Mr. Hans Jurgen Stehr
Chair, CDM Executive Board
UNFCCC Secretariat
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July 18th 2007

Re Request for review of the request for registration for the CDM project activity "SRBSL – Waste Heat Recovery based Captive Power Project" (Ref. no. 1076)

Dear Mr. Stehr,

SGS has been informed that the request for registration for the CDM project activity "SRBSL – Waste Heat Recovery based Captive Power Project" (Ref. no. 1076) is under consideration for review because three requests for review have been received from members of the Board.

The requests for review are based on the same reasons outlined below. SGS would like to provide a response to the issue raised by the request for review:

Request for clarification to the DOE/PP:

1. *The PDD refers to the installation of a 50MW captive power plant of which the 9.6MW related to waste heat recovery is the project activity. However the barrier analysis relates to the installation of the captive power plant and not just the project activity. Therefore, the additionality of the project activity requires further substantiation.*

SGS Reply:
The CDM project activity i.e 9.6 MW waste heat recovery (WHR) based power project faced technological and investment barriers. The CDM project activity is a part of a bigger installation (50 MW captive power plant). As explained in section 3.2 of the validation report, the technological barrier is the major barrier to the project activity i.e. to harness the potential of power generation from the waste gases which are dirty, corrosive and difficult to handle due to frequent rupture of boiler tubes and maintenance requirements. The skilled and trained labour to operate and maintain the technology is not available which leads to an unacceptably high risk of equipment malfunctioning and frequent shutdowns which affect the plant production too in case of standalone plants where grid can not be connected with captive power plants like the project activity. The risk of technological failure in WHR project is more than the other widely available proven technologies like coal based power plants. The technology used in the proposed project activity is not widely available in the West Bengal state in India. At the time of start of the project activity there were 27 sponge iron plants in the state, out of that 24 plants were purchasing electricity from the grid as per directories of industries, govt. of West Bengal. The other three plants including project activity having WHR projects sought for CDM benefits. This substantiates the fact of low penetration of the technology in the region due to the risk of technology failure.

Furthermore, the project activity faced the investment barrier because Indian Renewable Energy Development Agency Ltd. (IREDA) imposed some conditions in the loan agreement that the CDM funding should be utilised towards reducing of loan of IREDA and that the borrower should abided by the decision of IREDA and the borrower should not raised any objection thereto as explained in paragraph 7 (page 14), para XXVII (page 17) and para XXIX (page 18). The complete loan document was submitted with request for registration as appendix 3 to the PDD. This was concluded that the risk was perceived due to WHR project because the loan on coal based power plants were easily available in the region and potential CDM revenue helped in overcoming the barriers. The WHR project could only generate the CDM revenue and hence the proposal was accepted with above conditions in the agreement

2. *The PDD should clearly and transparently describe the project boundary, which components and Fuels are included in the project activity, and which components and fuels are not included.*

***SGS Reply*:**
The project boundary should cover the GHG emission sources:

- CO2 emissions from combustion from auxiliary fossil fuels

There is no auxiliary fuel being fired as auxiliary fossil fuel. The source is a waste gas and the project activity is to extract the heating potential to generate steam in the boiler which subsequently generates power with the help of turbo generator. All the other source of emissions like CH4 and N2O have been excluded from the project boundary for simplification as per ACM0004 version 02 methodology.

For the purpose of determining baseline emissions, project participants shall include the following emission sources:
- CO2 emissions from fossil fuel fired power plants connected to the electricity system;
- CO2 emissions from fossil fuel fired captive power plants supplying the project site facility;

As a conservative measure, the electricity grid was selected as baseline to the project activity. The grid emission factor was calculated as combined margin and was fixed ex-ante for the entire crediting period as described in ACM0002.

The spatial extent of the project boundary comprises the waste heat or gas sources, captive power generating equipment, any equipment used to provide auxiliary heat to the waste heat recovery process and the power plants connected physically to the electricity grid that the proposed project activity will affect.

The spatial extent of project boundary comprises the waste heat source (after burning chamber), WHR power generating equipment and the power plant connected physically to the electricity grid that the proposed project activity will affect. There is no equipment which can be used to provide **auxiliary** heat to the waste heat recovery process.

3. *It should be clearly justified why the methodology is applicable to the project activity.*

***SGS Reply*:**
As per methodology, this methodology applies to project activities that generate electricity from waste heat or the combustion of waste gases in industrial facilities. The methodology applies to electricity generation project activities:
- that displace electricity generation with fossil fuels in the electricity grid or displace captive electricity generation from fossil fuels;
- where no fuel switch is done in the process, where the waste heat or pressure or the waste gas is produced, after the implementation of the project activity

The methodology covers both new and existing facilities. For existing facilities, the methodology applies to existing capacity, as well as to planned increases in capacity during the crediting period. If capacity expansion is planned, the added capacity must be treated as a new facility. This consolidated baseline methodology shall be used in conjunction with the approved consolidated monitoring methodology ACM0004 ("Consolidated monitoring methodology for waste gas and/or heat and/or pressure for power generation").

The project activity completely follows the above applicability of the methodology. This activity generates electricity from waste gases in industrial facilities and displaces electricity generation with fossil fuels in the electricity grid. There is no fuel switch is done in the process for the waste heat or the waste gas is produced after the implementation of the project activity. This is a new facility and no capacity expansion was planned.

4. *It should be clearly stated whether there are any deviations from the methodology.*

***SGS Reply*:**
The project activity does not have any deviation from the methodology.

5. *It should be clearly justified that the methodology has been applied correctly. In doing so, why formulae and parameters that are not in the methodology have been used and if any parameters have been calculated when they should be measured.*

***SGS Reply*:**
Since the coal based power plant also supplies steam to the same turbines, the electricity generation and auxiliary consumption although being measured but calculated by apportioning the contribution from WHR project based on steam enthalpy. This is a well accepted method in the industries and the results are accurate and reliable. The detail of the monitoring is explained in the annex 4 to the PDD.

6. *The calculation of parameters EGy, EGGEN and EGAUX should be transparently described in the PDD.*

***SGS Reply*:**
This was described in the Annex 4 to the PDD. However, the revised PDD is being submitted with this letter for more clarity.

We apologize if the initial validation report has been unclear and hope that this letter and the attached information address the concerns of the members of the Board.

Sanjeev Kumar (0091 9871794628) will be the contact person for the review process and is available to address questions from the Board during the consideration of the review in case the Executive Board wishes.

Yours sincerely

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Annex 1 Revised PDD