



**TAMIL NADU WATER SUPPLY AND DRAINAGE BOARD
CHENNAI**

INTERNATIONAL COMPETITIVE BIDDING

BID DOCUMENT

FOR

**DESIGN, BUILD 60 MLD CAPACITY DESALINATION
PLANT BASED ON SEA WATER REVERSE OSMOSIS AT
KONIMEDU IN VILLUPURAM DISTRICT, TAMIL NADU
AND OPERATION AND MAINTENANCE FOR 20 YEARS**

IFB:15/DSP-VPM Pkg I /DO/CE/ VLR/2021

VOLUME - IV

PRICE BID

**The Chief Engineer,
Tamilnadu Water supply and Drainage Board,
8, 1st East Main Road,
Gandhinagar
Vellore - 632006**

Phone No: 0416 2243743

Email ID: cenrvlr@gmail.com

Website: <https://www.twadboard/tn.gov.in/tenders.html>

Preamble

- A. The Pricing Document shall be read in conjunction with Invitation to Tender (NIT), Instructions to Bidders and all Tender Documents, Specifications and Drawings as listed in Sub-clause 5.1.of Instructions to Bidder
- B. The Price Schedules are divided into separate Schedules as follows:

Schedule No. 1:	Plant and Mandatory Spare Parts Supplied from Abroad
Schedule No. 2:	Plant and Mandatory Spare Parts Supplied from Within the Employer's Country
Schedule No. 3:	Design Services
Schedule No. 4	Installation and Other Services
Schedule No. 5	Grand Summary (Schedule Nos. 1 to 4)
Schedule No. 6	Operation services
Schedule No.6.1	Power Consumption Charges
Schedule No. 7	Asset Replacement Fund and Schedule
Schedule No. 8:	Summary – O&M Prices
Schedule No 9:	System Expansion - Plant and Mandatory Spare Parts Supplied from Abroad for 12 MLD Expansion
Schedule No. 10:	System Expansion - Plant and Mandatory Spare Parts Supplied from within India for 12 MLD Expansion
Schedule No. 11	Summary of System Expansion prices
Schedule No. 12	Grand Summary
Schedule No. 13	Additional O&M Charges towards system Expansion
Schedule No. 14:	Additional Power Charges towards system Expansion

- C. The Schedules do not generally give a full description of the Plant to be supplied and Works and the services to be performed under each item. Bidders shall be deemed to have read the Employer's Requirements and other sections of the Bidding Document and reviewed the Drawings to ascertain the full scope of the requirements included in each item prior to filling in the rates and prices. The entered rates and prices shall be deemed to cover the full scope as aforesaid, including overheads and profit.
- D. If Bidders are unclear or uncertain as to the scope of any item, they shall seek clarification in accordance with ITB 7 prior to submitting their bid
- E. The lump sum for each Price Centre shall be held to include all waste on materials, duties, landing charges, shipping costs for transport by air, sea or land (or any combination thereof), insurance, import taxes and duties, unloading, storage, getting into position, hoisting, lowering, distributing to positions, fixing, labour, materials, scaffolding and staging, plant, supervision, overhead charges, profit, making good prior to handing over to the Employer and anything reasonably to be inferred from the description of the item and indispensably necessary thereto
- F. The activity descriptions for items within Price Centres shall be deemed to cover all aspects of the relevant item scope, irrespective of the fact that the Contractor may not have inserted an amount against any item description. The Price Centre Value of each Price Centre shall be deemed inclusive of all of the Contractor's obligations to execute the part of the Works covered by the Price Centre and to perform all of his other obligations under the Contract in respect thereof. The Contractor shall not be entitled to receive any further or additional payment in respect of such Price Centre
- G. The units and rates in figures entered into the Price Schedules should be typewritten or if written by hand, must be in print form. Price Schedules not presented accordingly may be considered nonresponsive. Any alterations necessary due to errors, etc., shall be initialled by the Bidder. As specified in the Bid Data Sheet and Particular Conditions of Contract, prices shall be fixed and firm for the duration of the Contract, or prices shall be subject to adjustment in accordance with the corresponding Appendix (Price Adjustment) to the Contract Agreement.
- H. Bid prices shall be quoted in the manner indicated and, in the currencies, specified in the Instructions to Bidders in the Bidding Document. For each item, Bidders shall complete each appropriate column in the respective Schedules, giving the price breakdown as indicated in the Schedules. Prices given in the Schedules against each item shall be for the scope covered by that item as detailed in Section 6 (Employer's Requirements) or elsewhere in the Bidding Document.
- I. Payments will be made to the Contractor in Indian Rupees.
- J. The Bidders shall note that the Bid price towards Design-build shall not exceed the percentage indicated in the Bid data sheet (18.2). In case, it exceeds, the bid is liable to be rejected
- K. For the purposes of making payments or part payments, valuing variations or evaluating claims, or for such other purposes as the Employer may reasonably require, the Contractor shall provide the Employer with a breakdown of

any composite or lump sum items included in the Schedules prior to execution of agreement.

L. Schedule 8 : Operation Services

This is a summation of bid prices in Schedule 6,6.1 and 7

a. Schedule 6: Contractor's Fixed Fee

The Contractor's Fixed Fee covers all fixed expenses for the Operation Service, including all staff and personnel, administration, contracted services, audit, guarantees, insurances, permits, fixed maintenance costs, overhead & profit. The detailed description and breakdown shall be provided.

b. Schedule 6: Contractor's Variable Charges

The Contractor's Variable Rate (CVR) covers output-related O&M costs including chemicals and other consumables and output related maintenance expenses and cost for disposal of solid waste as mentioned in Employer's Requirement (Section 6). The detailed description and breakdown shall be provided.

