PRESCRIPTION   SPECIFICATION   UNITIOUANTITY   UNIT-PRICE   ANOUNT   UNIT-PRICE		0						
SPECIFICATION   WITH ROWNTING   WITT-PRICE   ANOUNT   WITT-PRICE   WITT-PRICE   WITT-PRICE   WITT-PRICE   WITT-PRICE   WITT-PRICE   WITT-PRICE   WITT-PRICE   WITT-PRICE   WIT	100 AMALA (100				So		FC	
F. With metal Lath   m <sup>2</sup>   1.600   With metal Lath   m <sup>2</sup>   400   With metal Lath   m <sup>2</sup>   With metal Lath   m <sup>2</sup>   400   With Metal Lath   m <sup>2</sup>   With Metal Lath   m <sup>2</sup>	CKIFIION	SPECIFICATION	UNTIGORN			UNIT-PRICE	1	KEMAKKS
F. With safety cage   m   12								
6)    I-beam   m   45   m   65   m   25	adder	safety	<b>E</b>					with paintings  including  anchoring
I-beam   m   65     m   25	u.j		leach	4				
6) (6) (7) (8) (8) (9) (9) (9) (9) (9) (9) (9) (9) (9) (9	<b>1</b> n			45				
6)		I-beam		22				:
ring   With metal lath   m <sup>2</sup>   1,660				25	:	:		
ring   m <sup>2</sup>   1,660	al (6)							
ring   m <sup>2</sup>   1,660								
m <sup>2</sup>   1,660	Work						r	
With metal lath   $m^2$   40	astering		<b>-</b>	30 1	:			:
	teel	With metal lath		40				Roof gutter

NOTHERES	- I	SPITEN AUTO DET MIT	Rs			FC	DEMADIVE
TOTAL TANGEN	STECKLION	TOWN ACART I	UNIT-PRICE!	AMOUNT !UNI	UNIT-PRICE	AMOUNT	CAMMANA
Mortar steel troweled	For coping	EG 6		· · · · · · · · · · · · · · · · · · ·			
Mortar steel troweled	For floor	m <sup>2</sup>   980			· · · · · · · · · · · · · · · · · · ·		
Sub total (7)							
		:					: :
(8) Doors, Windows, and Louvers							
Steel flush hollow core swing door	Including   thresh hold	m 2		: 			with louver,  glass, painting  and hardwares
Aluminum louvers		m <sup>2</sup> 1 10					With bird  screen
Aluminum window	with glass	m 2   75					
Nameplates for rooms		each! 1			t	-	
Rolling door		m <sup>2</sup> 16					
							1

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						The second secon
NOTHOLOGIC	NOTERCITETORS		Rs		FC	DEWADUC
DESONAL LION	STECHTICALION		UNIT-PRICE! AMC	AMOUNT   UNIT-PRICE	CE! AMOUNT	TOURWAS
Sub total (8)				, — — — :		
(9) Painting Work	1 1 1 2 2 2 3 1 1			Martine Security and		
Vinyl paint for mortar	2 coats interior	m <sup>2</sup>   2,700				
Durosem cement paint		m <sup>2</sup>   930				
Sub total (9)				-	·	
		:				
(10) Ventilation System						
Exhaust air fan	Propeller fan   600øx6350MHx5mmAq   x0.75Kw	EA   4				
Miscellaneous		L.S   1				

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NOT TOTAL	WOTH A CTUTORIO	Vantankana	Rs			FC	SEAMOR
DESCRIPTION	SEBOLFICALIUM 	UNITIQUANTITI	UNIT-PRICE	AMOUNT	UNIT-PRICE	AMOUNT	CHARLES
Secondary electrical wiring		L.S. 1					
Control panel		EA 1			******		<i>y</i> 1
Sub total (10)							
(11) Drainage System					:		:
Drainage system		L.S   1					
			د مدید دستند د	:			
Sub total (11)							

Motherandogae	MOTERACTER	TWATE TEXT	RS	.*		FC	Card Series
DESCRIPTION	SPECIFICATION		UNIT-PRICE	AMOUNT	UNIT-PRICE	AMOUNT	KEMAKAS
(d) Guard House							
(1) Earth Work		ี เกี 					
(2) Reinforced Concrete Work		 S.					
(3) Concrete Block Work		3. S.					
(4) Waterproofing Work		L.s		-		-	
(5) Tile Work		s. I					
(6) Metal Work			<b>-</b>		:		
(7) Plaster Work							
(8) Doors, Windows and Louvers							
(9) Painting Work		I.s					
(10) Interior Finish Work		L.S.					
					; ; ;		

KOTENTOOOGK	**************************************		Rs		FC	OSTO A DUTTO
DESCRIFTION	SPECIFICATION	ONTICOPALITA	UNIT-PRICE	AMOUNT   UNIT-PRICE	AMOUNT	KEMAKKS
(11) Ventilation and Air-		1. s. 1		:		
(12) Water Supply, Drain-lage Sewage System		L.S. 1				
Total						

REMARKS			Including  disposal									Including  bending.cutting  and placing
FC	AMOUNT											
	UNIT-PRICE											
	AMOUNT								· · ·	! 		
Rs	UNIT-PRICE											
 			140	80 80	25	10	<b>-</b>					15
I UNIT				e E	€ 	E E	S.1		 :			ton
SPECIFICATION				Excavated sand	150mm thick	50mm thick Class-F						ASTM A615 Gr.40 deformed
DESCRIPTION		(1) Earth Work	Excavation	Backfilling	Grave layer	Leveling concrete	Dewatering		Sub total (1)		(2) Reinforced Concrete	Reinforcing bar
	SPECIFICATION UNITY!	AMOUNT   UNIT-PRICE  AMOUNT	SPECIFICATION   UNIT QUANTITY    RS   FC	PTION   SPECIFICATION   UNIT   QUANTITY   WIT-PRICE   AMOUNT   UNIT-PRICE   AMOUNT	PTION   SPECIFICATION   UNIT QUANTITY   RS   FC	SPECIFICATION   UNIT QUANTITY    R5   FC	SPECIFICATION   UNIT QUANTITY   RS   FC	SPECIFICATION   UNIT   QUANTITY   UNIT-PRICE   AMOUNT   UNIT-PRICE   AMOUNT	PTION SPECIFICATION   UNIT QUANTITY    R5   FC	FUON SPECIFICATION UNIT QUANTITY    SPECIFICATION   UNIT QUANTITY   UNIT PRICE   AMOUNT   UNIT PRICE   AMOUNT	PTION SPECIFICATION UNIT QUANTITY   RS FC   Inch   Inch	SPECIFICATION   UNIT QUANTITY   Rs   FC

NOTHOLONSAN	NOTE A CTRICOLO		YW T W W A I I O	Rs			FC	SHOVMOO
אסקן ודאסמקה	STECTFICALLOIN	7740		UNIT-PRICE	AMOUNT	UNIT-PRICE	AMOUNT	NEW TOTAL
Reinforced concrete	Underground   Class-D	ಣ ಟ ——-	35					Including form
Reinforced concrete	Column wall, beam,   slab class-D	ළ ස ——-	45					Including form
Reinforced concrete	Slab on grade   class-E	e E	15					Including form
Sub total (2)								
	. :					WARE AFTER 0		
(3) Concrete Block Work								
Concrete hollow block	390 x 190 x 150	Z =	190					
Precast concrete block								
Light weight concrete block for roof		я п	115					With sand  cushion,  elastic joint
Terrazzo panel		m2	10					With fixture
Sub total (3)								
The second secon		-	: . !		ļ <sup>*</sup>		!	

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UNIT-PRICE AMOUNT   UNIT-PRICE AMOUNT   KERLARIS   130	
Doors, w parabet	UNIT!QUANTITY
Doors, we paragraph the paragraph that the paragrap	
parapet parapet	$1 \text{ m}^2$
20 20 20 20 20 20 20 20 20 20 20 20 20 2	<u>-</u>
15.	
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	C   E

DESCRIPTION	NOTTRACTARAGE	VINTE SOLVEN	     \PTTMK A1	Rs			FC	SHOW MAG
	MOTIVOTICATIO	7		UNIT-PRICE	AMOUNT	UNIT-PRICE	AMOUNT	
(6) Metal Work			· · · · · · · · · · · · · · · · · · ·					
Steel ladder	with safety cage	E:	ю ————					With paintings lincluding anchoring
Roof drain		leach	2					
Down spout			10				·	
Door sill		E	ဖ	<b></b>				
						,		
Sub total (6)								
						:		
(7) Plaster Work				<b></b> *				· · · · · · · · · · · · · · · · · · ·
Mortar plastering   for wall		m <sup>2</sup>	590	· · · · · · · · · · · · · · · · · · ·				
Mortar steel trowelled	With metal lath	Z <sub>E</sub>	∞					Roof gutter

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   CT#GTGCSGR	MOTHACTUTOR	I   	Rs	-	FC	SHOVE
TOTAL	SPECIFICATION	TITINGA TING	UNIT-PRICE AMOUNT	T   UNIT-PRICE	AMOUNT	VENTANAS
Mortar steel trowelled	For coping	m 45				
Mortar steel trowelled	For floor	m <sup>2</sup>   100				
   Sub total (7)				:		
(8) Doors, Windows, and Louvers						
Steel flush hollow core swing door	Including thresh hold	m <sup>2</sup>   7				With louver, glass, painting and hardwares
Wood flush hollow core swing door	Including thresh hold	m <sup>2</sup>   14				With louver, glass, painting and hardwares
Aluminum window	With glass	m <sup>2</sup>   14				
Sub total (8)						

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NOTEGION	NOTHYGIGAGO	Ware and Alexander	Rs			FC	STOWNOO
TEGORITITOR	SFECTFICALLON		UNIT-PRICE AM	AMOUNT	UNIT-PRICE	AMOUNT	CANANCA
(9) Painting Work							
Vinyl paint for mortar	2 coats exterior	m <sup>2</sup>   410					
Durosem cement paint		т2   160					
Sub total (9)				<del></del>			
			· · · · · · · · · · · · · · · · · · ·				
(10) Interior Finish Work							
Nameplates of room		each 6					
Mop rack		each! 1					Including  painting
Sub total (10)							

	REMARKS											
											 : 	
4.	FC											
	  UNIT-PRICE									:		
()	AMOUNT						.:					
	RS UNIT-PRICE				, -							
	UNITIQUANTITY		ıo		i	— — — — — — — — — — — — — — — — — — —		1	:			
÷	TINU		EA	EA	EA	Lot	.i	EA			 	
O	SPECIFICATION		Air cooled  Window mounted   3,250 kcal/h	Propeller  150ø x 320CMH x 43w	Ceiling							
	DESCRIPTION	(11) Ventilation & Air Conditioning Work	Air conditioner	Exhaust air fan	Exhaust air fan	Spiral air duct	Secondary electrical works	Distribution & power board		Sub total (11)		

DESCRIPTION	SPECTETCATION	           	Rs		prind	FC	REMARKS
		1	UNIT-PRICE	AMOUNT	UNIT-PRICE	AMOUNT	
(12) Water Supply, Drain-I		L.S.					
1. Water supply system							
Water supply pipe	32¢ (G.S.P)	Lot					
Water supply pipe	25¢ (G.S.P)	Lot I					
Water supply pipe	20¢ (G.S.P)	Lot	1				
Valve		Lot	1				
Insulation work		L.S					
Sub total 1.				-		-	
2. Sanitary fixture							
Water closet	Vitreous china  Wash down coupled w/low  tank, paper holder	EA					

			Rs		FC		
DESCRIPTION		UNITIQUANTITY	. ]	AMOUNT UNIT	UNIT-PRICE! AMOUNT	LNI	REMARKS
Urinal	V.C. wall hung  Flush valve	EA   2					
Lavatory	V.C. wall hung   W/liquid soap holder,   mirror	EA 2					
Swing fauset		EA   1				-	
Sub total 2.							
3. Drainage & vent	: :				-		: : : : :
Septic tank	(FRP 1.0m <sup>3</sup>	EA   1					
Sewage pipe	ø75 - ø100 cast  iron	Lot   1					
Drain pipe &	ø40 - ø100	Lot				 	
Lead pipe	1ø50 - ø75 1	Lot 1					
Floor drain	~~ ~~	Lot   1					·

Notediaoada	NOTE TO SEC	WATER SILVE OF THE STATE OF THE	RS		FC	SAGVAGG
UESCRIFILON	SFECIFICALION 	UNTIL QUANITIE	UNIT-PRICE  AMOUNT	INT   UNIT-PRICE	AMOUNT	KEMAKAS
Clean out		Lot   1			 :	
Soil water basin	Concrete	Lot				
Rain water basin	Concrete	Lot				
Insulation work		L.S 1				
					·	
Sub total 3.				· ·		
	•	:				:
   Sub total (12)						

	OF	REMARKS								
; ; ;	DATE SHEET	FC		 						
:	IS IS	  UNIT-PRICE		 : :					· ·	
	-			 	<b></b>					
	SCHEDULE OF PRICES	UNIT-PRIC		 . <del></del> -			 ~ <b>~</b> ~~ •	<b></b>	,	
	SCHEDUI	UNITIQUANTITY	<b>-</b>	· · · · · · · · · · · · · · · · · · ·		<b></b>	 			
			7 1 <del></del> <del>-</del>	 S.1		L.s	 IL.S			
0	NMAL POWER PLANT Water Way	SPECIFICATION								
	PROJECT: WEST WHARF THERMAL POWER SUBJECT: Unit-2 Cooling Water Way	DESCRIPTION	D. Cooling Water Way	(a) Intake Open Channel		(b) Screen & Pump Pit	(c) Discharge Tunnel			Total D

	^ ^   				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ng strut ngle tc.				form	
SXAVMHA			Including		Including  waling, strut  jack, angle  brace etc.	Including  waling, stru  jack, angle  brace etc.				Including work and fastaging	
FC	AMOUNT				:						
	UNIT-PRICE										
	AMOUNT										
Rs	UNIT-PRICE										
ATTENDED			2,500	540	274	216	H	233	26	1,510	
	T T T T T T T T T T T T T T T T T T T		E E	E =	ton	ton	I.S.	SE	ε <sub>Ε</sub>	ළ =	
CDECTETOAGE	SFECEFICATION			Excavated sand	Driving & Removing	Driving		200mm thick	100mm thick	Class-D	
Notralabade	1700000	(a) Intake Open Channel	Excavation	Backfilling	Sheet pile	Sheet pile	Dewatering	Gravel layer	Leveling concrete	Reinforced concrete	

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بني سيدُ ب	NOTEGLASIA	CODOTETOACION	TATTIN ALIO LITERAL		Rs	1	FC	SZIGVMOG
	DESCRIF I LOIN	Northour or the state of the st	ו מסעות דו מסעות די	UNIT-PRICE	I AMOUNT	UNIT-PRICE	AMOUNT	T KENAKAS
	Reinforcing bar	ASTM A615 Gr.40   deformed	ton   136					Including bending, cutting
	Expansion Joints	Water Stop : Polyviny    chloride W=250mm	m   139		: :	:	:	
	Construction Joints		339	<u> </u>				Including  water stop
	Hand rail	SGP 50A and SGP 40A   height 1200mm	98   w		: : :			Including  painting
	Repair work for existing intake pipe		L.S.					
	Connective work with existing intake pipe		L.S     					:
<u></u>	Dismantle of existing pump house		ა. ა.					Including Miscellaneous foundations
<u> </u>	Cleaning of inside of existing intake pipe		L.S.				:	
	Removal and resto- ration of existing boundary wall		 					
L	Removal of stop log		L.S					
ļ					*: •			

SFECATION WITT-PRICE AMOUNT UNIT-PRICE AMOUNT  UNIT	TO THE PROPERTY OF THE			Rs		FC	0210 A 2800 C
I.S.	DESCRIPTION	SPECIFICATION	UNITIQUANTIT	UNIT-PRICE	UNIT-PRICE		KEMAKAS
Sub total (a)	Stop Log for existing inlet				:		
Sub total (a)							
Sub total (a)							
	Sub total (a)			,			
							:
							-

NOTHANTATORS		TW L			FC	SAGEMEA
SPECIFICALION		INT-PRICE!	AMOUNT	UNIT-PRICE	AMOUNT	
	10					
	m <sup>3</sup>   6,500	1 00	·			Including  disposal
Excavated sand	1 m <sup>3</sup> 1 3,000	00				
Driving & Removing	ton	657	:			Including  waling, strut,  jack, angle  brace etc.
Driving	ton		:			Including  waling, strut,    jack, angle  brace etc.
	L.S					
200mm thick	. m	139				
100mm thick   Class-F	£ #	1 02				
Class-D	m <sup>3</sup>   1,820 	20	:	: :		Including form work and form
ASTM A615 Gr.40 deformed	ton	182				Including    bending.cutting   and placing

RS   FC   PEMARKS	WOANTILL   UNIT-PRICE   AMOUNT   UNIT-PRICE   AMOUNT	66	405	13	Including angle	Including steel	Including	1   40     Including	tch 20 i	1 1 2	12	
	Stecarion loan	Water Stop : Polyvinyl m chloride W=250mm	<b>屋</b>	SGP 50A and SGP 40A   m   height 1200mm	Including handle,   m <sup>2</sup>   steel angle and   painting	F-32 Galvanized   m <sup>2</sup>   Including painting     for steel angle	Stainless steel SUS304/ m 640 with \$22-400	Cast-iron	leach	1000W x 1500H x 30t   set		
DESCRIPTION	Noti iton	Expansion joints	Construction joints	Hand rail	Checkered plate cover	Grating cover	Ladder	Guide channel	Anchor box	Wooden stopper	Angle steel for wash water pit	

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	S/IG # MGG	NEWAKKS	Including	pulling of stop														
	FC	AMOUNT				,								:				
		UNIT-PRICE													-			
		AMOUNT											:					
	Rs	UNIT-PRICE!		<del></del>			<b></b>			-			· · · · · · · · · · · · · · · · · · ·			 		
 	TINITAL ORIANG TANKI	ן ן	<i></i>							. 1		 						
	L TINITA		L.S		_				-		-	 -	 			 	.	
	COPPOSITION	SIECILICALION									-							
	npc ob Tom ox	LESCELL LOS	Leak test				Sub total (h)	Sub cotal (U)										

