



Price Schedule for Goods

Goods to be Imported						
Page No. <u>1</u> of <u>1</u>						
1	2	3	4	5	6	7
Line Item No.	Description of Goods	Country of Origin	Delivery Date	Quantity and Physical Unit Lot	Unit Price CIF In USD	DDP Price per Line item (Col. 5x6) In USD
1	Thermodynamic system	China	within 180 days		US\$	US\$
2	Water supply & drainage system	China	within 180 days		US\$	US\$
3	Electrical system	China	within 180 days		US\$	US\$
4	The thermal control and instrumental system	China	within 180 days		US\$	US\$
5	Subsidiary production equipment	China	within 180 days		US\$	US\$
6	Miscellaneous materials	China	within 180 days		US\$	US\$
7						
8						
9						
10						
Total FOB in USD						US\$

Name of EPC: China National Electric Wire & Cable Imp.Exp.Corp. Signature of Bidder: Liu Bo /Vice President

Remarks: Details equipment list is attached as Equipment List



Price Schedule for Services

Services

Page No. 1 of 1

1	2	3	4	5	6	7
Line Item No.	Description of service	Country of Origin	Delivery date at place of final destination	Quantity and Physical Unit	Unit Price	Total Price per Service (Col.5x6)
1	Installation of the Energy Converter and Auxiliaries	China	Project Site			
2	Connection to the wellhead and disposal systems	China	Project Site			
3	Commissioning of the Energy Converter	China	Project Site			

Total Price

US\$

Name of EPC: **China National Electric Wire & Cable Imp.Exp.Corp.** Signature of Bidder: **Liu Bo /Vice President**

EQUIPMENT LIST (for 1 Unit)

序号 No.	设备名称 Name of equipments	型号及规范 Type & Specification	单位 Unit	数量 Quantity
1	热机系统 Thermal Engine System			
1.1	汽轮机 Steam Turbine	D3.0-1.1	套 set	
1.2	主冷凝器 Main condenser	混合式冷凝 Mixed cooling type/ NX-2.9	台 set	
1.3	一级射汽抽汽器用凝汽器 Condenser	混合式冷凝 Mixed cooling type	台 set	
1.4	二级射汽抽汽器用凝汽器 Condenser	混合式冷凝 Mixed cooling type	台 set	
1.5	一级射汽抽汽器 One stage air ejector		台 set	
1.6	二级射汽抽汽器 Two stage air ejector		台 set	
1.7	疏水膨胀箱 Fansh tank		台 set	
1.8	油箱 Oil tank	4m3	台 set	
	排油烟机 exhaust fan	CQ2-J	台 set	
	配电机 motor	N=0.37kW,400V,AC	台 set	
1.9	高压离心油泵 Oil pump	65YL-100, Q=25m3/h,H=115m	台 set	
	配电机 motor	N=30kW,400V,AC	台 set	
1.10	交流润滑油泵 AC oil pump	KCB300, Q=18m3/h,H=35m	台 set	
	配电机 motor	N=5.5kW,400V,AC	台 set	
1.11	直流润滑油泵 DC oil pump	KCB300, Q=18m3/h,H=35m	台 set	
	配电机 motor	N=5.5kW,110V,DC	台 set	
1.12	冷油器 Oil cooler	TL250KB(65)Lx63	台 set	
1.13	汽水分离器 Moisture separator		台 set	
1.14	在线清洗装置 On-line clean device		台 set	
1.15	热水泵 warm water pump		台 set	
	配电机 motor	N=2.2kW,400V,AC	台 set	
1.16	主汽门 Main stop vavle		台 set	
1.17	疏水注水器 Drain flash tank		台 set	
1.18	发电机 Turbo generator	QFK3-3-2,11kV,3.0MW	台 set	
1.20	汽水分离器(井口) Moisture separator		组 set	
1.22	螺杆空压机 Air compressor SA11-7.5	Q=1.6m ³ /min, P=0.75MPa, N=11kW	台 set	
1.23	不锈钢储气罐 Stainless gas tank	V=1m ³ , P=0.8MPa	台 set	
1.24	取样器 sampler		台 set	
2	给排水系统 Water Supply & Drainage System			
2.1	循环水泵 Circulating water pump (SS)	12SH-13A, Q=810m ³ /h, H=24m, N=75kW	台 set	
2.2	冷却塔 Cooling Tower	Q=1750t/h, N=75kW	台 set	
2.3	加混凝剂装置 Flocculant Dosing Machine		套 set	
	计量泵 Dosing pump	JJM-120-1.0,Q=120L/h,P=1.0MPa, N=0.55kW	台 set	
	混凝剂溶液箱 Flocculant solution tank	V=1.0m ³ , N=0.55kW, (PE)	台 set	
2.4	回注水泵 Re-injection water pump (SS)	65WQ30-35-7.5, Q=30m ³ /h, H=35m, N=7.5kW	台 set	
2.5	加碱装置 NaOH Dosing Machine		套 set	

