

Bidder's Data Sheet

Bidder's Name

2.10.7 Field Instruments, Panel Mounted Instruments

Item No.	Service Name	Q'ty	Manufacturer	Type	Range	Unit	Accuracy	Explosion Class	Power/Air Supply	Output Signal	Remarks
1.0	Pressure Measurement										
	Pressure Gauge										
	Differential Pressure Gauge										
	Pressure Switch										
	Differential Pressure Switch										
	Pressure Transmitter										
	Differential Pressure Transmitter										
	Temperature Gauge										
2.0	Temperature Measurement										
	Temperature Switch										
	Resistance Temperature Detector										
	Thermocouple										
	Temperature Transmitter										
3.0	Flow Measurement										
	Orifice Plate										
	Venturi Tube										
	Flow Switch										
	Flow Transmitter (Differential Pressure type)										
	Electro Magnetic Flow-meter										
	Turbine Flow-meter										
	Mass Flow-meter										
4.0	Level Instruments										
	Level Instruments										

Item No.	Service Name	Q'ty	Manufacturer	Type	Range	Unit	Accuracy	Explosion Class	Power/Air Supply	Output Signal	Remarks
	Level Indication (Gauge type)										
	Level Gauge Glasses										
	Level Switches										
	Level Transmitter (D/P type)										
	Level Transmitter (Displacer or float element)										
	Level Transmitter (Capacitance type)										
5.0	Analyzer										
	pH Analyzer										
	Conductivity										
	DO ₂ Analyzer										
	Silica analyzer										
	SO ₂ Analyzer for flue gas										
	NO _x Analyzer for flue gas										
	O ₂ Analyzer for flue gas										
	CO ₂ Analyzer for flue gas										
	CO Analyzer for flue gas										
	SO ₂ Analyzer for ambient air										
	NO _x Analyzer for ambient air										
	Monitor for suspended particulate matter for ambient air										
	Gas chromatograph										
6.0	Turbine Supervisory Instruments										
	Speed										
	Vibration										
	Control valve position										
	Expansion										
	Differential expansion										
	Eccentricity										
7.0	Other										

Item No.	Service Name	Q'ty	Manufacturer	Type	Range	Unit	Accuracy	Explosion Class	Power/Air Supply	Output Signal	Remarks
	Ambient temperature										
	Wind direction										
	Wind speed										
	Fire detector										
	Combustible Gas Detectors										
	Control Valve Position Transmitter										
8.0	Panel Mounted Instruments										
	Recorder										
	Indicator										
	Other										

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2.10.9 Others

Item No.	Description	Units	Bidder to fill in
1.1	Air Dryer		
(1)	No. of air dryer		
(2)	Manufacturer		*
(3)	Type		*
(4)	Capacity	Nm ³ /h	*
(5)	Dew point at design pressure	°C	
1.2	Monitoring Camera and TV		
(1)	Camera		
	a) Manufacturer		*
	b) Type		*
	c) Model Numbers		*
	d) Type of camera		*
	d) Number of camera		*
(2)	Digital recorder		
	a) Manufacturer		*
	b) Type		*
	c) Model Numbers		*
	d) Size of memory	G bite	*
(3)	CD-R/RW		
	a) Manufacturer		*

Item No.	Description	Units	Bidder to fill in
	b) Type		*
	c) Model Numbers		*
(4)	DVD		
	a) Manufacturer		*
	b) Type		*
	c) Model Numbers		*
1.3	Voice Information System		
	a) Manufacturer		*
	b) Type		*
	c) Model Numbers		*
	d) Number of words		
1.4	The shed for emission monitoring		
	a) Dimension (WxDxH)	m	
	b) Air conditioner	Y/N	
	c) Power supply	V	
1.5	Telemeter System		
	a) Manufacturer		
	b) Type		
	c) Model Numbers		

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2.10.10 C&I Cables and Panels

Item No.	Description	Units	Bidder to fill in
1.0	I&C Cables		
1.1	Signal Cables		*
	a) Manufacturer		
	b) Type		
	c) Model Numbers		
	d) Type		
	e) Pairing of cores		
	f) Shielding		
	g) Applicable standard		
	h) Communication pair		
	i) Insulation material		
	j) Shielding material		
	k) Voltage grade	V	
	l) Total length	km	
1.2	Control/Power Cables		*
	a) Manufacturer		

