

GMR Industries Limited

Regd. & Corporate Office  
6-3-866/1/G2  
Greenlands, Begumpet  
Hyderabad - 500 016  
A.P., India

T 91-40-23410191-94  
F 91-40-23410184

[www.gmrgroup.co.in](http://www.gmrgroup.co.in)



07-November-2006

Kind Attention  
Chairman, Executive Board  
UNFCCC

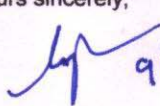
**Subject: Clarification on request for review for "16 MW Bagasse based cogeneration plant" by GMR Industries Ltd. (GIDL); (Reference No 0552)**

Dear Sir,

This is with reference to the request for review raised by Executive Board members for the project "16 MW Bagasse based cogeneration plant" by GMR Industries Ltd. (GIDL); (Reference No 0552). We are enclosing herewith our clarifications on the comments raised for your consideration.

Thanking you,

Yours sincerely,

 9/11/2006.

**M. Prabhakar Rao**  
Manager – New projects & CDM  
Mobile: 91 99499 90064  
Email: [mp rao@gmrgroup.co.in](mailto:mp rao@gmrgroup.co.in)  
[prmadhura@yahoo.com](mailto:prmadhura@yahoo.com)



**Reasons for Request:**

(a) The baseline scenario chosen (12) does not correspond to the project activity. The methodology scenario chosen specifies that "The existing unit(s) are only fired with biomass", while the project activity states that "The cogeneration plant uses bagasse as fuel ... along with some coal co-fired."

(b) Energy balance is necessary: (i) to determine heat generation; (ii) to determine the power generation; (iii) for crosschecking of biomass amount; and (iv) for crosschecking of coal amount. The energy balance should include bagasse energy, coal energy, boilers efficiency, steam parameters at main system points, including extraction points and system components energy efficiency.

(c) The following corrections to the Monitoring Plan are required:

**1. Metering of biomass quantity**

ACM0006v03 p.40 ID1 "Quantity of biomass type *i* combusted in the project plant during the year *y*." These parameters should be measured continuously and not estimated. PDD p.19 ID1 states that "the parameters are estimated and not measured."

**2. Calorific value of biomass and of coal**

ACM0006v03 p.40 ID2: "Net calorific value of biomass or fossil fuel type *i*". These parameters are not monitored in the PDD Monitoring Plan nor are they mentioned at all in the PDD.

**3. Heat quantity**

ACM0006v03 p.45 ID14: "Net quantity of heat generated from firing biomass in the project plant" This parameter is required for CHP plant. PDD declares that the project is CHP plant. This parameter is not monitored in the PDD Monitoring Plan.

**4. Thermal energy efficiency**

ACM0006v03 p.47 ID22: "Thermal energy efficiency". This parameter is not monitored in the PDD Monitoring Plan.

**Reply from Project proponent:**

- a) Scenario 12 applies to the project activity which conforms to P4/H4/B2 as described in the methodology. The project activity conforms to the applicability criteria as in the absence of project activity, power would have been generated in existing plant and grid connected power plants and heat would continue to be generated in existing boilers with same type of biomass residue i.e. bagasse. In the project activity, biomass residue is the predominant fuel used. Coal is co-fired only during start up.
- b) Methodology suggests (page 40) that "If the amount of biomass combusted is estimated from the amount of biomass delivered to the project site, a procedure should be established to undertake an energy balance for the verification period, considering the stocks of biomass at the beginning and end of each verification period."

As the quantity of fuels combusted in the project activity is being measured directly and not estimated, it does not call for energy balance procedures.

c) Monitoring Plan


**1) Metering of biomass quantity**

The biomass quantity in the project activity is being measured directly using weighing scale. The error is a typing error and corrected in the revised PDD (version 3.0).

**2) Calorific value of biomass and of coal**

The monitoring of calorific value of fossil fuel is included in the revised PDD (version 3.0)

Methodology (page 41, ID 2; Comments) suggests that "Monitoring of this parameter for project emissions is only required if CH<sub>4</sub> emissions from biomass combustion are included in the project boundary."

  
9/11/2006



The project activity does not consider CH<sub>4</sub> emissions due to biomass combustion and hence monitoring calorific value of biomass is not required.

**3) Heat quantity**

Monitoring this data is required for estimation of emissions reduction due to heat displacement. The project activity does not consider emissions reduction due to heat displacement (heat is being generated using the same type of biomass residues as in the baseline scenario) and hence monitoring of this data is not required.

**4) Thermal energy efficiency**

Project activity uses same boilers as prior to the project activity and thermal efficiency of the boilers pre and post project activity is same and heat is being generated using the same biomass residue as in the baseline. This is Scenario (a) as defined in methodology (page 32) and so  $ER_{heat, y} = 0$ . Hence monitoring this data is not required.

*Apr*  
9/11/2006