序号 No.	设备名称 Name of equipments	型号及规范 Type & Specification	单位 Unit	数量 Quantity
	NaOH储存罐 NaOH storage tank	V=10m ³ FRP	台 set	
	计量泵 Dosing pump	JJM-1000-0.4,Q=1000L/h,P=0.4MPa, N=0.75kW	台 set	
2.6	碱计量箱 NaOH dosing tank	V=2.0m ³ , N=1.1kW, (PE)	台 set	
2.7	NaOH输送泵 NaOH delivery pump	40FSB-20, Q=10m ³ /h, H=20m, N=3kW	台 set	
2.8	NaOH溶解槽 NaOH Dissolving Tank	1.7×1.2×1.5m (Q235)	台 set	
2.9	机械过滤器 Mechanical filter	GSL-1500/26, Q=26t/h	台 set	
2.10	反洗水泵 Backwashing Pump	IS125-100-315(1)A, Q=150m ³ /h, H=27.5m, N=18.5kW	台 set	
2.11	生产、生活水泵 Service water pump	IS80-50-315, Q=25m ³ /h, H=32m, N=5.5kW	台 set	
2.12	净水器 Water clarifier	LG6Bdx2-A, Q=3m ³ /h	台 set	
2.13	消防水泵 Fire fighting pump	XBD45-50, Q=162m ³ /h, H=50m, N=37kW	台 set	
2.14	稳压泵 Jockey pump	25LG3-10x6, Q=3m ³ /h, H=60m, N=2.2kW	台 set	
2.15	电动葫芦 Electric hoist	CD ₁ -2-6, Q=2t, H=6m, N=3.4kW	台 set	
2.16	排污泵 sewage water pump (SS)	50WQ15-8-0.75, Q=15m ³ /h, H=8m, N=0.75kW	台 set	
3	电气系统			
3.1	电力设备			
	Power equipment			
3.1.1	接地电阻柜			
	earth resistance cabinet			
3.1.2	11kV电流互感器			
	11kV CT			
3.1.3	11kV固定式高压开关柜			
	11kV immovable type switch panel			
3.1.4	11kV避雷器	单相		
	6kV lightning arrester	Single-phase		
3.1.5	干式变压器	SCB9-800kVA, 11 ±2×2.5/0.415kV, Ud=4.5%		
	Dry type transformer			
3.1.6	低压开关柜	GHK-Z2000 1600A	Set	
	L.V distribution board			
3.1.7	低压开关柜	GHK-Z2000 630A	Set	
	L.V distribution board			
3.1.8	动力箱			
	Power distribution box			
3.1.9	检修箱			
	Service box			
3.1.10	机旁操作箱			
	Side-engine operation box			
3.1.11	照明箱			
	Lighting distribution Box			
3.1.12	低压配电屏	GGD2	Set	
	L.V distribution panel			

序号 No.	设备名称 Name of equipments	型号及规范 Type & Specification	单位 Unit	数量 Quantity
3.1.13	Step up transformer	11/33V	set	
3.2	控制设备 Control equipment			
3.2.1	发电机保护屏 Generator Protection panel			
3.2.3	低压厂变压器保护屏 L.V house transformer Protection panel			
3.2.4	备自投屏 Backup automatic panel			
3.2.5	马赛克模拟屏 Mosaic mimic panel			
3.2.6	后台设备 Background			
3.2.7	电度表屏 Kilowatt hour panel			
3.2.8	直流屏 DC panel	800Ah (包括铅酸免维护电池)110V 800Ah (Inc lead acid needlessly maintenance battery)		
3.2.9	直流屏 DC panel	36Ah (包括铅酸免维护电池)50V 36Ah (Inc lead acid needlessly maintenance battery)		
3.2.10	UPS			
3.2.11	同期屏 synchronizing panel			
3.2.12	事故照明切换屏 Lighting panel of accident			
3.2.13	低压屏 L.V panel			
3.2.14	火灾自动报警控制系统 fire automatic alarm control system			
3.2.15	柴油发电机 Diesel generator	200kW	Set	
4	热控系统 The thermal control and instrumental system			
4.1	一次仪表 Local Instrument		Lot	
4.2	汽机就地压力表盘 Turbine Local Pressure Panel		Lot	
4.3	DCS系统 包括（2台操作员站、1个工程师站、1台UPS、3面过程柜） DCS system including (2 sets of operator stations, an engineer station, 1 UPS, 3 surface process cabinet)		Lot	
4.4	硫化氢检测系统 H2S Detection System		Lot	

