

**PRE-BID MEETING MINUTS OF BOILER & TG PACKGES**

- 1] Boiler shall be design for multi fuel slop (Minimum Bx 52<sup>0</sup> + Baggase 50% Moisture + coal (indian) having AFBC Furnace .[AFBC Furnace area and firing floor height Minimum 4 meter shall be suitable for same MCR Rating for Traveling grate conversion in future if required].
- 2] Boiler MCR to be Design excluding steam required for slop atomization system .
- 3] Boiler & TG Main Instrument list enclosed of control valve, motorized valve and Transmitters should be minimum & if required additional to be given by the vendor.
- 4] Revised List Enclosed herewith of approved make of components
- 5] Maintenance Gantry with chain pulley block for Boiler Fans and Feed pump to be provided
- 6] Please read tender document on line bagasse Weighment facility instead of weighment facility .and for coal provide load cell arrangement with weight indicator for coal bunker .
- 7] For Process PRDS Downstream of desuper heater minimum 6.0 meter CS Pipe to be provided
- 8] Coal crusher product size shall be considered as per Boiler requirements.
- 9] Tentative piping Length to be consider as follows –
  - A] TG Exhaust steam isolation valve to Distillery process steam header – 210 meter.
  - B] DM Water storage tank to Boiler condensate receiver tank – 150 meter.
  - C] Cooling tower make up water piping from our WTP CWST Tank – 150 meter.
- 10] DM Water make up and cooling tower make up pump set along with valves and piping to be consider in scope of supply .
  - A] Cooling Water Make up- 1 No.
  - B] DM Water Make up- [1W+1S] 25m<sup>3</sup> capacity each.
- 11] Mechanical Ash handling to be provided separately for Boiler and ESP . Water jacketed screw conveyers to be provided for Ash cooling including cooling water pumps from cooling tower with return piping .

- 12] Plummer block to be provided for entire Bagasse and Ash handling system including Bagasse feeder etc. instead of Pillow block.
- 13] Separate PRDS to be provided upstream of MSSV for slop atomizing system with NRV.
- 14] Two cell cooling tower to be provided with Two CT Fans [1W+1S]. 10% higher than rated capacity
- 15] Bagasse Silo knife edge gate valve and Trajectory portion to be provided with SS Construction & with metallic expansion bellow.
- 16] Evaporator and Economiser Ash hopper shall be SS409
- 17] Page No- 178 , 1.1.1, para No- 2 , read as TG Operating pressure 43 kg/cm<sup>2</sup>(g).
- 18] Boiler SA Fan VFD Drive to be consider.
- 19] All electrical, ESP, DCS, boiler & TG set Earth Pits in the scope of Boiler and TG Vendor, only Civil work above Earth pits in the scope of Purchaser.
- 20] Separate Distribution Transformer to be consider one for Boiler TG and Balance of Plant 2MVA and another one for Distillery plant 4MVA
- 21] Tentative Cable length to be consider as bellows-
  - a] New HT panel to Distillery Distribution Transformer – 250Meter
  - b] New HT Panel to Existing 18MW co-gen HT Panel for inter connection - 80 Meter.
  - c] New LT PCC to Distillery LT PCC Inter connection – 250 Meter.
- 22] Lighting for Balance of plant, Entire Boiler house, PRDS Section, power house building , Fuel handling system , Control room, Distillery PCC Room along with DT etc. included in Boiler and TG vendor .
- 23] All field instruments cabling up to DCS Panel located in control room including Boiler, TG, Fuel Handling, Balance of Plant etc with Ferruling and termination in scope of Boiler and TG Vendor.
- 24] Canopy for Boiler to be provided up to Economiser with Rain water gutter and down comer pipe and all field instruments individual canopy to be provided.
- 25] Page No- 124 , XXXI- read as The ESP Design should be four field instead of Three .
- 26] All Boiler Fans shall be simply supported type.
- 27] Page No -312 surplus Hot water pumps exclude in scope of supply.
- 28] Page No- 316 – slop firing system supply to be consider from inlet flange of slop receiving Tank located in boiler house.

- 29] Page No- 331- spares for two Year normal operation include in the Tender.
- 30] Consider revised SLD of Electrical Distribution system.
- 31] Page No- 343- Alternator Breaker voltage to be consider 11Kv instead of 415 v.
- 32] Page No- 345& 346- All power cables upto 6 sq.mm should be copper conductor and above 6 sq.mm to be consider Aluminum conductor instead of Copper.
- 33] Page No- 347 & 348- instrumentation to be consider "YES" Only.
- 34] Page No- 348 & 349- Spares for two year normal operation to be consider one No- each .
- 35] Terminal point , Electrical distribution system as per given /attached SLD .
- 36] The Distillery PCC is in Boiler and TG vendor scope.
- 37] Margin between BKW to KW Shall be 15%.
- 38] 3 MW TG Shall be synchronise with Existing TG and New DG Set .
- 39] 4MVA PCC Should have 4000A x 2 Nos. EDO ACB as Incomer and 2MVA PCC Should have 2500A x 2 Nos. EDO ACB as Incomer
- 40] Distillery steam Header Inlet Isolation valve for TG exhaust steam to be in the scope of Boiler/TG vendor.
- 41] Structure to be designed for Exhaust steam considering slop piping, Return condensate piping, cable tray with cable load.
- 42] Deareator storage tank capacity up to normal water level considering Boiler MCR shall be 40 Minute storage
- 43] Condensate receiving storage tank capacity up to over flow shall be 50 m<sup>3</sup>.
- 44] Dump condenser Return condensate piping with pumps up to condensate receiving tank to be consider in the scope of supply.
- 45] Online Brix analyser hook up to DCS for slop firing system.
- 46] Slop consumption minimum 12 TPH to be consider.
- 47] Consider fuel combination for Boiler as bellows -
- A] Syrup Spent wash with 1050 Kcal/kg GCV considering 3 TPH spent wash the fuel combination shall be 20% spent wash, 10% Indian coal of 3800 kcal/kg GCV and 70% Bagasse
- B] B Heavy Spent wash with 1450 Kcal/kg GCV considering 8.57 TPH spent wash the fuel combination shall be 55% spent wash, 10% Indian coal of 3800 kcal/kg GCV and 35% Bagasse

C] B Heavy Spent wash with 1450 Kcal/kg GCV considering 12 TPH spent wash the fuel combination shall be 75% spent wash, 15% Indian coal of 3800 kcal/kg GCV and 10% Bagasse.

48] Over speed protection system with minimum 3 Nos.of speed sensors for 2 out of 3 Logic with over speed guardian.

49] Shinkava make vibration monitoring system on TSP Panel with LCD Display and touch screen . hook up to DCS System to be provided,

50] Boiler & ESP Staircase railing and all gratings to be provided Deep Galvanized .