

PRICE FORMAT - FOR INDIAN BIDDERS																
NAME OF PROJECT:		2 x 660 MW Ennore SEZ STPP														
NAME OF PACKAGE:		HYDROGEN GENERATION PLANT														
TENDER ENQUIRY NO.		PE/PG/EN1/E-5595/2017														
TECHNICAL SPECIFICATION:		PE-TS-412-168-A001				SUPPLY				SERVICES			GRAND TOTAL			
S. No.	DESCRIPTION					UNIT	QTY	TOTAL EX WORKS PRICE (INR)	Excise Duty@.....% (INR)	CST @% Against C form & E1/E2 or VAT @.....% .Whichever is applicable (INR)	FREIGHT CHARGES INCLUDING SERVICE TAX) @% OF TOTAL EX WORKS (INR)	TOTAL F.O.R SITE PRICE (INR)	TOTAL SERVICES CHARGES (INR)	SERVICE TAX @% (INR)	TOTAL SERVICES CHARGES INCLUDING SERVICE TAX (INR)	TOTAL LUMP SUM PRICE FOR SUPPLY AND SERVICES WITH TAXES AND DUTIES (INR)
1.0	Total lump sum firm price inclusive of all prevailing taxes, duties and other levies for SUPPLY PART, SERVICES PART & MANDATORY SPARES comprising of design (i.e. Preparation and submission of drawing/ documents including " As Built" drawings and O&M Manuals) , engineering, manufacture, fabrication, assembly, inspection / testing at vendor's & sub-vendor & works, painting, maintenance tools & tackles (as applicable), fill of lubricants & consumables , mandatory spares alongwith spares for erection ,startup and commissioning as required, forwarding, proper packing, shipment and delivery at site,unloading, handling, transportation & storage at site, in site transportation, assembly, minor civil works, erection & commissioning, trial run at site, preparation of drawings in 3D (if applicable) and carrying out performance guarantee /Functional / Demonstration tests at site (As applicable), obtaining CCOE approval, training of customer/ client O&M staff (if applicable) & final handing over to end customer in flawless condition for project and package specified above complete with all accessories for the total scope defined as per BHEL NIT & tender technical specification, amendment & agreements till placement of order.					Set	1	1	2	3	4	5=1+2+3+4	6	7	8=6+7	9=5+8
2.0	MAJOR BREAK-UP OF PRICES GIVEN IN 1.0 ABOVE.															
2.1	Total lump sum firm price inclusive of all prevailing taxes, duties and other levies for SUPPLY PART comprising of design (i.e. Preparation and submission of drawing/ documents including " As Built" drawings and O&M Manuals) , engineering, manufacture, fabrication, assembly, inspection / testing at vendor's & sub-vendor & works, painting, maintenance tools & tackles (as applicable),fill of lubricants & consumables, alongwith spares for erection ,startup and commissioning as required, forwarding, proper packing, shipment and delivery at site, preparation of drawings in 3D (if applicable),obtaining CCOE approval for project and package specified above complete with all accessories for the total scope defined as per BHEL NIT & tender technical specification, amendment & agreements till placement of order.					Set	1							NA		
2.2	Total lump sum firm price inclusive of all prevailing taxes, duties and other levies for the SERVICES PART comprising of unloading, handling, transportation & storage at site, in site transportation, assembly, minor civil works, erection & commissioning, final painting at site, trial run at site and carrying out performance guarantee /Functional / Demonstration tests at site (As applicable), training of customer/ client O&M staff (if applicable) & final handing over to end customer in flawless condition for project and package specified above complete with all accessories for the total scope defined as per BHEL NIT & tender technical specification, amendment & agreements till placement of order.					Set	1			NA						
2.3	Total lumpsum firm price inclusive of all prevailing taxes, duties and other levies for Mandatory spares comprising of manufacture, fabrication, assembly, inspection / testing (as applicable) at vendor's & sub-vendor & works, painting, forwarding, proper packing, shipment, delivery at site & guarantee as per tender technical specification above, amendment & agreements till placement of order. (Price break up of mandatory spares is to be furnished as per Annexure- I).					Lot	1							NA		
Note- 1. Evaluation shall be done one the basis of total lump sum prices for complete supply and services. Total price indicated above at Column (9) minus service tax quoted at Column (7) of 1.0 shall be considered for evaluation & hence must be completed in all respect for the full scope defined & considering all terms and conditions agreed. Further Swachth Bharat Cess i.e.0.5% of Service tax rate is not cenvatable. Hence, this 0.5% component of cess shall be considered for Evaluation. 2. Bidder to quote the Prices in figures along with corresponding words 3. Bidder shall furnish item-wise break-up of Imported items for which bidder wish to avail concessional duty in annexure-II.																