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	SPECIFICATION	UNIT QUANTITY	Rs	Ē	FC	REMARKS
			UNIT-PRICE  AMOUNT	UNIT-PRICE	AMOUNT	**
		т <sup>3</sup> 1 780				Including
Excavated sand		m <sup>3</sup>   430				
Driving & Removing		ton   157				Including  waling, strut,  jack, angle  brace etc.
		L.S. 1				
200mm thick	]	m <sup>3</sup>   26				
100mm thick Class-F		m <sup>3</sup> 1 14				
Class-D		m <sup>3</sup>   157			:	Including form work and form staging
ASTM A615 Gr.40 deformed		ton   14				Including bending, cutting and placing
	1	_				

PROJECT: WEST WHARF THERMAL POWER PLANT	MAL POWER PLANT	,			DATE	TE	
SUBJECT: Unit-2 Other Civil Works	il Works	SCHEDUL	SCHEDULE OF PRICES		IHS	SHEET	OF.
NOTECTOR	MOTURACIATORGS	VATAMATIO	Rs			FC	STORMED
NOTI ITOOCITE	Steertonion		UNIT-PRICE	AMOUNT	UNIT-PRICE	AMOUNT	Carrena
E. Other Civil Works							
(a) Outdoor Pipe Support		L.S   1					
(b) Make-up Water Tank Foundation		L.S. 1					
(c) Cable Duct Foundation		IL.S 1					
						. — — — — — — — — — — — — — — — — — — —	
(d) Other Foundations		L.S   1		· · ·			
Total E							

NOTHOLOGO	NOTE ACTUACOS	 	Rs		FC	Sydymad
WALL TOWN	Srecition	1	UNIT-PRICE	AMOUNT   UNIT-PRICE	AMOUNT	S S S S S S S S S S S S S S S S S S S
Outdoor Pipe Support Foundations						
Excavation		п <sup>3</sup>   150				Including  disposal
Backfilling	Excavated sand	m <sup>3</sup>   110				
Gravel layer	150 mm thick	88 86				
Leveling concrete	50 mm thick   Class-F	m <sup>3</sup>   92				
Reinforced concrete	Class-D	m <sup>3</sup> 268				Including form work and form staging
Reinforcing bar	ASTM A615 Gr. 40 deformed	ton   22	:			Including  bending.cutting  and placing
Reinforced concrete pile	ø 400	ш   2,300				Including  materials and  top  reinforcements
				. ;		

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									أسبعة سندوارين إرارا		
SHADWAGA	Calvariant		Including  disposal		Including materials and top reinforcement			Including form   work and form   staging	Including bending, cutting and placing		
FC	AMOUNT										
	UNIT-PRICE										
	AMOUNT										
Rs	UNIT-PRICE										
  -   VTTTNIOITINII			30	9	524	8	 	20	N	6	8
			E	SE	E	- H	ල ස — — -	E =	ton	ළ = 	
SPECTETCANTON	NOTIVOT ITOT IS			Excavated sand	8400	200mm thick	100mm thick   Class-F	Class-D	ASTM A615 Gr. 40   deformed	Max. size 30 mm	50 mm thick.   0il 60 1/m
DESCRIPTION	יייייייייייייייייייייייייייייייייייייי	(b) Make-up Water Tank Foundation	Excavation	Backfilling	Reinforced concrete	Gravel layer	Leveling concrete	Reinforced concrete	Reinforcing bar	Crushed stone	011 sand

			Rs		FC	OTION WITHOUT
DESCRIFTION	SPECIFICALION	ONTI MONITITA	UNIT-PRICE	AMOUNT   UNIT-PRICE	I AMOUNT	KEMAKAS
Drain pipe	SGP 50A L=710mm   with mesh filter	Ipcs   4				
Sub total (b)						
				: :: ::		
						:
		,				

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DEWADIC	NEWANAS		Including  disposal		Including   waling, strut,   jack, angle   brace etc.				Including form   work and form   staging	Including   Including	For C.V cable  Including  wooden support
FC	AMOUNT	·					:			:	
	UNIT-PRICE										
	AMOUNT										
Rs	UNIT-PRICE										
			390	290	98	H	15	4	4.3	4	13
11817-72			က =	ළ =	lton	S	e =	e E 	೧೯	ton	E
MOTURACIATORO	ortoriton 			Excavated sand	Driving & Removing		200mm thick	50mm thick   Class-F	Class-D	ASTW A615 Gr. 40 deformed	Asbestos cement pipe   ø 200mm
NOTEGER	NESCRET TON	(c) Cable Duct and Manhole	Excavation	Backfilling	Sheet pile	Dewatering	Gravel layer	Leveling concrete	Reinforced concrete	Reinforcing bar	Piping for cable duct

Piping for cable duct steel conduit pipe m 74   PROTECT ANOUNT UNIT-PRICE ANOUNT PROGRAMMENT PRICE ANOUNT PROGRAMMENT PRICE ANOUNT PROGRAMMENT PROGRAM		0						
cable duct Asbectos cement pipe   m   74	NOTEGIO					FC	235.00	
cable duct, Asbectos cement pipe   m   74	DESCRIPTION		UNIT-PRICE		NIT-PRICE	AMOUNT	KEMAKAS	
cable duct Steel conduit pipe m 59   For contributing   Maching handle,   m   19	for cable	Asbectos cement & 100 mm					For power cable   Including  wooden support	
plate cover Including handle, m <sup>2</sup> 9   Including sep-32A and painting   for concression of the seps   400 mm width   m   19	cable	Steel conduit of 100 mm	 				1 😾 🕮 🗀	
teps)   400 mm width   m   19    ion joints   Water Stop: Copper   m   69    plate t=1mm W=200mm   69    (c)	plate	Including handle, SGP-32A and painting					Including angle for concrete corner	•
ion joints   Water Stop: Copper m   69     plate t=1mm W=200mm   69     (c)	1	400 mm width	 					
(5)	Construction joints	Stop: t=1mm						
) 1			 					
1 1 1			 	· — — -	<del></del>			
1 1				· · · · · · · · · · · · · · · · · · ·				
	1		 					
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NESCRIPTION	SPECIFICATION	VITATA I OHATTIV	RS RS	FC		PEMARKS
10 TX 1710000	NOTINGT ITOM IO		UNIT-PRICE; AMOUNT	UNIT-PRICE AMOUNT	OUNT	CHARLES THE COLUMN TO THE COLU
(d) Other Foundations						
(1) Oil Separator for Service Tank Area		L.s				
(2) Dust Box		L.S				
(3) Unit Neutralizing Pit		L.S				
(4) Foundation of Fire Protection System		L.S.				
Sub total (d)						
					-	

			2			DA.	
	SPECIFICATION	UNITIQUANTITY	UNIT-PRIC	AMOUNT	UNIT-PRICE	AMOUNT	H REMARKS
+ + -							
J		т <sub>3</sub> 80					Including  disposal
] =	Excavated sand	m <sup>3</sup> 1 48					
	Driving & Removing	ton   16					Including   waling, strut,     jack, angle     brace etc.
J		L.S	\				
	200mm thick	m <sup>3</sup>   4					
	100mm thick Class-F	ш <sub>3</sub>				:	
	Class-D	m <sup>3</sup>   14	·				Including form   work and form   staging
	ASTM A615 Gr.40 deformed	ton   1					Including  bending.cutting  and placing
	Water stop: Copper plate t=1mm w=200mm	m   29					

			26		
DESCRIPTION	SPECIFICATION	UNITIQUANTITY	 	IINTT-PRICE! AMOUNT	REMARKS
Hand rail	SGP 50A & SGP 40A   1200mm height	n 15		· · · · · · · · · · · · · · · · · · ·	Including painting and chain
Grating cover	F-19 Galvanized   Including painting	2=			Including steel
Ladder (steps)	400 mm width	E	2		Including   painting
Filter wire net	2.0m x 0.97m steel   clamp net #14 12mm	set			Including guide   channel
Drainage pipe	SGP 150 A Asphalt   jute cloth	15		: 	
Leak test		L.S			
   Sub total (1)		<u></u>			
		<u>-</u> -			

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Excavated sand   m <sup>3</sup>   2	UNIT-PRICE  AMOUNT		- REMARKS
sand		UNIT-PRICE  AMOUNT	
sand			
sand			
sand			Including  disposal
	2		
	22		
50mm thick m <sup>3</sup> Class-F			
Class-D   m <sup>3</sup>	ιο		Including form
ASTM A615 Gr.40   ton   deformed			Including   bending, cutting   and placing
2060L x 300 W x 30 t   set	<b>4</b>	<u></u> ;	
SGP 50A   m   Asphalt jute cloth	 		

		ger# warmen tecnols de-	 ]		 I		<i></i> _				<u> </u>		
PEM4 DUC	NEWAKAS	1	Including  disposal		Including	waling, strut,  jack, angle  brace etc.				Including form  work and form  staging	Including   Including   bending   and placing	Including water stop	
FC	AMOUNT					· :							
<b>LT.</b>	UNIT-PRICE												
	AMOUNT												
Rs	UNIT-PRICE					ہ خے جہ سے							
INTERPORTATION TO			440	170	88		н Н	14	ω	117	တ	98	
TENIL	TOOL		es :	e E	ton		L.S.	E	က #	E	ton	<b>E</b>	
NOTTATION	SFECIFICALION			Excavated sand				200mm thick	100mm thick   Class-F	Class-D	ASTM A615 Gr.40 deformed		
DESCRIPTION	DESCRIPTION	(3) Unit Neutralizing Pit	Excavation	Backfilling	Sheet pile		Dewatering	Gravel layer	Leveling concrete	Reinforced concrete	Reinforcing bar	Construction joints	

 $\left( \begin{array}{c} 1 \\ 1 \end{array} \right)$ 

		- ; ;			-
MECCDIDATON	いったったったったっといっている	VENTER LOTANGER	Rs	P.C	DEMADIZE
MOTITION	STECALLON	ו הוויה אמשור די הווים ו	UNIT-PRICE! AMOUNT	UNIT-PRICE  AMOUNT	CANADIAN
Acid and alkali proof	Epoxy resin Class-A	m <sup>2</sup>   290			Including glass
Hand rail	SGP 50A & SGP 40A height 1200mm	32			Including pain-   ting and chain    chain
Ladder (steps)	400 mm width	6			Including  painting
Anchor-box		each 12			
Leak test		L.S   1			
Sub-total (3)					

 $\binom{1}{2}$ 

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MOTEUTOSAG	1010100	T T T T T T T T T T T T T T T T T T T	Rs	<b>-</b>	FC	DEWAD1/2
DESCRIFILUN	SPECIFICATION	IUNILIQUANILII 	UNIT-PRICE	AMOUNT   UNIT-PRICE	AMOUNT	KEMAKAS
(4) Foundation of Fire Protection System						anne prime to
Gravel layer	150mm thick	8 S				
Leveling concrete	50 mm thick   Class-F	3 S				
Reinforced concrete	Class-D	m 3				Including form  work and form  staging
Reinforcing bar	ASTM A615 Gr.40 deformed	ton   2				Including   bending, cutting   and placing
Sub total (4)						
		. — —				White States

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PROJECT: WEST WHARF THERMAL POWER PLANT	RMAL POWER PLANT				DATE	EL .	
SUBJECT: Unit-2 Misc. Fo	Foundations	SCHEDUL	SCHEDULE OF PRICES		IHS		OF
DOCK DEPOTON	TOTAL STATE OF THE	VALUE OUT AND THE	Rs			FC	O TO A MOTO
DESCRIPTION	SPECIFICALIUM		UNIT-PRICE	AMOUNT	UNIT-PRICE	AMOUNT	I KEMAKINS
F. Misc Foundations							
(a) Transformer/yard Foundation							
(b) Flue Gas Duct Foundation		<u>                                     </u>					
		·					
		— - — -					
		- -					

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Under ground   m <sup>3</sup>   650	DESCRIPTION	SPECIFICATION	INTT I DIIANTITY	Rs			FC	REMARKS
Nard				UNIT-PRICE		UNIT-PRICE	AMOUNT	
Horizontal projection   m   42	Transformer Yard Foundation							
Horizontal projection   m   42			\ 					Including  disposal
Horizontal projection   m   42	Backfilling		<b> </b>					
crete   50 mm thick   m <sup>3</sup>   25   1		Horizontal projection						Driving & Iremoving
crete 50 mm thick   m <sup>3</sup>   25								
50 mm thick m <sup>3</sup> 8   8   Class-F   m 368   m 369.6 x 9.0 mm m 368   Driving length   m 340   Under ground   m <sup>3</sup> 440   Wall   Wall   m <sup>3</sup> 30   Class-D   m 3   M 3	Gravel layer	150mm thick						
\$609.6 x 9.0 mm       m       368         Driving length       1         Under ground       m³       440         Class-D       1       1         Wall       1       1         Class-D       1       1         Class-D       1       1	ncrete	50 mm thick Class-F						
Under ground   m <sup>3</sup>   440	pile	ø609.6 x 9.0 mm   Driving length	·					Including materials sand pile, concrete
Under ground								in pile, top  reinforcement  and field weld  joint
Wall	Reinforced concrete	Under ground Class-D						
	Reinforced concrete	Wall   Class-D			-			- 12

		•						
DESCRIPTION	SPECIFICATION	  UNIT QUA	QUANTITY  -	RS HNTT-PRICE!	AWOUNT	F F F F F F F F F F F F F F F F F F F	FC	REMARKS
Checkered plate cover   F	Plate 6 mm	2 =						  Including  Painting
Reinforcing bar		ton	25				1	
cement pipe		II.s						
Ladder (steps)	400 mm width ø 22	L.s.						Including  painting
Drainage system		L.s	 H					
						:		
				<del></del>				
				<del></del>			:  :	
Sub total (a)			- <del></del> -	<del></del>	1 :	:		wan was

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NOTHATAOSZA	YOTH ACT IN TO SE	VMTMX AITO MTVIII	Rs			FC	STORMEGO
DESCRIPTION	SECTFICALION		UNIT-PRICE	AMOUNT	UNIT-PRICE	AMOUNT	L NEWANKS
(b) Flue Gas Duct Foundation					; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;		- Lond Common Co
Excavation		m <sup>3</sup> 120	:	:			Including  disposal
Backfilling		1113 70					
Dewatering		S. I.					
Gravel layer	150mm thick	E E E E					
Leveling Concrete	50mm thick   Class-F	3 E					
Cast-in situ RC pile	ø550	m 320			, — — — — — — — — — — — — — — — — — — —	:	Including   materials top   chipping & top   reinforcement
pes.	Underground   Class-D	m <sup>3</sup>   50					
Reinforcing bar		ton   4			:		
				-			
Sub total (b)							

PROJECT: WEST WHARF THERMAL POWER PLANT SUBJECT: Unit-2 Road and drainage system	NMAL POWER PLANT drainage system	SCHEDUL	SCHEDULE OF PRICES	DATE	OF
DESCRIPTION	SPECIFICATION	UNIT QUANTITY	RS  UNIT-PRICE  AMOUNT	FC  UNIT-PRICE  AMOUNT	NT REMARKS
16. Road and Drainage					
(a) Road and Drainage System		1 I.S. 1			
Total G					

X

 $\left(\frac{1}{2}\right)^{-1} = 0$ 

SAGYMGA	Cumaran			Including   ladder, hook,   concrete corner			Including rein-   forced concrete   for crossing   road	Including rein- forced concrete for crossing road			
FC	PRICE! AMOUNT	:									
	r   UNIT-PRICE										
Rs	EI AMOUNT					:	:				
	UNIT-PRICE										
VATANAHO LATINI			3,600	175	17	1,300	310	45		009	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	T 10		C <sub>E</sub>	<del>8</del> <del>6</del> <del>1</del> .	set	E	E	E	S. 7.	E	
SOUTHANTER	Of ECLF LOAL LOW		Asphalt t=5cm,   subbase t=30cm	Checkered plate cover	Including concrete		Concrete pipe #500   sand, gravel layer	Concrete pipe \$200   sand, gravel layer			
NOTHOLAGORAGE	יייייייייייייייייייייייייייייייייייייי	(a) Road and Drainage System	Road pavement	Manhole	Catch basin	Side ditch	Drainage pipe	Drainage pipe	Dewatering	Road marking	Sub total (a)

()

PROJECT: WEST WHARF THERMAL POWER PLANT	ממטדמת מס מיוותמווסס	٠	DATE	
SUBJECT: Unit-2 Site Finishing Work	SCREDULE OF PKICES		SHEET	OF
INITERIOR INTERIOR	RS	<del></del> .	FC	SHEWSEKS
מבדירייייייייייייייייייייייייייייייייייי	UNIT-PRICE	AMOUNT !	UNIT-PRICE, AMOUNT	r ~
H. Site Finishing Work			<del></del>	
		<del> </del> -		-
(a) Site Finishing			, <del>,</del> ,	
Total H				
			:	

NOTEGIAOSHU	NOTHACTHICAGO	VATTORIOLOGICA	Rs	,		FC	RFMARKS
יייייייייייייייייייייייייייייייייייייי	or tour tour	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	UNIT-PRICE	AMOUNT	UNIT-PRICE	AMOUNT	CHARLE THE PARTY OF THE PARTY O
(a) Site Finishing Work							
(1) Guardrails							
(2) Gates and Fence		L.S. 1					
(3) Trees		L.S. 1					
(4) Monument		L.S.					
(5) Gravel Layer		L.S. 1					
(6) Patrol Way		L.S. 1					
(7) Miscellaneous Work		L.S.   1					
(8) Land Filling	from GL-1.0m to GL	m <sup>3</sup> 5,100					
Sub total (a)							
					:		