序号 No.	设备名称 Name of equipments	型号及规范 Type & Specification	单位 Unit	数量 Quantity
5	附属生产设备			
	Subsidiary production equipment			
5.1	分析化验设备			
	Oil analysis equipment			
5.2	金属试验设备			
	Metal testing equipment			
5.3	主要电气调试设备			
	main electric debugging engine facility			
5.4	热工试验室设备			
	Thermal control equipment for test house			
5.5	通风空调设备			
	Aeration & air-condition			
5.6	检修间			
	Examine and repair			
5.7	全厂消防设施			
	Fire fighting device for plant			
6	主要材料			
	Main materials			
6.1	保温油漆		Lot	
	Heat insulation & painting			
6.2	润滑油类		Lot	
	lubricating oil			
6.3	热力管道、阀门等		Lot	
	Heat engine pipe & valve			
6.4	给排水系统管道、阀门		Lot	
	Pipe & valve of water supply			
6.5	动力电缆		km	
	Power cable			
6.6	控制电缆		km	
	Control cable			
6.7	桥架		km	
	Bridge			
6.8	接地		km	
	Grounding			
6.9	电缆与安装材料		Lot	
	Instrument material			

兆瓦地热电站项目备件耗材
Annex B: Spare Part List for 5 Years Operation

序号 No.	设备名称 NAME OF EQUIPMENTS	单位 UNIT	备品数量 QTY.	备品价格 PRICE OF EQUIPMENT	
				单价 UNIT PRICE	总价 TOTAL PRICE
1	汽轮机易耗品及备件 Steam Turbine Spare Parts				
2	铠装热电偶 Armored Thermocouple				
3	特制双头螺母 Special double head Nut				
4	罩螺母 Cap Nut				
5	热套式热电偶 Shrunk-on Thermocouple				
6	双金属温度计 Bimetallic Thermometer				
7	阀座 Valve Seat				
8	特制双头螺母 Special double head bolt				
9	螺母 Nut				
10	联轴器铰刀 Coupling Reamer				
11	联轴器铰刀 Coupling Reamer				
12	联轴器铰刀 Coupling Reamer				
13	插头 Plug				
14	插头 Plug				
15	撞击子 Impact tup				
16	发电机备件 Generator Spare Parts				
17	套筒轴承 Sleeve Bearing	套 set			
18	定子线圈 Stator Winding	个 PC			
19	<u>玻璃钢冷却塔备件</u> <u>FRP Cooling Tower Spare Parts</u>			US\$0.00	US\$0.00

20	格栅填料 Filler				
21	收水器片 Water collector plate				
22	主变压器备件 Main Transformer Spare Parts				
23	气体继电器 Buchholze Realy	件 pc			
25	厂用变压器备件 Station Transformer Spare Parts			US\$0.00	US\$0.00
26	气体继电器 Buchholze Realy	件 pc			
27	垫圈 Gasket	套set			
28	11KV 移动式开关柜备件 Spare Parts of 11KV KYN Cabinet				
29	分合线圈 Switch on-off Winding				
30	熔断器 Fuse	件 pc			
31	旋钮 Knob	件 pc			
32	信号灯 Signal Lamp	件 pc			
33	照明灯 Lamp	件 pc			
34	按钮 Push Button	件 pc			
35	11kv 高压开关 11kv cabinet spare parts				
36	电流互感器 Current transformer				
37	电流互感器 Current transformer				
38	避雷器 Lightning arrester				
39	过压吸收器 Overvoltage absorber				
40	电力变压器温度控制器 Temperature controler of the power transformer				
41	低压开关柜备件 Spare Parts of LV Cabinet			US\$0.00	US\$0.00
42	万能转换开关 Multi-conversion Switch				
43	交流电压表 AC Voltmeter	件 pc			