The Contractor's Monthly Variable Payment will be determined by multiplying the CVR by the production volume as measured at the inlet of the Potable Water tanks.

For the avoidance of doubt, the volumes specified in the Bid Price Forms are estimates which are used for the purposes of bid price comparisons. The Contractor will be paid on the actual amounts of production.

The Contractor's Variable Rate (CVR) shall include all installation costs to ensure no degradation of membrane or asset life of components for 5 Years.

c. Schedule 6.1: Contractor's Electricity Payment

The Guaranteed Energy Efficiency or Specific Power Consumption value entered by Bidders shall not be greater than the value specified in the Schedule of Guarantees in Section 6 of the Bidding Documents. The bid value will replace the value in the Schedule of Guarantees in the event that the Bidder is successful.

The Guaranteed Energy Efficiency or Specific Power Consumption value applies to all electricity costs associated with running the SWRO Desalination Plant, administration offices and running the high lift pumps and which shall be metered separately.

During the Operation Service Period the Contractor shall facilitate the Employer to enter into a supply agreement with the TamilNadu Electricity Board (TNEB) and shall pay electricity charges in accordance with the supply agreement. The Employer shall reimburse such electricity payments at cost not exceeding the guarantee power charges as per the contract.

d. Schedule 7: Asset Replacement Fund

Bidders shall note that under GCC 14.18 assets with a life expectancy of less than five years are NOT eligible for replacement through the Asset Replacement Fund.

e. Schedule 9 and 10: System Expansion

The execution of Expansion Works from 60 MLD to 72 MLD will be requested by the Employer when the demand reaches and, in such case, they have to be ordered by the Employer/Employer's representative, who will issue orders defining the requested works to be carried out by the contractor, based on the activities priced in the Bill of Quantities. The order shall specify the activities to be carried out and the corresponding price shall be paid as per Appendix 1 (Terms and Procedure of payment).

Letter of Price Bid

{Note : The bidder must accomplish the Letter of Price Bid on its letterhead clearly showing the bidder's complete name and address}

Date:

ICB No.:

Invitation for Bid No.:

To:

**The Chief Engineer,
Tamilnadu Water supply and Drainage Board,
8, 1st East Main Road,
Gandhinagar
Vellore - 632006
Phone No: 0416 2243743**

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Document, including Addenda issued in accordance with Instructions to Bidders (ITB) 8.
- (b) We offer to design, manufacture, test, deliver, install, pre-commission, and commission in conformity with the Bidding Document the following Plant and Services: [. . . insert narrative . . .]
- (c) The total price of our Bid, excluding any discounts offered in item (d) below is the sum of

- 1. Design and Build 60 MLD desalination Plant --
- 2. Operation Services --

- (d) The discounts offered and the methodology for their application are as follows: [. . . insert discounts and methodology for their application if any . . .]
- (e) Our Bid shall be valid for a period of [. . . insert bid validity period as specified in ITB 20.1 of the BDS . . .] days from the date fixed for the submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
- (f) If our Bid is accepted, we commit to obtain a performance security in accordance with the Bidding Document.
- (g) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed.
- (h) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.

- (i) We agree to permit you to inspect our accounts and records and other documents relating to the bid submission and to have them audited by auditors appointed by you.
- (j) We agree that the payment of the variable cost will be based on the actual production of 'Product Water' subject to other conditions of contract

Name

.....

In the capacity of

Signed

Duly authorized to sign the Bid for and on behalf of

.....

Date

Appendix to Price Bid

[Note: with the exception of the items for which the Employer's requirements have been inserted, the following information must be completed before the Tender is submitted]

S. No.	Data to be Given	Sub-Clause	Data
1	Employer's Name and Address	1.1.32	The Managing Director, TamilNadu Water Supply And Drainage Board (TWAD), No.31, Kamarajar Salai, Chepauk, Chennai- 600 005
2	Contractor's name and Address	1.1.17	(To be filled by the Contractor)
3	Name and address of the Employer's Personnel	1.1.34	The Chief Engineer, Tamilnadu Water supply and Drainage Board, 8, 1st East Main Road, Gandhinagar Vellore - 632006 Phone No: 0416 2243743 Email ID: cenrvlr@gmail.com
4	Name and address of the Employer's Representative	1.1.35	Agency to be named by the Employer
5	Total Amount of Advance payments	14.2	10% (ten percent)
6	Number and Timing of Instalments	14.2	2 (Two)
7	Start repayment of advance payment	14.2	When payment to the contractor reaches 20% of the Design -build price, repayment of Advance payment shall commence.
8	Repayment of Advance payments	14.2	15% of the amount of each interim payment certificate (excluding advance payments and deductions and repayments of retention)
9	Percentage of retention	14.1	5 (Five)% of each payment
10	Limit of Retention Money	14.1	5 (Five)% of the Contract price

