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	Werner Betzenbichler	Werner.Betzenbichler@tuev-sued.de			

Request for review

Dear Sirs,

Please find below the response to the request for review formulated for the CDM project with the registration number 0947. In case you have any further inquiries please let us know as we kindly assist you.

Yours sincerely,

Werner Betzenbichler
Carbon Management Service

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Response to the CDM Executive Board

Issue 1:

The project participants didn't address how and why the generated electricity and steam will replace fossil-based electricity and steam consumed by the plants.

Response by the project participants:

1. The Project activity at both GDPL and KRPL includes generation of both power and steam by installing co-generation systems. The pre project and post project scenario for both the project activities are reproduced in tabular form below.

KRPL :-

(a) Pre Project

Parameter	Equipment	Numbers	Specifications	Fuel
Power	(a) Diesel Generator (DG)	5	2X1000 KW, 2X500 KW, 1X1250KW	Diesel
	(b) Furnace Oil Generator	1	2500 KW	Furnace Oil
Steam	Boilers	2	1X 8 TPH, 10 Kg/Cm^2 ; 1X 10 TPH,10 Kg/Cm^2	Coal, Rice Husk

(b) Post Project

In post project scenario both power and steam has been produced in a Cogeneration system comprising of a 2.5 MW Turbo Generator and a 45 Kg/Cm^2, 23.5 TPH Boiler. The fuel used in the project activity is Rice husk only.

GDPL :-

(c) Pre Project

Parameter	Equipment	Numbers	Specifications	Fuel
Power	(a) Diesel Generator	14	6X380KW, 7X500 KW, 1X750 KW	Diesel
Steam	Boilers	2	2x12 TPH, 10.5 Kg/Cm^2	Rice Husk

(d) Post Project

In post project scenario both power and steam has been produced in a Cogeneration system comprising of 2 X 2.5 MW Turbo Generator and a 65 Kg/Cm^2, 35 TPH Boiler. The fuel used in the project activity is Rice husk only.

As evident from above table that in Pre Project scenario of both the project activities the power was produced by Fossil Fuel (Diesel/Furnace Oil) based generating units whereas for producing steam in case of (a) KRPL both Coal and Rice Husk was used (b) GDPL only rice husk was used.

Due to the implementation of the project activities, which are based entirely on rice husk (renewable fuel) for both power and steam generation, the usage of fossil fuel which otherwise would have been used, is being avoided. The fossil fuel replacement takes place as follows:

For

(a) KRPL Project activity:

Diesel and furnace oil used for electricity generation and coal, which was used partially for steam generation in the baseline.

(b) GDPL Project activity:

Diesel used for electricity generation in the baseline.

Response by TÜV SÜD:

According to the given PDD and information from the onsite visit (which has now been made more transparent by the response to the request) the emission reduction approach was considered being evident and hence it has been accepted by the validation report issued by TÜV SÜD.

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Issue 2:
The PDD didn't provide sufficient information whether this project activity is additional - it lacks referring IRR or any economic tools or a strong convincing barrier that would prove the project activities additionality.

Response by the project participants:

The cogeneration technology using rice husk is not yet practiced in the paper sector in the state of Uttar Pradesh[1] (Refer Table-1 below). This can be due to the technical problems like erosion of equipments (ID fans, air pre-heaters, stacks) associated with use of rice husk in high pressure cogeneration systems or due to lack of precedence of using rice husk based cogeneration systems for power and steam production in paper sector in the region. The project activity faced difficulties in arranging loans since prospective financiers look for reliable, creditworthy, and firm sources of revenue for the project.(Refer: loan rejection letters Annex-1 and Annex-2).

In absence of debt funding for the project, the decision to put in promoters equity for funding the project could be taken considering CDM revenues which may accrue on successful registration of the project. Hence it can be construed that the project activity faces barrier and would have not happened in absence of CDM benefits.

Table-1

Mode of Power Supply	**Number of Plants**
Power through state grid	45
Power through captive DGs	30
Power through coal based Co-generations	3
Power through Bio mass based Cogeneration	2
Total	80

Response by TÜV SÜD:

Expressed concerns from the boiler manufacturers to use rice husk only for energy generation and the prevailing practice - as demonstrated again above – have been the most significant barriers that TÜV SÜD had considered in it judgement. Guidance for small scale activities does not mandatory require any additional in-depth financial assessment as requested by this review. The given barriers have been considered convincing enabling the introduction of a technology not yet widely used in this industrial sector. Therefore TÜV SÜD comes to the conclusion that the project is additional in the meaning of the Kyoto Protocol and related guidance.

[1] The data has been provided by Indian Agro & Recycled Paper mills association, an apex organization of Paper manufacturers in India.

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Issue 3:

Also, the PDD lacks information about biomass resources (amount required by the cogeneration plants and available biomass) and whether use of biomass will be sustainable in the long term (any references of study about biomass availability).

Response by the project participants:

The biomass (Rice Husk) used in the project activity is available in surplus in the respective regions of both the project activities.

For KRPL region

The following nearby districts fall in the region

(a) Bareily - 386081 tonnes
(b) Shahjanpur - 467747 tonnes
(c) Sitapur - 320394 tonnes
(d) Hardoi - 224346 tonnes

Crop Production: **1398568** tonnes

Rice Husk (considering conservative estimate of 22 percent): **307685** tonnes

For GDPL region

The following nearby districts fall in the region

(a) Meerut - 51208 tonnes
(b) Sahranpur - 174750 tonnes
(c) Muzaffarnagar - 105345 tonnes
(d) Haridwar - 57360 tonnes
(e) Bijnore - 176290 tonnes

Crop Production: **564953** tonnes
Rice Husk (considering conservative estimate of 22 percent): **124290 tonnes**

Please see the attached report[2] for crop production data in the respective regions of the project activity.

For KRPL there are around 40 rice mills in the region which are generating surplus amount of husk and for GDPL there are around 43 rice mills in the region generating surplus[3] amount of rice husk which shall be used by the project activities.

Response by TÜV SÜD:

According to TÜV SÜDs experiences and knowledge about the region in India TÜV SÜD had no concerns about any lack of biomass from sustainable resources in the region during the considered crediting period or project life time.

[2] Statistical analysis by Jagran Research centre
[3] Refer Annex-3, Biomass Annex-4