING PRESSURE: 0-6 KPA; CONNECTION: 1/2 IN; DIAPHRAGM MATERIAL: AISI 316 LSS; BODY MATERIAL: ALUMINIUM ALLOY; APPLICATION: WTP CONTROL SYSTEM; TYPE: MEASURE; SPECIFICATION: IEC 61518; MOUNT: BRACKET; ENCLOSURE: IP67; MANUF P/N: 266DSH.E.S.S.Q.2.B.1.V2..L2; AMBIENT TEMPERATURE -40 TO 85 DEGREE CEL; WATER ENVIROMENT	12	EA
49	572268	TRANSMITTER TEMP:-40 TO 12 DEG C;230 VAC	20	EA
50	0625705	TRANSMITTER: TYPE: FLOW; RANGE: 20 DEG C; OUTPUT: 20 MA; SUPPLY: 100-230 VAC; APPLICATION: WATER PLANT; CONNECTION: CABLE; MOUNT: REMOTE; ENCLOSURE: IP67; MANUF P/N: FET121.1.1.A.O.Y.1.A.1.A.1; FEV121 WATER MASTER ELECTROMAGNETIC	25	EA

		FLOWMETER NOT SUPPLY WITH TUBE		
51	0646771	TRANSDUCER: TYPE: PM8000; 6 ANALOG; INPUT: 1 A; OUTPUT: ANALOG AND DIGITAL; POWER SOURCE: 90/415 VAC; 120/300 VDC; SPECIFICATION: ESKOM 240-51999977; DRAWING NO: D-DT 9121 REV 0; TRANSDUCER STANDALONE CONSISTING OF A SCHNEIDER PM8000 SERIES TRANSDUCER (1X METSEPM8243, 3X METSEPM89M0024); COMMUNICATION PORTS: 1X RS485 PORT, 2X 10/100 BASE-T-ETHERNET (RJ45) PORTS; 6 PROGRAMMABLE ANALOGUE OUTPUTS (4-20MA), MODBUS, DNP3, IEC 61850; CALIBRATED WITH CALIBRATION CERTIFICATE PROVIDED WITH THE TRANSDUCER	40	EA
52	0646774	TRANSDUCER: TYPE: PM8000; REMOTE DISPLAY; INPUT: RJ45; OUTPUT: DIGITAL; POWER SOURCE: TRANSDUCER; SPECIFICATION: ESKOM 240-51999977; DRAWING NO: D-DT-9121 REV 0; TRANSDUCER STANDALONE DISPLAY CONSISTING OF A SCHNEIDER PM8000 SERIES REMOTE DISPLAY (1X METSEPM89RD96); 3M CABLE, MOUNTING HARDWARE FOR 30MM HOLE (NUT AND CENTRE PIN), MOUNTING HARDWARE FOR DIN96 CUTOOUT (92MM X 92MM) ADAPTOR PLATE	40	EA
53	0652816	TRANSDUCER: TYPE: RESISTANCE; INPUT: 0-150 DEG C; OUTPUT: 4-20 MA; POWER SOURCE: 230 VAC 50 HZ; APPLICATION: TRANSFORMER; SPECIFICATION: IEC 688; IEC 1010-1; OEM P/N: VR 400 L-154; MAX 15 VDC; PT 100 3 WIRE; WTI AND OTI; < +/- 0.2 PCT; TEST VOLTAGE 5.6 KV; CURRENT 2-3 MA; CONTACT ELECTRICAL ENGINEERING REGARDING THE SOLE SOURCE POWERTECH TRANSFORMERS; TILLQUIST	15	EA
54	0669626	TRANSDUCER: TYPE: TWO WIRE; INPUT: 0-100 BAR; OUTPUT: 4-20 MA; POWER SOURCE: 10-30 VDC; MANUF P/N: PCS 14220641; 2 WIRE AT 10-30 VDC; ACCURACY 0.5 PERCENT OF SPAN 1/4 NPT; SEALING: WITHOUT; WETTED PARTS: STAINLESS STEEL, I5-3 STANDARD	30	EA
55		SAFETY FILE (FIRST YEAR)	1	SUM
56		SAFETY FILE (YEARS 2-5)	4	ANNUALLY

2.1 Purchaser's design

Not Applicable

2.2 Procedure for submission and acceptance of Supplier's design

The *Supplier* must supply as per the item description and as and when required to do so

2.3 Other requirements of the Supplier's design

Not applicable

2.4 Use of Supplier's design

Not applicable

2.5 Manufacture & fabrication

All materials to comply to Eskom standards

2.6 Factory acceptance testing (FAT)

The *Purchaser* may request FAT and material inspection

2.7 Other tests and inspections and commissioning in place of use

Quality control checks documentation is in place at Arnot Power Station at the Main Store (Receiving)

2.8 Operating manuals and maintenance schedules

Not Applicable

3 Supply Requirements

The Supply Requirements for this contract are in an Annexure to the Contract Data provided by the *Purchaser*.