S. No.	Data to be Given	Sub-Clause	Data
11	Plant and Materials for payment when delivered to the site	14.6	As per Appendix 1 of contract agreement
12	Minimum amount of Interim Payment Certificates	14.4	2 (Two)% of the Contract Price
13	Payments in Local and Foreign Currencies		Payment shall be made in Indian Rupees
14	Percentage for Adjustment of Provisional Sums	13.5	3 (Three)%
15	Percentage of Profit for arriving at Cost Plus profit	1.1.24	Profit - 0%
16	Limit of Liquidated damages	9.6	10 (Ten) % of the Design build Price
17	Failure to reach production outputs during Operation services	10.7 (b)	
	Failure of Production output – Quantity		This Sub Clause shall include any applicable performance damages as specified in the Appendix 7 (Functional Guarantee) to the Contract Agreement.
	Failure of Production output – Quality		This Sub Clause shall include any applicable performance damages as specified in the Appendix 7 (Functional Guarantee) to the Contract Agreement.
	Failure-Excess power consumption		This Sub Clause shall include any applicable performance damages as specified in the Appendix 7 (Functional Guarantee) to the Contract Agreement.
	Failure to maintain guaranteed power consumption and Excess power consumed		No payment for Excess power charges. In addition to this Penal amount will be deducted from the Interim certificates as per Appendix 7- Functional guarantees

Schedules of Prices

Schedule No. 1: Plant and Mandatory Spare Parts Supplied from Abroad for 60 MLD

Item	Description	Country of Origin	Quantity	Unit Price ^a		Total Price ^a (Excluding GST)	Taxes and Duties
				Cost in Rupees	CIP	Cost in Rupees	Local Currency
1	2	3	4	5	6	7 = 4 x (5+6)	8
I	Intake and Conveyance System (Onshore &Offshore)						
A	Seawater Intake works & Raw Water Main						
B	Intake Pump and Intake Screens						
II	Pre- Treatment						
A	Pre-Treatment Units						
III	Reverse Osmosis (RO) System						
A	SW Reverse Osmosis (SWRO)						
IV	Post Treatment Systems						

Schedules of Prices

Schedule No. 1: Plant and Mandatory Spare Parts Supplied from Abroad for 60 MLD

Item	Description	Country of Origin	Quantity	Unit Price ^a		Total Price ^a (Excluding GST)	Taxes and Duties
				Cost in Rupees	CIP	Cost in Rupees	Local Currency
1	2	3	4	5	6	7 = 4 x (5+6)	8
A	Post Treatment plants						
V	Dosing system						
A	All mixing equipment's and dosing equipment's including valves for dosing system and lifting equipment etc complete..						
VI	Reject Management System						
A	Outfall System for Concentrate and all other Waste Discharge System						
VII	Electrical & Instrumentation						
A	Electrical SS 110/11 KV						
B	Electrical and cabling						
C	Instrumentation, Instruments including all controls						
VIII	General						

Schedules of Prices

Schedule No. 1: Plant and Mandatory Spare Parts Supplied from Abroad for 60 MLD

Item	Description	Country of Origin	Quantity	Unit Price ^a		Total Price ^a (<i>Excluding GST</i>)	Taxes and Duties
				Cost in Rupees	CIP	Cost in Rupees	Local Currency
1	2	3	4	5	6	7 = 4 x (5+6)	8
A	General Site Service Facilities, Ancillary & Support Services, Admin Building and Laboratory Workshop building, Control room, Green belts and road, compound wall and road side plantation : complete as per the specification and rainwater harvesting.						
B	Any other Item required to achieve a functional, reliable and durable plant including Vehicles, Machinery and Equipment to be supplied from Abroad.						
TOTAL Column 7 to be carried forward to Schedule No.5: Grand Summary							

Name of Bidder _____

Signature of Bidder _____

Schedule No. 2: Plant and Mandatory Spare Parts Supplied from Within India for 60 MLD

Item	Description	Local Currency	^a	Unit Price	Total Price ^a (<i>Excluding GST</i>)	GST @12%
			Quantity	CIP		
1	2	3	4	5	6 = 4 x 5	7
I	Intake and Conveyance System (Onshore &Offshore)					
A	Seawater Intake works & Raw Water Main	Rupees				
B	Intake Pump and Intake Screens	Rupees				
II	Pre- Treatment					
A	Pre-Treatment Units	Rupees				
III	Reverse Osmosis (RO) System					
A	SW Reverse Osmosis (SWRO)	Rupees				
IV	Post Treatment Systems					
A	Post Treatment plants	Rupees				
V	Dosing system					

Schedule No. 2: Plant and Mandatory Spare Parts Supplied from Within India for 60 MLD

Item	Description	Local Currency	^a	Unit Price	Total Price ^a (<i>Excluding GST</i>)	GST @12%
			Quantity	CIP		
1	2	3	4	5	6 = 4 x 5	7
A	All mixing equipment's and dosing equipment's including valves for dosing system and lifting equipment etc complete.	Rupees				
VI	Reject Management System					
a	Outfall System for Concentrate and all other Waste Discharge System	Rupees				
VII	Electrical & Instrumentation					
a	Electrical SS 110/11 KV Inc	Rupees				
b	Electrical and cabling	Rupees				
c	Instrumentation, Instruments including all controls	Rupees				
VIII	General					

Schedule No. 2: Plant and Mandatory Spare Parts Supplied from Within India for 60 MLD

Item	Description	Local Currency	^a	Unit Price	Total Price ^a (<i>Excluding GST</i>)	GST @12%
			Quantity	CIP		
1	2	3	4	5	6 = 4 x 5	7
A	General Site Service Facilities, Ancillary & Support Services, Admin Building and Laboratory Workshop building, Control room, Green belts and road , compound wall and road side plantation : complete as per the specification and rainwater harvesting.					
B	Any other Item required to achieve a functional, reliable and durable plant including Vehicles, Machinery and Equipment to be supplied within India					
TOTAL Column 6 to be carried forward to Schedule No. 5: Grand Summary						