Item No.	Description	Units	Bidder to fill in
	b) Type		
	c) Model Numbers		
	d) Type		
	e) Pairing of cores		
	f) Shielding		
	g) Applicable standard		
	h) Communication pair		
	i) Insulation material		
	j) Shielding material		
	k) Voltage grade	V	
	l) Total length	km	
1.3	Compensating Cables		*
	a) Manufacturer		
	b) Type		
	c) Model Numbers		
	d) Type		
	e) Pairing of cores		
	f) Shielding		
	g) Applicable standard		
	h) Communication pair	Y/N	

Item No.	Description	Units	Bidder to fill in
	i) Insulation material		
	j) Shielding material		
	k) Voltage grade	V	
	l) Total length	km	
2.0	Panels		
(1)	Name of panel		
(2)	Dimension (WxDxH)t	mm	
(3)	IEC degree of protection	mm	
(4)	Anti-vibration rubber	Y/N	
(5)	Interposing relay		
	a) Type		
	b) Manufacturer		
	c) Model		
	d) Contact rating	V A	
(6)	Location		
3.0	Each Local Cable Box/Junction Box		
(1)	Service		
(2)	Dimension (WxDxH)t	mm	
(3)	Location		

Item No.	Description	Units	Bidder to fill in
4.0	Each Local Instrument Panel		
(1)	Service		
(2)	Dimension (WxDxH)t	mm	
(3)	Location		
5.0	Local Control Panel		*
(1)	Name of Panel		
(2)	Manufacturer		
(3)	Power supply voltage requirements	V	
(4)	IEC degree of protection		
(5)	Are cooling fans require	Y/N	
(6)	Dimension (WxDxH)t	mm	
(7)	Anti-vibration rubber		

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2.11 CIVIL AND BUILDING WORKS

2.11.1 CIVIL AND BUILDING MATERIAL SUPPLIERS

The Bidder shall enter the names of the proposed main suppliers for civil works.

No.	Item	Supplier
1.	Ready Mixed Concrete (system to be proposed)	
2.	Steel Reinforcement bar (local)	
3.	Cement (local)	
4.	Fine and coarse aggregate (local)	
5.	Bricks (local)	
6.	Structural steel members	
7.	Roofing and wall cladding	
8.	Painting	
9.	Steel doors, roller shutter doors (local)	
10.	Fire Doors (local)	
	a) Steel	
	b) Timber	
11.	Fencing (local)	
12.	Locks	
13.	Bituminous premix	
14.	Sheet piling temporary works	
15.	Miscellaneous materials:	
	a) Glass	
	b) Water stop (local)	
	c) Sealants	
	d) HSFG/Torque Shearing Bolts	
	e) Louvers	
	f) Heavy Duty trench covers and chequered plates	

No.	Item	Supplier
	g) Sanitary fittings (local)	
	h) Ceiling boards	
	i) Profiled steel sheeting	
	j) Grating	
	k) Insulation material	

2.11.4 SCHEDULE OF TECHNICAL INFORMATION AND DATA

The schedule shall provide the following technical information and data. The information required herein may be included in a separate statement or augmented with further detail, if preferred.

2.11.4.1 BUILDING AND MACHINE FOUNDATION DATA

	Building / Structure	Type of Foundation Proposed	Thickness (mm)	Grade of Concrete	Weight of Reinforcement per m³ (kg)
a)	Gas Turbine Building				
b)	Steam Turbine Building				
c)	Gas Turbine Pedestal				
d)	Steam Turbine Pedestal				
e)	Bypass Stack, HRSG & Stack				
f)	Transformer Bays				
g)	Water Treatment House and Associated Facilities				
h)	Waste Water Treatment House and Associated Facilities				

	Building / Structure	Type of Foundation Proposed	Thickness (mm)	Grade of Concrete	Weight of Reinforcement per m³ (kg)
i)	Any other Ancillary Building and Structures () () ()				
j)	C.W. Pump Pit and Screen Area				
k)	C.W. Inlet Pipes Supports and C.W. Outlet Culvert				
l)	Misc. Equipment Foundations				

2.11.4.2 STRUCTURAL SYSTEM OF BUILDINGS

	Building/Structure	Type of Structural System	Total Weight / Volume of Material	
			Structural Steel (t)	Concrete (m ³)
a)	Gas Turbine Building			
b)	Steam Turbine Building			
c)	Others () () ()			

Note: Total weight of structural steel includes columns, girders, beams, crane girders, bracing members, studs, girts, purlins.

