





Amendment – II Dated 25-05-2023 to NIT No. PNMM/PC206/E/001
SETTING UP OF 0.5 MILLION METRIC TONNE PER ANNUM (1500 MTPD) GREEN AMMONIA PLANT



Sl. No.	Reference of Bidding Document				Amendment / Modification
	Part / Sec	Page No.	Clause no	Subject / Heading	
1.	Part-1; SECTION-2.0_PRE-QUALIFICATION CRITERIA (PQC)				Revised SECTION-2.0_PRE-QUALIFICATION CRITERIA (PQC) (Rev-1, Dtd. 25-05-2023) is enclosed.

Encl.: As Above

 पी डी आई एल PDIL	AVAADA GREEN AMMONIA PROJECT PRE-QUALIFICATION CRITERIA	PNMM/PC206/PQ/2.0	1	 AVAADA
		Document No.	REV	
		SHEET 1 OF 8		



Rev. 1, Dtd. 25-05-2023

SECTION 2.0

PRE-QUALIFICATION CRITERIA (PQC)

FOR

0.5 Million Tonne Per Annum (1500 TPD) Green Ammonia Project

 पी डी आई एल PDIL	AVAADA GREEN AMMONIA PROJECT PRE-QUALIFICATION CRITERIA	PNMM/PC206/PQ/2.0	1	 AVAADA
		Document No.	REV	
		SHEET 2 OF 8		

1.0 PRE-QUALIFICATION CRITERIA (PQC)

Expression of Interest (EOI) and Pre-qualification documents are invited from experienced LEPC bidders for Avaada Green Ammonia Project.

1.1 PQ Criteria for a Single Bidder/Sole Bidder

1.1.1 Technology Criteria

The Bidder should be capable of providing Process License and Basic Design Package of proven performance for minimum 1500 MTPD Ammonia Synthesis Unit based on Electrolyser Unit of 12 TPH capacity of Hydrogen and Air Separation Unit (ASU) of 41,500 Nm³/hr. Technology once selected and offered by the Bidder in Preliminary Technical Bid cannot be changed.

a) Electrolyser Block

Bidders will submit the details for their Electrolyser technologies or selected technologies or their supplier's electrolyser technologies. Based on their submitted details, Owner will take a view on bidders' capability.

b) Ammonia Block

i) Ammonia Synthesis Technology



Bidder should have supplied license for their selected ammonia synthesis process or should have license arrangement(s) for such technologies with process licensors of repute. Bidder will submit the details for their selected technologies or their supplier's technologies. Based on their submitted details, Owner will take a view on bidders' capability.

ii) Air Separation Unit (ASU)

Bidder should have supplied license for their selected Air separation unit (ASU) process or should have license arrangement(s) for such technologies with process licensors of repute. Bidder will submit the details for their selected technologies or their supplier's technologies. Based on their submitted details, Owner will take a view on bidders' capability.

iii) Ammonia Storage (at site)

EPC bidder or their proposed vendor should have built and commissioned similar sized ammonia storage tanks. Bidder will submit the details for their work or their vendor's work on similar storage tanks. Based on their submitted details, Owner will take a view on bidders' capability.

 पी डी आई एल PDIL	AVAADA GREEN AMMONIA PROJECT PRE-QUALIFICATION CRITERIA	PNMM/PC206/PQ/2.0	1	 AVAADA
		Document No.	REV	
		SHEET 3 OF 8		

c) Port Facilities

EPC bidder or their proposed vendor should have built and commissioned similar port loading facilities, large ammonia storage tanks at port, flare system and refrigeration system.

Bidder will submit the details for their work or their vendor's work on similar port facilities. Based on their submitted details, Owner will take a view on bidders' capability.

1.1.2 Experience Criteria for EPC work

a) Electrolyser Block

Bidder should have own manufacturing capacity or should have obtained written consent in form of agreement from reputed electrolyser manufacturers for supply of required Electrolyser capacity.



b) Ammonia Block

Bidder should have constructed and commissioned a large sized Ammonia plant / fertilizer plant / hydrocarbon facilities / LNG / refinery units / steel/Metallurgical plant / power generation in the last 10 years preceding last day of the month previous to the one in which NIT is invited.

Bidder should possess experience of having successfully completed at least one process plant in any of these fields with scope of work comprising of, Detailed Engineering, Procurement, supply, construction and erection of all civil, mechanical, electrical and instrumentation works, Testing, Pre-commissioning, Commissioning and Guarantee Test of the plant. The reference process plant shall be in satisfactory commercial operation for a minimum period of at least continuous 2 year after commissioning during last Ten (10) years, reckoned from last day of the month previous to the one in which NIT is invited.

c) Port Facilities

EPC bidder or their proposed vendor should have built and commissioned similar port loading facilities for handling ammonia or chemicals or LNG and large storage tanks. Successful operations of such port facilities over last 2 year also to be specified after commissioning, preceding last day of the month previous to the one in which NIT is invited.