Name of Bidder _____

Signature of Bidder _____

Schedule No. 3: Design Services

S.No	Description	Unit	In Figures (Excluding GST)	Price in Rs In Words
1	2	3	4	5
I	Intake and Conveyance System (Onshore &Offshore)			
A	Seawater Intake works & Raw Water Main	Lump sum		
B	Intake Pump and Intake Screens	Lump sum		
II	Pre- Treatment			
A	Pre-Treatment Units	Lump sum		

Schedule No. 3: Design Services

S.No	Description	Unit	Price in Rs	
			In Figures (Excluding GST)	In Words
1	2	3	4	5
III	Reverse Osmosis (RO) System			
A	SW Reverse Osmosis (SWRO)	Lump sum		
IV	Post Treatment Systems			
A	Post Treatment plants	Lump sum		
V	Dosing system			
A	All mixing equipment's and dosing equipment's including valves for dosing system and lifting equipment etc complete..	Lump sum		
VI	Reject Management System			

Schedule No. 3: Design Services

S.No	Description	Unit	Price in Rs	
			In Figures (Excluding GST)	In Words
1	2	3	4	5
A	Outfall System for Concentrate and all other Waste Discharge System	Lump sum		
VII	Electrical & Instrumentation			
A	Electrical SS 110/11 KV	Lump sum		
B	Electrical and cabling	Lump sum		
c	Instrumentation, Instruments including all controls	Lump sum		
VIII	General			

Schedule No. 3: Design Services

S.No	Description	Unit	Price in Rs	
			In Figures (Excluding GST)	In Words
1	2	3	4	5
A	General Site Service Facilities, Ancillary & Support Services, Admin Building and Laboratory Workshop building, Control room, Green belts and road , compound wall and road side plantation : complete as per the specification and rainwater harvesting.	Lump sum		
B	Any other Item required to achieve a functional, reliable and durable plant including Vehicles, Machinery and Equipment to be supplied from Abroad / India	Lump sum		
Total Cost for Basic Design, Detail engineering, cost and Documentation				

TOTAL Column 4 to be carried forward to Schedule No. 5: Grand Summary

Name of Bidder _____

Signature of Bidder _____

Schedule No. 4 – Build, Installation and Other Services

S.No	Description	Unit	Price in Rs	
			In Figures (Excluding GST)	In Words
1	2	3	4	5
4A	Build & Erection			
I	Intake and Conveyance System (Onshore &Offshore)			
A	Seawater Intake works & Raw Water Main			
	1. Civil Works intended for 72 MLD output capacity	Lump sum		
	2. Electrical, Mechanical and Instrumentation works and SCADA complete for 60 MLD output initially and capable of expansion up to 72 MLD after System Expansion works required by the Employer	Lump sum		
B	Intake Pump and Intake Screens			
	1. Civil Works intended for 72 MLD output capacity	Lump sum		

Schedule No. 4 – Build, Installation and Other Services

S.No	Description	Unit	Price in Rs	
			In Figures (Excluding GST)	In Words
1	2	3	4	5
	2. Electrical, Mechanical and Instrumentation works and SCADA complete for 60 MLD output initially and capable of expansion up to 72 MLD after System Expansion works required by the Employer	Lump sum		
II	Pre- Treatment			
A	Pre-Treatment Units			
	1. Civil Works intended for 72 MLD output capacity	Lump sum		
	2. Electrical, Mechanical and Instrumentation works and SCADA complete for 60 MLD output initially and capable of expansion up to 72 MLD after System Expansion works required by the Employer	Lump sum		
III	Reverse Osmosis (RO) System			

Schedule No. 4 – Build, Installation and Other Services

S.No	Description	Unit	Price in Rs	
			In Figures (Excluding GST)	In Words
1	2	3	4	5
A	SW Reverse Osmosis (SWRO)			
	1. Civil Works intended for 72 MLD output capacity	Lump sum		
	2. Electrical, Mechanical and Instrumentation works and SCADA complete for 60 MLD output initially and capable of expansion up to 72 MLD after System Expansion works required by the Employer	Lump sum		
IV	Post Treatment Systems			
A	Post Treatment plants			
	1. Civil Works intended for 72 MLD output capacity	Lump sum		

Schedule No. 4 – Build, Installation and Other Services

S.No	Description	Unit	Price in Rs	
			In Figures (Excluding GST)	In Words
1	2	3	4	5
	2. Electrical, Mechanical and Instrumentation works and SCADA complete for 60 MLD output initially and capable of expansion up to 72 MLD after System Expansion works required by the Employer	Lump sum		
V	Dosing system			
A	All mixing equipment's and dosing equipment's including valves for dosing system and lifting equipment etc complete..			
	1. Civil Works intended for 72 MLD output capacity	Lump sum		
	2. Electrical, Mechanical and Instrumentation works and SCADA complete for 60 MLD output initially and capable of expansion up to 72 MLD after System Expansion works required by the Employer	Lump sum		
VI	Reject Management System			

Schedule No. 4 – Build, Installation and Other Services

S.No	Description	Unit	Price in Rs	
			In Figures (Excluding GST)	In Words
1	2	3	4	5
A	Outfall System for Concentrate and all other Waste Discharge System			
	1. Civil Works intended for 72 MLD output capacity	Lump sum		
	2. Electrical, Mechanical and Instrumentation works and SCADA complete for 60 MLD output initially and capable of expansion up to 72 MLD after System Expansion works required by the Employer	Lump sum		
VII	Electrical & Instrumentation			
A	Electrical SS 110/11 KV			