 $A\left(\frac{1}{2}\right)$ 

PROJECT: WEST WHARF THERMAL POWE!	WEST WHARF THERMAL POWER PLANT		SCHEDULE	SCHEDULE OF PRICES			DATE	30
NOTEGIO	CODOLIDIAMION		- OTET TV ALLO	R	Rs		FC	DEMADUS
PESONIL'I I UN	Struction			UNIT-PRICE	I AMOUNT	UNIT-PRICE	: AMOUNT	- KEMAKAS
I. Dismantling Works								
B station   substructure	Below ground floor  level	L.S						Including pile  pull-out
Stack for B station   substructure	ditto	L.S.						ditto
Misc. foundations & wall for B station	ditto	L.S. 1						ditto
Stack for BX station   substructure	ditto	L.S.						ditto
BX station substructure	ditto	L.S.						ditto
Transformer fnds. for BX station	ditto 	L.S						ditto 
Total I								

# APPENDIX B

# FORM OF TENDER BOND

Name of Surety and Address	·		
<u> National III (1885) as to Albert an Ian Albert a Albert a Airea</u>			
Name of Principal (Tenderer) and Address		, <u> </u>	<u> Santa a</u>
	•		
Panel Sum of Bond (Express in words and figures)			
and the contract of the second of the contract of the second of the contract o			
	1.1	V 1.	, i
Date of Rid			
KNOW ALL MEN BY THESE PRESENTS, that in pursuance Bid and at the request of the said Principal (Tend	of the te	rms of the S	the urety
KNOW ALL MEN BY THESE PRESENTS, that in pursuance Bid and at the request of the said Principal (Tendahove-named are held and firmly bound onto the KarCorporation Limited (hereinafter called the Owner	of the te derer) we, rachi Elec ) in the s	rms of the S tric S um sta	the urety upply
KNOW ALL MEN BY THESE PRESENTS, that in pursuance Bid and at the request of the said Principal (Tendabove-named are held and firmly bound onto the Kar Corporation Limited (hereinafter called the Owner above, for the payment of which sum well and truly	of the tederer) we, rachl Elector of the second to be marked.	rms of the S tric S um sta de, we	the urety upply ted bind
NOW ALL MEN BY THESE PRESENTS, that in pursuance Bid and at the request of the said Principal (Tendahove-named are held and firmly bound onto the Karcorporation Limited (hereinafter called the Owner above, for the payment of which sum well and truly burselves, our heirs, executors, administrators, and severally, firmly by these presents.	of the tederer) we, rachi Electorically in the solution with the mand succession.	rms of the S tric S um sta de, we sors,	the urety upply ted bind jointly
KNOW ALL MEN BY THESE PRESENTS, that in pursuance Bid and at the request of the said Principal (Tendabove-named are held and firmly bound onto the Kar Corporation Limited (hereinafter called the Owner above, for the payment of which sum well and truly bourselves, our heirs, executors, administrators, a	of the tederer) we, rachi Elector of the second the second and success	rms of the S tric S um sta de, we sors,	the urety upply ted bind jointly
KNOW ALL MEN BY THESE PRESENTS, that in pursuance Bid and at the request of the said Principal (Tendabove-named are held and firmly bound onto the Kar Corporation Limited (hereinafter called the Owner above, for the payment of which sum well and truly burselves, our heirs, executors, administrators, and severally, firmly by these presents.	of the tederer) we, rachi Elector of the second successeres the	rms of the S tric S um sta de, we sors,	the urety upply ted bind jointly er has
KNOW ALL MEN BY THESE PRESENTS, that in pursuance Bid and at the request of the said Principal (Tendabove-named are held and firmly bound onto the Kar Corporation Limited (hereinafter called the Owner above, for the payment of which sum well and truly burselves, our heirs, executors, administrators, and severally, firmly by these presents.  THE CONDITION OF THIS OBLIGATION IS SUCH, that who	of the tederer) we, rachi Electrical Electrical Place in the second and successeres the	rms of the S tric S um sta de, we sors, Tender or Con	the urety upply ted bind jointly er has

WHER	EAS, the Owner has required as a condition for considering said
Tend	er that the Tenderer deposit with the Owner either a certified
cheq	ue or Cashier's cheque or banker's draft in the amount of
	(Rs.
	or in lieu therof furnish a Bid Bond or
Guar	antee in like amount from a Scheduled Bank of Pakistan (or in case of a
fore	ign Bank under-written by a Scheduled Bank of Pakistan).
Cond	itioned as under:
(1)	that the Bid Bond or Guarantee shall remain valid for not less than  days following the date set for
	opening of Bids regardless of the validity period of the Bid
	itself; and
(2)	that the Bid Bond or Guarantees of unsuccessful Tenderers will be
	returned by the Owner upon award of the Contract; and
(3)	that in event of failure of the successful Tenderer to execute the
	proposed Contract Agreement for such Works and furnish the required
	Performance Bond, the entire said sum be paid immediately to the
	said Owner as liquidated damages and not as penalty for the

NOW, THEREFORE, if the successful Tenderer shall, within the period specified therefor, on the attached prescribed form presented to him for signatures, enter into a formal Contract with the said Owner in accordance with his Bid as accepted and furnish within (45) days of his being requested to do so, a Performance Bond with good and sufficient surety, as may be required, upon the form prescribed by the said

successful Tenderer's failure to perform.

Owner for the faithful Performance and the proper fulfillment of said Contract, or in the event of withdrawal of said Bid within the time specified then this obligation shall be void and of no effect, but otherwise to remain in full force and effect.

(Rs upon first
written demand of the Owner, notice of which shall be sent by the Owner
by the registered post duly addressed to the Surety at its address given
above.
PROVIDED ALSO THAT the Owner shall be the sole and final judge for
deciding whether the Principal (Tenderer) has duly performed his
obligations to sign the Contract and to furnish the requisite
Performance Bond within the time stated above, or has defaulted in
fulfilling said requirements and the Surety shall pay without objection
the sum of (Rs.
) upon demand from the Owner forthwith and
without any reference to the Principal (Tenderer) or any person.

IN WITNESS WHEREOF, the above bounder Surety has executed this instrument under its seal on the date indicated above, the name and seal of the Surety being, hereto affixed and these presents duly signed by its undersigned representative pursuant to authority of its governing body.

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1.				1.	Signa	ture		· ·	· · · · · · · · · · · · · · · · · · ·
Corporate	Secretary (	seal)		2.	Name			. ** . * .	
corporavo	beer cours (			*.	Title	:	:		
	·								
2.	<u> </u>	· · · · · · · · · · · · · · · · · · ·			Corp	orate	Surety	(Sea	1)
							44,100	*	
	·		<del></del> .		<del></del>	•	· <del></del>	·	

#### APPENDIX C

For ease of reference, certain information and Special Stipulations applicable to the Contract are set forth herein.

> Clause or Conditions of contract

1. Amount of Tender Bond IT-5 of Instructions to Tenderers grand and a second and (Section I) Volume 1

Within 36 months from Time for completion Appendix F date of commencement for Unit 1 and 51 Months for Unit 2

3. Amount of Performance CC. 17 General of 20 percent of the Bond The Late of the Control of the conditions of Contract Price, reduc-Contract (Section ing the percentages as III), Volume 1 the Works progress.

CC. 19 of Section Guarantee Period 12 months after provisio-III, Volume 1 nal Taking Over.

Insurance:

Los Linex Design

CC. 36 of Section Full replacement value i) Works and Contractor's equipment III, Volume 1 of works. ii) Third party CC. 36 of Section for each incident.

III

Time of Commencement Form of Agreement Immediately upon the Contractor's receipt from the Owner of a written order to proceed.

#### 7. Liquidated damages:

- i) Guaranteed Heat Rate
- CC. 53 of Section III, Volume 1
- 1.0% of contract Price for each 0.1% increase in Heat Rate subject to combined limit of 10% of Contract Price for liquidated damage under Guaranteed Heat Rate and Guaranteed Capacity.

- ii) Guaranteed Capacity
- CC. 53 of Section III, Volume 1
- 1.0% of Contract Price for each 0.1% decrease in output subject to combined limit of 10% of Contract Price for liquidate damages under Guaranteed Heat Rate and Guaranteed Capacity.

- iii) Delay in completion
- CC. 54 of Section III, Volume 1
- 0.1% of the Contract Price for each and every day including holidays, of delay subject to maximum of 10% of the Contract Price.

- iv) Early completion
- IT. 11 of Section I, Volume 1

Credit shall be given for the purpose of evaluation at rate of 0.05% for each calendar day of earlier completion up to a maximum limit of 2.5% of Tender Price.

8. Exchange Rate:

IT. 10.2 of Section I, Volume I

Itemize stipulated exchange rates as follows:

Unit of Currency

Equivalent Pakistan Rupee

(Ten	derer	's	Name	1

#### APPENDIX D

#### RECEIPT OF ADDENDA

Tenderers shall acknowledge receipt of each addendum by listing hereunder each addendum received.

Receipt of the following addenda are acknowledged.

Addendum numbered \_

		dared	
		dated	
	-	dated	
		dated	
	·	dated	
•			
		•	

dated

Company Stamp

Date

#### APPENDIX E

#### LIST FOR GOODS IMPORTED OUTSIDE OF ELIGIBLE SOURCE COUNTRIES

Refer to next page.

APPENDIX E

LIST FOR GOODS IMPORTED OUTSIDE OF ELEGIBLE SOURCE COUNTRIES

(Tenderer's Name) Tenderers shall fill up and submit this List attaching to the FORM OF CERTIFICATES FOR

SOURCES & ORIGIN, AND ELIGIBILITY OF OECF specified in Volum 1

Item No.	Name of Equipment for Item-by-Item (A)	Name of Equipment or Materials (B)	Cost	Percentage* of B/A (%)
	•			1
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			· · .	
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-			3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
			-	_
			·	يسنو من

#### APPENDIX F

#### DELIVERY AND CONSTRUCTION SCHEDULE

	Major Schedule Items	Delivery/Completion from Date of Award of Contract
	The second secon	ya is president to the same and
0	Contractor's Data and Drawings Specified in 3.1 of Part I,	
	Volume 3 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	within 3 months
0	Other Data and Drawings	
		¥'
0	Materials at FOB Port of Export	
	To the second of the second	Section to the second of the first terms of the second of
0	Materials at Karachi Port	and the second of the second o
	in the property of the first factors	end to ever the energy of the other
0	Delivery of Plant Equipment and Materials at Job Site	e desta e la proposición de la companya de la comp
0	Installation Complete Start Preoperational Test	
0.	30 Days Continuous Operation Test	
0	Performance and Acceptance Test	
0	Final Project Completion	month day
		Specified 36 months for Unit 1 51 Months for Unit 2

#### APPENDIX G

#### DEPARTURES FROM OR QUALIFICATIONS TO TENDER DOCUMENTS

The Tender shall specify below, in detail, all deviations from the Tender Document (additional sheets shall be included suffixed (a), (b), (c), etc. should the space provided be inadequate). Any entry shall be referenced to the Tender Documents Part No. and Clause No. to which they refer.

The Tender shall be deemed to be compliant in all respects with the content and intent of the Tender Documents except in respect of deviations and exceptions listed hereunder. The Tender shall sign under seal as indicated hereunder to confirm that in all matters, except as detailed in this Form, the Tender submitted is in accordance in all respects with the Tender Documents.

The Tender shall initial on all sheets and complete this Form by signing under seal as indicated.

certify that the Tender submitte	d is in full compliance with the Tende
Document except for the deviation	ns listed herein.
We further certify that any othe	r deviations or exceptions identified
	he execution of the Contract for the
Yorks will be corrected by the T	enderer/Contractor to comply with the
requirements of the Tender Docum	ents and Contract Documents without an
Increase in the price for the Wo	rks and without any delay in the
execution of the Contract.	
	Signed
	Date

..... the Tenderer do hereby

Seal of Tenderer

#### APPENDIX H

## MANAGEMENT PROCEDURES

# APPENDIX I

# TENDERER'S DATA SHEETS

### APPENEDIX J

## MANDATORY AND RECOMMENDED

# SPARE PARTS AND EXPENDABLES

UNIT 1

# MANDATORY SPARE PARTS

# 1. Power Plant Equipment

en en stille en de service en			(Tenderer's Name) Currency in Country Origin		
Item	Unit	Quantity	Unit Price Amount FOB		
1. STEAM GENERATOR AND AUXILIARY EQUIPMENT					
1.1 STEAM GENERATOR					
(1) Boiler and Furnace		in the second se			
(A) Gasket for boiler and inspection door	%	200	en e		
(B) Glass for boiler and furnace inspection holes	%	200			
(C) Gasket and packing for boiler and furnace access (manhole)	%	300 avi			
(D) Tubes and backing rings	%	2 each size and each material			
SUB-TOTAL					
(2) Drum					
(A) Disk and ring pins of drum safety valves	%	100			
(B) Packing and gasket for drum manhole	%	300			
(C) Bolt, nut and washers for drum internals	%	10			

# Currency in Country Origin

	Item	Unit	Quantity	Unit Price FOB	Amount
	(D) Glass and gasket includ- ing mica for drum level gauge	%	500		
	(E) Lamp for level gauge	%	<b>300</b>		
	(F) Color screen for level gauge glass	%	200		
	(G) Valve packing	%	200		
	SUB-TOTAL			e Seekas seedale M	
(3)	Economizer				
	(A) Tubes	%.	2 each size		
	SUB-TOTAL				
(4)	Superheater, Reheater and Attemperator				
	(A) Disk of safety valves	%	100		•
e e	(B) Disk of power control valve (PCV)	%	200		-
	(C) Disk of pilot valve of PCV	%	200	F1 ( v)	
	(D) Seal ring of PCV	%	200		
	(E) Plug seal ring of PCV	%	200		
	(F) Gasket for PCV	%	200		
	(G) Tubes	%	2 each size and each material		

		Item : It	Unit	Quantity Unit Price Amount FOB
(5)	fra	ing, Brickwork, Re ctory, Insulation and ging	: -	
			•	
	(A)	Casing (each material)	%	5 each
	(B)	Brickwork, refractory, insulation and lagging	%	- 15 each - The Triber College
		SUB-TOTAL		
(6)	Pip	ing, Valves and Fitting		
	(A)	Blow down valve (complete)	set	i element promise de la companya della companya de la companya della companya del
	(B)	Drain valves for steam	%	50
er es		generator (SH, RH, Econ, Downcomer, etc.)		
	(C)	Packing for drain and vent valves	%	30 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
	(D)	Welding rods (each kind) to be used for the boiler	%	30 each
		SUB-TOTAL		
(7)	Air	Preheater		
	(A)	Cold end elements	%	100
	(B)	Intermediate layer element	%	50
	(C)	Hot end elements	%	25
	(D)	Post seal assembly	%	100
	(E)	Radial seal assembly	%	100a
	(F)	Circumferential seal assembly	%	100 100
	(G)	Soot blowing nozzle for air preheater	%	100

.***		Item	Unit	Quantity Unit Price Amount FOB
	(H)	Washing nozzles for air preheater	%	100
	(1)	Oil seal and packing for oil pump	%	100
	(J)	Gasket for manhole and inspection door	%	100
	(K)	Glass for inspection door	%	100
	(L)	Manometer	set	
	(M)	Motor bearing	set	1 100 100 100
	(N)	Lamp for observation light	piece	<b>3</b>
<del></del> -		SUB-TOTAL		
(8)	Ste	am Coil Air Preheater		
	(A)	Fin tubes	%	30
	(B)	Flange gasket	%	20
		SUB-TOTAL		
(9)	Oil	Burner and Igniter		
	(A)	Fuel oil guns without tips	%	50
	(B)	Tips, burner plate, and tip nut for fuel oil guns	%	200 each
		(heavy fuel oil and diesel	oil)	
	(C)	Igniter guns without tips	%	50
	(D)	Tips, burner plate, and tip nut for igniter guns	%	<ul> <li>200 The search field</li> <li>201 The search field</li> </ul>
	(E)	Packing and "O" ring for fuel oil guns	pieces	200

(Tenderer's Name) Currency in Country Origin

	ltem	Unit	Quantity FOB Amount
(F)	Packing and "O" ring for igniters guns	pieces	200
(G)	Flexible hose or ball joint for fuel oil burner (each size)	%	30
(H)	Flexible hose for igniter (each size)	%	30
(1)	Flame detector for fuel oil and igniter	%	
(J)	Complete set of atomizer for main burners and igniters	%	<b>100</b>
(K)	Gasket for access doors	%	<b>100</b>
(L)	Glass for access doors	%	100
(M)	Defuser cones	%	300
(N)	Solenoid valves for igniter	%	50 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
(0)	Spark plug	%	200
(P)	Pilot box for igniter (complete set)	%	30

Item	Unit	Quantity Unit Price Amoun FOB
(10) Soot Blowing System		
(A) For boiler soot blower		en en Santa en Esta Securio. En la companya de la
(a) Complete soot blower set	set	<b>2</b>
(b) Head valves (complete set)	set	
(c) Chain and chain pins or gear assembly	set	
(d) Gland packing	%	200
(e) Limit switch	%	40
(B) For air preheater soot blower	· .	
(a) Valve disc	%	100
(b) Valve spindle	%	100
(c) Glans packing	%	200
(C) For control panel		
(a) Fuse and lamp	%	200
(b) Switch	%	20
SUB-TOTAL		
(11) Blow Down Tank		
(A) Glass and gasket for level gauge	%	200
(B) Manhole gasket	%	200
SUB-TOTAL	•	

		Item	Unit	Quantity	Unit Price Amount FOB
•	(12)	Air, Flue Duct and Soot Hopper		and the state of	
		(A) Gasket for the manhole	%	200	
		(B) Bolts and nuts for manhole	%	200	
		(C) Packing for damper shaft	%	200	e O New Agraphy (All Conference of the Conferenc
		SUB-TOTAL			
)	(13)	Forced Draft Fan			
		(A) Bearing for fan	com- plete set	1	
	<del> :- :</del> :	SUB-TOTAL			
	(14)	Induced Draft Fan			
		(A) Bearing for fan	com- plate set	1	
		SUB-TOTAL			
	(15)	Gas Recirculation Fan	<del></del>	<del></del>	
)		(A) Bearing for fan	com- plete set	1 each	
		SUB-TOTAL	· · · · · · · · · · · · · · · · · · ·		
	(16)	Heavy Fuel Oil, Warm-up Oil and Ignition Oil System	. "		
		(A) Heavy fuel oil system		Star Division Tables Starts	on 166 in 186 in 196 in 196 Option 196 in 196 in Option 196 in
		(a) Heavy fuel oil heater		100	