Particulars of bidder / authorised representative																
Name	Designation	Signature					Date	Company Seal								

PRICE FORMAT - FOR INDIAN BIDDERS ANNEXURE-I LIST OF MANDATORY SPARES									
NAME OF PROJECT:		2 x 660 MW Ennore SEZ STPP							
NAME OF PACKAGE:		HYDROGEN GENERATION PLANT							
TENDER ENQUIRY NO.		PE/PG/EN1/E-5595/2017							
TECHNICAL SPECIFICATION:		PE-TS-412-168-A001							
S. N.	DESCRIPTION	UNIT	QTY	UNIT EX- WORKS PRICE INCLUDING P&F (INR)	TOTAL EX- WORKS PRICE INCLUDING P&F (INR)	Excise Duty @ % (INR)	CST @% Against C-form & E1/E2 or VAT @.....% Whichever is applicable (INR)	FREIGHT CHARGES INCLUDING SERVICE TAX) @.....% OF TOTAL EX-WORKS (INR)	TOTAL F.O.R SITE PRICE (INR)
				1	2	3	4	5	6=2+3+4+5
A	MECHANICAL								
1	Rectifier diodes	Nos.	20% of total quantity.						
2	Rectifier fuse	Nos.	20% of total quantity.						
3	Rectifier cooling fan & motor bearings	set each type.	One (1) set each type.						
4	Connecting tube/hose between Manifold header and hydrogen cylinder.	Nos.	4						
5	Springs of suction and Discharge Valves	Set	1						
6	Gaskets of suction and discharge valve	Set	1						
7	Bearings of Drive end, non-drive end, intermediate and motor	Set	1						
8	V-Belts / Coupling	Set	1						
B	C&I								
1	Each type of lamps, PBs, ILPBs, fuse, MCB, MCCB used in the equipment/system.	Nos.	20 % of Installed of each type.						
2.0	Measuring Instruments								
2.1	Indicators, Recorders, Electrical Metering and Skid Mounted Instruments	Nos.	10 % of Installed of each type/Model or a minimum of one number for each model and type, whichever is more						
2.1.1	Indicators, recorders and meters offered from each model for the project. These instruments shall be supplied with three sets of blank scales.	Nos.	10% of total number of instruments for each Type and model or a minimum of one number for each model and type, whichever is more						
2.2	Temperature Elements and Thermowells								
1	Thermocouple/RTD elements	Nos.	10% spare for each type and length of element furnished with thermocouple/RTD assemblies, or a minimum of one number of each type & length, whichever is more.						
2	Thermowells	Nos.	10% for each type of temperature sensors or a minimum of one for each type, whichever is more						
2.3	Temperature,Transmitters and Electronic Transmitters (For Pressure, DP, Temp, Flow, Level), Temperature, Pressure Flow & Level Switch, safety switches, Gauges, meters, Transducer or any other instrument etc.		10% of total number of Instruments/transducers offered for each model and type for the project or a minimum of one number, whichever is more.						
2.4	I/O cards								
2.4.1	Analog input module	Nos.	10% of qty Installed of each category/model or at least 2 No. of each type/model (Whichever is more)						
2.4.2	Analog output module	Nos.	10% of qty Installed of each category/model or at least 2 No. of each type/model (Whichever is more)						
2.4.3	RTD/TC cards/modules	Nos.	10% of qty Installed of each category/model or at least 2 No. of each type/model (Whichever is more)						
2.4.4	Digital input module	Nos.	10% of qty Installed of each category/model or at least 2 No. of each type/model (Whichever is more)						
2.4.5	Digital output module	Nos.	10% of qty Installed of each category/model or at least 2 No. of each type/model (Whichever is more)						
2.5	All types of electronic modules, controllers, function modules, cards, terminal boards, relay boards, power supply cards etc for above mentioned system and other Control System/Sub- systems and any other type of PCB not covered above	Nos.	10% of qty Installed of each category/model or at least 2 No. of each type/model (Whichever is more)						