Schedule No. 4 – Build, Installation and Other Services

S.No	Description	Unit	Price in Rs	
			In Figures (Excluding GST)	In Words
1	2	3	4	5
	1. Civil Works intended for 72 MLD output capacity	Lump sum		
	2. Electrical, Mechanical and Instrumentation works and SCADA complete for 60 MLD output initially and capable of expansion up to 72 MLD after System Expansion works required by the Employer	Lump sum		
B	Electrical and cabling			
	1. Civil Works intended for 72 MLD output capacity	Lump sum		
	2. Electrical, Mechanical and Instrumentation works and SCADA complete for 60 MLD output initially and capable of expansion up to 72 MLD after System Expansion works required by the Employer	Lump sum		

Schedule No. 4 – Build, Installation and Other Services

S.No	Description	Unit	Price in Rs	
			In Figures (Excluding GST)	In Words
1	2	3	4	5
C	Instrumentation, Instruments including all controls			
	1. Civil Works intended for 72 MLD output capacity	Lump sum		
	2. Electrical, Mechanical and Instrumentation works and SCADA complete for 60 MLD output initially and capable of expansion up to 72 MLD after System Expansion works required by the Employer	Lump sum		
VIII	General			
A	General Site Service Facilities, Ancillary & Support Services, Admin Building and Laboratory Workshop building, Control room, Green belts and road , compound wall and road side plantation : complete as per the specification and rainwater harvesting.			
	1. Civil Works intended for 72 MLD output capacity	Lump sum		
	2. Electrical, Mechanical and Instrumentation works and SCADA complete for 60 MLD output initially and capable of expansion up to 72 MLD after System Expansion works required by the Employer	Lump sum		

Schedule No. 4 – Build, Installation and Other Services

S.No	Description	Unit	Price in Rs	
			In Figures (Excluding GST)	In Words
1	2	3	4	5
B	Any other Item required to achieve a functional, reliable and durable plant including Vehicles, Machinery and Equipment to be supplied from Abroad / Employer's Country	Lump sum		
	1. Civil Works intended for 72 MLD output capacity			
	2. Electrical, Mechanical and Instrumentation works and SCADA complete for 60 MLD output initially and capable of expansion up to 72 MLD after System Expansion works required by the Employer			
4B	Trial run and Commissioning for 6 months period			
Total Cost for Build, installation and conveying main works				
TOTAL Column 4 to be carried forward to Schedule No. 5: Grand Summary				

Name of Bidder _____

Signature of Bidder _____

Schedule No. 5: Summary

Schedule No.	Title	Total Price in Indian Rupees (Excluding GST)
		Local
1	Plant and Mandatory Spare Parts Supplied from Abroad ^b	
2	Plant and Mandatory Spare Parts Supplied from Within the India	
3	Design Services	
4	Build, Installation and Other Services	
Total		
GST @ 12%		
Grand Total to be carried forward to Letter of Price Bid		

Name of Bidder _____

Signature of Bidder _____

Schedule No. 6: Operation Services

Operation and maintenance of the all facilities as per bid document including preventive and break down maintenance of all installations, Civil Structures and equipment, management of plant and all connected works, providing all consumables, spares, chemicals, labour, transportation, storage and , Sludge handling,, , insurance and deployment of supervisory and non-supervisory personnel for day to day, training of O&M personnel of Employer, operation and maintenance of the plant (**Excluding power consumption charges**) as per the scope specified under Clause No. 19.2.2, Section 19: Operation and Maintenance Services, Volume –II, Part 1 of Bid Document for a period of **20 years** ; all duties, taxes, statutory levies, municipal taxes etc **excluding GST**.

S.No	O&M Period	Fixed cost per annum in Rs	Variable cost for production and conveyance of Product water up to Employer's Sump per ML Rs	Total cost per annum
a	b	c	d	$f = c + (d*60*365.25)$
6A.1	1 st Year			
6A.2	2 nd Year			
6A.3	3 rd Year			
6A.4	4 th Year			
6A.5	5 th Year			
6A.6	6 th Year			
6A.7	7 th Year			
6A.8	8 th Year			
6A.9	9 th Year			
6A.10	10 th Year			
6A.11	11 th Year			
6A.12	12 th Year			

Schedule No. 6: Operation Services

Operation and maintenance of the all facilities as per bid document including preventive and break down maintenance of all installations, Civil Structures and equipment, management of plant and all connected works, providing all consumables, spares, chemicals, labour, transportation, storage and , Sludge handling,, , insurance and deployment of supervisory and non-supervisory personnel for day to day, training of O&M personnel of Employer, operation and maintenance of the plant (**Excluding power consumption charges**) as per the scope specified under Clause No. 19.2.2, Section 19: Operation and Maintenance Services, Volume –II, Part 1 of Bid Document for a period of **20 years** ; all duties, taxes, statutory levies, municipal taxes etc **excluding GST**.

S.No	O&M Period	Fixed cost per annum in Rs	Variable cost for production and conveyance of Product water up to Employer's Sump per ML Rs	Total cost per annum
a	b	c	d	$f = c + (d*60*365.25)$
6A.13	13 th Year			
6A.14	14 th Year			
6A.15	15 th Year			
6A.16	16 th Year			
6A.17	17 th Year			
6A.18	18 th Year			
6A.19	19 th Year			
6A.20	20 th Year			
	Total Operation Service Charges for 20 years			

Name of Bidder _____

Signature of Bidder _____

Schedule No. 6.1: Power consumption charges

Power Charges towards Operation and maintenance of the all facilities as per bid document including preventive and break down maintenance of all installations and equipment, management of plant and all connected works for day to day operation and maintenance of the plant for a period of **20 years** ; including all lightings in the Plant and Buildings etc **excluding GST**.

