

## ANNEXURE -II

### FORM 13 FOR ROUTE 2

**FORM OF DEED OF JOINT UNDERTAKING FOR EPC PACKAGE FOR WASTE TO  
ENERGY PROJECT (2X350 TPD) AT KAWAS AS PER CLAUSE 3.1.2.0, ITEM 3 OF BID  
DATA SHEETS  
(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)**

**DEED OF JOINT UNDERTAKING TO BE EXECUTED BY THE BIDDER/ CONTRACTOR, MEETING THE REQUIREMENTS OF CLAUSE 3.1.2.1, [INDIAN EPC / R&M COMPANY] AND THE COLLABORATOR/ ASSOCIATE WHO MEETS THE REQUIREMENT OF CLAUSE 3.1.1.0, ITEM 3 OF BID DATA SHEETS (BDS) [AS A QUALIFIED WASTE TO ENERGY PLANT EQUIPMENT MANUFACTURER (QWEPM)] FOR SUCCESSFUL PERFORMANCE OF THE WASTE TO ENERGY EQUIPMENT SYSTEM INCLUDING MEETING THE TECHNICAL GUARANTEES**

The DEED OF UNDERTAKING executed this ..... day of .....Two thousand ..... by M/s ..... a Company incorporated under ..... having its Registered Office at.....(hereinafter called the "Bidder/Contractor/Indian EPC / R&M Company", which expression shall include its successors, administrators, executors and permitted assigns) AND

M/s ..... a Company incorporated under ..... having its Registered Office at.....(hereinafter called "**QUALIFIED WASTE TO ENERGY PLANT EQUIPMENT MANUFACTURER (QWEPM)**", which expression shall include its successors, administrators, executors and permitted assigns)

in favour of NTPC Ltd., a Government of India Enterprise incorporated under the Companies Act, 1956, having its Registered Office at NTPC Bhawan, Scope Complex, 7, Institutional Area, Lodhi Road, New Delhi-110003 INDIA (hereinafter called "NTPC" or "Employer" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Employer invited Bids for design, engineering, manufacture, shop fabrication, preassembly, shop testing/type testing at manufacturer's works, packing, transportation, unloading, handling and conservation of equipment at site, complete services of construction including erection, supervision, pre-commissioning, commissioning and performance testing of equipments under bidder's scope of work of Waste to Energy Equipment System and its associated auxiliaries including all associated Electrical, Control & Instrumentation, Civil, Structural and Architecture works for **EPC PACKAGE FOR WASTE TO ENERGY PROJECT (2X350 TD)** for its Kawas Gas Power Station vide its Bidding Document No.: CS-2600-001-9:

AND WHEREAS clause 3.1.2.4, item 3 of BDS of Bidding Documents, stipulate that the bidder, meeting the requirement of Clause 3.1.3.1, item 3 of BDS and "QWEPM" meeting the requirements of Clause 3.1.1.0, item 3 of BDS on its own, shall furnish a Deed of Joint Undertaking.

WHEREAS M/s ..... (Bidder/Contractor) is submitting its proposal in response to the aforesaid Invitation for Bid by the Employer for **EPC PACKAGE FOR WASTE TO ENERGY PROJECT (2X350 TPD)** for its Kawas Gas Power Station vide its Bidding Document No.: CS-2600-001-9:

WHEREAS M/s ..... (Bidder/Contractor), an Indian EPC / R&M Company, registered in India under the Companies Act of India, as on the date of Techno-Commercial Bid opening, should have executed at least one Engineering, Procurement, Construction (EPC) Contract OR Renovation & Modernisation (R&M) Contract of value not less than ₹ 100 Crores consisting of at least Steam Generator and Steam Turbine Generator Set in a thermal power plant.

AND WHEREAS the Bidder and QWEPM are required to jointly execute and furnish along with the bid an irrevocable Deed of Joint Undertaking and be jointly and severally liable and bound unto the Employer for the successful performance of the Waste to Energy Equipment System including meeting the technical guarantees for its Kawas Waste to Energy Project, as per bidding documents, in the event, the Bid is accepted by the Employer resulting into a Contract/ Contracts.

**NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:**

1. That in consideration of the award of the Contract(s) by the Employer to the Contractor, we the Contractor and the QWEPM, do hereby declare and undertake that we shall be jointly and severally responsible to the Employer for the execution and successful performance of all the contractual obligations including the technical guarantees for the complete **EPC PACKAGE FOR WASTE TO ENERGY PROJECT (2X350 TPD)**, as specified under the said Contract(s) to the satisfaction of the Employer.
2. In case of any breach of the Contract committed by the Contractor, we the QWEPM, do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the complete Waste to Energy Equipment System and undertake to carry out all obligations and responsibilities stipulated in the Contract, including the technical guarantees for the complete Waste to Energy Equipment System Package. Further if the Employer sustains any loss or damage on account of any breach of the Contract, we the QWEPM and the Contractor jointly and severally undertake to promptly indemnify, and pay such loss/damages caused to the Employer on its written demand without any demur, reservation, contest or protest in any manner whatsoever and the Contractor.