2.11.4.3 TYPE OF CONNECTION PROPOSED FOR GIRDER TO COLUMN

	Building/Structure	Type of Connection
a)	Gas turbine Building	
b)	Steam Turbine Building	
c)	Others () () ()	

2.11.4.4 CLADDING FOR GT/ST BUILDING

	Items	Roof Cladding	Wall Cladding
1.	Materials:		
	a) External Skin		
	b) Insulation		
	c) Inner Skin		
2.	Thickness		
	a) External Skin		
	b) Insulation		
	c) Inner Skin		
3.	Coating		
	a) External Skin		
	b) Inner Skin		

	Items	Roof Cladding	Wall Cladding
4.	Fixing Method		
5.	Fixing Material		
6.	Value of Reduction in Sound Transmission		

2.11.5 UNIT RATES FOR CILIL AND BUILDING WORKS

Item No.	Description	Unit	Rate (RM)
1.	Earthworks		
1.1	Filling works for Site Preparation.	m ³	
1.2	Cutting, removal of spoils, and site leveling	m ³	
2.	Trenches		
2.1	Construct cable and pipe trench with reinforced concrete covers of cross sectional area not exceeding 1 m ² , inclusive of excavation, formwork, concreting, backfilling, unistrut, edge angle and all incidental work required.	m	
2.2	- ditto – but exceeding 1 m ² and not exceeding 2 m ²	m	
2.3	- ditto – but exceeding 2m ² and not exceeding 3 m ²	m	
2.4	Extra over Items 2.1, 2.2 and 2.3 for checkered plate cover	m	
3.	Excavation		
3.1	Excavate for foundations, trenches, pier holes, manholes, tanks, etc including strutting, planking dewatering not exceeding 2m deep and backfill and remove surplus spoil and deposit and spread and level on site as specified.	m ³	
3.2	- ditto - exceeding 2m and not exceeding 4m deep - ditto	m ³	
3.3	- ditto – exceeding 4m and not exceeding 5m	m ³	
3.4	Laying of hardcore of dry broken bricks or crushed rocks including binding with sand.	m ³	
3.5	Close turf. on 150mm bed of black soil	m ²	

Item No.	Description	Unit	Rate (RM)
4.	Concrete Works		
4.1	Supply, place and compact Class C10 concrete mix including shuttering	m ³	
4.2	Supply, place and compact Class C20/20 concrete mix including shuttering but excluding steel reinforcement	m ³	
4.3	Supply, place and compact Class C25/20 concrete mix including shuttering but excluding steel reinforcement	m ³	
4.4	Supply, place and compact Class C30/20 concrete mix including shuttering but excluding steel reinforcement	m ³	
4.5	Supply, place in position reinforcement to concrete work including cutting, bending etc.		
	a) 6mm to 12mm diameter Mild Steel	kg	
	b) 6mm to 12mm diameter H.Y. Steel	kg	
	c) 16mm to 20mm diameter Mild Steel	kg	
	d) 16mm to 20mm diameter H.Y. Steel	kg	
	e) 25mm to 32mm diameter Mild Steel	kg	
	f) 25mm to 32mm diameter H.Y Steel	kg	
4.6	Supply, cut to size and place in position welded fabric reinforcement or approved equivalent.	kg	
4.7	Formwork		
	a) Formwork Class F1	m ²	
	b) Formwork Class F2	m ²	
	c) Formwork Class F3	m ²	
4.8	Cement rendering, nominal 50mm thick to floors, landings, apron drains, etc as specified	m ²	