S. No.	Power consumption charges of Product water					Total cost of power per annum Rs.
	Year	Power consumption in KWH/ML	Demand Requirement in KVA	Demand Charges per KVA / month (Rs. 350 per month)	Cost/KWH (Rs. 6.35 per KWH)	$g = (c*60*365.25*f) + (d*e*12)$
a	b	c	d	e	f	g
6A.1	1 st Year					
6A.2	2 nd Year					
6A.3	3 rd Year					
6A.4	4 th Year					
6A.5	5 th Year					
6A.6	6 th Year					
6A.7	7 th Year					
6A.8	8 th Year					
6A.9	9 th Year					
6A.10	10 th Year					
6A.11	11 th Year					
6A.12	12 th Year					
6A.13	13 th Year					

Schedule No. 6.1: Power consumption charges

Power Charges towards Operation and maintenance of the all facilities as per bid document including preventive and break down maintenance of all installations and equipment, management of plant and all connected works for day to day operation and maintenance of the plant for a period of **20 years** ; including all lightings in the Plant and Buildings etc **excluding GST**.

S. No.	Power consumption charges of Product water					Total cost of power per annum Rs.
	Year	Power consumption in KWH/ML	Demand Requirement in KVA	Demand Charges per KVA / month (Rs. 350 per month)	Cost/KWH (Rs. 6.35 per KWH)	$g = (c*60*365.25*f) + (d*e*12)$
a	b	c	d	e	f	g
6A.14	14 th Year					
6A.1.5	15 th Year					
6A.16	16 th Year					
6A.17	17 th Year					
6A.18	18 th Year					
6A.19	19 th Year					
6A.20	20 th Year					
	Total Power Charges for 20 years					

Name of Bidder _____

Signature of Bidder _____

Schedule No. 7: Asset Replacement Fund, excluding GST

Item	Description/Components	Quantity	Unit Price		Total Price	
			CIP Local Parts Local Currency INR	CIP Imported Parts Cost in India Rupees	Local Currency Portion INR	Foreign Portion Cost in Indian Rupee
1	2	3	4	5	6 = 3 x 4	7 = 3 x 5
a.		4				
b.		3				
7.A.1	1st Year total					
a.		4				
b.		3				
7.A.2	2nd Year total					
a.		4				
b.		3				
7.A.3	3rd Year total					
a.		4				
b.		3				
7.A.4	4th Year total					
a.		4				
b.		3				
7.A.5	5th Year total					
a.		4				
b.		3				
7.A.6	6th Year total					
a.						
b.						
7.A.7	7th Year total					

Schedule No. 7: Asset Replacement Fund, excluding GST

Item	Description/Components	Quantity	Unit Price		Total Price	
			CIP Local Parts Local Currency INR	CIP Imported Parts Cost in India Rupees	Local Currency Portion INR	Foreign Portion Cost in Indian Rupee
1	2	3	4	5	6 = 3 x 4	7 = 3 x 5
a.						
b.						
7.A.8	8th Year total					
a.						
b.						
7.A.9	9th Year total					
a.						
b.						
7.A.10	10th Year total					
a.						
b.						
7.A.11	11th Year total					
a.						
b.						
7.A.12	12th Year total					
a.						
b.						
7.A.13	13th Year total					
a.						

Schedule No. 7: Asset Replacement Fund, excluding GST

Item	Description/Components	Quantity	Unit Price		Total Price	
			CIP Local Parts Local Currency INR	CIP Imported Parts Cost in India Rupees	Local Currency Portion INR	Foreign Portion Cost in Indian Rupee
1	2	3	4	5	6 = 3 x 4	7 = 3 x 5
b.						
7.A.1 4	14th Year total					
a.						
b.						
7.A.1 5	15th Year total					
a.						
b.						
7.A.1 6	16th Year total					
a.						
b.						
7.A.1 7	17th Year total					
a.						
b.						
7.A.1 8	18th Year total					
a.						
b.						
7.A.1 9	19th Year total					
a.						

