## hiranmaye energy

Regd. Office: Plot No. X1 - 2 & 3, Block EP Saltlake, Sector-V, Kolkata - 700091

Tender Specification no: HEL/22-23/004

#### NOTICE INVITING BID FOR

#### SUPPLY OF BIOMASS PELLETS FOR HIRANMAYE ENERGY LIMITED (HEL)

## **NOTICE INVITING BIDS FOR:**

## SUPPLY OF BIOMASS PELLETS TO HIRANMAYE ENERGY LIMITED (HEL), HALDIA POWER PLANT, WEST BENGAL.

#### Enquiry Reference no: HEL/22-23/004

Title of Work: "SUPPLY OF BIOMASS PELLETS TO HIRANMAYE ENERGY LIMITED (HEL)", 2X150 MW COAL BASED THERMAL POWER PLANT, AT VILLAGE: KASHBERIA, SIBRAMNAGAR PO, HALDIA, PURBA MEDINIPUR (WEST BENGAL).

#### Guidelines for Bid Submission:

The Bid shall be submitted strictly as per instructions given herein by sending email to the Email IDs specified as under:

Bid submission mail must bear proper subject/title mentioning "BID FOR SUPPLY OF BIOMASS PELLETS TO HIRANMAYE ENERGY LIMITED, HALDIA" (Tender ref: HEL/22-23/004)

All communications regarding this tender shall be addressed to the following officer/s:

1. Mr. Satyajeet Gupta

Email: procurement@hiranmayeenergy.in

and

2. Mr. Sayan Sensharma

Email: <u>sayan.sensharma@hiranmayeenergy.in</u>

Website: <u>http://www.hiranmayeenergy.com/publish\_tender.html</u>

The Bidder shall indicate authorized person name, contact number and e-mail ID (mandatory) of the person to whom RFQ/Tender and all other communications shall be addressed for this tender.

The Bidder shall confirm their capability to supply trial quantity for period of One (01) year. The Bidder may submit supporting credentials.

## **Tender Timelines**

Sr. No.	Date	Event Description
1	01-11-2022	Date of availability of Bid Documents from HEL Website
2	16-11-2022	Last Date of submission of Bid.

**Note:** HEL reserves the right, in its sole discretion, to amend the above deadlines and events at any time.

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#### **GENERAL TERMS AND CONDITIONS**

- The Bid Document has been prepared for inviting bids for Supply of Biomass Pellets (Torrified and Non-Torrified) to HEL Power Plant. The purpose of this document is to provide potential Bidders with the information to assist in the formulation of their Bid. For the avoidance of any doubt, prospective Bidders shall not be permitted to Bid through a Consortium of any form.
- 2. Whilst this Bid Document has been prepared in good faith, all information contained in this Bid Document, including financial, geographical, commercial, legal and technical information has been included for illustrative purposes only to assist Bidders in making their own evaluation of the Bid. Each Bidder shall be solely responsible for satisfying itself as to the information required to submit a Bid for the Scope of Work. The Bidder shall conduct appropriate due diligence, investigations, projections, conclusions and consult their own advisors to independently verify the information and facts in this Bid Document and to obtain any additional information they might require prior to submitting their Bid.
- 3. Neither HEL, nor its employees, partners, directors, other staff or the consultants / advisors of any such person:
  - a. accepts any responsibility or liability to any Bidder or any other person arising out of or in relation to this Bid Document (including in relation to omissions of information) and/or in respect of the use of, reliance on, such information by Bidders and/or incurred or suffered any costs, losses, damages & other consequences in connection with anything contained in this Bid Document including any matter deemed to form part of this Bid Document, the award of the Contract, or otherwise arising in any way from the qualification process for the said Contract; and
  - b. makes any representations or warranty (express or implied) as to the adequacy, accuracy, reasonableness or completeness of any information in this Bid Document.

4. Each Bidder shall be solely responsible for satisfying itself as to the information required to submit a Bid. Bidders are advised to make their own assessments prior to submitting their Bids.

5. By participating in the Bid process, each Bidder acknowledges and accepts that it has not been induced to enter into such agreement by any representation or warranty, express or implied, or relied upon any such representation or warranty by or on behalf of HEL or any person working in the Bid process. Such participation shall be considered as deemed acceptance of the terms and conditions of this Bid Document.

6. HEL may, at its own discretion, but without being under any obligation to do so, update, amend or supplement this Bid Document as may be deemed necessary at any time, including to:

- a. amend the Scope of Work and/or terms of the business opportunity described in this Bid Document.
- b. amend, terminate or suspend any element of the procurement process, including by extending any date, time period or deadline provided for in this Bid Document.

- c. reject or disqualify any or all Bid(s) with or without assigning any reason.
- d. waive any defect or irregularity in any Bid or any non-conformity in the form or content of any Bid and accept that Bid.
- e. re-advertise for new Bids or enter into negotiations for this Bid Document with other qualified third parties; and/or
- f. proceed with the Scope of Work and/or work of a similar nature in some other manner or not at all.

Notice of such change shall be uploaded on Website: <u>http://www.hiranmayeenergy.com/publish\_tender.html</u> The Bidders are required to visit the website and keep abreast of any such changes.

7. Though adequate care has been taken while preparing the Bid Document, the Bidder shall satisfy itself that the documents are complete in all respects. Intimation of any discrepancy shall be given to HEL immediately in writing. If no intimation is received from any of the Bidders within the timelines of clarifications/ suggestions, it shall be considered that the Bid Documents are complete in all respects and have been received by the Bidder. HEL also reserves the right as to whether to implement or not the clarification/ suggestions received within the timelines and is in no way bound to implement any/all suggestions.

8. HEL reserves the right at its sole discretion to cancel or amend the bidding process or to reject any or all of the Bids received without assigning any reasons. HEL shall not be liable for any claim whatsoever and/or any expenses or losses that might be incurred by the Bidder in preparation and submission of the Bid as well as for post bid discussions/interactions. For the avoidance of doubt, each Bidder shall be solely responsible for all costs incurred in evaluating whether or not to submit a Bid, in the preparation of any such Bid and in participation of the bidding process, including, without limitation, all costs of providing information requested by, or on behalf of, HEL, attending meetings, conducting due diligence and engaging in negotiations.

9. It shall not be binding on HEL to accept the lowest or any other Bid. It shall not be obligatory on the part of HEL to furnish any information or explanation for the cause of rejection of the whole or any part of the Bid.

10. The Bidder shall not assign or transfer the Contract or any part thereof, without prior written consent of HEL.

11. The Bidder shall comply with Applicable Laws and requirements/policies of State Govts. and any other statutory authority (s) related to Scope of Work during the tenure of the Contract.

12. This Bid Document and the Contract shall be governed by the laws of India and all legal proceedings in connection with the Bid Document and Contract shall be subject to the exclusive jurisdiction of the courts at Kolkata.

13. Canvassing in any manner (either directly or indirectly) may, in HEL's sole discretion, lead to disqualification and blacklisting of the Bidder from further involvement in the bidding process and from participating in the future tenders issued by HEL.

14. Safety and Insurance of workers/Employees of the Bidder is in the scope of the Bidder.

15. HEL is concerned to avoid any conflicts of interest and may, at its own discretion, disqualify any Bidder from further involvement in the bidding process, should an actual or potential conflict of interest arise.

16. Bidders shall not issue or release any publicity in relation to, nor comment on, the Contract/PO, the bidding process without HEL's prior written consent to the relevant communication. In particular, Bidders shall not make any statement to the media, press or any other similar organizations regarding the nature of any Bid, its content or any information relating thereto without the prior written consent of HEL.