· · · · · ·		item	Unit	Quantity	Unit Pri FOB	ce Amount
	(b)	Tube of heavy fuel oil heater	. % :	5 4		
	(c)	Bearing for pump	com- plete set	1		
	(d)	Gland packing for pump	%	200		er i de la companya d
	(e)	Flexible hose for tank	set	1 each		
		arm-up and Ignition wel (Natural gas)				
		SUB-TOTAL				
		Detector and Flame ision Camera Cooling ystem				
	(A) F	lexible hose (each size)	%	20 each size		
		SUB-TOTAL				 
	Piping Genera	System for Steam ator				
		and packing and gasket or valve	%	50 each size	e e e	
		ontrol valve diaphragm each size)	piece	1	ing a second	
	(C) Va	lve (each rating, size)	set	2		ing the second second
		pe and fitting (each ze and material)	piece	2		

. 1		item	Unit	Quantity	Unit Price Amount FOB
. •	(E) G	lass for sight flow	set	1 each size	i (1944 - Norden Santonio) Professoria
		SUB-TOTAL			
(19)	Instr	umentation			and the second
	(A) Bo	oiler control	: .	en Arriva de la Carlo de Carlo	en inggang di ekkiring. Garago Ma
	(a)	Pressure transmitters	set	1 each	
	(b)	Flow transmitters	set	1 each	
	(c)	Temperature transmitters	set	1 each	e deservición de la companya de la c La companya de la co
	(d)	Level transmitters	set	1 each	
	(e)	EP, PE converter	set	1 each	er en
	(f)	Standard spare parts for operating modules and power sources	set	1 each	
	(g)	Standard spare parts for selector stations	set	1 each	en de la companya de La companya de la co
	(h)	Standard spare parts for positioners	set	1 each	towart of the second of the se
	(i)	Standard spare parts for control valves	set	1 each	to the section of the
	(j)	Standard spare parts for control drives	set	1 each	
	(k)	Standard spare parts for indicators	set	1 each	and Signal Services Survey of the Services
	(1)	Standard spare parts for recorders	set	1 each	

Item	Unit	Quantity	Unit Price Amount FOB
(m) Standard spare parts for flue gas analyzers	set	1 1	
(n) Lamps	%	200	
(B) Burner control			
(a) Standard spare parts for relay, operating modules, power sources	set	1 each	
(b) Pilot lamps	%	200	en grande de la companya de la comp
(c) Indication lamps	%	200	en e
(d) Fuses	%	200	
(e) Control switches	set	1 each	
(f) Limit switches	set	1 each	
(C) Other instrument mounted on the BTG board and the auxiliary control panel	÷.		
(a) Standard spare parts of recorders (lamp, fuse, pen, etc.), and indicators	set	2 each	
(b) Chart and ink pad for recorder		each 2 years	
(D) Local control		** 1	
<ul><li>(a) Standard spare parts for transmitters (pressure, temperature, flow, level)</li></ul>	set	1 each	
<pre>(b) Standard spare parts    for controllers    (pressure, temperature,    flow, level)</pre>	set	1 each	

i e la	Unit	Quantity	Unit Price FOB	Amount
(c) Pressure switches	set	1 each		
(d) Control switches	set	. 1 each	· · · · · · · · · · · · · · · · · · ·	· • .
(e) Lamps for operation indication and annunciator	%	200		
SUB-TOTAL		<del></del>		
TOTAL OF STEAM GENERATOR	10 mg			

Carried to Summary Sheets

		Item	Unit	Quantity	Unit Price Amount FOB
1.2		M GENERATOR AUXILIARY	·	ti an il	the grade of the second second
	EQUL	PMENT		2.15 2	with the state of
(1)	Steam	m Converter System			
	(A)	Gasket for steam convertor and steam converter drain cooler	%	100	regional Services de la companya de la compa La companya de la companya del companya de la companya del companya de la companya de la companya de la companya de la companya del companya del companya del companya del companya de la companya del companya del companya del companya del companya
	(B)	Bearings for steam converter feedwater pump	com- plate set		
	(C)	Control valve diaphragm	piece	each	
	· · (D)	Spring for safety valve and relief valve	set	each 1	
<del></del> ;	<u>, , , , , , , , , , , , , , , , , , , </u>	SUB-TOTAL	<u>.</u>		
(2)	Inst	rument Air System			· · · · · · · · · · · · · · · · · · ·
	(A)	Wrist-pin bushing	set	1	
		Pair of crank pin bearing shells	set	1	
		Pair of connecting rod polts and nuts	set	1	
		Complete valve assembly for cylinder	set	2	
	(E)	Piston ring	set	5	
	(F) ]	Packing ring	set	1	
	(G) (	Gasket for "O" ring	set	1	
	(H)	/-belt	set	1	
	(I) I	Filter cartridge	%	50	
		Gland packing and gasket For valve	%	each 50	

Every of	Item	Unit	Quantit	Unit Price Amount y FOB
(3) Ser	vice Air System			
(A)	Wrist-pin bushing	set	1	
(B)	Pair of crank pin bearing shells	set	1	
(C)	Pair of connecting rod bolts and nuts	set	1	engen i de la servició de la companya de la company
(D)	Wrist-pin retaining rings	com- plete	1	
		set		
(E)	Scraper rings	com- plete set	1	
(F)	Bearing for compressor	com- plete	1	$\frac{1}{1+\epsilon} \frac{1}{2} $
•		set		
(G)	Complete valve assembly for LP and HP cylinder	set	1	war ar in tetting the
(H)	Piston rings	com- plete	each	<b>1</b> 6. – 17.
		set		The second second
(1)	Packing rings, gasket	set	each	1
(J)	Gland packing and gasket for valve	%	50	
	SUB-TOTAL			
(4) Che	mical Feed System			
(A)	Plunger for pumps	set	each	<b>1</b>
(B)	Gland packings	set	each	1 - 1 - 1 - 1 - 1
(C)	Ball valves	set	each	

\$25 D24	Item	Unit	Quantity Unit Price Amoun FOB
(D)	Valve seat	set	each 1
(E)	Gasket	set	each 1
(F)	Valve packing and gasket	%	each 50
(G)	Standard spare parts for recorder (include, ink pad, ink, charts, fuses)		1 year
(H)	Level switch	set	1
	SUB-TOTAL		
(5) Sam	pling Rack System		
(A)	ксі	kg	2
(B)	15A SUS 304 pipe	m	5
(C)	Valve packing	%	50
(D)	Thermometer	set	<b>5</b> 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1
(E)	Pressure reducer	set	2
(F)	Ion exchanger resin (cation)	%	100
(G)	Standard spare parts for recorder (include, ink pad, ink, charts, fuses)		1 year
	Standard spare part for each analyzers and sensors	set	
(1)	Glass for sight flow	%	100 100
	SUB-TOTAL		The second secon

Carried to Summary Sheets

	Item	Unit	Quantity	Unit Price FOB	Amount
2. STEAM 'EQUIPM	TURBINE AND AUXILIARY				
2.1 Steam	Turbine				
(1) Ste	am Turbine			Augustus (1996)	
(A)	Turbine bearing assembly (HP, IP and LP)	set	1 each	en en de de la companya de la compan	
(B)	Thrust bearing (complete)	set	1		
(C)	Complete set of thrust pad	set	1		
(D)	Gland steam packing (HP, IP and LP)	set	1 each		
(E)	Atmospheric relief diaphragm	piece	5	ing the second of the second o	
(F)	Casing bolt, nut and washer	set	1 each size		
(G)	Raw material of casing bolts and nuts (complete)	%	10		•
(H)	Control valve (sleeve, gasket, valve stem, pin of crosshead, spring,	piece	1 each	en e	
	etc.)		and the second of the second o		٠
(1)	Main stop valve (bypass valve)	piece	: :1		
<b>(J)</b>	Main stop valve (gasket of head cover)	piece	4		
(K)	Combined reheat valve (gasket)	piece	1 each		
-( <b>L)</b>	Filter element for oil conditioner	unit	1		4.
(M)	Oil cooler packing	piece	2 each		

y - *	. •	Item :	Unit	Quantity Unit Price Amount FOB
-	(N)	Gauge glass for main oil tank, oil conditioner and oil storage tank	piece	4 each
	(0)	Bearing for gland steam exhaust blower	set	2
	(P)	Gasket for steam seal regulator	piece	each 4
	(Q)	Gland steam condenser packing	piece	each 6
	(R)	Expansion joint for cross over piping	piece	1
	(S)	Turbine bypass valve inner parts gasket	set	1
		SUB-TOTAL		
(2)	Pip	ing and Valves		
	(A)	Gland packing and gasket for valve (each rating, size, kind)	%	50 each
	(B)	Control valve diaphragm (each size)	piece	2 each
	(C)	Valve over 25A (more than 35kg/cm <sup>2</sup> g	set	1 each
	(D)	rating, size kind) Valve up to 25A	set	2
	(E)	Pipe and fitting (each size and material)	piece	1 each
		SUB-TOTAL		
(3)	Inst	trumentation	<del></del>	
	(A)	TSI		
	(a)	Vibration detector	set	2

r.	Item		Unit	Quantity	Unit Price FOB	Amount
(b)	Standard spare parts for recorder (lamp, fuse, pen, etc.)		set	1		
(c)	Chart, ink pad for recorder	•		2 years	er Car	
(d)	Operating modules		set	1 each		
	nstrument mounted on TG board			18 (18 1) 18 (18 1) 18 (18 1) 18 (18 1)	$\frac{1}{2} \left( \frac{1}{2} + \frac{1}{2} \frac{\partial x}{\partial x} \right) = \frac{1}{2} \left( \frac{\partial x}{\partial x} - \frac{\partial x}{\partial x} \right)$	Y .
(a)	Standard spare parts for recorder (lamp, fuse, pen, etc.) and	÷	set	1		
	indicator					
(b)	Chart, ink pad for recorder			2 years		* ¥.
(C) E	HC		, ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;		$(x_i \circ t_i y_i^T) = 0  \forall i \in \mathbb{N}$	
(a)	Standard spare parts for transmitter	÷ 1.	set	1 each	ent. Kalanta	1 +
	Standard spare parts for actuating device		set	1 each		
(c)	Pressure switch		set	1 each		
(d)	Limit switch		set	1 each		
(e)	Operating module		set	1 each		
(f)	Lamps		%	200 each, with		
				10 pcs minimum	·	
<del></del>	SUB-TOTAL					

Carried to Summary Sheets

	Item	Unit	Quantity	Unit Price Amount FOB
2.2 Steam Tu Equipmen	rbine Auxiliary t			
(1) Surfac	e Condenser			
(A) Co	ndenser tube	%	5	
(B) Tu	be plug	piece	150	
	cking for condenser ter box manhole	%	200 each	
	cking for condenser ter box cover	%	200 each	
	ectrode for cathodic otection	%	50	and the second of the second o
(F) Ga	uge glass	%	400	
(G) Br	ush for condenser tube	piece	1,000	
•	n for condenser tube eaning	set	2	
(I) Pu	mp for leak detector	set	1	
	SUB-TOTAL		<del></del>	

		Item	Unit	Quantity Unit Price Amount FOB
(2)	Air	Ejector		
	(A)	Steam jet air ejector condenser		
	٠	Packing	piece	4
		Ejector nozzle (first and second)	set	1 each
	(B)	Starting air ejector nozzle	set	1
	<del></del>	SUB-TOTAL		
(3)		ming Vacuum Equipment Bearing for pump and motor	set	<b>1</b>
	(B)	Gland packing	%	100
		SUB-TOTAL		
(4)	Circ	culating Water Pump		
	(A)	Cutless bearing or proved design material and motor bearing	set	4 each
	(B)	Casing ring	set	$oldsymbol{2}$ , which is the second constant $oldsymbol{2}$
	(C)	Packing, sleeve, etc.	set	2 each
÷		Cathodic protection plate (aluminium)	%	100
	(E)	Impeller	set	1
<del></del>		SUB-TOTAL		

Item	Unit	Quantity	Unit Price Amount FOB
(5) Condensate Pump (A) Bearing for pump and motor	set	1	
(B) Gland packing	%	200	
(C) Wearing ring	%	100	
(D) Rotor complete (balanced)	set	1	
SUB-TOTAL			
(6) Feedwater Heaters			
(A) Gasket	%	100 each	
(B) Gauge glass	%	200 each	
(C) Relief valve spring assembly	set	1 each	
(D) Bearing for pump and motor of drain pump	set	1 each	
(E) Packing, gasket and sleeve of drain pump	%	200 each	
SUB-TOTAL			
(7) Deaerator			
(A) Packing for manhole	%	400	
(B) Gauge glass	%	100	
(C) Spray valve	set	2	
SUB-TOTAL			

3 - 12 - 3 3 - 12 - 3		Item	Unit	Quantity	Unit Price FOB	Amo
(8)	Boiler F	eed Pump				
	(A) Bear pump	ing and seal for	comp- lete set	4		
	(B) Gask	et, packing, etc.		400 each	and the second	
	(C) Roto	r complete (balar	nced) set	1		
	· .	SUB-TOTAL				-
(9)	Bearing Heat Exc	Cooling Water hanger				
	(A) Tube	; ;	%	5		
	(B) Pack	ing for manhole	piece	2		
	(C) Cath	odic protection p	olate %	200	A 14	
		SUB-TOTAL				
(10)	Bearing	Cooling Water Pum	ıp		1	
	(A) Bear	ing	set	1		٠
	(B) Glan	d packing	%	100		
	(C) Gask	et	%	100	*.	11.1
		ing for primary ing water booster	set	<b>1</b>		
	etc.	d packing, gasket for primary cool r booster pump		100 each		

Item	Unit	Quantity Unit Price Amount FOB
(11) Chemical Injection System for Bearing Cooling Water		
(A) Chemical injection pump		
(a) Bearing	set	1
(b) Gland packing	%	200
(c) Diaphragm	set	1
(B) Valve		
(a) Diaphragm	set	2
<ul><li>(b) Gland packing, gasket,</li><li>0 ring, etc.</li></ul>	%.	200 each
(C) Gauge glass for chemical tank	set	2
(D) Indication lamp	%	400 each
SUB-TOTAL		
(12) Make-up Water Transfer Pump		
(A) Bearing	set	
(B) Gland packing	%	100
(C) Gasket	%	100
SUB-TOTAL		

j.: -		Item	Unit	Quantity	Unit Price Amount FOB
(13)	Make	e-up Water Tank			
	(A)	Packing for manhole	%	100	
	(B)	Diaphragm for level control valve	set	2	
	(C)	Gland packing, gasket, etc. for valve	set	2	
	(D)	Standard spare parts for level transmitter	set	2	
	(E)	Inner floating seal material	set	1	
		SUB-TOTAL			Factories and
(14)	Turl	oine Clean Drain Tank			
	(A)	Condensate return pump			
		Bearing for pump	com- plate set	· • <b>1</b> · ·	
	(B)	Control valve diaphragm	piece	each	
		SUB-TOTAL			
(15)	Pip:	ing and Valves			
	(A)	Gland packing and gasket for valve (each rating, size, kind)	%	50 each	
	(B)	Control valve diaphragm (each size)	piece	2 each	
	(C)	Valve over 25A (more than 35kg/cm <sup>2</sup> g rating, size kind)	set	1 each	
	(D)	Valve up to 25A	set	2	

		Item	Unit	Quantity	Unit Price FOB	Amount
	(E)	Pipe and fitting (each size and material)	piece	1 each		
	(F)	Topping valve (manual feedwater valve) (complete)	set	1		**.
	(G)	BFP minimum flow orifice	set	2		4
	(H)	BFP minimum flow control valve inner valve	set	1		
	(1)	Glass for sight flow	set	3 each size	ing and the second	
	(J)	Cathodic protection plate for C.W.piping (Aluminium)	%	100		
		SUB-TOTAL				
(16)	Ins	trument				
	(A)	Thermocouples for turbine bearings	set	1 each		
		Thermometers for turbine bearings	set	2 each		
		Standard spare parts for transmitter (pressure, temperature, flow, level)	set	1 each		
	(B)	Standard spare parts for controllers (pressure, tempera- ture, flow, level)	set	1 each		9: 9:
	(C)	Pressure switches	set	1		w <sub>i</sub>
	(D)	Control switches	set	1		

(Ter	idei	er's	Nar	ne)
Currency	in	Count	ry	Origin

 Item	Unit	Quantity	Unit Pric	ce Amount
(E) Lamps for operation indicator and annunciator	%	200, with 10 pcs minimum		
 SUB-TOTAL				
TOTAL OF STEAM TURBINE AUX	ILIARY		<del></del>	

Carried to Summary Sheets

		Item		Unit	Quantity	Unit Price FOB	Amount	
		RY SYSTEM AND ( RY EQUIPMENT	COMMON					
(1)	) Hou	se Boiler					•	
	(A)	Tube		%	3 each size	and the second s		
	(B)	Packing for beinspection do		%	200			
	(C)	Glass for boi	ler inspec-	%	200			$\bigcirc$
	(D)	Spring for savalve	fety	%	100			
	(E)	Packing for d	rum manhole	%	200			
	(F)	Gland packing etc, for valve		set	1 each size			
	(G)	Valve		set	1 each			
	(H)	Diaphragm for valve	control	set	1 each size			
	(1)	Bearing and moseal for fuel		set	2 each			
	(J)	Bearing for fe	eedwater	set	1			$\bigcirc$
	(K)	Gland packing feedwater pump		set	1,			·
	(L)	Oil burner gur igniter	n and	set	3			
	(M)	Relays		set	1 each			
	(N)	Lamp for opera	ation and	%	30			

Item	Unit Quantity Unit Price Amount FOB
(O) Transmitter	set 1 each and a set
(P) Control switch	set 1 each
SUB-TOTAL	
(2) Turbine Room Overhead Crane	
(A) Brush and holder for motor	% 100 each
(B) Brake lining for main and auxiliary hoist	% 100 each
(C) Coil for magnetic brake	% 100
(D) Main contactor tip for controller	<b>100</b>
(E) Wire rope (for main hoist and auxiliary	% 100 each
hoist)	gradina kita bersalah di terdapat di t Pengantan di pengantan di terdapat di t
(F) Fuse	% 100
(G) Indicator lamp	% 200
(3) Water Pretreatment System	
(A) Cutless bearing and motor bearing	set 3 each
(B) Casing ring	set 3 each
(C) Bearing for all pumps, blowers and rake	set 1 each
(D) Gland packing for all pumps	set 1 each
(E) Shaft sleeve for all pumps	set 1 each
(F) Level switch	set 1 each
(G) Level gauge	% 200