Item No.	Description	Unit	Rate (RM)
5.	Piling Works (if applicable)		
5.1	Temporary sheet piles including handling, driving in place and extracting on completion of the Work	m ²	
5.2	Temporary Steel H-piles including handling, driving in place and extracting on completion of the Work	m	
6.	Brick Works and Block Work		
6.1	Supply and lay 230mm thick fair faced brickwork including water repellent treatment externally	m ²	
6.2	- ditto - but 115mm thick brickwork	m ²	
6.3	Supply and lay 230mm thick concrete Block work	m ²	
6.4	Supply and lay 230mm thick brickwork	m ²	
6.5	- ditto - but 115mm thick brickwork	m ²	
6.6	- ditto - but 230mm thick concrete wall	m ²	
6.7	20mm cement sand external rendering to brickwork	m ²	
6.8	20mm cement sand internal plastering to brickwork	m ²	
7.	Tiling and Paving Works		
7.1	Supply and fix glazed ceramic tiles to walls	m ²	
7.2	Supply and lay acid resistant floor tiles	m ²	
7.3	Supply and lay homogenous ceramic floor tiles	m ²	
7.4	Supply and lay 40mm thick granolithic topping as specified to U3 finish	m ²	
8.	Wall Cladding, Roofing and Ceiling Works		
8.1	Supply and fix single skin roof cladding as specified	m ²	

Item No.	Description	Unit	Rate (RM)
8.2	Supply and fix double skin roof cladding as specified	m ²	
8.3	Supply and fix single skin wall cladding as specified	m ²	
8.4	Supply and fix double skin wall cladding as specified	m ²	
8.5	Supply and fix natural draught ventilators with frames as specified	m ²	
8.6	Supply and install fixed steel louvers with frames as specified	m ²	
8.7	Supply and install fixed aluminum louvers with frames as specified	m ²	
8.8	Supply and install fixed aluminum louver windows inclusive of glazing, burglar bars etc. as specified	m ²	
8.9	Supply and fix aluminum casement windows inclusive of Cool pane gray float glass	m ²	
8.10	- ditto - but aluminum sliding windows	m ²	
8.11	Supply and fix acoustic tile panel suspended ceiling as specified	m ²	
8.12	Supply and fix non-combustible mineral fiber board suspended ceiling as specified	m ²	
9.	Sanitary and Plumbing Works		
9.1	Colored glazed wash basin and accessories	one	
9.2	Squatting Type W.C.	one	
9.3	Pedestal Type W.C.	one	
9.4	White glazed wall urinals	one	
9.5	Wall-hung bowl urinals	one	
9.6	Shower set and fittings	one	

Item No.	Description	Unit	Rate (RM)
9.7	Copper Tubing		
	a) 12.5mm diameter	m	
	b) 19mm diameter	m	
	c) 25mm diameter	m	
	d) 32mm diameter	m	
	e) 38mm diameter	m	
	f) 50mm diameter	m	
	g) 75mm diameter	m	
9.8	Cast Iron Piping		
	a) 75mm diameter	m	
	b) 100mm diameter	m	
	c) 150mm diameter	m	
9.9	Galvanized Steel Iron Piping		
	a) 12.5mm diameter	m	
	b) 19mm diameter	m	
	c) 25mm diameter	m	
	d) 38mm diameter	m	
	e) 50mm diameter	m	
	f) 75mm diameter	m	
	g) Fiber glass water storage tank including ball valves, overflow and fittings for : -		
	h) 900 liter capacity	one	
	i) 1150 liter capacity	one	
	j) 1350 liter capacity	one	
	k) 1800 liter capacity	one	

Item No.	Description	Unit	Rate (RM)
10.	Doors		
10.1	Steel sliding doors including hardware, locks, closers etc.	m ²	
10.2	Pressed steel doors including hardware, locks, closers etc.	m ²	
10.3	Roller Shutter door including hardware, locks, closers etc.	m ²	
10.4	Standard timber single leaf fire doors 1 hr fire rating including hardware, locks, closers etc.	No.	
10.5	Standard timber single leaf fire doors 2 hr fire rating including hardware, locks, closers etc.	No.	
10.6	Standard single leaf flush doors including hardware, locks, closers etc.	No.	
10.7	Standard steel single leaf door 1 hr fire rating including hardware, locks, closers etc.	No.	
10.8	Standard steel single leaf door 2hr fire rating including hardware, locks, closers etc.	No.	
10.9	Standard timber double leaf flush door including hardware, locks, closer, etc	No.	
10.10	Standard timber double leaf 1 hr fire rating including hardware, locks, closers, etc	No.	
10.11	Standard timber double leaf 2 hr fire rating including hardware, locks, closer, etc	No.	
10.12	Standard steel double leaf 1 hr fire rating including hardware, locks, closers etc.	No.	
10.13	Standard steel double leaf 2 hr fire rating including hardware, locks, closers etc.	No.	