17. All Bidders shall regard and treat the terms of the Bid Document and all information as being strictly private and confidential and shall ensure that the same is not disclosed, copied, reproduced, distributed or passed to any other person at any time, except for:

- a) the purpose of enabling a Bid to be prepared and submitted.
- b) as may be required to be disclosed by judicial or administrative process, and
- c) disclosed in an action or proceeding brought by a Bidder in pursuit of its rights or the exercise of its remedies in connection with the scope of work.

18. Copyright in the information in relation to the Bid Document and bidding process rests exclusively with HEL or its advisers (as applicable) and such documentation may not be copied, reproduced, distributed or otherwise made available to any other third party (either in whole or in part) without the prior written consent of HEL, except in connection with the preparation and submission of a Bid.

19. Bidder shall submit only one Bid and any of the parent company/ Associate/ affiliate/ Related Parties/ ultimate parent company of the Bidder shall not separately participate (directly or indirectly) in the same bidding process.

19. A Bidder shall not have conflict of interest that affects the bidding process. Further, if any Bidder is found to have a common interest with other Bidders participating in the same bidding process, the Bids of all such Bidders shall be rejected in HEL's sole discretion.

20. HEL reserves its right to make changes/amendments to this Bid Document and any Purchase Order.

Ministry of Power (MoP) has issued revised policy dated 8th Oct 2021 with Notification number 11/86/2017-Th. II, for Power generation through Co-firing of Biomass in Coal Based Power Plants. The Policy mandates use of 5% to 10% blend of Biomass pellets made, primarily agro residue along with Coal. In order to meet the said requirement, HEL hereby invites Bids from interested and eligible parties for "SUPPLY OF BIOMASS PELLETS TO HIRANMAYE ENERGY LIMITED, HALDIA".

## **1. INTRODUCTION**

Hiranmaye Energy Limited ("Herein referred to as 'HEL' or 'Owner' or 'Company'), presently operates Coal based generation units of 2x150 MW Capacity operating on Indian coal, located at Village: Kashberia, Sibramnagar PO, Haldia, Purba Medinipur (West Bengal).

To reduce Greenhouse Gas emission, HEL intends to utilize agro residue-based pellets (terrified and non-torrified) along with coal for power generation through biomass cofiring.

The tendering/procurement activities for this Project are being managed from HEL's following office:

Hiranmaye Energy Limited (HEL), Plot No. X1 - 2 & 3, Block EP, Saltlake, Sector-V, Kolkata – 700091

## 2. BIDDER PRE-QUALIFICATION CRITERIA

Interested parties to note that the Bidder shall be required to fulfil the Pre-Qualification Criteria in order to qualify for the subject work. The Bidder shall be required to submit relevant supporting documents to demonstrate their qualification during the bid submission stage against Tender document.

#### 2.1 TECHNICAL REQUIREMENT

a. The Bidder should have Minimum supply capacity of 50 TPD. The Bidder shall submit credential (POs / certificates / customers letters etc.) demonstrating 50 TPD supply of biomass pellets contract/s executed or under execution in the last 2 years. New supplier having no past experience may submit supporting credential of production capacity to supply 75 TPD.

b. The Bidder should have executed at-least One (01) Contract including scope of supply including transportation / logistics responsibility. New supplier having no past experience of logistics may submit supporting credentials of logistics capability through their own / tie-ups.

c. The Bidder shall confirm to meet the detailed technical requirement as mentioned under **Annexure-1** of this document.

#### 2.2 FINANCIAL REQUIREMENT

- a. The Bidder should have annual average turnover of not less than INR 2.5 Crores for last three financial years. The Bidder shall submit proof duly certified by statutory auditors.
- b. The Bidder should confirm the adequacy of working capital for INR 1 Crore for sustaining operations and submit supporting credit limit / bank solvency letter.
- c. In case the annual accounts for the financial year immediately preceding the last date of submission of Bid are not audited, the Bidder shall submit a certificate to this effect from its Statutory Auditors.

Note: Both Technical & Financial parameters shall form part of the total qualification requirement.

## 2. SCOPE OF WORK

2.1 The scope of work under this package shall include 'Supply, Loading & Unloading, Transport, and Delivery of material at HEL Site', as per the guaranteed parameters mentioned in Clause No. 3 of the Bid Document.

Details of the material required under the proposed contract period are as under:

Sr. No.	Description of Item	Indicative Quantity [to be supplied in Tonnes per day] (TPD)	Total Qty. (Tonnes)	Biomass Delivery	Period of Supply
1	Agro Residue Based Biomass Pellets	10	2920 <sup>*</sup>	As per schedule specified in Tender	Approx. One (01) year

\* Considering Plant Load Factor as 80%, (80% of 365\*10=2920)

**Note:** The daily requirement estimated above is indicative only and may change based on actual Plant Load Factor and requirement of HEL.

2.2 The bidder should ensure an Initial Supply of 10 TPD to conduct the Pilot test (Trial of Biomass) in the Boiler. Post successful review of the performance and reliability of the biomass firing, supply on continuous basis for a period of One (01) year, the Contract shall be extended further for a period of Six (06) years as per mutually agreed terms and conditions.

2.3 The brief Scope of Work under this tender shall be to deliver of Biomass at the designated delivery point of HEL, inline to detailed scope of work/T&C/Technical specification via truck mode logistics. The quantity indicated shall be supplied in

uniformly distributed manner over the contract period of One (01) year barring monsoon period of 4 Months.

2.3 Unloading shall be in the scope of the Bidder at a designated place inside HEL plant. The Carriage vehicles should be fully covered and waterproofed during transportation to prevent the material from rain, sunlight and to prevent dust aspects. Consignment not supplied in tarpaulin covered trucks shall not be accepted.

2.4 The Bidder may also offer transport by rail mode with the prior consent from HEL, subject to ensure the environment compliance during transportation.

2.5 The Bidder may supply the material i.e. Biomass pellets packed in bags. In that case, the Bidder shall unload the material at his own cost and extra charges, if any, shall be borne by the Bidder.

2.6 Before unloading, the samples shall be tested for moisture content. However, the HGI report shall be submitted by the Supplier with each carriage vehicle/consignment at the time of supply.

2.7 Demurrage, if any, on the Carriage vehicle for reasons attributable to the Bidder shall be borne by the Bidder.

#### **3. TECHNICAL SPECIFICATION**

3.1 The Bidder can supply only one type or combination of both Torrefied and Non-Torrefied as per the specification. The bidder shall quote the price for pellets and its GCV (ARB\*) as per Annexure-3. The pellets shall adhere to the technical specification given in Table-1 and bidder shall submit declaration as per the **Annexure – 1**.

3.2 Base material for pellet manufacturing shall be agro residue which means the leftover portion of the agriculture produce such as stubble/straw/stalk/husk of those agro residues which are surplus and not being used as animal fodder such as paddy, soya, arhar, gwar, cotton, gram, jawar, bajara, moong, mustard, sesame, til, maize, sunflower, jute, coffee, etc., groundnut shell, coconut shell, castor seed shell etc., pine needle, elephant grass, sarkana and horticulture waste such as dry leaves and trimmings generated during the maintenance and pruning of trees and plants.

3.3 Any by-product of woodwork factory (such as wood, wood chips, saw dust, furniture waste etc.) shall not be treated as agro/ crop residue and shall not be accepted for delivery.