Schedule No. 7: Asset Replacement Fund, excluding GST

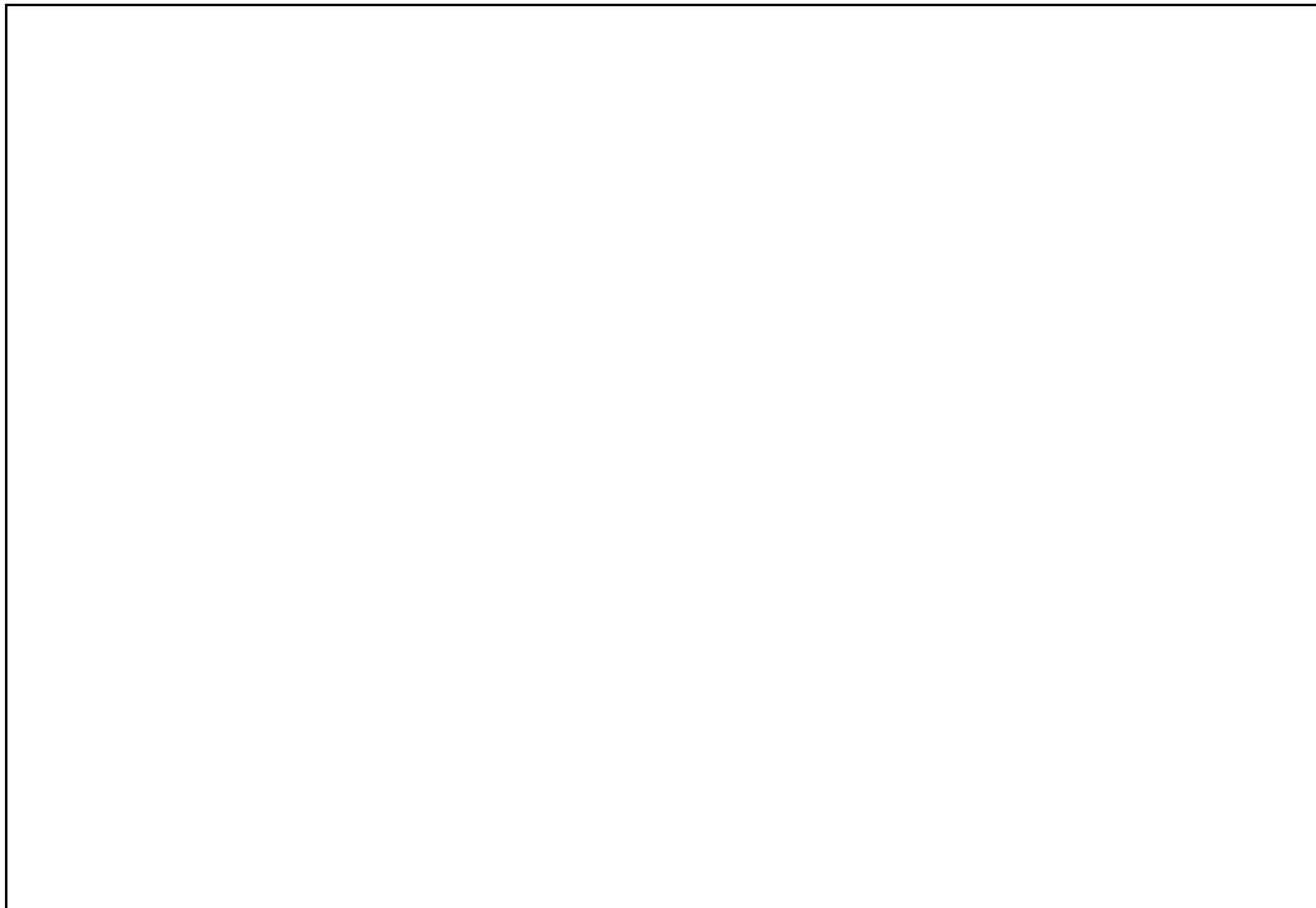
Item	Description/Components	Quantity	Unit Price		Total Price	
			CIP Local Parts Local Currency INR	CIP Imported Parts Cost in India Rupees	Local Currency Portion INR	Foreign Portion Cost in Indian Rupee
1	2	3	4	5	6 = 3 x 4	7 = 3 x 5
b.						
7.A.2 0	20th Year total					
a.						
b.						
Total Asset Replacement Fund for 20 Years O&M						

Name of Bidder
Signature of Bidder

Schedule No. 8: Grand summary of Operation Services			
Schedule No.	Title	Total Price in Indian Rupees, excluding GST	
		Amount	Words
6	Operation Services for 20 Years		
6.1	Power consumption Charges for 20 Years		
7	Asset Replacement Fund for 20 years		
Total			
GST @ 12%			
Grand Total to be carried forward to Letter of Price Bid			

Name of Bidder _____

Signature of Bidder _____



Schedule No. 9: Plant and Mandatory Spare Parts Supplied from Abroad for 12 MLD Output capacity Expansion including installation Charges

Item	Description	Country of Origin	Quantity	Unit Price ^a		Total Price ^a excluding GST	Taxes and Duties
				Cost in Rupees	CIP	Cost in Rupees	Local Currency
1	2	3	4	5	6	7 = 4 x (5+6)	8
I	Intake and Conveyance System (Onshore &Offshore)						
A	Seawater Intake works & Raw Water Main						
B	Intake Pump and Intake Screens						
II	Pre- Treatment						
A	Pre-Treatment Units						
III	Reverse Osmosis (RO) System						
A	SW Reverse Osmosis (SWRO)						
IV	Post Treatment Systems						

Schedule No. 9: Plant and Mandatory Spare Parts Supplied from Abroad for 12 MLD Output capacity Expansion including installation Charges

Item	Description	Country of Origin	Quantity	Unit Price ^a		Total Price ^a excluding GST	Taxes and Duties
				Cost in Rupees	CIP	Cost in Rupees	Local Currency
1	2	3	4	5	6	7 = 4 x (5+6)	8
A	Post Treatment plants						
V	Dosing system						
A	All mixing equipment's and dosing equipment's including valves for dosing system and lifting equipment etc complete..						
VI	Reject Management System						
A	Outfall System for Concentrate and all other Waste Discharge System						
VII	Electrical & Instrumentation						
A	Electrical SS 110/11 KV						
B	Electrical and cabling						
C	Instrumentation, Instruments including all controls						

Schedule No. 9: Plant and Mandatory Spare Parts Supplied from Abroad for 12 MLD Output capacity Expansion including installation Charges