2.6	Electronic Cards/modules	Nos.	10% of number for each type or minimum of 2 number for each type whichever is high.						

PRICE FORMAT - FOR INDIAN BIDDERS ANNEXURE-I LIST OF MANDATORY SPARES									
NAME OF PROJECT:			2 x 660 MW Ennore SEZ STPP						
NAME OF PACKAGE:			HYDROGEN GENERATION PLANT						
TENDER ENQUIRY NO.			PE/PG/EN1/E-5595/2017						
TECHNICAL SPECIFICATION:			PE-TS-412-168-A001						
S. N.	DESCRIPTION	UNIT	QTY	UNIT EX- WORKS PRICE INCLUDING P&F (INR)	TOTAL EX- WORKS PRICE INCLUDING P&F (INR)	Excise Duty @ % (INR)	CST @% Against C-form & E1/E2 or VAT @.....% Whichever is applicable (INR)	FREIGHT CHARGES INCLUDING SERVICE TAX) @.....% OF TOTAL EX-WORKS (INR)	TOTAL F.O.R SITE PRICE (INR)
2.07	Auto/Manual stations, set-point/bias stations etc	Nos.	10% of the number of stations offered for the project from each type or a minimum of 2 number from each model, whichever is more.						
2.08	Control logic power supply fuses, MCB,MCCB, at each current rating required for the project.	Nos.	20% spare for each type/Model						
2.09	Electronic cards of each type used for each type of Server supplied with any control system	Nos.	Ten (10) percent or 2 no. (Whichever is more)						
2.10	Electric to pneumatic converters of each type utilized with automatic control system using pneumatic drives	Nos.	Ten (10) percent of each type or a minimum of one of each type, whichever is more.						
2.11	Control OWS	Nos.	Two No. of each type with complete accessories & monitors.						
2.12	Data highway cable with adequate connectors of each type	set	200 mts. each						
2.13	Prefab cable connectors	Nos.	10% or 5 nos (whichever is more) of each type of Installed						
2.14	Cubicle power supply power supply modules	Nos.	Ten (10) percent or 5 nos (whichever is more) of Installed of each type and rating						
2.15	Interposing/coupling relays.	Nos.	Ten (10) percent Installed of each type and rating						
2.16	Ethernet Switches, Routers & other communication hardware	Nos.	10% of qty Installed of each type or a minimum of 2 numbers from each						
2.17	Sensors with special cables, Power supply modules, Relay Interface Module, and electronic modules used for vibration monitoring system.	Nos.	10% of qty installed or Five no. (Whichever is more) of each type)						