3.4 Agro residue based biomass pellets can be manufactured using single or multiple agro/crop residues together.

3.5 The Bidder shall mention the name(s) of agro/crop residue(s) used for manufacturing of Torrefied pellets and their approximate proportion in each consignment details during dispatch of Material.

3.6 Natural additives/binder such as lignin, starch, animal dung etc. can be used for manufacturing torrefied pellets briquettes, if required, and same shall also be explicitly mentioned by the Bidder in consignment details.

3.7 HEL reserves the right to exclude any base Material/additive/ binder or modify their proportion, if any adverse impact of the base Material/ additives/binder is found on boiler in long run.

#### Table-1

SI. No.	Technical Data	Unit	Specification for Torrefied/Non-Torrefied pellets
1	Base Material	NA	Agro Residue/Crop Residue (wood based pellets will not be acceptable)
2	Diameter*	mm	In case of cylindrical shape: Diameter: Not more than 25 mm Length: Not more than 35 mm For other shapes: No dimension should exceed 35 mm.
3	Bulk Density	Kg/m3	Not less than 600
4	Fines% (Length< 3mm) (ARB***)	Weight %	Fines $\leq$ 5%
5	Moisture (ARB***)	Weight %	9% to 14%
6	Gross Calorific Value (ARB***)	Kcal/Kg	To be quoted by the bidder Non-Torrefied: Not less than 2800 Torrefied: Not less than 3400
7	Hard Groove Grindability Index (HGI)		Not less than 50
8	Particle size distribution <sup>#</sup> (After crushing and pulverizing in site lab pulverizer)	Weight %	Passing proportion from 2 mm mesh size sieve: ≥ 75% Passing proportion from 3 mm mesh size sieve: =100%
9	Chlorine	Weight %	Not more than 0.5
10	Sulphur	Weight %	Not more than 0.2
11	Ash (ARB***)	Weight %	Not more than 14%

#### Technical Specification for Agro residue based Biomass Pellet.

\* During contract period, dimension of biomass pellets may be revised/modified on mutual consent basis without any financial/cost implication to HEL.

<sup>#</sup> Applicable for non- torrefied pellets.

**\*\*\*** ARB: As Received Basis.

## 4. PERIOD OF CONTRACT

4.1 Supply Duration:

The bidder should ensure an Initial Supply of 10 MT to conduct the pilot test (Trial of Biomass) in the Boiler. Post successful review of the performance and reliability of the biomass firing, supply on continuous basis for a period of One (01) year shall be considered as per the condition mentioned in this document.

4.2 Delivery Commencement:

The Supplier shall commence delivery of material within Fifteen (15) days from the issue of the Purchase Order.

4.3 Delivery Address:

The consignment shall be delivered to the following address: Hiranmaye Energy Limited (HEL), Haldia Power Plant, Village: Kashberia, Sibramnagar PO, Haldia, Purba Medinipur (WB) PIN: 721635

4.4 Delivery Schedule:

4.4.1 Default delivery schedule shall be the quantity allocated to the Supplier for the supply of pellets on a daily basis, which is 10 MT per day. Accordingly, the Supplier shall deliver that quantity of pellets to the Plant site.

4.4.2 There should be continuous off take of the biomass by the plant as per the terms of the Contract. The Owner shall not restrict the supply from the Bidder unless some exigency happens and with mutual consent with the Bidder.

4.4.3 Although the Bidder shall supply the pellets as per the above delivery schedule, however, the Bidder shall have the flexibility to supply the material in higher quantity than the delivery schedule on mutual consent basis to meet the annual supply requirement. In such a case, the Bidder shall give One-week advance intimation to the Owner and the Owner shall give the consent to supply material in higher quantity after assessing traffic congestion or other aspects, as required.

4.4.4 The Owner shall also give reduced delivery schedule to the Bidder by giving oneweek advance notice through the official e-mail ID of the Engineer in Charge (EIC) or email ID of any other person authorized by him, and the Bidder shall despatch the consignment accordingly.

## **5. PRICE AND ITS EFFECTIVENESS**

5.1 Price Basis: Free on Road/Delivered at Place/Rail at HEL.

#### 5.2 Price Escalation:

For destination Prices quoted by the Bidder shall be subjected to adjustment during performance of the Contract to reflect changes in the cost of labour, Diesel, Electricity in accordance with the procedures specified below:

It is understood that the price component of the items for any shipment/dispatch comprises of a fixed portion (designated as 'F' and the value of which is specified hereunder) and a variable portion linked with the indices for labour, diesel, electricity (description and co-efficient as enumerated below):

The amount of price adjustment towards variable portion payable/recoverable on each shipment/dispatch shall be computed as under:

 $\mathsf{EC} = \mathsf{EC}_1 - \mathsf{EC}_0$ 

EC<sub>1</sub> will be computed as follows:

 $EC_1 = EC_0 \{F + a X (A_1/A_0) + b X (B_1/B_0) + c X (C_1/C_0) + Lb X (L_1/L_0)\}$ 

Where EC = Adjustment to **FOR Destination** Price Component expressed in the currency of the Contract payable to the Contractor for each shipment/despatch.

 $EC_1$  = Adjusted Amount of **FOR destination** Price Component expressed in the currency of the Contract payable to the Contractor for each shipment/ dispatch.

 $EC_0 = FOR$  destination Price for the item in the currency of the Contract, shipment/ dispatch wise.

F = The fixed portion of Component of the Contract Price. It shall be 0.15.

a = Co-efficient of High Speed Diesel fuel.

b = Co-efficient of Electricity.

c = Co-efficient of WPI (Food Particle Index).

Note: Value of a, b and c each will be 0.20

Lb = Co-efficient for labour component, which shall be 0.25

 $A_0$  = High Speed Diesel Price as on One (01) month prior to date of submission of Price bid.

 $A_1$  = High Speed diesel oil price as on One (01) month prior to the date of shipment.

Note: Price of High-Speed diesel oil, at Pump Station of Indian Oil Corporation or HP or any other Govt. oil company nearest to the Project Site, where the material shall be delivered. (Selling price inclusive of all taxes and duties as per litre of H.S.D. Oil).

 $B_0$  = WPI (Electricity) as on one month prior to date of submission of Price bids.

 $B_1$  = WPI (Electricity) as on one month prior to the date of shipment.

Note: As per Office of Economic Advisor.

 $C_0$  = WPI (Food Article) as on one month prior to date of submission of Price bids.

 $C_1$  = WPI (Food Article) as on one month prior to the date of shipment.

Note: As per Office of Economic Advisor.

 $L_0$  = All India Consumer Price Index for Industrial workers (All Indian Monthly Average) as on one month prior to date of submission of Price bid.

 $L_1$  = All India Consumer Price Index for Industrial workers (All Indian Monthly Average) as on one month prior to the date of shipment.

Note: As published by Labour Bureau Shimla, Govt. of India.