 पी डी आई एल PDIL	AVAADA GREEN AMMONIA PROJECT PRE-QUALIFICATION CRITERIA	PNMM/PC206/PQ/2.0	1	 AVAADA
		Document No.	REV	
		SHEET 4 OF 8		

1.1.3 Financial Criteria (common for all packages)

- a) Bidder shall submit their last 3 Financial Years / Calendar Years audited financial performance reports. Based on bidder's submitted details, Avaada will take a view on bidders' capability.
- b) Bidder's Net Worth should be positive for last Financial Years / Calendar Years.

Owner shall take final view of the Bidder's financial capability.

1.2 PQ Criteria for a Consortium with Joint and Several Responsibilities:

The total number of Consortium members including their leader shall be prominently mentioned in submitted PQ documents.

1.2.1 Technology Criteria

Either of the Consortium Members should be capable of providing Process License and Basic Design Package of proven performance for minimum 1500 MTPD Ammonia Synthesis Unit based on Electrolyser Unit of 12 TPH capacity of Hydrogen and Air Separation Unit (ASU) of 41,500 Nm³/hr. Technology once selected and offered by the Consortium in the Preliminary Technical Bid cannot be changed.

a) Electrolyser Block

Either of the Consortium Members will submit the details for their Electrolyser technologies or selected technologies or their supplier's electrolyser technologies. Based on their submitted details, Owner will take a view on Consortium's capability.

b) Ammonia Block

i) Ammonia Synthesis Technology



Either of the Consortium Members should have supplied license for their selected ammonia synthesis process or should have license arrangement(s) for such technologies with process licensors of repute.. Consortium will submit the details for their selected technologies or their supplier's technologies. Based on their submitted details, Owner will take a view on consortium's capability.

ii) Air Separation Unit (ASU)

Either of the Consortium Members should have supplied license for their selected Air separation unit (ASU) process or should have license arrangement(s) for such technologies with process licensors of repute.. Consortium will submit the details for their selected technologies or their supplier's technologies. Based on their submitted details, Owner will take a view on consortium's capability.

iii) Ammonia Storage (at site)

Either of the Consortium Members or their proposed vendor should have built and commissioned similar sized ammonia storage tanks. Consortium will submit the details for their work or their proposed vendor's work on the similar storage tanks. Based on their submitted details, Owner will take a view on consortium's capability.

 पी डी आई एल PDIL	AVAADA GREEN AMMONIA PROJECT PRE-QUALIFICATION CRITERIA	PNMM/PC206/PQ/2.0	1	 AVAADA
		Document No.	REV	
		SHEET 5 OF 8		

c) Port Facilities

Either of the Consortium Members or their proposed vendor should have built and commissioned similar port loading facilities, large ammonia storage tanks at port, flare system and refrigeration system. Consortium will submit the details for their work or their vendor's work on similar port facilities. Based on their submitted details, Owner will take a view on consortium's capability.

1.2.2 Experience Criteria for EPC work

a) Electrolyser Block

Either of the Consortium Members should have own manufacturing capacity or should have obtained written consent in form of agreement from reputed electrolyser manufacturers for supply of required Electrolyser capacity.

b) Ammonia Block

Either of the Consortium Members should have constructed and commissioned a large sized Ammonia plant/ fertilizer plant/ hydrocarbon facilities / LNG / refinery units / steel / Metallurgical plant / power generation in the last 10 years preceding last day of the month previous to the one in which NIT is invited..

Consortium should possess experience of having successfully completed at least one process plant in any of these fields with scope of work comprising of, Detailed Engineering, Procurement, supply, construction and erection of all civil, mechanical, electrical and instrumentation works, Testing, Pre-commissioning, Commissioning and Guarantee Test of the plant. The reference process plant shall be in satisfactory commercial operation for a minimum period of at least continuous 2 year after commissioning during last Ten (10) years, reckoned from last day of the month previous to the one in which NIT is invited.



c) Port Facilities

Either of the Consortium Members or their proposed vendor should have built and commissioned similar port loading facilities for handling ammonia or chemicals or LNG and large storage tanks,. Successful operations of such port facilities over last 2 year also to be specified after commissioning, preceding last day of the month previous to the one in which NIT is invited.

1.2.3 Financial Criteria (common for all packages)

- All Consortium members shall submit their last 3 Financial Years / Calendar Years audited financial performance reports. Based on bidder's submitted details, Avaada will take a view on bidders' capability.
- Net Worth of Prime/Lead member should be positive for last Financial Years / Calendar Years.

Owner shall take final view of the Bidder's financial capability.

 पी डी आई एल PDIL	AVAADA GREEN AMMONIA PROJECT PRE-QUALIFICATION CRITERIA	PNMM/PC206/PQ/2.0	1	 AVAADA
		Document No.	REV	
		SHEET 6 OF 8		

1.2.4 Consortium & distribution of work

Prime/Lead Bidder will be responsible for overall coordination among the consortium partners and successful execution of the all contracts executed between the consortium and Owners. Prime/Lead Bidder shall be sole responsible entity for Guarantees and Warranties for the entire scope.

The identification of the Lead Bidder of the Consortium and the distribution of work, roles & responsibilities amongst the Consortium members will be clearly indicated in the form of a Consortium Agreement duly signed by all the members of the Consortium.