				<u>th Million to the Colorest Color</u>
	Item	Unit	Quantity	Unit Price Amount FOB
(H)	Diaphragm for control valve	set	1 each size	
(1)	Gland packing, gasket, etc. for valve	set	1 each	ing distribution of the second
(J)	Solenoid valve	piece	5	are well as the first of the second
(K)	Relay	set	<b>1</b>	
(L)	Gauge glass	set	1 each	$a_1 \cap a_2 = a_1$
(M)	Lamp for operation and annunciator	%	100	
(N)	Control switch	set	1 each	
	SUB-TOTAL			
(4) Filt	er Equipment	<del></del> -		
(A)	Bearing for back wash water pump	set	1 each	
(B)	Gland packing for back wash water pump	set	1 each	
(C)	Gauge glass	set	1 each	Albert Commence
(D)	Diaphragm for control valve	set	2 each size	
(E)	Solenoid valve	piece	5	
(F)	Gland packing, gasket, etc.for valve	set	2 each size	
(G)	Relay	set	1	
(H)	Lamp for operation and annunciator	%	50	erina de la propieta de la composición de la composición de la composición de la composición de la composición La composición de la
(1)	Pressure switch for flow switch	set	1 each	
			•	compilered for

Item	Unit	Quantity	Unit Price FOB	Amount
(J) Control switch	set	1 each	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
(K) Transmitter	set	1 each		: *
(L) Control switch	set	1 each		
SUB-TOTAL	·			. 1
(5) Service Water Tank				
(A) Packing for manhole	set	1 each		** .
(B) Diaphragm for level control valve	set	1 each		1.
(C) Gland packing, gasket, etc. for valve	set	1 each		
(D) Standard spare parts for level transmitter	set	1		.:
(E) Service water pump and motor				
(a) Bearing for pump	set	1		
(b) Gland packing for pump	set	1		
(c) Shaft sleeve for pump	set	1		
SUB-TOTAL			:	
(6) Water Treatment System		·		
(A) Ion exchanger resin (cation and anion)	%	50 each		
(B) Bearing for supply pump	set	1 1 -	and the second	
(C) Gland packing for supply pump	set	) <b>1</b>		
(D) Diaphragm for diaphragm valve	piece	5 each size		
(E) Diaphragm valve	set	1 each		

		•			
		Item	Unit	Quantity	Unit Price Amount FOB
	(F)	Gauge glass of chemical tank	set	1 each	
	(G)	Gland packing, gasket, etc. for valve	set	1 each size	
	(H)	Solenoid valve	piece	5	en e
	(I)	Relay	set	1 each	
	(J)	Lamp for operation and annunciator	%	50	
	(K)	Recording charts, pens, ink, etc.		1 year	
	(L)	Pressure switch and flow switch	set	1 each	
	(M)	Standard spare parts for transmitter and controller	set	1	
	(N)	Control switch	set	1	
•	(0)	Rascing ring	%	50	
	(P)	Standard spare parts for silica meter	set	2	
	(Q)	Nini pump for silica meter	piece	5	
		SUB-TOTAL			
(7)	Dem	ineralized Water Tank		- :	
	(A)	Packing for manhole	%	100	ang mengangka
	(B)	Diaphragm for level control valve	set	1 each	general surgerial de la companya de La companya de la co
	(C)	Gland packing, gasket etc. for valve	set.	1 each size	
	(D)	Standard spare parts for level transmitter	set	1	
		e e			and the second of the second s

· · · · · · · · · · · · · · · · · · ·	Item	Unit	Quantity Unit Price Amount FOB
-	(E) Demineralized water transfer pump	** 1/4	
	(a) Bearing for pump	set	1
	(b) Gland packing for pump	set	1
	(c) Shaft sleeve for pump	set	1
	SUB-TOTAL		
(8)	) Fire Protection System		
	(A) Diesel driven emergency fresh water fire pump		
	(a) Piston ring for engine	set	1 comp- lete
	(b) 0-ring for engine	set	1 comp- lete
	(c) Fuel injection valve	piece	2
	(d) Inlet valve assembly	set	2 comp- lete
	(e) Exhaust valve assembly	set	2 comp- lete
	(f) Bearing for pump	set	1 comp- lete
	(g) Gland packing for pump	set	1
	(h) Shaft sleeve for pump	set	1 to
	(i) Gauge glass for fuel oil tank	set	
	(B) Motor driven emergency fresh water fire pump		
	(a) Bearing for pump	set	1 соmp- lete

Item	Unit	Quantity Unit Price Amount FOB
(b) Gland packing for pump	set	1
(c) Shaft sleeve for pump	set	
(C) Fire water pump		
(a) Bearing for pump	set	1 comp- lete
(b) Gland packing for pump	set	<b>1</b>
(c) Shaft sleeve for pump	set	<b>1</b>
(D) Air foam concentrate injection pump and diesel engine		
(a) Piston ring for engine	set	1 comp- lete
(b) 0-ring for engine	set	1 comp- lete
(c) Fuel injection valve	set	2 comp- lete
(d) Inlet valve assembly	set	1 comp- lete
(e) Exhaust valve assembly	set	1 comp- lete
(f) Bearing for pump and diesel engine	set	1 comp- lete
(g) Gland packing for pump	set	
(h) Gauge glass for fuel oil tank	set	
(E) Piping and valve		
(a) Gland packing, gasket, etc. for valve	set	1 each size

	Item viers	Unit	Quantity Unit Price Amount FOB
	(b) Solenoid valve	set	1 comp- lete
()	<ul><li>Control panel, fire protection panel and instrument</li></ul>		
	(a) Lamp for operation and annunciator	*	50
	(b) Pressure switch	set	1 - 38 to 10 to 10 to 10 to
	(c) Relay	set	1 each
	(d) Transmitter	set	1 each
	(e) Control switch and push button	set	1 each
	SUB-TOTAL		
(9) Но	eavy Fuel Oil Suction Heater	(NOI	APPLICABLE)
(a)	Tube of residual oil suction heater	%	9 (1 <b>5</b> ) - 1 (17) (17) (17) 28 (17)
(b)	Gasket	%	100 am a mar a mar
	SUB-TOTAL		
(10) H	eavy Fuel Oil Transfer Pump	(NOT	APPLICABLE)
(a)	Bearing for pump	set	1 comp- lete
(b)	Gland packing for pump	set	1 comp- lete
(c)	Percolate element of strainer	set	
(d)	Diaphragm for pressure control valve	set	
(e)	Gland packing, gasket, etc. for valve	set	1

Item	Unit	Quantity Unit Price Amount FOB
(f) Lamp for operation and annunciator	%	50
(g) Pressure switch	set	1
(h) control switch	set	1
SUB-TOTAL		
(11) Fuel Oil Piping		
(a) Gland packing for valve	set	1 each size
(b) Valve	set	1 each size
SUB-TOTAL		
(12) Drainage and Waste Water Treatment System	·.	
(A) Bearing for all pumps and blowers	set	1 each size
(B) Gland packing for all pumps	set	1 each size
(C) Diaphragm for control valve	set	1 each size
(D) Diaphragm for chemical feed pumps	set	1 each size
(E) Gland packing, gasket, O-ring, etc. for valve	set	1 each size
(F) Gauge glass for chemical tank	set	1 each
(G) Lamp for operation and annunciator	%	The <b>50</b> calculate Administration of
(H) Relays	set	1 each
(I) Control switch	set	

un de la seconda	Item	Unit	Quantity	Unit Price FOB	Amount
(J)	Solenoid valve	set	1		
(K)	Recording chart, pens, ink, etc.	year.	1		
(L)	KCl for pH meter	kg	1		
(M)	Standard spare parts for analyzer	set	1		
(N)	Fuse	%	200		
(0)	pH Electrode	piece	5 each		:
	SUB-TOTAL				
(13) Chl	orination System		:		
(A)	Bearing and gland packing for all pumps	set	each 1		
(B)	Gland packing, gasket, etc. for valve	set	1 each size		
(C)	Inner parts for strainer	set	1		•
(D)	Fuse	%	100		
(E)	Lamp for operation and annunciator	%	100		
(F)	Gauge glass for injection flow meter	set	2		
(G)	Pressure switch and flow switch	set	1 each		
(H)	Relay	set	1 each		
(1)	Electrode	set	2		
(J)	Rectifire element	set	1		
(K)	Solenoid valve	piece	5 each size		

Item	Unit	Quantity Unit Price Amount FOB
(14) Yard Instrument Air System		
(A) Wrist-pin busing	set	
(B) Pair of crank pin bearing shells	set	<b>1</b>
(C) Pair of connecting rod bolts and nuts	set	Property of the Control of the Contr
(D) Complete valve assembly for cylinder	set	1
(E) Piston ring	set	
(F) Packing ring	set	1
(G) Gasket and O-ring	set	1
(H) V-belt	set	1
(I) Filter cartridge	%	50
(J) Gland packing and gasket for valve	%	50
SUB-TOTAL		
(15) Laboratory		
(A) Spectro photometer		
(a) W lamp	piece	5
(b) D <sub>2</sub> lamp	piece	5. The state of th
(c) Filters	piece	2 each
(d) Tungsten lamp	piece	<b>5</b>
(e) Standard spare parts	set	<b>1</b>

(Tenderer's Name) Currency in Country Origin

	il. Asi i i i i i i i i i i i i i i i i i i	Unit	Quantity	Unit Price Amount FOB
	(B) pll meter	<del></del>		
	(a) pH Electrodes	set	. 2	
	(b) Standard spare parts	set	1	
	(C) Conductivity meter			
	(a) Standard cell (K=1.0)	set	2	
	(K=0.1)	set	2	
}	(K= 10)	set	2	
·	(b) Standard spare parts	set	1	
	(D) Drying Oven	:		
	(a) Heating element	set	1	
	(E) Muffle furnace			
	(a) Heating element	set	1	
	(b) Standard spare parts	set	1	
	(c) Thermo couple	set	2	
	(F) Magnetic stirrer		•	
è	(a) Standard spare parts	set	1	
,	(G) Water bath			
	(a) Standard spare parts	set	1	
	(H) Shaker	1.5	vilorit evit	
	(a) Bottle holder	set	2	
	(b) Standard spare parts	set	1	en eta egine de tradición de la companya de la comp La companya de la co

Item	Unit	Quantity Unit Price Amount FOB
(I) Demineralizer		
(a) Cation and anion resin	%	100 each
(b) Standard spare parts	set	
(J) Jar test apparatus		
(a) Glass parts	set	1
(b) Lamp	piece	5
(K) Indigo carmine apparatus		
(a) Glass parts	set	1
(b) Standard spare parts	set	1
(L) Calorimeter		
(a) Combustion capsules	piece	10
(b) Fuse wire	card	4
(c) Sealing rings	%	200
(d) Drive belts	%	200
(e) Valve seats	set	2
(M) Pour points bath		
(a) Standard test jar	piece	6
(b) Cock ring gaskets for test jar	Pkt	6 6
(c) Cock discs for test bath pockets	Pkt 	6 - 20 - 20 - 20 - 20 - 20 - 20 - 20 - 2

(N) Flash point testers  (a) Thermometer set 2  (b) Probe plug and socket set 1  (c) Flexible drive set 1  (d) Gas tube m 10  (0) Hot plates  (a) Heating element set 1 each  (b) Standard spare parts set 1  (P) Centrifuge  (a) Centrifuge tubes piece 10  (b) Standard spare parts set 1  (Q) ORSAT Apparatus  (a) Glass parts (Complete set 2 set)  (b) Pipettes set 2  (c) Rubber expansion bag set 2  (d) Burettes set 2  (R) Sulfur content apparatus		<b>Item</b>	Unit	Quantity	Unit Price Amount FOB
(b) Probe plug and socket set 1  (c) Flexible drive set 1  (d) Gas tube m 10  (O) Hot plates  (a) Heating element set 1 each  (b) Standard spare parts set 1  (P) Centrifuge  (a) Centrifuge tubes piece 10  (b) Standard spare parts set 1  (Q) ORSAT Apparatus  (a) Glass parts (Complete set 2 set)  (b) Pipettes set 2  (c) Rubber expansion bag set 2  (d) Burettes set 2	•	(N) Flash point testers	1.		
(c) Flexible drive set 1  (d) Gas tube m 10  (0) Hot plates  (a) Heating element set 1 each  (b) Standard spare parts set 1  (P) Centrifuge  (a) Centrifuge tubes piece 10  (b) Standard spare parts set 1  (Q) ORSAT Apparatus  (a) Glass parts (Complete set 2 set)  (b) Pipettes set 2  (c) Rubber expansion bag set 2  (d) Burettes set 2		(a) Thermometer	set	2	
(d) Gas tube m 10  (0) Hot plates  (a) Heating element set 1 each  (b) Standard spare parts set 1  (P) Centrifuge  (a) Centrifuge tubes piece 10  (b) Standard spare parts set 1  (Q) ORSAT Apparatus  (a) Glass parts (Complete set 2 set)  (b) Pipettes set 2  (c) Rubber expansion bag set 2  (d) Burettes set 2		(b) Probe plug and socket	set	1	tak di kacampatan di
(a) Heating element set 1 each (b) Standard spare parts set 1  (P) Centrifuge  (a) Centrifuge tubes piece 10  (b) Standard spare parts set 1  (Q) ORSAT Apparatus  (a) Glass parts (Complete set 2 set)  (b) Pipettes set 2  (c) Rubber expansion bag set 2  (d) Burettes set 2	* %;	(c) Flexible drive	set	1	
(a) Heating element set 1 each  (b) Standard spare parts set 1  (P) Centrifuge  (a) Centrifuge tubes piece 10  (b) Standard spare parts set 1  (Q) ORSAT Apparatus  (a) Glass parts (Complete set 2 set)  (b) Pipettes set 2  (c) Rubber expansion bag set 2  (d) Burettes set 2		(d) Gas tube	m	10	
(b) Standard spare parts set 1  (P) Centrifuge  (a) Centrifuge tubes piece 10  (b) Standard spare parts set 1  (Q) ORSAT Apparatus  (a) Glass parts (Complete set 2 set)  (b) Pipettes set 2  (c) Rubber expansion bag set 2  (d) Burettes set 2		(O) Hot plates			
(P) Centrifuge  (a) Centrifuge tubes piece 10  (b) Standard spare parts set 1  (Q) ORSAT Apparatus  (a) Glass parts (Complete set 2 set)  (b) Pipettes set 2  (c) Rubber expansion bag set 2  (d) Burettes set 2	· .	(a) Heating element	set	1 each	
(a) Centrifuge tubes piece 10  (b) Standard spare parts set 1  (Q) ORSAT Apparatus  (a) Glass parts (Complete set 2 set)  (b) Pipettes set 2  (c) Rubber expansion bag set 2  (d) Burettes set 2		(b) Standard spare parts	set	1	
(b) Standard spare parts set 1  (Q) ORSAT Apparatus  (a) Glass parts (Complete set 2 set)  (b) Pipettes set 2  (c) Rubber expansion bag set 2  (d) Burettes set 2		(P) Centrifuge			
<ul> <li>(Q) ORSAT Apparatus</li> <li>(a) Glass parts (Complete set 2 set)</li> <li>(b) Pipettes set 2</li> <li>(c) Rubber expansion bag set 2</li> <li>(d) Burettes set 2</li> </ul>		(a) Centrifuge tubes	piece	10	
<ul> <li>(a) Glass parts (Complete set 2 set)</li> <li>(b) Pipettes set 2</li> <li>(c) Rubber expansion bag set 2</li> <li>(d) Burettes set 2</li> </ul>		(b) Standard spare parts	set	1	
set) (b) Pipettes set 2 (c) Rubber expansion bag set 2 (d) Burettes set 2		(Q) ORSAT Apparatus			
(c) Rubber expansion bag set 2 (d) Burettes set 2			set	2	
(d) Burettes set 2		(b) Pipettes	set	2	2
		(c) Rubber expansion bag	set	2	
(R) Sulfur content apparatus	. •	(d) Burettes	set	2	·
		(R) Sulfur content apparatus			
(a) Heating element set 4		(a) Heating element	set	4	
(b) Quartz tube set 2		(b) Quartz tube	set	2	•
(S) Atomic absorption flame spectro photometer					
(a) Hollow cathodic lamp set 1 each		(a) Hollow cathodic lamp	set	1 each	
(b) Filter set 1		(b) Filter	set	1	

Item	Unit	Quantity	Unit Price FOB	Amount
(c) Recorder Chart	year	1		
(T) NOx SOx, $0_2$ analyzer			. 43 40,0	•
(a) Gas sampler	set	Comp- lete 1		` :
(b) Scrubber	set	2		
(c) Converter	set	2		j jere
(d) Standard gas	set	1 each		1 (3
SUB-TOTAL	·			
(16) Fork Lift				
(A) Bearing	set	1		
(B) Oil seal	set	1		
(C) Hose	set	1	energie in State e	
(D) O-ring	set	1	. Asset	
(E) Packing	set	1		•
(F) Tires	%	100		
SUB-TOTAL				

(Tenderer's Name) Currency in Country Origin

İtem	Unit Quantity Unit Price Amoun FOB
(17) Truck Crane	
(A) Bearing	set 1
(B) Oil seal	set 1
(C) Hose	set 1
(D) O-ring	set 1 1 1
(E) Packing	set 1
(F) Tires	% 100
SUB-TOTAL	