#### 5.3 Illustration:

Considering:

 $EC_0 = FOR$  Price of Biomass = Rs.4,000/MT

Date of Submission of Bid: 21.05.2022 Date of Shipment: 16.07.2022

 $A_0$  = Cost of HSD as on 20.04.2022 = Rs.99/-

 $A_1 = \text{Cost of HSD as on 15.06.2022 (say)} = \text{Rs.110/-}$ 

 $B_0 = WPI$  (Fuel and Power) as on 20.04.2022 (say) = 150

 $B_1 = WPI$  (Fuel and Power) as on 15.06.2022 = 160

 $C_0 = WPI$  (Food Index) as on 20.04.2022 (say) = 168

 $C_1 = WPI$  (Food Index) as on 15.06.2022 (say) = 185

 $L_0$  = All India Consumer Price Index for Industrial Workers, as on 20.04.2022 (say) = 125

 $L_1$  = All India Consumer Price Index for Industrial Workers, as on 15.06.2022 (say) = 130

Then EC<sub>1</sub> will be computed as:

$$\begin{split} \mathsf{EC}_1 &= \mathsf{EC}_0 \left\{ \mathsf{F} + \mathsf{a} \; \mathsf{X} \; (\mathsf{A}_1/\mathsf{A}_0) + \mathsf{b} \; \mathsf{X} \; (\mathsf{B}_1/\mathsf{B}_0) + \mathsf{c} \; \mathsf{X} \; (\mathsf{C}_1/\mathsf{C}_0) + \mathsf{Lb} \; \mathsf{X} \; (\mathsf{L}_1/\mathsf{L}_0) \right\} \\ &= 4000 \; \{ 0.15 + 0.20 \; \mathsf{X} \; (110/99) + 0.20 \; \mathsf{X} \; (160/150) + 0.20 \; \mathsf{X} \; (185/168) + 0.25 \; \mathsf{X} \; (130/125) \} \\ &= 4000 \; \{ 0.15 + 0.20 \; \mathsf{X} \; (1.11) + 0.20 \; \mathsf{X} \; (1.06) + 0.20 \; \mathsf{X} \; (1.10) + 0.25 \; \mathsf{X} \; (1.04) \} \\ &= 4000 \; \{ 0.15 + 0.222 + 0.212 + 0.22 + 0.26 \} \\ &= 4000 \; \{ 1.064 \} \\ &= 4256 \end{split}$$
Hence,  $\mathsf{EC} = \mathsf{EC1} - \mathsf{EC0} \\ &= 4256 - 4000 \\ &= 256. \end{split}$ 

#### **5.5 Security Deposit**:

The Security Deposit shall be Rs.5000/- (Rupees Five Thousand Only) per MTPD quantity per year of Supply Period.

In case after having been issued the Notification of Award/Purchase Order of a package, if the bidder does not accept the Notification of Award/Purchase Order or do not submit an acceptable Performance Security, which results in tender being annulled then the bidder shall be treated ineligible for participation in retendering of this particular package. Further, such vendor shall also be dealt as per the provisions of the policy for Withholding and Banning of Business Dealings.

If after award of the Purchase Order/Contract it is found that the manufacturing plant from which supplies are being made, is not registered in the name of the Contractor/one of the Partner of Consortium, to whom Purchase Order/Contract is awarded, then the Contract shall be terminated and security deposit of the bidder is liable to be forfeited and bidder is also liable to be debarred for participation in subsequent tenders.

Note: Security Deposit may be submitted in any of the following forms:

- a. A crossed Demand Draft/ Bankers Cheque drawn in favor of Plant payable at Kolkata.
- b. An irrevocable Bank Guarantee as per the Plant standard format from any Nationalized Bank / Scheduled Bank as acceptable to the Owner.

## 5.6 Liquidated Damages (LD):

The Contractor should deliver Material as per daily delivery schedule to avoid Liquidated Damages (LD) for short supply in a given month against aggregate of daily delivery schedule in that month.

5.6.1 The Supplier shall have to commence delivery of material within 270 days from the date of issue of the Purchase Order. To facilitate initial capacity ramp up, no Liquidated Damages shall be levied for initial 120 days from the delivery start date (hereinafter referred to as 'NO LD period').

5.6.2 Liquidated Damages (LD) shall not be applicable for short supply up to 15% in a month against aggregate of daily delivery schedule in that month. However, for monthly short supply beyond 15%, Liquidated Damages (LD) shall be recovered from the Supplier @ 5% of the awarded price of the biomass pellets for shortfall quantities.

5.6.3 GST Extra as applicable shall also be levied on Liquidated Damages.

## **6. QUANTITY DETERMINATION**

6.1 Weighment of trucks shall be carried out on Weighbridges (for tare and gross) at HEL Plant. The Bidder may witness weighment of trucks once in 30 days, HEL's representative will accompany the Bidder's representative when any such visit is carried out. The Bidder shall intimate HEL via e-mail at least Two (02) days in advance about the date of such visit.

Net weight = Gross weight less the Tare weight as measured at HEL Weighbridge.

6.2 The Owner shall provide a copy of calibration certificates if requested by the Contractor. The Owner shall undertake the calibration of WB in line with the schedule/practice as recommended by the Legal Metrology.

## 7. QUALITY DETERMINATION

7.1 The Owner shall carry out the sampling and analysis of torrefied/non-torrefied pellets at HEL Site as per the provisions of either BIS or ASTM. HEL shall carry out the sampling and testing process as per the relevant BIS (IS 436 Part-1) standards for sampling from the consignment received in a day.

7.2 The authorized representatives of the Owner and the pellet Supplier shall jointly witness the process of sample collection and preparation of the laboratory samples. The representatives shall put their signature on the sample tags in evidence of the process of sampling. Both Owner and the pellet supplier shall sign on the samples register maintained by the Owner at the unloading end.

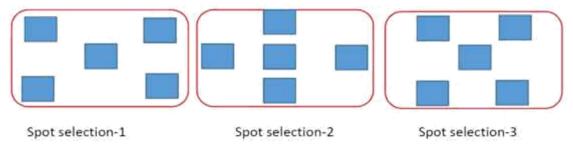
7.3 For purpose of rejection test before unloading, the samples shall be tested for moisture content by the Owner. If the test result of any sample collected from a truck/consignment meets Technical parameter criterion for moisture content as given in **(Table-1)**, then truck shall be allowed for unloading. Otherwise, the truck (Consignment) will be rejected if test result meets the rejection criterion as given in **(Table-3)** and it shall be the supplier's responsibility to carry it back on his own cost.

7.4 For testing of GCV and other Technical parameters, single sample shall be prepared for all the consignments received in a day from a particular Supplier. For avoidance of doubt, in case supply is from multiple Suppliers in a day, Supplier-wise sample shall be prepared for all the consignment received in a day.

7.5 The final laboratory sample shall be divided into 3 (three) parts. Part-1 of the sample is for analysis of GCV and other technical parameters by HEL lab at Site. Part-2 sample is to be handed over to the pellet supplier for its own analysis. Part- 3 of the sample, called Referee Sample, shall be sealed jointly and shall be kept with HEL under proper lock and key arrangement.

7.6 The sample quantity of approximately 30 Kg is to be collected from each truck/consignment from 4-5 randomly selected spots on the truck top after removing biomass pellet layer of approximately 25-30 cm depth from the top. Approximately 5-6 kg of sample is to be collected from each spot.

7.7 Five spots are selected for sampling of biomass pallet as shown in figure below. Any one spot selection option shall be decided by HEL sampling staff after viewing the biomass loading pattern. Spot selection is not in Supplier's scope.



7.8 The HEL's representative will have the right to witness sampling and testing of pellets for the Base Parameters at the loading end.

7.9 The supplier's representative will have the option to witness the sample collection, preparation, testing of the main sample, and final packing of the reserve sample. Any dispute related to sampling, preparation, and analysis activity has to be raised strictly within 48 hours of the respective activity. Further, any dispute related to testing results may be raised strictly within 7 days of the declaration of the results by HEL. The disputes concerning sampling and testing may be entertained only if backed up by logical and justifiable reasons. Frivolous/repeated disputes may invite penal action by the Owner.