The leader of the Consortium shall be authorized to incur liabilities and receive instructions for and on behalf of any and all member(s) of the Consortium. All the members of the Consortium shall be jointly and severally bound unto the OWNER for execution of the contract in accordance with the contract terms and shall jointly and severally be liable to the OWNER to perform all contractual obligations including technical guarantees.

All the members of the Consortium shall be liable jointly and severally for the performance of the contract and discharge of the contractor's obligations and liabilities under the Contract. An Apostle / notarized Authenticated Declaration to this effect as per **Appendix- I** (included here in) shall be included in the bid and a similar statement shall be specifically included in the Form of contract (in case the bid is successful), which shall also be signed by the Consortium members in confirmation.



A consortium once established at the time of submitting the Bid shall not be allowed to be altered with respect to constituting members of the Consortium or their respective roles/ scope of work, except if and when required in writing by OWNER. If during the evaluation of bids, a consortium proposes any alteration/ changes in the orientation of consortium or replacements or inclusions or exclusions of any partner(s)/ member(s) which had originally submitted the bid, bid from such a consortium shall be liable for rejection.

1.3 Patents & IPR

Patents applicable to technological Know-How shall be valid to India and as applicable to Bidder and no pending cases in relation to third part claim with respect of infringement of rights in the developed IPR or any other and shall have graded validity of each patents used.

1.4 Present liabilities

Bidder should submit details related to their Liabilities Related to debt, equity funding, third party creditors.

 पी डी आई एल PDIL	AVAADA GREEN AMMONIA PROJECT PRE-QUALIFICATION CRITERIA	PNMM/PC206/PQ/2.0	1	 AVAADA
		Document No.	REV	
		SHEET 7 OF 8		

APPENDIX – I

FORMAT OF DECLARATION (NOTARIAL ATTESTED)



To,

M/s Avaada Green H2 Private Limited
Noida (UP, India)

Subject: _____

Dear Sir,

- The Bid no. _____ dated _____ submitted by us may be regarded as a joint bid of _____ (*name of Consortium members*) _____ for the subject work.
- The signature of Mr. _____ (*name of Consortium member*) _____ on the Bid & offer may be regarded as signature(s) of the duly authorized signatory of M/s. _____, (*First Leader of Consortium*) _____ on the Bid & offer and may be regarded as signature(s) of the duly authorized signatory of M/s . _____ (*all the names of Consortium members to be written here*) _____ and we do hereby ratify, confirm and adopt the said signature(s) as the signature(s) of our duly authorized signatory.
 - The signature of Mr. _____ on the bid offer shall be regarded as the signature of the duly authorized signatory of M/s _____, (*name of the second Consortium member*) _____ and we do hereby ratify, confirm and adopt the said signature as the signature(s) of our duly authorized signatory.
 - The signature of Mr. _____ on the bid offer shall be regarded as the signature of the duly authorized signatory of M/s _____, (*name of the third Consortium member, if applicable*) _____ and we do hereby ratify, confirm and adopt the said signature as the signature(s) of our duly authorized signatory.
- We further undertake to be jointly and severally liable for execution of the Contract, if awarded, in accordance with its terms, and to jointly and severally assume responsibility for all obligations and liabilities under the contract.
- We hereby state that M/s. _____ shall be the Leader of the Consortium authorized to represent the Consortium in all transactions with M/s. Avaada Green H2 Private Limited and to bind all the Consortium members, in the event of the Consortium submitting this joint bid being selected as the successful bidder for the award of the Contract. Notwithstanding anything contrary in the Consortium Agreement, the leader of Consortium shall have single point responsibility for execution of the contract.

 पी डी आई एल PDIL	AVAADA GREEN AMMONIA PROJECT PRE-QUALIFICATION CRITERIA	PNMM/PC206/PQ/2.0	1	 AVAADA
		Document No.	REV	
		SHEET 8 OF 8		

5. We hereby confirm that _____ who is a Consortium member qualified under Clause 1.2 of the Pre-Qualification Criteria **for 0.5 Million Tonne Per Annum Green Ammonia Project** shall be directly performing and responsible for managing the following critical activities of the Project.

[Set forth identified critical activities]

6. (a) (Name of the Consortium member) shall be directly responsible for performing the following _____ activities _____ of _____ the _____ Project.

(Set forth activities)

- (b) (Name of the Consortium member) shall be directly responsible for performing the following _____ activities _____ of _____ the _____ Project.

(Set forth activities)

7. As and when the contract is awarded, we undertake to sign such further document(s) and/or contracts as M/s Avaada Green H2 Private Limited may require to further jointly and severally bind us _____, _____ and _____ in the manner hereinabove set forth for the due, proper and timely performance of all obligations and the due discharge of all liabilities under the Contract.

8. We hereby confirm that the undersigned are each duly authorized and competent to issue this letter / undertaking on behalf of each of the signatories for whom they have signed.

Yours faithfully,

1. For _____
(Name)
Designation

2. For _____
(Name)
Designation

3. For _____
(Name)
Designation