Item No.	Description	Unit	Rate (RM)
11.	Structural Steelwork		
11.1	Supply and deliver to site and erect in position mild steel stanchions, columns, beams, bracing, girts and trusses inclusive of splices, bolts and nuts etc necessary for fixing with surface blasting and painting complete as specified	kg	
12.	Roads, drainage and fencing		
12.1	200mm thick concrete roads and hard-standing including 70mm base course, 300mm thick sub-base as specified	m ²	
12.2	80mm thick premix road including 300mm thick base course and 100mm thick sub-base as specified	m ²	
12.3	Supply and lay drainage block drains including bedding		
	a) 300mm	m	
	b) 450mm	m	
	c) 610mm	m	
12.4	Manholes not exceed 1.5m x 1.5m x 2m including cast iron covers	No.	
12.5	Chain link fencing with barbed strands and posts as specified	m	
12.6	Supply and lay sub-base filing for road construction	m ³	
12.7	Supply and lay base course for road construction	m ³	
12.8	Galvanized steel street lighting pole with buried concrete foundation, 10m top clearance from ground level, with 150W/250W high pressure sodium/mercury lamp, base to bituminous-painted	No.	

2.11.6 VENTILATION & AIR-CONDITIONING

TECHNICAL PARTICULARS

No.	Description	Unit	QTY	Bidder to fill in
1.	Air conditioner			
	a) Manufacturer			*
	b) Country of manufacturer			
	c) Type and model No.			*
	d) Type of refrigerant			*
	e) Total cooling capacity	kW		*
	f) Total heating capacity	kW		
	g) Compressor Manufacture			
	h) Compressor type and model			*
	i) Electrical characteristics	V/Ph/Hz		
	j) Full Load current	A		
	k) Maximum starting current	A		
	l) Power factor at 80% full load			
	m) Maximum efficiency	kW/TR		*
	n) Power input (compressor)	kW		*
	o) Power input (fan)	kW		
	p) Total Operating Weight	kg		
	q) Overall Dimensions			*L xW xH
	r) Delivery to Site (weeks)			
	s) Protecting Devices			
	t) Noise Level			
3.	Ventilation Fans			
	a) Manufacturer			
	b) Country of Manufacturer			
	c) Type			*

No.	Description	Unit	QTY	Bidder to fill in
	d) Nominal Fan Diameter	mm		
	e) Total Air Volume	m ³ /h		*
	f) Fan Efficiency			*
	g) Total Operating Weight	kg		
	h) Expected noise level at 1m horizontally from the hood of the equipment and 1.2m above floor level	dB(A)		
4.	Ductwork & Air Diffusion Equipment			
	a) Galvanized Sheet Steel : Ductwork			
	- Manufacturer			
	- Country of Manufacturer			
	- Local Agent of Sheet Steel			
	- Fabricator of Ducts			
	- Fabricator of Diffuser & Grilles			
	b) Flexible Acoustic Ductwork			
	- Type & Model No.			
	- Material of Duct			
	- Material of Insulation			
	- Material of Sheath			

2.12 CONSTRUCTION

2.12.1 Construction Management

The Bidder shall provide a description of the method of construction management to be adopted and the staff levels and responsibilities.

Document No.* _____

2.12.2 Contractor Manning Allocation

The Bidder shall provide the manning allocation of major contractors to be used onsite during the construction phase.

Document No.* _____

2.12.3 Site Security

The Bidder shall include a description of its proposed security arrangements during construction of the Project.

Document No.* _____

2.12.4 Shipment

The Bidder shall include a description of the method of shipment and shipment routing for major pieces of equipment.

Document No.* _____

2.13 TRAINING

2.13.1 Factory Training

The Contractor shall state proposed time for factory training of SJSC Uzbekenergo's personnel.

Description	Time Duration	Location
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

2.13.2 Site Training

The Contractor shall state proposed time for site training of SJSC Uzbekenergo's personnel.

Description	Time Duration	Location
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

2.13.3 Similar Plant Training

The Contractor shall state proposed time for similar plant training of SJSC "Uzbekenergo"'s personnel.

Description	Time Duration	Location
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