7.10 In case of dispute is raised within the stipulated time, the Reference sample shall be analyzed in a NABL accredited laboratory as notified by the Owner time to time, expense of which shall be borne equally by both Owner and the pellet supplier. Expense borne on supplier part shall be adjusted against payment to the supplier. NABL accredited laboratory report of referee sample shall be final and binding on both the parties. Dispute raised beyond the stipulated time shall not be entertained.

7.11 It may be noted that referee samples shall only be used in case of conflict of quality and price adjustment, whereas, in case of rejection of consignment due to Total moisture (TM) content, Owner's reported TM content result will be final and binding.

7.12 As this process of sampling and preparation is a continuous round the clock process to deal with the multiple consignment workloads, so the Owner would carry out the process as per the time deemed suitable for the process. Hence, it is the responsibility of the supplier's representative to be available at all times to witness the same.

7.13 The Owner may request the Supplier to withdraw representative who is not diligent and/or is not cooperative. Frivolous/unreasonable objections to the sampling and testing process at the Owner's Site will not be entertained. It may be noted that witnessing testing (if any) carried out outside the Owner's lab will not be feasible and should be avoided.

7.14 The Owner may also consider sharing part of the sample (third sample) with the Supplier. The third sample is for reference of the Supplier only and results of analysis of the third sample will not be considered for determining the payments.

7.15 Referee samples will be preserved in the Owner's laboratory under locked almirah in sealed condition in a moisture-free area for 30 days (from the date of declaration of such results) in the safe custody of the Owner.

7.16 Generally, Quality reports will be generated within 7 working days of receipt of the material and the same will be communicated to the Supplier, subject to receipt of loading end quality report.

7.17 To prevent misuse of the facility by disputing the majority of results of the lot, the Owner will abort the reserve testing process in case if the reserve sample results (first two) are within the repeatability limits (as per BIS 1350) from original results. In this case, original results will be considered for payment purposes.

7.18 Any pellet that is received at HEL will not be returned/ permitted to be collected by the Supplier unless agreed to in writing by HEL.

7.19 Standards/Methods as per the table below will be referenced/used for quality determination:

Sr. No.	Technical Data	Testing Method/Standard
1	Dimension (Diameter & Length)	ISO 17829 or Equivalent method may be referred ISO 17829 refers for the Solid Biofuels —For the determination of length and diameter of pellets
2	Fines (%)	ISO 18846 or Equivalent method may be referred ISO 18846:2016 specifies a method for determining the amount of material passing through a sieve with 3.15 mm diameter round hole.
3	GCV (ARB)*	IS 1350 or Equivalent method may be referred
4	Moisture Content (ARB) <sup>*</sup>	Method based upon IS 1350 or equivalent method may be referred
5	HGI	ISO 5074 or equivalent method may be referred

## Table-2

\* ARB: As Received Basis.

7.20 For Determination of Total Moisture (TM) content:

a. Samples shall be collected from each truck/dumper for TM determination.

b. TM will be determined by validated method based on IS 1350 (10g of 2.90 mm passing sample will be heated for 2 hours at 108 +/- Deg C.

Total moisture will be computed as per the formula below:

 $TM\% = (W_1 - W_2) \times 100 / W1$ 

Where:  $W_1$  = Initial weight of sample (10 grams)

 $W_2$  = Final weight of sample

Note: Before unloading, the samples shall be tested for moisture at Station end. If this value is in the rejection level range, the consignment shall be rejected and it shall be the suppliers' responsibility to carry it back at his own cost.

## 8. COMPUTATIONAL METHODOLOGY FOR VARIOUS RECOVERIES/QUANTITY ADJUSTMENTS

8.1 The supplier shall guarantee technical parameters of agro residue-based pellets as given in Table-1 under Clause No. 3. The characteristics contained in Technical

Specification (Table-1 under Clause No. 3.) shall be adhered to and maintained and nonadherence shall result in 'Quantity and Price Adjustment' as per Clause 8.3 or even rejection as per **Clause 8.2** of this volume.

8.2 Rejection of Consignment

The consignment of biomass pellets arrived at Site shall adhere to the technical specification. The Biomass Pellet's rejection criteria shall be as per the following Table -3. Moisture shall be tested at Owner's Lab at Site before unloading. Other parameters shall be furnished by the Supplier before unloading of the material at Owner's Site location and shall also be tested by Owner at their Lab.

Technical data	Unit	<b>Rejection Level</b>
Moisture	Weight %	>14%
Ash	Weight %	>14%
GCV (Torrefied Pellets)	Kcal/kg	< 3400 **
GCV (Non-Torrefied Pellets)	Kcal/Kg	< 2800*
HGI	-	<48
Chlorine	Weight %	>0.5
Sulphur	Weight %	> = 0.25

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\*\* Material supplied of GCV less than 3400 Kcal/Kg is liable for rejection and no payment shall be made for already delivered and consumed.

\* Material supplied of GCV less than 2800 Kcal/Kg is liable for rejection and no payment shall be made for already delivered and consumed.

8.3 Price Adjustment for Gross Calorific Value (GCV)

If a consignment of agro residue-based pellets does not meet the guaranteed parameters for Gross Calorific Value (ARB) but is within the acceptable limit, the consignment shall be accepted but with pro-rata upward or downward price adjustment as calculated using the following formula:

## 8.3.1 Torrified Pellet:

a. **Stipulation of limits for Quoted GCV:** Based on the Base material and Mixing material as per technical specification, the Bidder is required to quote GCV value of biomass in Kcal/Kg within the range as mentioned below:

In case of Torrified Pellet

- Minimum Limit: 3400 kCal/kg
- Maximum Limit: 5000 kCal/kg

b. The Supplier shall supply the agro residue based torrefied biomass pellets of GCV not less than 3400 kcal/kg. Price shall be adjusted for GCV variation of supplied

material as below:

## For GCV (ARB)>=3400 Kcal/Kg [For GCV more than or equal to 3400 Kcal/Kg]

Upward pro-rata price adjustment shall be done for GCV variation of supplied material as per following formula:

#### Adjusted FOR Price = [Quoted FOR Price X Actual GCV(ARB)] Quoted GCV (ARB)

Note: FOR (Freight on Road shall be referred as FOR) Price: FOR Destination Price.

In case upward GCV variation is more than the Maximum Limit for Torrefied pellet then Price adjustment on account of GCV shall be limited to Maximum Limit for Torrefied pellet only.

The downward GCV variation from Minimum limit, pro-rata price adjustment shall be done for GCV variation of supplied material as per following formula:

## i. For GCV 3400 Kcal/Kg> GCV=>3000 Kcal/Kg [For GCV less than 3400 Kcal/Kg AND more than or equal to 3000 Kcal/Kg]

## Adjusted FOR Price = 0.75 x [Quoted FOR Price X Actual GCV(ARB)] Quoted GCV (ARB)

ii. For GCV 3000 Kcal/Kg>GCV=>2600 Kcal/Kg [For GCV less than 3000 Kcal/Kg AND more than or equal to 2600 Kcal/Kg]

## Adjusted FOR Price = 0.50 x [Quoted FOR Price X Actual GCV(ARB)] Quoted GCV (ARB)

iii. In case of GCV (ARB) is less than 2600 kcal/Kg, no payment shall be made for already delivered and consumed material of GCV less than 2600 Kcal/kg.