44	熔芯 Fuse Core	件 pc			
45	照明灯灯泡 Lamp bulb	件 pc			
46	熔芯 Fuse Core	件 pc			
47	熔芯 Fuse Core	件 pc			
48	信号灯 Signal Lamp	件 pc			
49	信号灯 Signal Lamp	件 pc			
50	控制按钮 Control Button	件 pc			
51	控制按钮 Control Button	件 pc			
52	万能转换开关 Multi-conversion Switch				
53	<u>控制测量系统备件</u> <u>Metering & Regulating System Spare Parts</u>				
54	各种热电偶 Various Thermocouple				
55	各种热电阻 Various Thermal Resistor				
56	各种压力表 Various Pressure Gauge				
57	压力变送器 Various Pressure Transducer				
58	压力控制器 Various Pressure Controller				
59	差压变送器 Various Pressure Difference Transducer	台 set			
60	差压控制器 Pressure Difference Controller				
61	各种截止阀 Various Stop Valves				
62	<u>阀门备件</u> <u>Valve Spare Parts</u>			US\$0.00	US\$0.00
63	节流阀 Various Throttle Valve				
64	闸阀 Various Gate Valve				
65	截止阀 Various Stop Valve				
66	安全阀 Various Safety Valve				

67	防爆阀 Anti-Blast Valve				
68	蝶阀 Various Butterfly Valve				
69	热工仪表 Thermal instrument spare parts				
70	双金属温度计 Bimetallic thermometer				
71	双金属温度计 Bimetallic thermometer				
72	双金属温度计 Bimetallic thermometer				
73	活动法兰式热电阻 Removable flange type thermometer				
74	热电阻 Thermometer				
75	电动套筒式调节阀电路板 Circuit board of the sleeved electrical motor valve				
76	变送器 Transmitter of the water level gauge in the water tank				
77	轴向位移探头 Shaft positioner detector				
78	汽轮机转速探头 Speed detector				
79	轴承震动探头 Bearing vibration detector				
80	仪表盘用直流稳压电源 Regulated power supply for instrument panel				
81	音响报警器 Audible alarm				
82	DCS8路隔离电流(电压)型模拟量输入模块 8-channel separate voltage(current) simulation input module of DCS				
83	DCS DP 总线重复器模块及其底座 DP bus repeater module and its base frame of DCS				
84	DCS16路交流继电器开关量冗余输出双连接器型端子模块 16- channel AC-type switching value redundancy Output double contactor terminal module (220VAC/5A) DCS				
85	DCS16路直流继电器开关量冗余输出双连接器型端子模块 16- channel DC-type switching value redundancy Output double contactor terminal module (220VAC/5A) DCS				
86	SWP系列微处理数字化仪表PID自整定控制仪 SWP digital instrument PID				
87	SWP系列微处理数字化仪表PID自整定控制仪 SWP digital instrument PID controller				
88	气动阀门定位器 Positioner of the pneumatic valve				

89	三组合探头 Three function combination ditector	件 pc			
90	输配电系统 Transmission and distribution system spare parts			US\$0.00	US\$0.00
91	电流互感器 Current transformer				
92	直流屏触摸屏 DC pannel touch screen				
93	电气保护系统 Electric protectiong system spare parts				
94	线路保护模块 Line protection module				
95	发电机差动保护模块 Differential motion protection module				
96	厂变保护模块 Service transformer projection module				
97	变压器差动模块 Differential motion protection module				
98	变压器后备模块 Transformer backup module				
99	发电机后备模块 Generator backup module				
100	备自投模块 Standby automatic action module				
101	发电机开关 Generator switch				
102	测控模块 detection module				
103	电动机 Motor			US\$0.00	US\$0.00
104	直流油泵电动机 DC oil lubricate Motor				
105	循环水泵电动机 Motor circulation water pump				
106	冷却塔风机电动机 Motor of Cooling tower				
107	冷却水泵电动机 Motor of cooling water pump				
108	高压油泵电动机 Motor of high pressure oil pump				
109	交流油泵电动机 Motor of AC oil pump				
110	汽封冷却器电动机 Motor of gland steam cooler				
111	反洗泵电动机 Motor of back washing pump				

112	盘车电机 Motor of gearing				
113	油箱风机电动机 Motor of fan on oil tank				
114	直流电机控制柜 DC motor control pannel spare parts				
115	FL分流器 FL Diverter				
116	励磁屏DAVR--S1 Exciting pannel DAVR--S1 spare parts				
117	直流接触器 DC contactor				
118	磁力断路器 Magnetism circuit breaker				
119	分流器 Diverter				
120	电流表 Amperemeter				
121	电压表 Voltmeter				
122	二极管整桥 Diode full bridge				
123	电源模块 Power module				
124	轴流风机 Axis fan				
备品备件合同总价Lump Sum for Spare Part:					