2.18	RJ 45 connector with box of each type	Nos.	Twenty (20) percent or 2 no. (Whichever is more)						
2.19	Hooters, Buzzers, Cooling fans of each type.	Nos.	Ten (10) percent or 2 no. (Whichever is more)						
2.2	Interface cables	Set	2 sets of each type/model						
2.21	Power supply modules (AC to DC converters)	Nos.	10% or Five no. converters) (Whichever is more) of each type/model						
2.22	Motors								
2.22.1	Terminal plates	Nos.	10 Nos. each for small motors upto 3 kW & 4 Nos. each for more than 30 kW						
2.22.2	Heaters	Set	2 sets						
2.22.3	Greasing arrangements	Set	4 sets each type of motor						
2.22.4	Motor of each type and rating	Nos.	10% of the installed quantity or minimum 1 number whichever be higher						
2.22.5	Bearings (DE and NDE) for each type and rating of motor	Sets.	4 sets						
2.23	Relay based Control Panels								
2.23.1	LEDs for indicating lights	Nos.	10% of qty installed.						
2.23.2	Control circuit fuses/MCB/MCCB/Semiconductor Fuses	Nos.	300% of installed of each type, current rating.						
2.23.3	Relays modules & contactors.	Nos.	20% spare of qty Installed of each type & rating.						
2.24	Alarm Annunciation System								
2.24.1	logic modules, group card modules, power supply modules Hooters and any other electronic module.	Nos.	20% spares of each type installed						
2.24.2	un-engraved window boxes complete with LED etc.	Nos.	5% spares of each size installed						
2.24.3	LEDs for annunciation facia windows and LEDs box assemblies offered for the project	Nos.	20% of qty installed						
2.24.4	Annunciator hooter	Nos.	One (1) No. of each type						
2.25	Un-interrupted Power Supply System and DC Control Power Supply System								
2.25.1	As per Manufacturer's Recommendation for Three Years Continuous Operation or minimum quantities indicated as below (whichever is more)								
2.25.1.1	Fuses/Semiconductor Fuses	Nos.	300% of installed of each type, current rating with each panel /board						

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NAME OF PROJECT:			2 x 660 MW Ennore SEZ STPP						
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TENDER ENQUIRY NO.			PE/PG/EN1/E-5595/2017						
TECHNICAL SPECIFICATION:			PE-TS-412-168-A001						
S. N.	DESCRIPTION	UNIT	QTY	UNIT EX- WORKS PRICE INCLUDING P&F (INR)	TOTAL EX- WORKS PRICE INCLUDING P&F (INR)	Excise Duty @% (INR)	CST @% Against C-form & E1/E2 or VAT @.....% Whichever is applicable (INR)	FREIGHT CHARGES INCLUDING SERVICE TAX) @.....% OF TOTAL EX-WORKS (INR)	TOTAL F.O.R SITE PRICE (INR)
2.25.1.2	Miscellaneous parts for the power supplies such as SCRS transistors, resistors, diodes, light bulbs, static switches , blocking diodes etc	Nos.	Minimum of 10% or at least two (whichever is more) of each type						
2.25.1.3	Battery cells complete with contactor, cover plates etc	Nos.	10% of qty installed						
2.25.1.4	Electronic Modules like Rectifier control card, inverter control card, Driver card, IGBT Module, DC-DC converter card or any other card as listed in approved BOM for UPS, AC supply & 24 V DC supply etc.	Set	1 Set of each type & rating						
2.25.1.5	Miniature Circuit breakers for AC and DC supply.	Nos.	20 % of installed or 10 Nos of each type (which ever is more) for ACDB and DCDB.						
2.25.1.6	Digital/analog panel meters/indicators	Nos.	5% or 2 no. of each type (whichever is more)						
2.25.1.7	CT's, CVT's VT's chokes, AC/DC isolators, contactors, timers, relays.	Nos.	10% or 2 nos. of each type and rating (whichever is more)						
2.25.1.8	Cooling Fans in UPS & 24 V DC charger panels	Nos.	10% or 2 nos. of each type and rating (whichever is more)						
2.25.1.9	following accessory equipment for the battery shall be furnished :	Set	Two sets						
a)	Cell lifting facilities								
b)	Assembly wrenches								
c)	Vent plug hydrometer thermometer								
d)	Vent plug								
e)	Supply of corrosion-preventive grease.								
f)	10% spare cells.								
2.25.1.10	Electronic modules of each type & rating for UPS and DC control power supply system.	Set	One set of with each set consisting of at least one number of each type of						
2.25.1.11	MCCB for UPS & 24 V DC charger panels, ACDB, DCDB.	Nos.	20 % of installed or 5 Nos of each type (which ever is more)						
2.26	Erection hardware								
2.25.1	Instrument valves	Nos.	Ten (10) percent of each type & Size installed						
2.26.2	Condensate pots of each type & Size installed	Nos.	Ten (10) percent of total number of installed or four numbers whichever is higher .						
2.26.3	Manifold	Nos.	Ten (10) percent of each type & Size installed						
2.26.4	Fittings	Nos.	Ten (10) percent of each type & Size installed						
2.26.0	Mandatory Spares for Control valves, Power Cylinder, Control Dampers, Actuators and Accessories								
a)	Following spares shall be furnished for control valves, Power Cylinder, Control Dampers as applicable.								
b)	One set of spare control valve stem packing for each control valve.								
c)	Two moulded rubber diaphragms for each control valve.								
d)	One sets of each of O-rings and rubber gaskets for each control valve.								
e)	100 percent qty. of lubricants for gaskets for each control valve on one year consumption basis.								
f)	2 sets of limit switches and 1 set of valve positioner for each control valve.								
g)	20 percent of position transmitter (4-20mA) for total qty. of control valve.								
h)	One (1) set of valve trims (such as plug, stem, seat ring /cage, guide bushing, stem lock pin, packing retaining ring, etc) for each control valve.								
i)	One completes actuator of each type or min 10% for each type and size whichever is more.								
j)	20 percent of Solenoid valves or min 2 no. of each type for total qty. of control valves.								
k)	20% of I to P converters, Pressure regulators.								