**Note:** In case, the Supplier is found to frequently supply the material of GCV less than 3400 Kcal/Kg or found to take deviations in other technical parameters, warning letter shall be issued to the Supplier.

c. However, if material is supplied below 2600 Kcal/Kg in more than 3 (Three) instances during the currency of the Contract even after issuing warning letter, then the Contract shall be liable for cancellation.

d. Material supplied of GCV less than 2600 Kcal/Kg is liable for rejection and no payment shall be made for material already delivered and consumed.

Illustration I:

Quoted Price- Rs. 5000/MT (FOR Basis) Quoted GCV- 4000 Kcal/Kg Actual GCV- 3800 Kcal/Kg Adjusted Price-  $[5000 \times 3800]/4000 = \text{Rs} 4750/\text{MT}$  (FOR Basis)

Illustration II:

Quoted Price- Rs. 5000/MT (FOR Basis) Quoted GCV- 4000 Kcal/Kg Actual GCV- 3300 Kcal/Kg Adjusted Price- 0.75 x [5000 X 3300]/4000 = Rs 3093.75/MT (FOR Basis)

Illustration III:

Quoted Price- Rs. 5000/MT (FOR Basis) Quoted GCV- 4000 Kcal/Kg Actual GCV- 2900 Kcal/Kg Adjusted Price- 0.50 x [5000 X 2900]/4000 = Rs 1812.50/MT (FOR Basis)

#### e. Weight Correction for Quoted Moisture

If consignment of biomass pellets does not meet the guaranteed parameter for moisture (ARB) but is within the acceptance limit as given in Table-1, the consignment shall be accepted but with pro rata quantity adjustment (weight correction) as calculated by using following formula:

Weight correction factor on account of Moisture (M):

## M = {100+X - Moisture % (ARB)}/100

Where,

X = lower moisture percentage limit as per specification = 9%.

Weight correction on account of moisture (ARB) shall be done only if it lies in range of 9 % < Moisture (ARB)  $\le$  14%.

For moisture (ARB) less than or equal to 9%, no weight correction shall be done.

For moisture (ARB) more than 14%, the consignment of biomass pellets shall be rejected.

#### g. Quantity Adjustment for Ash

If consignment of biomass pellets does not meet the guaranteed parameter for Ash, but is within the acceptance limit as given in Table-1, the consignment shall be accepted but with pro rata quantity adjustment (weight correction) as calculated using following formula:

Weight correction factor on account of Ash (A):

## A = {100 + Y - Ash Content % (ARB)}/100

Where,

Y = Ash percentage limit as per specification (Not less than 14%).

Weight correction on account of Ash Content (ARB) shall be done only if it is more 14%. For Ash content less than or equal to 14%, no weight correction shall be done.

#### h. Corrected Weight of Consignment

If W is the weight of consignment supplied, then final corrected weight on account of both moisture and ash corrections shall be calculated as below:

#### $W_{corrected} = W \times M \times A$

Where,

M = Weight correction factor on account of Moisture (M)

A = Weight correction factor on account of Ash (A)

The corrected weight (W  $_{\rm corrected}$ ) of the consignment and adjusted price for GCV of the biomass pellets as worked out above shall be considered for the payment to be made to the Supplier.

## 8.3.2 Non Torrified Pellet

a. Stipulation of limits for Quoted GCV: Based on the Base material and Mixing material as per technical specification, the Bidder is required to quote GCV value of biomass in Kcal/Kg within the range as mentioned below:

In case of Non-Torrified Pellet

- Minimum Limit: 2800 kCal/kg
- Maximum Limit: 4000 kCal/kg

b. The Supplier shall supply the agro residue based torrefied biomass pellets of GCV not less than 2800 kcal/kg. Price shall be adjusted for GCV variation of supplied material as below:

# For GCV (ARB)>= 2800 kcal/kg [For GCV more than or equal to 2800 kcal/kg]

Upward pro-rata price adjustment shall be done for GCV variation of supplied material as per following formula:

## Adjusted FOR Price = [Quoted FOR Price X Actual GCV(ARB)] Quoted GCV(ARB)

Note: FOR (Freight on Road shall be referred as FOR) Price: FOR Destination Price.

The downward GCV variation from Minimum limit, pro-rata price adjustment shall be done for GCV variation of supplied material as per following formula:

## For GCV 2 8 00 Kcal/Kg> GCV=>2400 Kcal/Kg [For GCV less than 2 8 00 Kcal/Kg AND more than or equal to 2400 Kcal/Kg]

## Adjusted FOR Price = 0.75 x [Quoted FOR Price X Actual GCV(ARB)] Quoted GCV (ARB)

For GCV 2400 Kcal/Kg>GCV=>2000 Kcal/Kg [For GCV less than 2400 Kcal/Kg AND more than or equal to 2000 Kcal/Kg]

## Adjusted FOR Price = 0.50 x [Quoted FOR Price X Actual GCV(ARB)] Quoted GCV (ARB)

c. In case of GCV (ARB) is less than 2000 kcal/Kg, no payment shall be made for already delivered and consumed material of GCV less than 2000 Kcal/kg.

d. Note: In case, the Supplier is found to frequently supply the material of GCV less than 2800 Kcal/Kg or found to take deviations in other technical parameters, warning letter shall be issued to the Supplier.

e. However, if material is supplied below 2000 Kcal/Kg in more than 3 (Three) instances during the currency of contract even after issuing warning letter then Contract shall be liable for cancellation.

f. Material supplied of GCV less than 2000 Kcal/Kg is liable for rejection and no payment shall be made for material already delivered and consumed.

Illustration I:

Quoted Price- Rs. 3500/MT (FOR Basis) Quoted GCV- 3200 Kcal/Kg Actual GCV- 3000 Kcal/Kg Adjusted Price- [3500 X 3000]/3200 = Rs. 3281.25/MT (FOR Basis)

Illustration II: Quoted Price- Rs. 3500/MT (FOR Basis) Quoted GCV- 3200 Kcal/Kg Actual GCV- 2500 Kcal/Kg Adjusted Price- 0.75X [3500 X 2500]/3200 = Rs. 2050.78/MT (FOR Basis)

Illustration III: Quoted Price- Rs. 3500/MT (FOR Basis) Quoted GCV- 3200 Kcal/Kg Actual GCV- 2200 Kcal/Kg Adjusted Price- 0.50X [3500 X 2200]/3200 = Rs. 1203.13/MT (FOR Basis)

## g. Weight Correction for Quoted Moisture

If consignment of biomass pellets does not meet the guaranteed parameter for moisture (ARB) but is within the acceptance limit as given in Table-1, the consignment shall be

accepted but with pro rata quantity adjustment (weight correction) as calculated by using following formula:

Weight correction factor on account of Moisture (M):

## M = {100 + X - Moisture % (ARB)}/100

Where,

X = lower moisture percentage limit as per specification = 9%.

Weight correction on account of moisture (ARB) shall be done only if it lies in range of 9 % < Moisture (ARB)  $\le$  14%.

For moisture (ARB) less than or equal to 9%, no weight correction shall be done.

For moisture (ARB) more than 14%, the consignment of biomass pellets shall be rejected.

#### g. Quantity Adjustment for Ash

If consignment of biomass pellets does not meet the guaranteed parameter for Ash, but is within the acceptance limit as given in Table-1, the consignment shall be accepted but with pro rata quantity adjustment (weight correction) as calculated using following formula:

Weight correction factor on account of Ash (A):

## A = {100 + Y - Ash Content % (ARB)}/100

Where,

Y = Ash percentage limit as per specification (Not more than 14%).