4 Specification of the *services* to be provided

All materials to comply with Eskom standards

5 Constraints on how the *Supplier* Provides the Goods

5.1 Programming constraints

Not applicable

5.2 Work to be done by the Delivery Date

N/A

5.3 Marking the *goods*

N/A

5.4 Constraints at the delivery place and place of use

The items must be delivered at Arnot Power Station Stores between Monday and Thursday at 09:00 to 15:00. On Friday, between 9:00 and 12:00

5.5 Cooperating with Others

The *Supplier* must fully co-operate with the *Purchaser's* team during off-loading at the project site

5.6 Services & other things to be provided by the *Purchaser* or *Supplier*

N/A

5.7 Management meetings

Regular meetings of a general nature may be convened and chaired by the *Supply Manager* as follows:

Title and purpose	Approximate time & interval	Location	Attendance by:
Risk registers and compensation events	As and when required	Material Management Boardroom	<i>Purchaser, Supplier, and Supply Manager</i>
Overall contract progress and feedback	As and when required	Material Management Boardroom	<i>Purchaser, Supplier, and Supply Manager</i>

Meetings of a specialist nature may be convened as specified elsewhere in this Goods Information or if not so specified by persons and at times and locations to suit the Parties, the nature and the progress of the manufacture of the *goods*. Records of these meetings shall be submitted to the *Supply Manager* by the person convening the meeting within five days of the meeting.

All meetings shall be recorded using minutes or a register prepared and circulated by the person who convened the meeting. Such minutes or register shall not be used for the purpose of confirming actions or instructions under the contract as these shall be done separately by the person identified in the *conditions of contract* to carry out such actions or instructions.

5.8 Documentation control

All documentation from the *Supplier* must be provided in hard copy and must also be emailed to the *Supply Manager*, as per the communication process agreed after contract award.

5.9 Health and safety risk management

The *Supplier* shall comply with the occupational health and safety Act 85 of 1993 requirements: all applicable procedures and standards in their recent revisions. Eskom Life Saving Rules and other Eskom safety rules and requirements not limited to:

- Driven Machinery Regulations
- Fossil Fire Fuel regulations
- Plant Safety Regulations
- Working At Heights Standard
- Regulation For Hazardous Chemical Agents
- Confined space standard
- Occupational Hygiene management

- Control of noise is through wearing hearing protection
- Dust, dust suppression or as the last resort issue dust mask
- Waste, put waste in the correct waste bin
- Water to be conserve, use as little as possible
- Adhere to all Eskom lifesaving rules
- Submission of monthly health and safety statistics is mandatory

A. Road Safety

- a. Speed limit: 40km/h
- b. By passing Speed humps not allowed
- c. Transporting People at the back of the bakkie is not allowed
- d. Buckle up always
- e. Park only at demarcated areas

B. Sanitation

- a. Toilets for both genders are available at the plant

C. Emergency

- a. The emergency number for Arnot is 013 297 9222 Pax:5222
b. Emergency alarms are tested every Wednesday 10H00

D. Access

Before access can be granted the following must be met:

- a. Safety file with all the requirements to be submitted and approved prior site establishment and access
b. SHE Induction attendance is compulsory
c. All applicable trainings, statutory requirements and guidelines to be strictly adhered to. Use safety file and OHS specification as reference

COMPULSORY COMPLIANCE TO 5 IDENTIFIED LIFE SAVING RULES:

Rule1: Open, Isolate, Test, Earth, Bond, and/or Insulate before touch
(That is, any plant operating above 1 000 V)

No person may work on any electrical network unless:

- He/she is trained and authorised as competent for the task to be done.
- A pre-task risk assessment to identify all risks and hazards has been conducted prior to any work commencing.
- An equipotential zone is created for each worker on the job site by earthing, bonding, and/or insulating according to approved procedures.
- All conducting material is connected, all staff on site wear electrical safety shoes, and insulating techniques are applied according to standards; and
- The authorised person (team leader) has certified and shown all team members that the apparatus is safe to work on.