The liability of the QWEPM shall be limited to an amount equivalent to **ten percent (10%)** of value of contract awarded to the Contractor.

This is without prejudice to any rights of the Employer against the Contractor under the Contract and/or guarantees. It shall not be necessary or obligatory for the Employer to first proceed against the Contractor before proceeding against the QWEPM, nor any extension of time or any relaxation given by the Employer to the Contractor would prejudice any rights of the Employer under this Deed of Joint Undertaking to proceed against the QWEPM.

3. Without prejudice to the generality of the Undertaking in paragraph 1 above, the manner of achieving the objectives set forth in paragraph 1 above shall be as follows:
  - (a) We, the QWEPM shall be fully responsible for complete engineering, preparation of all designs, design calculations, design documents/ drawings and manufacturing drawings; preparation of all P&IDs & process flow diagrams; Selection of auxiliaries, and interfacing/ integrating with auxiliaries so as to ensure satisfactory, reliable, safe and trouble free performance of all Waste to Energy Equipment's and auxiliaries meeting all stipulated technical requirements as well as all guaranteed parameters specified in the Contract for **EPC PACKAGE FOR WASTE TO ENERGY PROJECT (2X350 TPD)**.
  - (b) We, the QWEPM shall be specifically responsible for the following:
    - (i) Design, engineering, erection / erection supervision and commissioning / commissioning supervision of complete waste to energy plant being offered to NTPC by bidder.
    - (ii) Design, engineering, manufacturing / getting manufactured Grate, Combustion System or Waste Heat Recovery Steam Generator (WHRSG) or both, as applicable.
    - (iii) Complete design of Grate, Waste Heat Recovery Steam Generator & Flue Gas treatment system including selection/design of Grate & Flue Gas treatment material, lining & all internals; complete mass flow balance as well as design of structural/supporting system

including selection of material & accessories etc.

- (iv) Selection of auxiliaries for Grate, Waste Heat Recovery Steam Generator & Flue Gas treatment System including preparation of purchase specification for critical auxiliaries viz CEMS, Grab Crane, Turbine, Generator, SNCR, Fans, Bag Filter, Flue Gas reactor (Lime & Activated Carbon rejection).
- (v) Design of controls, protections and interlocks for all the auxiliaries for Grate, Waste Heat Recovery Steam Generator & Flue Gas treatment System including Absorber for their safe and reliable operation as integral units with other equipments of the Main Plant.
- (vi) Providing all design data required by the Contractor to carry out design/ selection of balance equipment/ system including all civil inputs for foundation design, site construction, structural work etc. for Grate, Waste Heat Recovery Steam Generator & Flue Gas treatment System and for their proper interfacing and integration.
- (vii) Provide manufacturing/fabrication drawings for Grate, Waste Heat Recovery Steam Generator & Flue Gas treatment system including its internals.
- (viii) All the write up/documents/drawings/ design/calculations provided by the Bidder shall be duly wetted by QWEPM.

Further, we, the QWEPM shall extend our quality surveillance/ supervision/ quality control to the Contractor during manufacture, erection, commissioning and performance testing, both at Contractor's and/ or at Employer's project site. Without prejudice to the overall responsibilities of the QWEPM for successful commissioning and performance of Waste to Energy Equipment System, the QWEPM shall depute its technical experts from time to time to the Contractor's/ Sub-vendor's works/ Employer's project site, as mutually agreed upon between the Employer and the Contractor in accordance with the stipulation of the Contracts.

- (a) We, the QWEPM will be fully responsible for the quality of manufacture of all equipments/ main assemblies/ components for incorporation in the Waste to Energy Equipment System.

For the items to be manufactured by the contractor at his/or his vendor's works as per the QWEPM design & manufacturing drawings released by us, the Associate/ Collaborator shall ensure completeness and correctness of the design, data, document and information in every detail provided to the Contractor which would result in the same quality of equipment as if manufactured at QWEPM or its Sub-vendor's works and shall meet QWEPM acceptance.

- (b) We the QWEPM shall be fully responsible for complete for design, engineering, supply, installation, putting in to satisfactory operation and carrying out the guarantee tests for Waste to Energy Equipment System to the satisfaction of the Employer.

Further, the QWEPM shall ensure proper design, manufacture, installation, testing and successful performance of the Waste to Energy Equipment System under the said Contract in accordance with stipulations of Bidding Documents and if necessary, the QWEPM shall advise the Contractor/ his Sub-Vendor suitable modifications of design and implement necessary corrective measures to discharge the obligations under the contract.