Weight correction on account of Ash Content (ARB) shall be done only if it is more 14%. For Ash content less than or equal to 14%, no weight correction shall be done.

#### h. Corrected Weight of Consignment

If W is the weight of consignment supplied, then final corrected weight on account of both moisture and ash corrections shall be calculated as below:

#### $W_{corrected} = W \times M \times A$

Where,

M = Weight correction factor on account of Moisture (M)

A = Weight correction factor on account of Ash (A)

The corrected weight (W  $_{corrected}$ ) of the consignment and adjusted price for GCV of the biomass pellets as worked out above shall be considered for the payment to be made to the Supplier.

#### 8.4 Recovery on Account of Excess Fines in Consignment

Dimension of agro residue-based pellets has been given in the technical specification which shall be adhered to. Dust, crushed agro residue-based pellets in consignment as received at HEL shall be treated as fines and there shall be recovery on account of excess fines (ARB) if it exceeds 5%. The recovery on account of excess fines will be worked out as per the following formula:

Recovery = (Adjusted price of Biomass pellets) x W x (Actual Weight % of fines - 5%)

W = Weight of consignment as received

This amount shall be recovered from the payment of that consignment.

#### 8.5 Rejection Level

The consignment of agro residue-based biomass pellets received at HEL plant shall adhere to technical specification. The rejection criteria shall be as per the following Table-4. Moisture shall be tested at Owner's Lab at Project site before unloading, and the sample shall be liable to be rejected in case it exceeds the rejection level.

#### Table-4

SI. No	Technical Data	Units	Rejection Level
1	Total Moisture (ARB*)	Weight %	More than 14%

## 9. BILLING AND PAYMENT TERMS

The Contractor shall submit the bills on Batch basis in triplicate for the Material received in a calendar month at TSPL Plant as per methodology as under:

9.1 The Contractor shall raise an invoice for the Batch i.e. total quantity received at HEL in a calendar month.

9.2 The bills are to be submitted along with the following supporting documents (as applicable), included but not limited to:

- i. Copies of weighment certificate by HEL.
- ii. Copy of quality reports of loading end.
- iii. Copy of HEL receipt end quality reports.
- iv. Certified working for deriving payable quantity.
- v. Original challan copies of truck engaged in transportation.
- vi. HGI Certificate from NABL accredited lab.
- vii. Composition of Biomass pellets.

9.3 The eligible payments shall be released after adjusting various penalties/ recoveries/ other adjustments as per the following procedure:

- a. HEL shall release the 85% payment against undisputed invoice for the quantity received in a Batch as admissible, within Thirty (30) calendar days from the date of receipt of such invoices (complete in all respects as determined solely by HEL) as per the detail mentioned in 9.2 at HEL Site.
- b. The balance 15% payment shall be kept as Performance Guarantee and the same shall be released within Thirty (30) days after due receipt of Goods Receipt Note along with Test Results and other documents as mentioned in Clause 9.2

9.4 The Contractor(s) are advised to submit bills that are complete in all respects and well in time for timely release of payment.

9.5 Tax at source shall be deducted, as per the relevant rules of Income Tax Act, 1961, any amendments modifications and substitutions thereto, from all payments on account of supply provided by the Contractor. HEL will issue valid certificates for the tax deducted at source as applicable.

9.6 All the relevant payments due as per the Contract shall be released to the Contractor on production of documentary evidence such as LR copy/ e-way bill/ toll tax receipts etc. to ensure that Biomass Pellets have been supplied from bidder's declared place (District) of manufacturing plant.

9.7 In case the location of manufacturing Plant is not yet finalized, then bidder may declare the tentative location of manufacturing Plant. However, the Bidder shall declare the location of their manufacturing Plant within 90 days of placement of Award.

9.8 If a Contractor does not declare the Plant Location within 90 days of placement of Award, then the Contract is liable to be terminated and security deposit of the bidder is liable to be forfeited and the bidder is liable to be debarred for participation in subsequent tenders.

9.9 However, in the event of declaration of location of manufacturing plant after the placement of Award, the FOR destination price quoted by the bidder and incorporated in NOA/PO, shall remain the same.

9.10 Invoices/bills in triplicate with supporting documents shall be addressed/submitted to the following address:

To, Hiranmaye Energy Limited Village: Kashberia, Sibramnagar po, Haldia, Purba Medinipur (West Bengal) PIN: 721635

#### Safety Requirements

1. The Contractor shall be responsible for & shall follow the safety rule under the provision of Factories Act 1948, West Bengal Factory Rules & Indian Electricity Safety Rules amended up to date and other statutory safety rules and regulation in force during currency of the Contract.

2. The Contractor shall provide all necessary PPEs like Safety Shoes, Safety helmet, goggles, Dust mask, Ear plug etc. to all his employees. All PPEs should of ISI grade. PPEs of sub-standard make shall not be allowed. Neither Contractor nor his employees shall be permitted to enter factory premises without safety PPEs. The Contractor should ensure strict compliance on safety measures as adopted by HEL.

3. Ensuring safety and prevention of any accident /incident of the employees of the Contractor shall be the sole responsibility of the Contractor.

4. Charges towards any damage of HEL's equipment /material caused due to Biomass trucks shall be deducted from Contractor's bill, after assessment by HEL. The assessment of HEL shall be final and binding to the Contractor.

5. All workers/employees of the Contractor shall be comprehensively insured. The contractor should have a GPA of each worker / employee of Rs. 10 Lakh.

6. The Contractor shall take all safety precaution and provide adequate supervision by competent person in order to do the job safely and without damage to plant, personal, equipment and the environment.

7. All Biomass trucks entering HEL shall be checked thoroughly by HEL. All vehicles shall have valid Registration number, Pollution Certificate and necessary documents.

8. All truck drivers should possess valid driving license, without which entry of vehicle shall not be permitted inside the plant. Cleaners and Helpers who do not possess proper driving license should not be allowed for driving.

9. The Trucks should be in good condition by all means. Any broken/damaged trucks shall not be permitted for entering in plant premises.

10. Two working head lights, rear lights and rear mirror, tyres, horn (forward and reverse) should be in good and working condition. Vehicle Registration number (front and rear) should be visible clearly.

11. Trucks should not exceed the speed limit of 20 KM per Hour inside the factory premises. Any rash driving shall be penalized on the spot, and may lead to rejection of material.

12. Overloading of material in trucks shall not be allowed.

13. Spillage of material en-route Main Gate to unloading point shall not be entertained.

14. Drinking and Driving inside factory premises is strictly prohibited.

15. Overtaking of vehicles inside factory premises is strictly prohibited.

16. In case of any injury or death due to the negligence of the Contractor or his employees, workers, agents, representatives, and subcontractors, the Contractor shall immediately deposit the following amount in lump sum to pay compensation to the aggrieved person:

i. Fatal injury or accident causing death Penalty, Penalty Compensation of Rs. Ten (10) Lakh per person shall be borne by the Contractor.

ii. Major injuries or accidents causing 25% or more permanent disablement to workmen or employees, Penalty @ Rs. One (01) Lakh, till a maximum limit of Rs. Five (05) Lakh (depending on the severity).

iii. Minor injuries or accidents leading to hospitalization, the Contractor shall pay regular wages during the period of sick leave due to injury/accident inside plant. The Contractor shall liable to pay compensation amount of up to/maximum Rs. One (01) lakh, as per directives of HEL.