Item	Description	Country of Origin	Quantity	Unit Price ^a		Total Price ^a excluding GST	Taxes and Duties
				Cost in Rupees	CIP	Cost in Rupees	Local Currency
1	2	3	4	5	6	7 = 4 x (5+6)	8
VIII	General						
A	General Site Service Facilities, Ancillary & Support Services, Admin Building and Laboratory Workshop building, Control room, Green belts and road , compound wall and road side plantation : complete as per the specification and rainwater harvesting.						
B	Any other Item required to achieve a functional, reliable and durable plant including Vehicles, Machinery and Equipment to be supplied from Abroad.						
TOTAL Column 7 to be carried forward to Schedule No.5: Grand Summary							

**Schedule No. 10: Plant and Mandatory Spare Parts Supplied from Within India for 12 MLD Output capacity Expansion
Including installation Charges**

Item	Description	Quantity	Unit Price ^a		Total Price ^a (Excluding GST)	GST @12%
			Local Currency	CIP Price		
1	2	3	4	5	6 = 3 x 5	7
I	Intake and Conveyance System (Onshore &Offshore)					
A	Seawater Intake works & Raw Water Main					
B	Intake Pump and Intake Screens					
II	Pre- Treatment					
A	Lamella along with Chemical Dosing					
B	Ultrafiltration					
III	Reverse Osmosis (RO) System					
A	SW Reverse Osmosis (SWRO)					
IV	Post Treatment Systems					

**Schedule No. 10: Plant and Mandatory Spare Parts Supplied from Within India for 12 MLD Output capacity Expansion
Including installation Charges**

Item	Description	Quantity	Unit Price ^a		Total Price ^a (Excluding GST)	GST @12%
			Local Currency	CIP Price		
1	2	3	4	5	6 = 3 x 5	7
A	Post Treatment plants					
V	Dosing system					
A	All mixing equipment's and dosing equipment's including valves for dosing system and lifting equipment etc complete.					
VI	Reject Management System					
a	Outfall System for Concentrate and all other Waste Discharge System					
VII	Electrical & Instrumentation					
a	Electrical SS 110/11 KV Inc					
b	Electrical and cabling					
c	Instrumentation, Instruments including all controls					

**Schedule No. 10: Plant and Mandatory Spare Parts Supplied from Within India for 12 MLD Output capacity Expansion
Including installation Charges**

Item	Description	Quantity	Unit Price ^a		Total Price ^a (Excluding GST)	GST @12%
			Local Currency	CIP Price		
1	2	3	4	5	6 = 3 x 5	7
VIII	General					
A	General Site Service Facilities, Ancillary & Support Services, Admin Building and Laboratory Workshop building, Control room, Green belts and road , compound wall and road side plantation : complete as per the specification and rainwater harvesting.					
B	Any other Item required to achieve a functional, reliable and durable plant including Vehicles, Machinery and Equipment to be supplied from India					
TOTAL Column 6 to be carried forward to Schedule No. 5: Grand Summary						

Name of Bidder _____

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Schedule No. 11: Summary of System Expansion			
Schedule No.	Title	Total Price in Indian Rupees, Excluding GST	
		Amount	Words
9	System Expansion - Plant and Mandatory Spare Parts Supplied from Abroad for 12 MLD Expansion		
10	System Expansion - Plant and Mandatory Spare Parts Supplied from within India for 12 MLD Expansion		
Total			
GST @ 12%			
Grand Total to be carried forward to Letter of Price Bid			

Name of Bidder _____

Signature of Bidder _____

Schedule No. 12: Grand Summary			
Schedule No.	Title	Total Price in Indian Rupees, Excluding GST	
		Amount	Words
1	Plant and Mandatory Spare Parts Supplied from Abroad for 60 MLD		
2	Plant and Mandatory Spare Parts Supplied from Within India for 60 MLD		
3	Design Services		
4	Build, Installation and Other Services		
5	Summary of Design-Build Price (1+2+3+4)		
6	Operation Services for 20 years		
7	Asset Replacement Fund for 20 years		
8	Summary of O & M Price (6+7)		
Total Excluding GST			
GST @12%			
Grand Total to be carried forward to Letter of Price Bid			

Name of Bidder _____

Signature of Bidder _____

Schedule No. 13: Additional Operation Services due to Expansion from 60 MLD to 72 MLD

Additional Operation and maintenance charges towards additional facilities of system (**Excluding power consumption charges**) and producing additional 12 MLD water after System expansion **excluding GST**.

S.No	O&M Period	Fixed cost per annum in Rs	Variable cost for production and conveyance of Product water per ML Rs	Total cost per annum
A	b	C	d	$E = c + (d*12*365)$
1	Additional O & M Charges per year			

- This Operation Service Charges /ML shall not exceed Schedule 6 beyond reasonable limit.

Name of Bidder _____

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Schedule No. 14: Power consumption charges

Additional Power Consumption Charges towards production of additional quantity of 12 MLD after System Expansion etc **excluding GST**.

S.No	Power consumption charges of Product water					Total cost of power per annum Rs
	Year	Power consumption in KWH/ML	Demand Requirement in KVA	Demand Charges per KVA / month (Rs. 350 per month)	Cost/KWH (Rs. 6.35 per KWH)	$g = (c*12*365 *f) + (d*e*12)$
a	b	c	d	e	f	g
1	Additional Power Consumption towards System Expansion per year					
<ul style="list-style-type: none">This Power consumption/ML shall not exceed Schedule 6.1 beyond reasonable limit.						

Name of Bidder _____

Signature of Bidder _____