2.27.0	Mandatory spares not covered above								

PRICE FORMAT - FOR INDIAN BIDDERS									
ANNEXURE-I									
LIST OF MANDATORY SPARES									
NAME OF PROJECT:		2 x 660 MW Ennore SEZ STPP							
NAME OF PACKAGE:		HYDROGEN GENERATION PLANT							
TENDER ENQUIRY NO.		PE/PG/EN1/E-5595/2017							
TECHNICAL SPECIFICATION:		PE-TS-412-168-A001							
S. N.	DESCRIPTION	UNIT	QTY	UNIT EX- WORKS PRICE INCLUDING P&F (INR)	TOTAL EX- WORKS PRICE INCLUDING P&F (INR)	Excise Duty @ % (INR)	CST @% Against C-form & E1/E2 or VAT @.....% Whichever is applicable (INR)	FREIGHT CHARGES INCLUDING SERVICE TAX) @% OF TOTAL EX-WORKS (INR)	TOTAL F.O.R SITE PRICE (INR)
a)	Bidder to supply 10% or 1 no. (whichever is more) of each type of sensor/instrument, instrumentation/mechanical fittings etc: for any other electronic system.								
Note: Mandatory spares listed above is bare minimum requirement. In case any additional mandatory spares requirement is covered elsewhere in the tender specification apart from specified above, same shall be deemed to have been covered in bidders scope of supply.									
Particulars of bidder / authorised representative									
Nam	Designation	Signature & Company Seal							

PRICE FORMAT FOR INDIAN BIDDERS						
2 x 660 MW Ennore SEZ STPP						
ANNEXURE II						
CIF CONTENT - HYDROGEN GENERATION PLANT						
Enq No : PE/PG/EN1/E-5595/2017						
Sl No.	Description of Equipment / Item	Unit	Qty	Currency	Unit Rate in Foreign Currency	Total CIF value in foreign currency
1						
2						
3						
4						
5						
6						
				Total CIF value of items		
Notes:						
1.0	Bidder's quoted price in various schedules shall be inclusive of above total price for import component.					
2.0	Bidder shall furnish item-wise break-up of imported items for which bidder wish to avail concessional duty in above table.					
3.0	The total CIF content available for this tender enquiry is Rs. 2,80,19,281/-. Bidders to indicate the list of items and CIF value in above tablet. The total CIF content quoted in foreign currency shall be converted in equivalent INR. Essentiality certificate shall be issued by TANGEDCO through BHEL for the items to be imported by the vendor for specified items, limited to CIF content of Rs. 2,80,19,281/-, for availing concessional custom duty.					
4.0	For conversion of foreign currency to equivalent INR, exchange rate of P1 opening date shall be cosidered as per clause no. 19.3 of instructions to bidders of GCC Rev06.					

PRICE FORMAT - FOR FOREIGN BIDDERS

NAME OF PROJECT:		4X270 MW BHADRADRI TPP																	
NAME OF PACKAGE:		MILL REJECT SYSTEM (CONVEYOR TYPE)																	
TENDER ENQUIRY NO.																			
TECHNICAL SPECIFICATION:		PE-TS-411-160-A002 Rev01		IMPORTED ITEMS (Supply not from Indian Territory)						INDIGENEOUS ITEMS (Supply from Indian Territory)				TOTAL		SERVICES			GRAND TOTAL
S. No.	DESCRIPTION	UNIT	QTY	C&F Price (including seaworthy packing)	Ocean / Marine Insurance	Custom Duty after availing Convat and considering concessional duty against essentiality certificate	Inland FREIGHT CHARGES (INCLUDING SERVICE TAX)	F.O.R. site price for Imported Items supply	TOTAL EX- WORKS PRICE	Excise Duty@..... %	CST @% Against C- form & E1/E2 or VAT @.....% OF TOTAL EX- WORKS Which ever is applicable	FREIGHT CHARGES INCLUDING SERVICE TAX) @.....% OF TOTAL EX- WORKS	TOTAL F.O.R SITE PRICE	Total FOR Site IMPORTED + INDIGENEOUS SUPPLY	TOTAL SERVICES CHARGES	SERVICE TAX @%	TOTAL SERVICES CHARGES INCLUDING SERVICE TAX	TOTAL LUMP SUM PRICE FOR SUPPLY AND E&C SERVICE WITH SERVICE TAX.	