Carried to Summary Sheets

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				<del></del>	<del></del>
		Item	Unit	Quantity	Unit Price Amount FOB
4,	GENERATOR EQUIPMENT	AND ELECTRICAL			
	(1) Common	n Parts		•	
	(A) Pa	anel and board			
	(a)	Indicating lamp (including annunciator lamp)	%	200 each type	
	(b)	Lamp lens and globe	%	100 each type	
	(c)	Lamp socket with resistance or transformer	set	50 each type	
÷		Main protective relay (except over current relay)	set	1 each type	
	(e)	Over current relay	set	3 each type	
	(f)	Auxiliary relay (including time relay)	set	20 each type	
	(g)	Control switches and changeover switches	set	5 each type	
	(h <sub>j</sub> )	Push button with indication lamp (Series II)	%	50 each type	• • •
		Push buttons	set	10 each type	
	(i)	Recording charts, pens and ink		each type for Five (5) year	
:	(j)	Closing and tripping coil for VCB and ACB	set	5 each type	
		Enclosed fuses	%	200 each type	

	FOB
(k) Molded type ACB set	10 each type
(1) Magnetic contactor set	10 each type
(m) Thermal relay set	10 each type
(n) Control transformer set in control center	3 each type
(B) Motor	en e
(a) Bearing %	200 all of
(b) Brush of DC motor %	motors 200 each type
(C) Current transformer set	2 each class ratio
(D) Potential transformer set	1 each class ratio
SUB-TOTAL	e tage of face of the content
(2) Special Parts	
(A) Generator  (a) Generator bushing piece	
(b) Vibration detector piece	
(c) Packing, gasket, % packing compound	400 % 1 1 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2

(Tenderer's Name) Currency in Country Origin

	Item	Unit	Quantity	Unit Price Amount FOB
	(d) Bearing and assemble	set	1	
	(e) Oil seal rings and O-rings	set	<b>2</b> ,	
	(f) Brush	. %	1,000	
	(g) Brush holder	set	10	
	(h) Cooling air filter for collector ring	%	200	and the second s
	(B) Exciter and AVR			
	Control device	%	100	The Control of the Co
	(a) Module	piece	2 each type	
	(C) H <sub>2</sub> gas control cubicle			
÷	(a) Silica gel	%	200	
	(b) H <sub>2</sub> gas reducing valve	set	<b>1</b>	
	(D) Seal oil unit			
	(a) Packing and gasket	%	400	talik kalendaria. Kanadaria
	(b) Differential pressure control valve	set	1	i des gi
	(E) Isolated phase bus duct			en e
	(a) Insulator	piece	4	
	(F) Potential transformer			tigan sa katalan sa ka Katalan sa katalan sa
	(a) Secondary fuse	%	200	
	(b) Current limiting fuse for primary	%	200	

		Item	Unit	Quantity	Unit Price / FOB	lmount
	(G) M	ain transformer				
	(a)	Hightension side bushing	piece	10 x 10 x	and the second of the second o	
	(b)	Lowtension side bushing	piece	· 1	total para seatorial.	
	(c)	Bursting plate	set	2		
	(d)	Packing and gasket	%	200		
	(e)	Removal type unit radiator (including fan and motor)	set		male, migra	
	(f)	Thermo-element of temperature detector	piece	2		
	(g)	Silica gel	%	200		4
	(h)	Insulation oil	lit.	600		
•	(H) A	uxiliary transformer				
	(a)	Hightension side bushing	piece	. 1.		
	(b)	Lowtension side bushing	piece	1		
	(c)	Bursting plate	set	2		
	(d)	Packings and gasket	%	200		
	(e)	Removal type unit radiator	set	1		
	(f)	Thermo-element of temperature detector	piece	2	Addison (1)	
	(g)	Silica gel	%	200	ing sa	:
	<del></del>		<del></del>			<del></del>

	Item	Unit	Quantity Unit Price Amount FOB
(h)	Insulation oil	lit.	600
(i)	Lightning arresterset with condenser	set	
(I) S	tarting transformer		the control of the control
(a)	Hightension side bushing	piece	<b>1</b>
(b)	Lowtension side bushing	piece	
(c)	Bursting plate	set	2 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
(d)	Packings and gasket	%	200
(e)	Removal type unit radiator	set	1
(f)	Thermo-element of temperature detector	piece	2 
(g)	Silica gel	%	200
(h)	Insulation oil	lit.	600
(i)	Lightning arrester with condenser	set	
(J) 6	,600V M/C		
(a)	PT primary and secondary fuse	%	200 each
(b)	VCB assembly		
	3,000A	set	1
	600A	set	3 44 3
(K) 4	OOV power center		
(a)	PT primary and secondary fuses	%	200 each

	Item	Unit	Quantity	Unit Price Amou FOB	nt
(1	o) Movable and fixed contactors for ACB		: :		
	3,000A	set	3 each		
	600A	set	6 each	end send	
(	c) Complete assembly of	ACB	:		
•	3,000A	set	2		
	600A	set	4		
(L)	400V control center				
(4	a) Unit assembly	set	6	garage and the	
(M)	Distribution panel	•	200		
( 8	a) Molded type circuit breaker	set	6		
(N)	Emergency diesel gener	ator	form to		
(8	a) Diesel engine	Beginstern		e e garage	
	Admission gear rods	set	1944 - P <b>1</b>		
	Exhaust gear rods	set	1		
	Piston rings	set	1 each piston		
	Connecting rod bush	set	1		
	Cylinder head and accessories	set	2		
	Admission valves	set	1 each type		
	Exhausting valves	set	1 each type		

(Tenderer's Name)
Currency in Country Origin

	Item	Unit	Quantity	Unit Price FOB	Amount
	Valve spring	set	1 each type	*	
	Injector	set	2		
	Injector holder	set	2		
	Oil cartridges	set		Section 1	
	Joints	%	100	est. N	
(b)	Generator			er e	
	Brushes	%	200	er e	
	Brush holder	set	2		
	Control device	%	100	Tylenda (1997)	
	Module	piece	2 each type		
(O) Ba	attery and charger	• .	i jir dirin er		
(a)	Battery cells	cell	11		
(b)	Battery charger module	set	2		4
(c)	Electronic part	%	100	1.00	
(P) Pa	aging				
(a)	paging handset	set	2 each	ere organizacje	
(b)	Speaker		•		
	horn type	set	4 each		
	cone type	set	2 each	politica de la composición dela composición de la composición dela composición de la composición dela composición dela composición de la composición de la composición dela composició	

	Item was a second	Unit	Quantity Unit Price Amount FOB
 (Q) P	ABX		
(a)	Fuses	%	200 each type
(b)	Lamps	%	200 each type
(c)	Condensor	%	200
(d)	Varistor	%	200
(e)	Discharge tube	%	200
(f)	Relay	set	20 each type
(g)	Resistor of relay	%	200 each type
	Jumper wire	%	200
 (1)	oil	%	200
(j)	Expendables		each type for Five (5) years
(k)	Fuse for repair	%	200
(1)	Telephone set	set	25
(R) C	lock		
(a)	Slave clock	set	5

It	em	Unit	Quantity	Unit Price Amou FOB
(S) Lighting				
(a) Lighti except lamp	ng fixture mercury vapor	set	5 each type	
· · · · · · · · · · · · · · · ·	ng fixture for y vapor lamp	set	10 each type	
(c) Mercur	y vapor lamp	set	50 each type	
(d) Power	receptacle	set	10 each type	
SUB	-TOTAL			

Carried to Summary Sheets

. **	Item	er grendlik	Unit	Quant	ity	Unit Price Amoun
. PLANT C	OMPUTER SYST	EM		٠.	<del></del>	
(1) Com	puter System					
(A)	Cards	a di di	set	1 e	ach	
(B)	Indicator 1	amps	%	200 e	ach	
(C)	Fuses		%	200 e	ach	
(D)	CPU power u	nit	set	1 e	ach	
(E)	I/O unit		set	1 e	ach	
(f)	Standard sp	are parts	set	1 e	ach	
	SUB-TO	TAL				
(2) Pri	nter					
(A)	Cards		set	1 e	ach	
(B)	Paper for p	rinter	box	2	0	
(c)	Ribbon		roll	4	0	* '
(D)	Standard sp	are parts	set	1 e	ach	
	SUB-TO	TAL				
(3) CRT	Display					
(A)	Cards		set	1 e	ach	
(B)	Cathode ray	tubes	set	1 e	ach	
(c)	Standard sp	are parts	set	1 e	ach	

٠ :	Item	Unit	Quantity	Unit Price Amount FOB
(4)	Fixed Head Disk or IC bulk		·.	
	(A) Cards	set	1 each	
	(B) Standard spare parts	set	1 each	
	SUB-TOTAL			
(5)	Floppy Disk Devices			
	(A) Cards	set	1 each	
	(B) Standard spare parts	set	1 each	
	(C) Floppy disk	sheet	10	
	SUB-TOTAL			
(6)	Trend Recorder			
	(A) Cards	set	1 each	
	(B) Pens	set	1 each	
	(C) Ink	set	2 each	
	(D) Chart	roll	40	
	SUB-TOTAL			
(7)	Hard Copy			
	(A) Cards	set	1	
	(B) Standard spare parts	set	1	en de la companya de
	(C) Ribbon	set	1	
	SUB-TOTAL			

Carried to Summary Sheets

# EXPENDABLES

#### Power Plant Equipment

	Item	Unit	Quantity	Unit Price Amount FOB
(1)	Nitrogen (N <sub>2</sub> ) gas (7 Nm <sup>3</sup> )	cylin- der	20	
(2)	Carbon dioxide (CO <sub>2</sub> ) gas (7 Nm <sup>3</sup> )	cylin- der	10	page of the Hollands
(3)	Standard gas for gas analizer		₽ <sup>‡</sup>	$\sqrt{1-\alpha} (r+s)^{2} = 1-\alpha (s)$
	(a) 4.5% $0_2$ in $N_2$ gas (2 $Nm^3$ )	cylin- der	20	
	(b) 4.5% $\rm H_2$ in $\rm N_2$ gas (2 $\rm Nm^3$ )	cylin- der	4	grande de la companya de la company La companya de la co
(4)	Hydrazine ( $N_2H_4$ ) as 100% $N_2H_4$	kg	100	
(5)	Phosphate ( $Na_3PO_4.12H_2O$ ) as	kg	100	
•	100% Na <sub>3</sub> PO <sub>4</sub> )			
(6)	Ammonia (NH <sub>3</sub> ) gas	cylin- der	10	
(7)	Sodium nitrate bactericide (for cooling water system)	kg	100	engalak bilan 1946. Masarah dan 1946 sa
(8)	Dry chemical	kg	1,800	
(9)	Potassium hydroxide (KOH 25% weight)	kg	60	geografisk en en en en Geografisk en en en en
(10)	High molecular coagulant for waste water treatment system	kg	100	general (n. 1865). Marija da Arija

Item	Unit	Quantity	Unit Price FOB	Amount
11) Coagulant for waste water treatment system	lit.	800		
12) PAC (Poly Aluminum Chloride) of main surface condenser	lit.	1,000		
13) Ferric Chloride (FeCl <sub>3</sub> )	lit.	1,000		
14) Propane gas (C <sub>3</sub> H <sub>8</sub> )	Cylin- der	: * <b>2</b>		
15) Acetylene gas (C <sub>2</sub> H <sub>2</sub> )	Cylin- der	<b>2</b> 000		
16) Oxygen gas (0 <sub>2</sub> )	Cylin- der	2		
17) Laughing gas (N <sub>2</sub> 0)	Cylin- der	3		ta ek sass
18) Sulfuric acid (for slica analyzer)	kg	10		
19) Ammonium molybodate (for slica analyzer)	kg	10		a ta
20) Tartaric acid (for slica analyzer)	kg	20		
21) 1-amino 2-napthol 4-sulphonic acid	kg	<b>5</b> ::		
(for slica analyzer) 22) Sodium hydrogensulfate	kg	10		
(for slica analyzer)		5		
23) Sodium sulfate anhydrous (for silica analyzer)	kg	<b>3</b>		

# MANDATORY SPARE PARTS

# 2. Building Service Facility

		Item		Unit	Quantity	Unit Price Amount FOB
		DITIONING FILATION SYSTEM		. :		
.(1)	Air	Cooled Chiller	Unit	* *		
	(A)	Fuse	4	%	200 each size	and the state of t
	(B)	Pilot lamp		%	200 each size	general en
	(C)	Packing	official of the second of the	%	200	
		SUB-TOTAL				
		Handling Unit Bearing for fan		%	100 each	
				Ġ.	unit 250	
	(8)	V-belt for fan		%	200 each unit	
	(C)	Filter element filter	for Pre-	%	200 each unit	
	(D)	Grease		drum	1	
		SUB-TOTAL	<del>-</del>			

Item	Unit	Quantity	Unit Price FOB	Amount
(3) Fan				
(A) Bearing	%	200 each unit		
(B) V-belt	%	200 each unit	erio Majorie da Liberari	
SUB-TOTAL				
(4) Pump			···	
(A) Gland packing	%	400 each unit		
(B) Liner ring	<b>%</b>	200 each unit		·
(C) Rubber packing	%	200		
(D) Water seal ring	%	200		
(E) Oil seal	%	100		
SUB-TOTAL				
(5) Air Cooled Packaged Air Conditioner			1 11 11 11 11 11 11 11 11 11 11 11 11 1	
(A) V-belt	%	200 each unit		(4)
(B) Bearing	%	200 each unit		
(C) Fuse	%	200		
(D) Prefilter		200		
(E) Packing	%	200 each unit		
SUB-TOTAL				

20 to 2	este de la companya d	Item		. A . A .	Unit	Quantity	Unit Price FOB	e Amount
(6)	Filter							
	(A) Filt	er elemen	ıt		%	200	•	
	(B) Lamp	•			%	100	)	•
	(C) Fuse	<b>)</b>		21	%	200	)	
	(D) Rela	iy			%	100	)	s .
		SUB-TOTA	\L				e Mae ja	
(7)	Tank	: 1	, i - 15.					
	(A) Pack	king for m	anhole	<u>'</u>	%	200	<b>)</b>	·
		SUB-TOT/	\L		,			44 1
(8)	Piping							
		nd packing			%	200	0	
		valve (ea e, kind)		ing,				
		SUB-TOTA	AL.	.,			1	

Total of Air conditioning and Ventilation system

Item	Unit	Quantity Unit Price Amount FOB
WATER SUPPLY, SEWAGE AND SANITARY SYSTEM		
(1) Instantaneous Electric Water Heater	·	
(A) Thermostat	%	200
(B) Operation fuse	%	200
(C) Heater	%	200
(D) Lamp	%	200 each
SUB-TOTAL		
(2) Hot Water Storage Heater	-	
(A) Thermostat	%	200 each
(B) Fuse	*	<b>200</b> 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1
(C) Float	%	100
(D) Heater	%	100
(E) Packing	%	200 each
(F) Lamp	%	100 each
SUB-TOTAL		
(3) Waste Water Pump		
(A) Mechanical Seal	%	200
(B) Bearing	%	100
SUB-TOTAL		

2 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Item	Unit	Quan	tity	Unit Price FOB	Amount
(4) Pip	ing	<u>,</u>				
(A)	Grand packing and gasket for valve (each rating, size, kind)	%		200		
	SUB-TOTAL					· · · · · · · · · · · · · · · · · · ·
(5) Sep	tic tank					
(A)	Packing for each pump	%	\$4.5°	200		
(B)	Bearing for blower	%		200		
(C)	Disinfectant	%		200	100%	

Total of Water supply, sewage and sanitary system

Item	Unit	Quantity	Unit Price FOB	Amount
8. SECONDARY ELECTRICAL AND AUTOMATIC CONTROL SYSTEM			V2 - 2	- 1
(1) Panel (each panel)				
(A) Lamp for operation and annunciator	· %	400		
(B) Relay	%	200 eacl	a Seed See	
(C) Control switch and push button	%.	100	en de la companya de La companya de la co	
(D) Fuse (each)	%	200 eacl		
SUB-TOTAL				
TOTAL OF BUILDING SERVICE	E FACILIT	Y		

Carried Summary Sheets

# TENDERER'S RECOMMENDED SPARE PARTS (For three (3) years)

#### 1. Power Plant Equipment

	·	Curre	ncy in Count	ry Origin
Item	: Unit	Quantity	Unit Price FOB	Amount

# TENDERER'S RECOMMENDED TOOL AND TESTING EQUIPMENT

# 1. Power Plant Equipment

	Currency in Country Or			
Item	Unit	Quantity	Unit Price FOB	Amount

# TENDERER'S RECOMMENDED SPARE PART (For three (3) years)

#### 2. Building Service Facility

		Curre	ncy in Country Origin
 Item	Unit	Quantity	Unit Price Amount FOB

#### TENDERER'S RECOMMENDED TOOL AND TESTING EQUIPMENT

#### 2. Building Service Facility

		Curre	ncy in Count	ry Origin
Item	Unit	Quantity	Unit Price FOB	Amount

#### SCHEDULE OF PRICE

FOR

RECOMMENDED SPARE PARTS

# SCHEDULE OF PRICES FOR TENDERER'S RECOMMENDED SPARE PARTS (For Five (5) Years)

			(Tenderer's (UNIT:	Name)
Item	Unit	Quantity	Unit Price	Amount

# APPENDIX K

(Tenderer	's	Na	me)

# FORM OF CERTIFICATES

<u>FOR</u>

# SOURCE & ORIGIN AND ELIGIBILITY

I, the undersigned, hereby certify that the goods	to be supplied are
produced in (name of eligible	source country).
I, the undersigned, further certify that to the b	est of my information
and belief, the portion imported from the non-eli	gible source countries
is less than thirty percent (30%) in accordance w	ith the following
formula:	
Imported CIF Price + Import Duty	x 100, and
Supplier's FOB Price (where applicable Exfactory	
I, the undersigned, hereby certify that	(name of company)
has been incorporated and registered in	(name of eligible
source country), and is controlled by nationals o	f the eligible source
countries.	
	For and on behalf of
	(Contractor's Name)
	Name :
	Position:
	(SEAL)