- (c) In the event the QWEPM and the Contractor fail to demonstrate that the Waste to Energy Equipment System meets the guaranteed parameters and demonstration parameters as specified in the contract, the QWEPM and the Contractor shall promptly carry out all the corrective measures related to engineering services at their own expense and shall promptly provide corrected design to the Employer.

- (d) Implementation of the corrected design and all other necessary repairs, replacements, rectification or modifications to the Waste to Energy Equipment System and payment of financial liabilities and penalties and fulfillment of all other contractual obligations as provided under the contract shall be the joint and severally responsibility of the Contractor and Associate/Collaborator.
4. We, the Contractor and the QWEPM do hereby undertake and confirm that this Deed of Joint Undertaking shall be irrevocable and shall not be revoked till ninety (90) days after the expiry of defect liability period of the plant under the Contract and further stipulate that the Undertaking herein contained shall terminate after ninety (90) days upon satisfactory completion of such defect liability period. We further agree that this undertaking shall be without any prejudice to the various liabilities of the Contractor, including the Contract Performance Guarantees as well as other obligations of the Contractor in terms of the Contract.
5. We, the Contractor and the QWEPM will be fully responsible for the quality of all equipment/main assemblies/components manufactured at their works or at their Vendor's works or constructed at site, and their repairs or replacement if necessary for incorporation in the relevant system(s) of **EPC PACKAGE FOR WASTE TO ENERGY PROJECT (2X350 TPD)** and timely delivery thereof to meet the completion schedule under the Contract.
6. In case of Award, in addition to the Contractor's Performance Bank Guarantee furnished by the Contractor, the QWEPM shall furnish "as Security" an on demand Performance Bank Guarantees in favour of the Employer as per provisions of the Bidding Documents. The value of such Bank Guarantees shall be equal to Five percent (5%) of the total contract price of the Contract signed between the Contractor and NTPC and it shall be towards guaranteeing the faithful performance/compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The Bank Guarantee shall be unconditional, irrevocable and valid for entire period of contract, i.e. till ninety (90) days beyond the end of the Defect Liability period of the **EPC PACKAGE FOR WASTE TO ENERGY PROJECT (2X350 TPD)** under the Contract. In case of delay in completion of the defect liability period, the validity at this Bank Guarantee shall be extended by the period of such delay. The Bank Guarantee amount shall be promptly paid to the Employer on demand without any demur, reservation, protest or contest.
7. Any dispute that may arise in connection with this Deed of Joint Undertaking shall be settled as per arbitration procedure/rules mentioned in the Contract documents. This Deed of Joint Undertaking shall be construed and interpreted in accordance with the Laws of India and the Courts of Delhi shall have exclusive jurisdiction.
8. We, the QWEPM and the Contractor agree that this Deed of Joint Undertaking shall be irrevocable and shall form an integral part of the Contract. We further agree that this Deed of Joint Undertaking shall continue to be enforceable till the successful completion of Contract and till the Employer discharge it.
9. That this Deed shall be operative from the effective date of the NOA.

IN WITNESS WHEREOF, the QWEPM, the OTHER PROMOTER(S) and the Contractor, through their authorised representatives, have executed these present and affixed common seals of their respective companies on the Day, Month and Year first mentioned above.

For M/s .....

(Bidder/Contractor)

Witness :

1. ....  
(Name in Block Letters) (Signature of the authorized representative)

.....  
(Official Address) Name : .....  
Designation : .....

Common Seal of the Company  
For M/s ..... (QWEPM)

Witness :

1. ....  
(Name in Block Letters) (Signature of the authorized representative)

.....  
(Official Address) Name : .....  
Designation : .....

Common Seal of the Company

**Notes:**

- i) Whenever the term 'waste fired' is appearing above, "Waste" shall be deemed to include Municipal Solid Waste (MSW)/ Refused Derived Fuel (RDF).
- ii) Refused Derived Fuel shall mean fuel derived from combustible waste fraction of solid waste like plastic, wood, pulp or organic waste in the form of fluff
- iii) Wherever the term "**Flue Gas Treatment System**", is appearing above, the same shall be deemed to include complete flue gas treatment system with De-NOx system, Lime system, activated carbon system, bag house, flue gas cooling, ducting etc.
- iv) Wherever the term "per stream", is appearing above, the same shall mean a single block of Waste Heat Recovery Steam Generator.
- v) Wherever the term "Waste Heat Recovery Steam Generator" is appearing above, the same shall be deemed to include furnace and pressure parts as minimum.
- vi) **Power of Attorney of each of the person signing the Deed of Joint Undertaking and Board resolution in regard of POA of Authorised signatory, shall be furnished alongwith this Deed of Joint Undertaking.**
- vii) **The list of banks which are acceptable to NTPC for issuing Bank Guarantee in this regard is indicated in Annexure-I to SCC.**

\* Bidder to strike out, whichever is not applicable.