				1	2	3	4	5=1+3+4	6	7	8	9	10=6+7+8 +9	11=5+10	12	13	14=12+13	15=11+14	
1.0	Total lump sum firm price inclusive of all prevailing taxes, duties and other levies for SUPPLY PART , SERVICES PART & MANDATORY SPARES comprising of design (i.e. Preparation and submission of drawing/ documents including " As Built " drawings and O&M Manuals) , engineering, manufacture, fabrication, assembly, inspection / testing at vendor's & sub-vendor & works, painting, maintenance tools & tackles (as applicable), fill of lubricants & consumables , mandatory spares alongwith spares for erection ,startup and commissioning as required, forwarding, proper packing, shipment and delivery at site,unloading, handling, transportation & storage at site, in site transportation, assembly,minor civil works, erection & commissioning, trial run at site, preparation of drawings in 3D (if applicable) and carrying out	Set	1																
2.0	MAJOR BREAK-UP OF PRICES GIVEN IN 1.0 ABOVE.																		
2.1	Total lump sum firm price inclusive of all prevailing taxes, duties and other levies for SUPPLY PART comprising of design (i.e. Preparation and submission of drawing/ documents including " As Built " drawings and O&M Manuals) , engineering, manufacture, fabrication, assembly, inspection / testing at vendor's & sub-vendor & works, painting, maintenance tools & tackles (as applicable),fill of lubricants & consumables, alongwith spares for erection , startup and commissioning as required, forwarding, proper packing, shipment and delivery at site,	Set	1		BY BHEL											NA			

NAME OF PROJECT:			2 x 660 MW Empore SEZ STPP													
NAME OF PACKAGE:			HYDROGEN GENERATION PLANT													
TENDER ENQUIRY NO.																
TECHNICAL SPECIFICATION:			PE-TS-412-168-A001			IMPORTED ITEMS (Supply not from Indian Territory)					INDIGENEOUS ITEMS (Supply from Indian Territory)					TOTAL
S. N.	DESCRIPTION	UNIT	QTY	Unit C&F Price (including seaworthy packing)	Total C&F Price (including seaworthy packing)	Ocean / Marine Insurance (by ICHIEL)	Custom Duty after availing Concessional and considering concessional duty against essentiality certificate.	Inland FREIGHT CHARGES (INCLUDING SERVICE TAX)	F.O.R. site Imported items supply price	UNIT EX-WORKS PRICE INCLUDING P&F (INR)	TOTAL EX-WORKS PRICE INCLUDING P&F (INR)	Excise Duty @...% (INR)	CST @ ...% Against C-form & E1/E2 or VAT @...%. Whichever is applicable (INR)	FREIGHT CHARGES INCLUDING SERVICE TAX) @...% OF TOTAL EX-WORKS (INR)	TOTAL F.O.R SITE PRICE (INR)	Total FOR Site IMPORTED + INDIGENEOUS SUPPLY
				1	2	3	4	5	6=2+4+5	7	8	9	10	11	12=8+9+10+11	13=6+12
A	MECHANICAL															
1	Rectifier diodes	Nos.	20% of total quantity.													
2	Rectifier fuse	Nos.	20% of total quantity.													
3	Rectifier cooling fan & motor bearings	set each type.	One (1) set each type.													
4	Connecting tube/hose between manifold header and hydrogen cylinder.	Nos.	4													
5	Springs of suction and Discharge Valves	Set	1													
6	Gaskets of suction and discharge valve	Set	1													
7	Bearings of Drive end, non-drive end, intermediate and motor	Set	1													
8	V-Belts / Couplings	Set	1													
9	GMI															
	Each type of lamps, P/Bs, ILPBs, fuse, MCB, MCCB used in the system/instrument.	Nos.	20 % of installed of each type.													
2.0	Measuring Instruments															
2.1	Indicators, Recorders, Electrical Measuring and Skid Mounted Instruments	Nos.	10 % of installed of each type/model or a minimum of one number for each model and type, whichever is more.													
2.1.1	Indicators, recorders and meters offered from each model for the project. These instruments shall be supplied with three sets of blank scales.	Nos.	10% of total number of instruments for each type and model or a minimum of one number for each model and type, whichever is more.													
2.2	Temperature Elements and Thermowells															
1	Thermocouple/RTD elements	Nos.	10% spare for each type and length of element furnished with thermocouple/RTD assemblies, or a minimum of one number of each type & length, whichever is more.													
2	Thermowells	Nos.	10% for each type of temperature sensors or a minimum of one for each type, whichever is more.													
2.3	Temperature Transmitters and Electronic Transmitters (For Pressure, DP, Temp, Flow, Level), Temperature, Pressure, Flow & Level Switch, safety switches, gauges, meters, Transducer or any other instrument etc.															
2.4	I/O cards															
2.4.1	Analog input module	Nos.	10% of qty installed of each category/model or at least 2 No. of each type/model (Whichever is more).													
2.4.2	Analog output module	Nos.	10% of qty installed of each category/model or at least 2 No. of each type/model (Whichever is more).													