# APPENEDIX J

#### MANDATORY AND RECOMMENDED

#### SPARE PARTS AND EXPENDABLES

UNIT 2

#### MANDATORY SPARE PARTS

# 1. Power Plant Equipment

		Curre	ncy in Count	ry Origi
Item	Unit	Quantity	Unit Price FOB	Amount
. STEAM GENERATOR AND AUXILIARY EQUIPMENT	٠.			
.1 STEAM GENERATOR				
(1) Boiler and Furnace				
(A) Gasket for boiler and inspection door	%	200		
(B) Glass for boiler and furnace inspection holes	%	200		
(C) Gasket and packing for boiler and furnace access (manhole)	%	300		
(D) Tubes and backing rings	%	2 each size and each material		
SUB-TOTAL				
(2) Drum				
(A) Disk and ring pins of drum safety valves	%	100		
(B) Packing and gasket for drum manhole	%	300		
(C) Bolt, nut and washers for drum internals	%	10		

#### Currency in Country Origin

, t		Item Janes	Unit	Quantity Unit Price Amou
	(D)	Glass and gasket includ- ing mica for drum level gauge	%	500
	(E)	Lamp for level gauge	%	1 4/ <b>300</b> . 4 - 4 124 1 1 1 1
	(F)	Color screen for level gauge glass	%	200
	(G)	Valve packing	%	200 1 111 1111
		SUB-TOTAL		
(3)	Eco	nomizer		
	(A)	Tubes	%	2 each size
		SUB-TOTAL	······································	
(4)		erheater, Reheater and emperator		
	(A)	Disk of safety valves	%	100 ·
	(B)	Disk of power control valve (PCV)	%	200
	(C)	Disk of pilot valve of PCV	%	200
	(D)	Seal ring of PCV	%	200
	(E)	Plug seal ring of PCV	%	200
	(F)	Gasket for PCV	%	200
	(G)	Tubes	<b>%</b>	2 each size and each material

#### Currency in Country Origin

	era vis	Item	31	Unit	Quantity	Unit Price FOB	Amount
(5)	fra	ing, Brickwork ctory, Insulat ging		:			
	(A)	Casing (each	naterial)	%	5 each		
	(B)	Brickwork, reinsulation and		%	15 each	Same State	
	<del> </del>	SUB-TOTA	AL.	·····			.:
(6)	Pip	ing, Valves and	l Fitting		: '		
	(A)	Blow down value (complete)	ve	set	1		
	(B)	Drain valves a generator (SH Downcomer, etc	, RH, Econ,	%	50		
	(C)	Packing for divalves	rain and vent	%	30		
	(D)	Welding rods to be used for		%	30 each		
		SUB-TOT/	<b>NL</b>				
(7)	Air	Preheater					
	(A)	Cold end eleme	ents	%	100		
	(B)	Intermediate 1	layer element	%	50		
	(C)	Hot end elemen	nts	%	25		
	(D)	Post seal asso	embly	%	100		
	(E)	Radial seal as	ssembly	%	100	*. •	
	(F)	Circumferentia assembly	ıl seal	%	100		
	(G)	Soot blowing rair preheater	nozzle for	%	100		

	i in T	Item	Unit	Quantity	Unit Price FOB	Amount
	(H)	Washing nozzles for air preheater	%	100		j. 18.
	(I)	Oil seal and packing for oil pump	%	100		
	(J)	Gasket for manhole and inspection door	%	100		
	(K)	Glass for inspection door	%	100		
	(L)	Manometer	set	1		·
-	(M)	Motor bearing	set	1	ing the second s	· · · · · · ·
	(N)	Lamp for observation light	piece	3		
<del></del>	<del></del>	SUB-TOTAL				
(8)	Ste	am Coil Air Preheater				
	(A)	Fin tubes	%	30	Carango Assa	. *
:	(B)	Flange gasket	%	20		
<del></del>		SUB-TOTAL		<u> </u>	1 1 1	
(9)	Oil	Burner and Igniter		2		
	(A)	Fuel oil guns without tip	s %	50		
	(B)	Tips, burner plate, and tip nut for fuel oil guns (heavy fuel oil and diese	% l oil)	200 each		
	(C)	Igniter guns without tips	%	50		
	(D)	Tips, burner plate, and tip nut for igniter guns	%	200		
ž.	(E)	Packing and "O" ring for fuel oil guns	pieces	200		

(Tenderer's Name)

#### Currency in Country Origin

	Item	Unit	Quantity	Unit Price FOB	Amount
(F)	Packing and "O" ring for igniters guns	pieces	200		
(G)	Flexible hose or ball joint for fuel oil burner (each size)	%	30	Agents of a second seco	+ ;
(H)	Flexible hose for igniter (each size)	%	30		
(1)	Flame detector for fuel oil and igniter	%	50		· · · · · ·
(J)	Complete set of atomizer for main burners and igniters	%	100	er en	
. (К)	Gasket for access doors	%	100		
(L)	Glass for access doors	%	100		
(M)	Defuser cones	%	300		
(N)	Solenoid valves for igniter	%	50		: '
(0)	Spark plug	%	200		
(P)	Pilot box for igniter (complete set)	%	30		

SUB-TOTAL

	item	···· Unit	Quantity	Unit Price FOB	Amount
(10) Soo	t Blowing System	* : .			
· (A)	For boiler soot blower	2		te de la companya de	. 1
(	a) Complete soot blower set	set	2	1995年 1995年 - 1995年 1996年 - 1996年	
(	b) Head valves (complete set)	set	2		
(	c) Chain and chain pins or gear assembly	set	2		
. (	d) Gland packing	* %	200	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	* * *
(	e) Limit switch	%	40		
(B)	For air preheater soot blower				
(	a) Valve disc	%	100		
(	b) Valve spindle	%	100		
· · (	c) Glans packing	%	200		
(C)	For control panel				
(	a) Fuse and lamp	%	200		
(	b) Switch	%	20		
	SUB-TOTAL	· <del>! - iii</del>	i a .		
(11) Blo	w Down Tank				
(A)	Glass and gasket for level gauge	%	200	en jaron en La en la	
(B)	Manhole gasket	%	200		
	SUB-TOTAL				···

Item	Unit	Quantity	Unit Price Amount FOB
(12) Air, Flue Duct and Soot Hoppe	r		
(A) Gasket for the manhole	%	200	
(B) Bolts and nuts for manhole	%	200	a Santa an
(C) Packing for damper shaft	%	200	
SUB-TOTAL			
(13) Forced Draft Fan		· .	
(A) Bearing for fan	com- plete set	1	
SUB-TOTAL			
(14) Induced Draft Fan			
(A) Bearing for fan	com- plate set	1	
SUB-TOTAL			
(15) Gas Recirculation Fan  (A) Bearing for fan	com- plete	1 each	
	set	· .	<u> </u>
SUB-TOTAL			
(16) Heavy Fuel Oil, Warm-up Oil and Ignition Oil System			policy for a second sec
(A) Heavy fuel oil system			
(a) Heavy fuel oil heater gasket	. %	100	

	:	Item	Unit	Quantity	Unit Price FOB	Amount
	(b)	Tube of heavy fuel oil heater	%	5		
	(c)	Bearing for pump	com- plete set	1		. 19 - 1742
	(d)	Gland packing for pump	%	200		2
	(e)	Flexible hose for tank	set	1 each		
		arm-up oil and Ignition il System	I			
	(a)	Bearing for pump	com- plete set	1		
	(b)	Gland packing for pump	* * %	200		
	(c)	Flexible hose for tank	set	1 each		
		SUB-TOTAL			er i vila	
(17)		Detector and Flame ision Camera Cooling ystem		+ 112	er van en g	
	(A) F.	lexible hose (each size	.) %	20 each size		
		SUB-TOTAL			ar ja sad	
(18)	Pipin Gener	g System for Steam ator				
		land packing and gasket or valve	%	50 each size		
.*		ontrol valve diaphragm each size)	piece			
	(C) V	alve (each rating, size	) set	<b>2</b>		
		ipe and fitting (each ize and material)	piece	2		

SUB-TOTAL  19) Instrumentation  (A) Boiler control  (a) Pressure transmitters set 1 each  (b) Flow transmitters set 1 each  (c) Temperature set 1 each  (d) Level transmitters set 1 each  (e) EP, PE converter set 1 each  (f) Standard spare parts for operating modules and power sources  (g) Standard spare parts set 1 each  (h) Standard spare parts set 1 each  (ii) Standard spare parts set 1 each  (j) Standard spare parts set 1 each  (ii) Standard spare parts set 1 each  (j) Standard spare parts set 1 each  (j) Standard spare parts set 1 each  (k) Standard spare parts set 1 each  (j) Standard spare parts set 1 each  (k) Standard spare parts set 1 each	the est.	Item		Unit	Quantity	Unit Price Amount FOB
(A) Boiler control  (a) Pressure transmitters set 1 each  (b) Flow transmitters set 1 each  (c) Temperature set 1 each  (d) Level transmitters set 1 each  (e) EP, PE converter set 1 each  (f) Standard spare parts for operating modules and power sources  (g) Standard spare parts set 1 each  (h) Standard spare parts set 1 each  (i) Standard spare parts set 1 each  (ii) Standard spare parts set 1 each  (iv) Standard spare parts set 1 each	(E)	) Glass for sight	flow	set		
(A) Boiler control  (a) Pressure transmitters set 1 each  (b) Flow transmitters set 1 each  (c) Temperature set 1 each  (d) Level transmitters set 1 each  (e) EP, PE converter set 1 each  (f) Standard spare parts for operating modules and power sources  (g) Standard spare parts for selector stations  (h) Standard spare parts set 1 each  (i) Standard spare parts set 1 each  (j) Standard spare parts set 1 each  (i) Standard spare parts set 1 each  (j) Standard spare parts set 1 each  (k) Standard spare parts set 1 each		SUB-TOTAL				es este de
(a) Pressure transmitters set 1 each  (b) Flow transmitters set 1 each  (c) Temperature transmitters set 1 each  (d) Level transmitters set 1 each  (e) EP, PE converter set 1 each  (f) Standard spare parts for operating modules and power sources  (g) Standard spare parts for selector stations  (h) Standard spare parts set 1 each  (i) Standard spare parts set 1 each  (j) Standard spare parts set 1 each  (i) Standard spare parts set 1 each  (ii) Standard spare parts set 1 each  (iv) Standard spare parts set 1 each	19) Ins	strumentation				
(b) Flow transmitters set 1 each  (c) Temperature transmitters set 1 each  (d) Level transmitters set 1 each  (e) EP, PE converter set 1 each  (f) Standard spare parts for operating modules and power sources  (g) Standard spare parts for selector stations  (h) Standard spare parts for positioners  (i) Standard spare parts for control valves  (j) Standard spare parts for control drives  (k) Standard spare parts for indicators	(A)	) Boiler control				
(c) Temperature transmitters  (d) Level transmitters set 1 each  (e) EP, PE converter set 1 each  (f) Standard spare parts for operating modules and power sources  (g) Standard spare parts set 1 each  (h) Standard spare parts set 1 each  for positioners  (i) Standard spare parts set 1 each  for control valves  (j) Standard spare parts set 1 each  for control drives  (k) Standard spare parts set 1 each  for indicators	(	(a) Pressure trans	smitters	set	1 each	
transmitters  (d) Level transmitters set 1 each  (e) EP, PE converter set 1 each  (f) Standard spare parts for operating modules and power sources  (g) Standard spare parts for selector stations  (h) Standard spare parts set 1 each for positioners  (i) Standard spare parts set 1 each for control valves  (j) Standard spare parts set 1 each for control drives  (k) Standard spare parts set 1 each for indicators	(	(b) Flow transmit	ters	set	1 each	
<ul> <li>(e) EP, PE converter set 1 each</li> <li>(f) Standard spare parts for operating modules and power sources</li> <li>(g) Standard spare parts for selector stations</li> <li>(h) Standard spare parts for positioners</li> <li>(i) Standard spare parts for control valves</li> <li>(j) Standard spare parts for control drives</li> <li>(k) Standard spare parts set 1 each for control drives</li> <li>(k) Standard spare parts for control drives</li> </ul>	(			set	1 each	
(f) Standard spare parts set 1 each for operating modules and power sources  (g) Standard spare parts set 1 each for selector stations  (h) Standard spare parts set 1 each for positioners  (i) Standard spare parts set 1 each for control valves  (j) Standard spare parts set 1 each for control drives  (k) Standard spare parts set 1 each for indicators	•	(d) Level transmi	tters	set	1 each	
for operating modules and power sources  (g) Standard spare parts set 1 each for selector stations  (h) Standard spare parts set 1 each for positioners  (i) Standard spare parts set 1 each for control valves  (j) Standard spare parts set 1 each for control drives  (k) Standard spare parts set 1 each for indicators	(	(e) EP, PE convert	ter	set	1 each	er i visit i v
for selector stations  (h) Standard spare parts set 1 each for positioners  (i) Standard spare parts set 1 each for control valves  (j) Standard spare parts set 1 each for control drives  (k) Standard spare parts set 1 each for indicators		for operating	modules	set	1 each	
for positioners  (i) Standard spare parts set 1 each for control valves  (j) Standard spare parts set 1 each for control drives  (k) Standard spare parts set 1 each for indicators	(			set	1 each	
for control valves  (j) Standard spare parts set 1 each for control drives  (k) Standard spare parts set 1 each for indicators	+			set	1 each	
for control drives  (k) Standard spare parts set 1 each for indicators	(			set	1 each	
for indicators	(			set	1 each	er og er <del>ål</del> siden ål. Sål stræ
	(			set	1 each	na singapakan kesal Pengahan pengahan
(1) Standard spare parts set 1 each for recorders	• (		e parts	set		

· ;	Item	Unit	Quantity	Unit Price FOB	Amount
(m)	Standard spare parts for flue gas analyzers	set	# <b>1</b>		:
(n)	Lamps	%	200		
(B) B	urner control				
 (a)	Standard spare parts for relay, operating modules, power sources	set	1 each		
(b)	Pilot lamps	%	200		** ***
(c)	Indication lamps	%	200		
(d)	Fuses	. %	200		
(e)	Control switches	set	1 each		
(f)	Limit switches	set	1 each		
 0	ther instrument mounted n the BTG board and the uxiliary control panel				
(a)	Standard spare parts of recorders (lamp, fuse, pen, etc.), and indicators	set	2 each		
(b)	Chart and ink pad for recorder		each 2 years	. *	
(D) L	ocal control				
(a)	Standard spare parts for transmitters (pressure, temperature, flow, level)	set	1 each		
(b)	Standard spare parts for controllers (pressure, temperature, flow, level)	set	1 each		

## Currency in Country Origin

Item	Unit	Quantity	Unit Price Amount FOB
(c) Pressure switches	set	1 each	
(d) Control switches	set	1 each	
(e) Lamps for operation indication and annunciator	%	200	
SUB-TOTAL	· · · · · · · · · · · · · · · · · · ·		
TOTAL OF STEAM GENERATOR	·	<del></del>	

Carried to Summary Sheets

		Item	4	Unit	Quantity	Unit Price FOB	Amount
1.2	STEAM EQUIP	GENERATOR AUXIL	JARY				
(1)	Steam	Converter Syste	em		·		
		Gasket for steam convertor and st		%	100		
		converter drain			4. · · · · · · · · · · · · · · · · · · ·	en de la companya de La companya de la co	
		Bearings for ste converter feedwa pump		com- plate set	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	artista en la	•:
	(C)	Control valve di	aphragm	piece	each		·
	(D)	Spring for safet and relief valve		set	each 1		
		SUB-TOTAL					y
(2)	Instr	ument Air System	n.	- <del>'</del> -			
	(A) W	rist-pin bushing	<u>,                                    </u>	set	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
		air of crank pir hells	n bearing	set	1		
		air of connecting olts and nuts	ng rod	set	1		
		omplete valve as or cylinder	ssembly	set	2		
	(E) P	iston ring		set	5		
	(F) F	acking ring	•	set	1		
	(G) G	asket for "O" ri	ing	set	1		
	(H) V	-belt		set	1		
	(I) F	ilter cartridge	to and growing the second	%	50	eveleting a 	and an arms
		land packing and or valve	l gasket	%	each 50	e de arte y 1.50 Grand Santa Santa Grand Santa S	

Item	Unit	Quantity	Unit Price Amount FOB
(3) Service Air System			
(A) Wrist-pin bushing	set	1	
(B) Pair of crank pin bearing shells	set	1	
(C) Pair of connecting rod bolts and nuts	set	1	
(D) Wrist-pin retaining rings	com- plete set	1	
(E) Scraper rings	com- plete set	1	
(F) Bearing for compressor	com- plete set	1	
(G) Complete valve assembly for LP and HP cylinder	set	1	
(H) Piston rings	com- plete set	each 1	
(I) Packing rings, gasket	set	each 1	
(J) Gland packing and gasket for valve	%	50	
SUB-TOTAL			
(4) Chemical Feed System			
(A) Plunger for pumps	set	each 1	
(B) Gland packings	set	each 1	
(C) Ball valves	set	each 1	

#### Currency in Country Origin

		Item	Unit	Quantity	Unit Price Amount FOB
	(D)	Valve seat	set	each 1	
	(E)	Gasket	set	each 1	
	(F)	Valve packing and gasket	%	each 50	
	(G)	Standard spare parts for recorder (include, ink pad, ink, charts, fuses)	ē.	1 year	and the second of the second o
	(li)	Level switch	set	1	
,-		SUB-TOTAL			
(5)	Sam	pling Rack System			
	(A)	KC1	kg	2	
	(B)	15A SUS 304 pipe	m	5	
	(C)	Valve packing	%	* <b>50</b> / * *	
		Thermometer	set	5	
	(E)	Pressure reducer	set	<b>2</b>	
	(F)	Ion exchanger resin (cation)	%	100	n de la companya de La companya de la co
•	(G)	Standard spare parts for recorder (include, ink pad, ink, charts, fuses)		1 year	
	(H)	Standard spare part for each analyzers and sensors	set	1	anderson († 1865) 1945 - Amerikaanse († 1865) 1865 - Amerikaanse († 1865)
	(I)	Glass for sight flow	%	100	
		SUB-TOTAL .	<u>-</u> -		