17. Child labour: HEL opposes and does not permit use of Forced or Child Labour.

## Annexure I

## Declaration by the Bidder

## (To be submitted on Companies letter head along with technical bid)

We, the undersigned, has read the technical specifications for agro residuebased biomass pellets, and declare the following:

- a) We have read and completely understood the technical specification document and have no reservations to it including amendment/ Clarification.
- b) We have quoted the price in price bid for the agro residue-based biomass pellets having technical specification as follows:

SI. No.	Technical Data	Unit	Specification for Torrefied/Non-Torrefied pellets
1	Base Material	NA	Agro Residue/Crop Residue (wood based pellets will not be acceptable)
2	Diameter*	mm	In case of cylindrical shape: Diameter: Not more than 25 mm Length: Not more than 35 mm For other shapes: No dimension should exceed 35 mm.
3	Bulk Density	Kg/m3	Not less than 600
4	Fines% (Length< 3mm) (ARB***)	Weight %	Fines $\leq$ 5%
5	Moisture (ARB***)	Weight %	9% to 14%
6	Gross Calorific Value (ARB***)	Kcal/Kg	To be quoted by the bidder Non-Torrefied: Not less than 2800 Torrefied: Not less than 3400
7	Hard Groove Grindability Index (HGI)		Not less than 50
8	Particle size distribution <sup>#</sup> (After crushing and pulverizing in site lab pulverizer)	Weight %	Passing proportion from 2 mm mesh size sieve: ≥ 75% Passing proportion from 3 mm mesh size sieve: =100%
9	Chlorine	Weight %	Not more than 0.5
10	Sulphur	Weight %	Not more than 0.2
11	Ash (ARB***)	Weight %	Not more than 14%

c) We understand that quantity and price adjustment shall be made for supplying the material deviating from technical specification but within acceptable range of technical specification.

- d) We understand that rejection of consignment shall be made for not meeting acceptance limits of parameters.
- e) We understand that liquidated damage (LD) shall be recovered for supply shortfall as per contract condition.
- f) We declare that we have read the bid document and has no reservation to it and shall abide by its provision.

Name/ Designation:

Name of Company/firm/agency

Signature:

Date:

Place

## Annexure II

## **PROOF OF EXPERIENCE**

The Bidder shall submit copies of POs of supplies of similar Material, along with proof of satisfactory execution of supplies such as Performance/Completion certificates etc. made by them to other IPP's/State Electricity Boards/State Govt./Govt. of India and their Institutions/Undertakings on the Performa given below:

Sr. No.	Material	PO No. and Date	Quantity Ordered (MT)	Quantity Supplied (MT)	Name of Purchaser, Designation & Contact Details
1					
2					
3					
4					
5					

Note: Copies of Performance /Completion certificates for the PO's mentioned in the above table needs to be furnished along with Annexure.

Authorized Signatory:

Date:....

Name:....

Designation:.....

Address and Seal of the Applicant:

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#### Annexure III

#### PRICE BID FORMAT

## (to be submitted in Company Letterhead)

To,

Hiranmaye Energy Limited Village: Kashberia, Sibramnagar PO, Haldia, Purba Medinipur (West Bengal)

Dear Sir,

Subject: Bid for Supply of Agro residue based biomass pellets to HEL plant.

We have examined the Bid Documents no. HEL/22-23/001, the receipt of which is hereby acknowledged. We, undersigned, offer the above named package: "**SUPPLY OF BIOMASS PELLETS TO HIRANMAYE ENERGY LIMITED (HEL)**", inclusive of all charges, applicable taxes and duties, except GST.

Daily Quantity*	Quoted Price (FOR HEL Site) <u>Exclusive of</u> <u>GST</u>	GST	Quoted Price (FOR HEL Site) <u>Inclusive of</u> <u>GST</u>	Quoted GCV (ARB)	Quoted Price, <u>inclusive of</u> <u>GST</u>
(MT)	(Rs./MT)	(Rs./MT)	(Rs./MT)	(KCal/kg)	(Rs./MT/GCV)

\* - Bids offering quantity lower than the minimum quantity (i.e. 10 tonnes per day) shall be rejected being non-responsive.

We agree to abide by this Bid as stipulated in the Bid Documents and it shall remain binding upon us.

Signature:.....

Date:....

Name:....

Designation:.....

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## Annexure IV

#### SCHEDULE OF DEVIATIONS IN BID

The bidder shall fill list of deviations as per below format, mentioning Clause no. clearly.

Sr. No	Clause No.	Deviations taken

The bidder hereby certifies that the above mentioned are the only deviations from the Owner's Instructions to Bidders.

Signature:

Date:

Name:

**Designation:** 

#### DEFINATIONS

**"Annexure"** shall mean any of the annexures, supplements or documents, appended to this document which form an integral part hereof.

**"Applicable Laws"** shall mean all laws for the time being in force in India, including all acts, rules, regulations, resolutions, statute, decisions, bylaws, circulars, guidelines, policy initiatives and notifications made there under and judgments, decrees, injunctions, writs and orders of any court of record.

"Applicable Permits" shall mean all approvals, affiliations, clearances, consents, permissions, licenses, authorizations or no objection certificates required to be obtained under Applicable Laws from any governmental (central, state or local), statutory or other authority prior to performance and discharge of the respective rights and obligations of the Parties under the Contract.

"Associate" shall refer to any Bidder who has received any direct or indirect subsidy, grant, concessional loan or subordinated debt from any other bidder, or any Bidder thereof or has provided any such subsidy, grant, concessional loan or subordinated debt to any other bidder, its member.

"Bidder/Bidding Company" shall mean an individual, a company/firm/society duly incorporated/registered under the relevant laws of India and making the Bid in response to and as required by this Bid Document. For the avoidance of doubt, any references to "the **Bidder**" in this Bid Document or Contract shall be interpreted as "the **Contractor**" once the Bidder's Bid has been accepted by HEL and Contract has been awarded to him/it.

**"Bid Document"** shall mean this document including other documents such as Notice Inviting Tender (NIT), bid documents and Price Bid and other formats being issued to and submitted by the Bidders.

**"Bid/ Offer/ Proposal"** shall mean the proposals of the Bidder submitted in response to and as required as per the Bid Document issued by HEL.

"**Contract**" shall mean the legally binding contract formed between HEL and the Successful Bidder including the terms of this Bid Document, Letter of Award and Purchase Order(s) including its annexures, amendments etc. The same will govern the terms of the supply/work performed by the Contractor and shall constitute a Contract between HEL and the Contractor.

"**Contractor(s)**" shall mean the Successful Bidder(s) with whom the Contract(s) have been entered into by HEL and shall include legal representative of such individual or persons composing a firm or a company or the successors-in-interest and permitted assigns of such individual, firm or company, as the case may be for performing activities defined in the Scope of Work.

"**Consortium**" means a group of companies and/or organizations and/or firms responding as a Bidder.

"Material" shall mean Agro Residue/ Crop Residue with Technical Specifications mentioned in Table-1 of this Bid Document.

"HEL Power Plant" shall mean Hiranmaye Energy Limited, 2 X 150 MW Thermal Power Plant, at Haldia, West Bengal.

"Purchase Order(s) / PO(s)" shall mean the document issued by HEL to the Contractor in which HEL specifies the Scope of Works with various terms & conditions which are to be performed by the Contractor under the Contract.

"Scope of Work" shall mean entire scope to be performed by the Successful Bidder related to Supply of Agro residue based biomass pellets, delivery of Material to HEL Power Plant.