2.4.3	RTD/TC cards/modules	Nos.	10% of qty installed of each category/model or at least 2 No. of each type/model (Whichever is more).													
2.4.4	Digital input module	Nos.	10% of qty installed of each category/model or at least 2 No. of each type/model (Whichever is more).													
2.4.5	Digital output module	Nos.	10% of qty installed of each category/model or at least 2 No. of each type/model (Whichever is more).													
2.5	All types of electronic modules, controllers, function modules, cards, terminal boards, relay boards, power supply cards etc for above mentioned system and other Control Systems/Sub-systems and any other type of PCB not covered above	Nos.	10% of qty installed of each category/model or at least 2 No. of each type/model (Whichever is more).													
2.6	Electronic Cards/modules	Nos.	10% of number for each type or minimum of 2 number for each type, whichever is high.													
2.07	Auto/manual stations, set-point/bias stations etc	Nos.	10% of the number of stations offered for the project from each type or a minimum of 2 number from each model, whichever is more.													
2.08	Control logic power supply fuses, MCB/MCCB, at each current rating required for the project.	Nos.	20% spare for each type/model													
2.09	Electronic cards of each type used for each type of Servers supplied with any control system															

PRICE FORMAT - For Foreign Bidders ANNEXURE-I LIST OF MANDATORY SPARES																
NAME OF PROJECT:		2 x 660 MW Ennore SEZ STPP														
NAME OF PACKAGE:		HYDROGEN GENERATION PLANT														
TENDER ENQUIRY NO.																
TECHNICAL SPECIFICATION:		PE-TS-412-168-A001														
S. N.	DESCRIPTION	UNIT	QTY	IMPORTED ITEMS (Supply not from Indian Territory)							INDIGENEOUS ITEMS (Supply from Indian Territory)					TOTAL
				Unit C&F Price (including seaworthy packing)	Total C&F Price (including seaworthy packing)	Ocean / Marine Insurance (by BHEL)	Custom Duty after availing Concessional and considering concessional duty against essentiality certificate	Inland FREIGHT CHARGES (INCLUDING SERVICE TAX)	F.O.R. site Imported Items supply price	UNIT EX-WORKS PRICE INCLUDING P&F (INR)	TOTAL EX-WORKS PRICE INCLUDING P&F (INR)	Excise Duty @...% (INR)	CST @ ...% Against G-form & E1/E2 or VAT @...% Whichever is applicable (INR)	FREIGHT CHARGES INCLUDING SERVICE TAX) % OF TOTAL EX-WORKS (INR)	TOTAL F.O.R SITE PRICE (INR)	Total FOR Site IMPORTED + INDIGENEOUS SUPPLY
				1	2	3	4	5	6=2+4+5	7	8	9	10	11	12=8+9+10+11	13=6+12
2.23.2	Control circuit fuses/MCB/MCCB/Semiconductor Fuses	Nos.	300% of installed of each type, current rating.													
2.23.3	Relays modules & contactors.	Nos.	20% spare of qty installed of each type & rating.													
2.24	Alarm Annunciation System															
2.24.1	Logic modules, group card modules, power supply modules, Hooters and any other electronic module.	Nos.	20% spares of each type installed													
2.24.2	un-engraved window boxes complete with LED etc.	Nos.	5% spares of each size installed													
2.24.3	LEDs for annunciation face windows and LEDs low assemblies offered for the protect	Nos.	20% of qty installed													
2.24.4	Annunciator hooter	Nos.	One (1) No. of each type													
2.25	Un-interrupted Power Supply System and DC Control Power Supply System															
2.25.1	As per Manufacturer's Recommendation for Three Years Continuous Operation or minimum quantities indicated as below (whichever is more)															
2.25.1.1	Fuses/Semiconductor Fuses	Nos.	300% of installed of each type, current rating with each panel board													
2.25.1.2	Miscellaneous parts for the power supplies such as SCRS, transistors, resistors, diodes, light bulbs, static switches, blocking diodes etc.	Nos.	Minimum of 10% or at least two (whichever is more) of each type													
2.25.1.3	Battery cells complete with contactor cover plates etc.	Nos.	10% of qty installed													
2.25.1.4	Electronic Modules like Rectifier control card, inverter control card, Driver card, IGBT Module, DC-DC converter card or any other card as listed in approved BOM for UPS, AC supply & 24 V DC supply etc.	Set	1 Set of each type & rating													
2.25.1.5	Miniature Circuit breakers for AC and DC supply.	Nos.	20 % of installed or 10 Nos of each type (whichever ever is more) for ACDB and DCDB.													