Carried to Summary Sheets

Item	Unit	Quantity Unit Price Amount FOB	
2. STEAM TURBINE AND AUXILIARY EQUIPMENT			
2.1 Steam Turbine			
(1) Steam Turbine			
(A) Turbine bearing assembly (HP, IP and LP)	set	1 each	
(B) Thrust bearing (complete)	set	1	(
(C) Complete set of thrust pad	set		
(D) Gland steam packing (HP, IP and LP)	set <sub>.</sub>	1 each	
(E) Atmospheric relief diaphragm	piece	<b>5</b>	
(F) Casing bolt, nut and washer	set	1 each size	-
(G) Raw material of casing bolts and nuts (complete)	%	10	
(H) Control valve (sleeve, gasket, valve stem, pin	piece	1 each	_
of crosshead, spring, etc.)		and the state of the	(
(I) Main stop valve (bypass valve)	piece		
(J) Main stop valve (gasket of head cover)	piece	${f 4}$ . The state of the state of the state of ${f 4}$ . The state of the state of the state of ${f 4}$	-
(K) Combined reheat valve (gasket)	piece	1 each	
(L) Filter element for oil conditioner	unit	$(p_1,p_2) = \{p_1,\dots,p_n\}$ $\{p_1,\dots,p_n\}$ $\{p_1,\dots,p_n\}$ $\{p_1,\dots,p_n\}$ $\{p_1,\dots,p_n\}$ $\{p_1,\dots,p_n\}$ $\{p_1,\dots,p_n\}$	
(M) Oil cooler packing	piece	2 each	

· · · · · · · · · · · · · · · · · · ·		Itém	Unit	Quantity Unit Pr	rice Amount
	(N)	Gauge glass for main oil tank, oil conditioner and oil storage tank	piece	4 each	
·	(0)	Bearing for gland steam exhaust blower	set	2	4, *
	(P)	Gasket for steam seal regulator	piece	each 4	
	(Q)	Gland steam condenser packing	piece	each 6	
	(R)	Expansion joint for cross over piping	piece	1	
	(S)	Turbine bypass valve inner parts gasket	set	1	
		SUB-TOTAL			
(2)	Pip.	ing and Valves			
	(A)	Gland packing and gasket for valve (each rating, size, kind)	%	50 each	
	(B)	Control valve diaphragm (each size)	piece	2 each	
	(C)	Valve over 25A (more than 35kg/cm <sup>2</sup> g rating, size kind)	set	1 each	•
	(D)	Valve up to 25A	set	2	;
	(E)	Pipe and fitting (each size and material)	piece	1 each	
		SUB-TOTAL			
(3)	(A)	trumentation TSI ) Vibration detector	set	2	

# Currency in Country Origin

	Item	Unit	Quantity	Unit Price FOB	Amount
	Standard spare parts for recorder (lamp, fuse, pen, etc.)	set	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	en en en en gemeen. Die en	
(c)	Chart, ink pad for recorder		2 years		
(d)	Operating modules	set	1 each		
	nstrument mounted on IG board		; I		eta eg
(a)	Standard spare parts for recorder (lamp, fuse, pen, etc.) and indicator	set	1		
(b)	Chart, ink pad for recorder		2 years		
(C) El	IC		. *		
(a)	Standard spare parts for transmitter	set	1 each		
(b)	Standard spare parts for actuating device	set	1 each		
(e)	Pressure switch	set	1 each		
(d)	Limit switch	set	1 each		
(e)	Operating module	set	1 each		
<b>(f)</b>	Lamps	%	200 each, with 10 pcs		
			minimum		

SUB-TOTAL

TOTAL OF STEAM TURBINE

Carried to Summary Sheets

	Item	Unit	Quantity	Unit Price Amount FOB
2.2 Steam Equip	Turbine Auxiliary ment			
(1) Sur	face Condenser			
(A)	Condenser tube	%	5	en e
(B)	Tube plug	piece	150	v <u>.</u>
(C)	Packing for condenser water box manhole	%	200 each	er deue de la composición del composición de la composición de la composición del composición de la co
(D)	Packing for condenser water box cover	%	200 each	en e
(E)	Electrode for cathodic protection	%	50	er de la companya de La companya de la co
(F)	Gauge glass	%	400	
(G)	Brush for condenser tube	piece	1,000	
(H)	Gun for condenser tube cleaning	set	2	en e
(1)	Pump for leak detector	set	1	
	SUB-TOTAL			
(2) A:	ir Extraction Equipment			
(A)	Air extraction vacuum pump			
	Bearing for pump	com- plate	1	
	Control valve diaphragm	set piece	each	er en et skriver en
	SUB-TOTAL	P1000		

e ty	-	Item	Unit	Quantity	Unit Price FOB	Amount
(2A)	Air	Ejector			ŧ	
	(A)	Steam jet air ejector condenser				
		Packing	piece	4	A Maria	
		Ejector nozzle (first and second)	set	1 each		
	(B)	Starting air ejector nozzle	set	1	to kind of sale	·
		SUB-TOTAL				
(3)		ning Vacuum Equipment Bearing for pump and motor	set	1		
	(B)	Gland packing	%	100	te de esta	
		SUB-TOTAL			The state of the state of the	
(4)	Circ	culating Water Pump				
	(A)	Cutless bearing or proved design material and motor bearing	set	4 each		
	(B)	Casing ring	set	2		
	(C)	Packing, sleeve, etc.	set	2 each	· ·	:
	(D)	Cathodic protection plate (aluminium)	%	100		
	(E)	Impeller	set	1	:	
		SUB-TOTAL	<del>,-</del>			

·			
Item	Unit	Quantity	Unit Price Amount FOB
(5) Condensate Pump (A) Bearing for pump and motor	set	1	
(B) Gland packing	%	200	
(C) Wearing ring	%	100	the state of the state of
(D) Rotor complete (balance	d) set	1	
SUB-TOTAL			
(6) Feedwater Heaters			
(A) Gasket	%	100 each	y
(B) Gauge glass	%	200 each	
(C) Relief valve spring assembly	set	1 each	
(D) Bearing for pump and motor of drain pump	set	1 each	
(E) Packing, gasket and sleeve of drain pump	%	200 each	
SUB-TOTAL			
(7) Deaerator			Head of the second
(A) Packing for manhole	%	400	
(B) Gauge glass	%	100	
(C) Spray valve	set	. ii <b>2</b>	
SUB-TOTAL			

Item	Unit	Quantity	Unit Price Amount FOB	
(8) Boiler Feed Pump				
(A) Bearing and seal for pump	comp- lete set	. <b>4</b>	er e	
(B) Gasket, packing, etc.	%	400 each		
(C) Rotor complete (balanced)	set	1		
SUB-TOTAL				
(9) Bearing Cooling Water Heat Exchanger		-		
(A) Tube	%.	5		
(B) Packing for manhole	piece	2		
(C) Cathodic protection plate	%	200		
SUB-TOTAL		1.		
(10) Bearing Cooling Water Pump				
(A) Bearing	set	1		
(B) Gland packing	%	100		
(C) Gasket	%	100		
(D) Bearing for primary cooling water booster	set	1.		
pump (E) Gland packing, gasket, etc. for primary cooling water booster pump	%	100 each		

Item (1994)	Unit	Quantity Unit Price Amount FOB
(11) Chemical Injection System for Bearing Cooling Water		
(A) Chemical injection pump		
(a) Bearing	set	$oldsymbol{1}{oldsymbol{1}} oldsymbol{1}{oldsymbol{1}} oldsymbol{1}{oldsymbol{1}} oldsymbol{1}{oldsymbol{1}} oldsymbol{1}{oldsymbol{1}} oldsymbol{1}{oldsymbol{1}} oldsymbol{1} oldsymbol{1}{oldsymbol{1}} oldsymbol{1} oldsymbol{1}{oldsymbol{1}} oldsymbol{1}{oldsymbol{1}} oldsymbol{1}{oldsymbol{1}} oldsymbol{1}{oldsymbol{1}} oldsymbol{1} oldsymbol{1}{oldsymbol{1}} oldsymbol{1} oldsymbol{1}{oldsymbol{1}} oldsymbol{1} old$
(b) Gland packing	%	200 (2004)
(c) Diaphragm	set	1
(B) Valve	•	en de la companya de La companya de la co
(a) Diaphragm	set	<b>2</b>
(b) Gland packing, gasket, O ring, etc.	* %	200 each
(C) Gauge glass for chemical tank	set	· 2 · 1 · 1 · 11 · 12 · 14 · 14
(D) Indication lamp	%	400 each
SUB-TOTAL	······································	
(12) Make-up Water Transfer Pump	<del></del>	
(A) Bearing	set	1
(B) Gland packing	%	100
(C) Gasket	%	100
SUB-TOTAL	<u> </u>	

-	Item	Unit	Quantity	Unit Price Amount FOB
(13) M	ake-up Water Tank			
(	A) Packing for manhole	%	100	
(	B) Diaphragm for level control valve	set	2	
(	C) Gland packing, gasket, etc. for valve	set	2	
(	D) Standard spare parts for level transmitter	set	2	
(	E) Inner floating seal material	set	1	
<del></del>	SUB-TOTAL			:
(14) T	urbine Clean Drain Tank	·		
(	A) Condensate return pump			
	Bearing for pump	com- plate set	<b>1</b>	
(	B) Control valve diaphragm	piece	each	
	SUB-TOTAL		· · · · · · · · · · · · · · · · · · ·	
(15) P	iping and Valves			
·.	A) Gland packing and gasket for valve (each rating, size, kind)	%	50 each	
(1	B) Control valve diaphragm (each size)	piece	2 each	
((	C) Valve over 25A (more than 35kg/cm <sup>2</sup> g rating, size kind)	set	1 each	
	D) Valve up to 25A	set	2	

# Currency in Country Origin

1.1		Item - Tem	Unit	Quantity	Unit Price FOB	Amount
	(E)	Pipe and fitting (each size and material)	piece	1 each		
٠.		Topping valve (manual feedwater valve) (complete)	set	<b>1</b>		
		BFP minimum flow orifice	set	2		."
		BFP minimum flow control valve inner valve	set	1		
	(I)	Glass for sight flow	set	3 each size		
	(J)	Cathodic protection plate for C.W.piping (Aluminium)	<b>%</b>	100		
	<u></u>	SUB-TOTAL				
(16)	Ins	trument				
	(A)	Thermocouples for turbine bearings	set	1 each		
		Thermometers for turbine bearings	set	2 each		
		· · · · · · · · · · · · · · · · · · ·	set set	2 each		
	(B)	bearings Standard spare parts for transmitter (pressure, temperature,				
		bearings  Standard spare parts for transmitter (pressure, temperature, flow, level)  Standard spare parts for controllers (pressure, tempera-	set	1 each		

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#### Currency in Country Origin

1 28 Z	Item	Unit	Quantity Unit Price Amount FOB
(E)	Lamps for operation indicator and annunciator	: %	200, with 10 pcs minimum
	SUB-TOTAL	<del>:</del>	
TO'	TAL OF STEAM TURBINE AUXI	LIARY	

Carried to Summary Sheets

(Tenderer's Name) Currency in Country Origin

571	Item	Unit	Quantity Unit Price Amoun FOB	t
	CILLARY SYSTEM AND COMMON XILIARY EQUIPMENT			
(1	) Turbine Room Overhead Crane		er i generale di Poste de la compa	
	(A) Brush and holder for motor	%	100 each	
	(B) Brake lining for main and auxiliary hoist	%	each constant and the constant of the constant	
٠.	(C) Coil for magnetic brake	%	100	
٠	(D) Main contactor tip for controller	%	100	
	(E) Wire rope (for main hoist and auxiliary hoist)	* %	100 each was a market was	
	(F) Fuse	%	100 - 100 - 134	
	(G) Indicator lamp	%	200 	
	SUB-TOTAL			
(2)	Fire Protection System		The State of the S	
	(A) Diesel driven emergency fresh water fire pump		Andrew Control of the	
	(a) Piston ring for engine	set	1 comp- lete	•
	(b) 0-ring for engine	set	1 comp- lete	
	(c) Fuel injection valve	piece		
	(d) Inlet valve assembly	set	2 comp-	
	(e) Exhaust valve assembly	set	2 comp- lete	
	(f) Bearing for pump	set	1 comp-	

Item	Unit	Quantity	Unit Price FOB	Amount
(g) Gland packing for pump	set	1		
(h) Shaft sleeve for pump	set	1.		3 4
(i) Gauge glass for fuel oil tank	set	1	9 37 12	٠
(B) Motor driven emergency fresh water fire pump				
(a) Bearing for pump	set .	1 comp- lete		
(b) Gland packing for pump	set	1		
(c) Shaft sleeve for pump	set	1 :	to the second of	. :
(C) Fire water pump		·		
(a) Bearing for pump	set	1 comp- lete	11.7	7.3
(b) Gland packing for pump	set	1		
(c) Shaft sleeve for pump	set	1 .		
(D) Air foam concentrate injection pump and diesel engine				
(a) Piston ring for engine	set	1 comp- lete		
(b) 0-ring for engine	set	1 comp- lete		
(c) Fuel injection valve	set	2 comp- lete		
(d) Inlet valve assembly .	set	1 comp- lete		
(e) Exhaust valve assembly	set	1 comp- lete		;);
(f) Bearing for pump and diesel engine	set	1 comp-	. Heldelije	

September 1994	Item	Unit	Quantity	Unit Price FOB	Amount
(g)	Gland packing for pump	set	- 1		. 1 .
(h)	Gauge glass for fuel oil tank	set	<b>1</b>		
(E) P	iping and valve				
(a)	Gland packing, gasket, etc. for valve	, set	1 each size		
(b)	Solenoid valve	set	1 comp- lete		
p	ontrol panel, fire rotection panel and nstrument				
(a)	Lamp for operation and annunciator	1 %	50		
(b)	Pressure switch	set	1		
(c)	Relay	set	1 each		
(d)	Transmitter	set	1 each		
(e)	Control switch and push button	set	1 each		
	SUB-TOTAL				:
(3) Fuel 0	il Piping				
(a) Gla	nd packing for valve	set	1 each size		÷
(b) Val	ve	set	1 each		

(Tenderer's Name)

Item	Unit	Quantity	Unit Price FOB	Amount
(4) Drainage and Waste Water Treatment System				
(A) Bearing for all pumps and blowers	set	1 each size		· . •
(B) Gland packing for all pumps	set	1 each size		
(C) Diaphragm for control valve	set	1 each size	ant tagent	
(D) Diaphragm for chemical feed pumps	set	1 each size		
(E) Gland packing, gasket, O-ring, etc. for valve	set	1 each size		
(F) Gauge glass for chemical tank	set	1 each		
(G) Lamp for operation and annunciator	%	50		
(H) Relays	set	1 each		
(I) Control switch	set	1		i
(J) Solenoid valve	set	1		
(K) Recording chart, pens, ink, etc.	year	1		
(L) KCl for pH meter	kg	1		
(M) Standard spare parts for analyzer	set	1		
(N) Fuse	%	200		
(O) pH Electrode	piece	5 each		
SUB-TOTAL				·

	Item	Unit	Quantity	Unit Price Amount FOB
(5) Chlor	rination System			St. Committee
(A)	Bearing and gland packing for all pumps	set	each 1	
(B)	Gland packing, gasket, etc. for valve	set	1 each	ter i de la companya
(C).	Inner parts for straine	r set	1,00	Additional Annual Control of the Con
(D)	Fuse	%	100	
(E)	Lamp for operation and annunciator	%	100	
	Gauge glass for injection flow meter	set	2	
	Pressure switch and flow switch	set	1 each	
(H)	Relay	set	1 each	
(1)	Electrode	set	2	
<b>(</b> J)	Rectifire element	set	1	
(K)	Solenoid valve	piece	5 each size	
<del></del>	SUB-TOTAL		<u></u>	
(6) Yard	Instrument Air System			
(A)	Wrist-pin busing	set	1	
(B)	Pair of crank pin bearing shells	set	. <b>1</b>	
	Pair of connecting rod bolts and nuts	set	1	
(D)	Complete valve assembly for cylinder	set	1	
(E)	Piston ring	set	1	

## Currency in Country Origin

Item	Unit	Quantity	Unit Price FOB	Amount
(F) Packing ring	set	1		
(G) Gasket and O-ring	set	1		
(H) V-belt	set	1		14
(I) Filter cartridge	%	50		
(J) Gland packing and gasket for valve	·· %	50		
SUB-TOTAL				
TOTAL OF COMMON AUXILIARY	EQUIPME	NT		

Carried to Summary Sheets

	ergyen i Ni Norwe	Item	Unit	Quantity	Unit Price Amount FOB
4.	GENERATOR EQUIPMENT	AND ELECTRICAL	F ( )		
	(1) Commo	n Parts		.1	
	(A) P	anel and board			
	(a)	Indicating lamp (including annunciato lamp)	% or	200 each type	
	(b)	Lamp lens and globe	%	100 each type	
	(c)	Lamp socket with resistance or transformer	set	50 each type	grade a Mercada
	(d)	Main protective relay (except over current relay)	y set	1 each type	
	(e)	Over current relay	set	3 each type	e de la companya de La companya de la co
	(f)	Auxiliary relay (including time relay	set y)	20 each type	
	(g)	Control switches and changeover switches	set	5 each type	
	(h)	Push button with indication lamp (Series II)	%	50 each	
<i>:</i> .		Push buttons	set	10 each type	
	(i)	Recording charts, per and ink	as	each type for Five (5) year	s. Tyra erwyd o'r c
	<b>(</b> [,	Closing and tripping coil for VCB and ACB	set	5 each type	
		Enclosed fuses	%	200 each type	

(Tenderer's Name)

Item	Unit	Quantity	Unit Price Amount FOB
(k) Molded type ACB	set	10 each type	
(1) Magnetic contactor	set	10 each type	
(m) Thermal relay	set	10 each type	
(n) Control transformer in control center	set	3 each type	
(B) Motor			
(a) Bearing	<b>%</b>	200 all of motors	
(b) Brush of DC motor	%	200 each	in the second se
(C) Current transformer	set	2 each class ratio	egypter 40 a
(D) Potential transformer	set	1 each class ratio	
SUB-TOTAL	· · · · · · · · · · · · · · · · · · ·		
(2) Special Parts  (A) Generator		t iii t art ii	
(a) Generator bushing	piece	1	
(b) Vibration detector	piece		
(c) Packing, gasket, packing compound	%	400	