Rule 2: Hook up on heights

Working at height is defined as any work performed above a stable work surface or where a person puts himself/herself in a position where he/she exposes himself/herself to a fall from or into.

No person may work at height where there is a risk of falling unless:

- A pre-task risk assessment to identify all risks and hazards has been conducted prior to commencing any work at height.
- He/she is appropriately trained.
- He/she is appropriately secured during ascending and descending and
- He/she is using an approved fall arrest system where applicable.

Rule 3: Buckle up

No person may drive any vehicle on Eskom business and/or on Eskom premises unless the driver and all passengers are wearing seat belts.

Rule 4: Be Sober

- 1 No person is allowed to work under the influence of drugs and alcohol.
- 2 "Under the influence" means the use of alcohol, drugs, and/or a controlled substance to the extent that
 - 1 He individual's faculties are in any way impaired by the consumption or use of the substances; or
 - 2 The individual is unable to perform in a safe, productive manner; or
 - 3 The individual has a level of any such substance in his/her body that corresponds to or exceeds accepted medical/legal standards; or

- 4 The individual has a level of alcohol in his/her body that is greater than 0.02% blood alcohol concentration.

This includes any level of an illegal substance in the body, irrespective of when the substance was used.

Rule 5: Ensure that you have a permit to work

Where an authorisation limitation exists, no person shall work without the required Permit to Work (PTW), which is governed by the Plant Safety Regulations, Operating Regulations for High Voltage Systems (ORHVS) etc.

No plant is to be returned to service without the cancellation of all permits on that plant in accordance with procedure.

NB: In the case of live work, a "live work declaration form" is to be completed by the authorised person who is the person responsible for the safe execution of work according to relevant standards and procedures.

Please ensure that these rules are understood and communicated with the urgency that they deserve. If any of these rules are unclear or the consequences not understood, please do not hesitate to discuss it with Eskom.

We would like to continue our current partnership and therefore urge your support in the implementation and upholding of these rules.

5.10 Environmental constraints and management

The *Supplier* shall comply with the health and safety requirements contained the *Purchaser's* SHE Specification.

5.11 Quality

Quality check sheet should be in place.

The Supplier will be expected to comply with Supplier Quality Management Specification 240-105658000 (previously called QM58) and ISO: 9001 requirements and other Eskom Holdings SOC Limited's Standards and specifications.

5.12 Invoicing and payment

Within one week of receiving a payment certificate from the *Supply Manager* in terms of core clause 51.1, the *Supplier* provides the *Purchaser* with a tax invoice showing the amount due for payment equal to that stated in the *Supply Manager's* certificate.

The *Supplier* shall address the tax invoice to *Purchaser* and include on each invoice the following information:

- Name and address of the *Supplier* and the *Supply Manager*,
- The contract number and title,
- *Supplier's* VAT registration number,
- The *Purchaser's* VAT registration number.
- Description of *goods* and *services* provided for each item invoiced based on the Price Schedule,
- Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT and
- (add others as required).

Detailed tax invoice, clearly showing: Eskom Holdings SOC LTD Electronic copy to Finance Shared Services Megawatt Park
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5.13 Insurance provided by the *Purchaser*

Refer to Annexure B – Insurance to be provided by the *Purchaser*

5.14 Contract change management

Clause 6 Compensation events of the NEC3 Supply Contract will apply to all changes in this contract.

5.15 Provision of bonds and guarantees

Not applicable

5.16 Records of Defined Cost, payments & assessments of compensation events to be kept by the *Supplier*

All records and quality documentation must be provided in hard copy and must be electronically emailed to the *Supply manager*

6 Procurement

6.1 Subcontracting

6.1.1 Preferred subcontractors

Not applicable

6.1.2 Limitations on subcontracting

Not applicable

6.1.3 Spares and consumables

Not applicable

6.1.4 Other requirements related to procurement

Not applicable

6.1.5 Cataloguing requirements by the *Supplier*

Not applicable

7 List of drawings

7.1 Drawings issued by the *Purchaser*

Not applicable

C3.2 *SUPPLIER'S* GOODS INFORMATION

Not applicable