2.25.1.6	Digital/analog panel meters/indicators	Nos.	5% or 2 no. of each type (whichever is more)													
2.25.1.7	CT's, CVT's VT's chokes, AC/DC isolation, contactors, fuses, relays.	Nos.	10% or 2 nos. of each type and rating, (whichever is more)													
2.25.1.8	Cooling Fans in UPS & 24 V DC charger panels	Nos.	10% or 2 nos. of each type and rating, (whichever is more)													
2.25.1.9	following accessory equipment for the battery shall be furnished:	Set	Two sets													
	a) Cell filter facilities.															
	b) Assembly wrenches															
	c) Vent plug hydrometer thermometer															
	d) Vent plug															
	e) Supply of corrosion-preventive grease.															
	f) 10% spare cells.															
2.25.1.10	Electronic modules of each type & rating for UPS and DC control power supply system.	Set	One set of with each set consisting of at least one number of each type of electronic module for inverters, chargers, static switch, stabilizer etc.													
2.25.1.11	MCCB for UPS & 24 V DC charger panels, ACDB, DCDB.	Nos.	20 % of installed or 5 Nos of each type (whichever ever is more)													
2.26	Erection hardware															
2.26.1	Instrument valves	Nos.	Ten (10) percent of each type & Size installed.													
2.26.2	Condensate pots of each type & Size installed	Nos.	Ten (10) percent of total number of installed or four numbers whichever is higher.													
2.26.3	Manifold	Nos.	Ten (10) percent of each type & Size installed.													
2.26.4	Fittings	Nos.	Ten (10) percent of each type & Size installed.													
2.26.0	Mandatory Spares for Control valves, Power Cylinder, Control Damagers, Actuators and Accessories															
	a) Following spares shall be furnished for control valves, Power Cylinder, Control Damagers as applicable.															
	b) One set of spare control valve stem packing for each control valve.															
	c) Two moulded rubber diaphragms for each control valve.															
	d) One sets of each of O-ring and rubber gaskets for each control valve.															
	e) 100 percent qty. of lubricants for gaskets for each control valve on one year consumption basis.															
	f) 2 sets of limit switches and 1 set of valve positioner for each control valve.															
	g) 20 percent of position transmitter (4-20mA) for total qty. of control valve.															
	h) One (1) set of valve trim (such as plug, stem, seat ring cage, guide bushing, stem lock pin, packing retaining ring, etc) for each control valve.															
	i) One complete actuator of each type or min 10% for each type and size whichever is more.															
	j) 20 percent of Solenoid valves or min 2 no. of each type for total qty. of control valves.															
	k) 20% of I to P converters, Pressure regulators.															
2.27.0	Mandatory spares not covered above															
	a) Bidder to supply 10% or 1 no. (whichever is more) of each type of sensor/instrument, instrumentation/mechanical fittings etc for any other electronic system.															
Note: Mandatory spares listed above is bare minimum requirement. In case any additional mandatory spares requirement is covered elsewhere in the tender specification apart from specified above, same shall be deemed to have been covered in bidders scope of supply.																
Particulars of bidder / authorised representative																
	Name					Designation			Signature & Company Seal					Date		

PRICE FORMAT FOR FOREIGN BIDDERS						
2 x 660 MW Ennore SEZ STPP						
ANNEXURE II						
CIF CONTENT - HYDROGEN GENERATION PLANT						
Enq No :						
Sl No.	Description of Equipment / Item	Unit	Qty	Currency	Unit Rate in Foreign	Total CIF value in foreign currency
1						
2						
3						
4						
5						
6						
				Total CIF value of items		
Notes:						
1.0	Bidder's quoted price in various schedules shall be inclusive of above total price for import component.					
2.0	Bidder shall furnish item-wise break-up of imported items for which bidder wish to avail concessional duty in above table.					
3.0	The total CIF content available for this tender enquiry is Rs. 2,80,19,281/-. Bidders to indicate the list of items and CIF value in above tablet. The total CIF content quoted in foreign currency shall be converted in equivalent INR. Essentiality certificate shall be issued by TANGEDCO through BHEL for the items to be imported by the vendor for specified items, limited to CIF content of Rs. 2,80,19,281/-, for availing concessional custom duty.					
4.0	For conversion of foreign currency to equivalent INR, exchange rate of P1 opening date shall be cosidered as per clause no. 19.3 of instructions to bidders of GCC Rev06.					