UNFCCC Secretariat
Martin-Luther-King-Strasse 8
D-53153 Bonn
Germany

Att: CDM Executive Board

DET NORSKE VERITAS
DNV Certification
International Climate Change Services
Veritasveien 1
NO-1322 Høvik
Norway
Tel: +47-6757 9900
Fax: +47-6757 9911
http://www.dnv.com
NO 945 748 931 MVA

Your ref.:	Our ref.:	Date:
CDM Ref 0591	MLEH/KCHA	30 October 2006

Response to request for review
"Shalivahana Non-Conventional Renewable Sources Biomass Power Project" (0591)

Dear Members of the CDM Executive Board,

We refer to the requests for review raised by four Board members concerning DNV's request for registration of the "Shalivahana Non-Conventional Renewable Sources Biomass Power Project" (0591) and would like to provide the following initial response to the issues raised by the requests for review.

Comment 1:

On the description of the project activity (PDD pg 2) is said that biomass fuel is available in abundance within radii of 50 km of the plant site. In the validation report (sec 3.2) is said that "surplus biomass is available in the region and that the project activity will not lead to leakage effects elsewhere due to use of fossil fuels". Nevertheless one of the main arguments used in the barrier analysis to justify the additionality of the project activity is that CDM will reduce the project risks related to biomass availability and seasonal prices (PDD pg 13 and 14). This contradiction shall be explained; or the biomass is abundant and there is no risk associated with biomass availability and so this is not a barrier to the project activity; or there is a possibility of shortage of biomass and then leakage effects should be considered.

DNV Response:

As stated in the validation report, it was verified by DNV from official documentation (Administrative Staff College of India (ASCI) report on "Socio-economic impacts of biomass power plants") that surplus biomass is available in the region. The availability of biomass was also verified through interviewing the biomass suppliers (validation report section 2.2) to confirm that biomass would not have been used for any other purpose in absence of the project activity. This is in line with "General guidelines on leakage in biomass project activities" adopted by the Board at its 25th meeting.

However, the availability does not contradict the barrier analysis which identifies a barrier due the risks related to biomass availability. The increase in the biomass demand for renewable energy project is considered as a business opportunity by farmers, and a steep increase in the price of biomass was observed. Hence, there is an uncertainty with regard to the biomass price. The risk is mainly related to price fluctuations of the biomass which will have an influence on generation cost. The revenues from the CDM will help to reduce the project risks related to the observed

price increase of the biomass due to the increased demand and the new business opportunity for the farmers.

Comment 2:

The analysis of the biomass price risks as one of the barrier to the project activity is incomplete. They only presented how the biomass prices have raised during the last years. This analysis to be relevant need to include also the same figures for the coal to be compared with the figures for the biomass. Relative prices are important and not absolute prices. Variations in absolute prices can reflect inflation, for example.

DNV Response:

As stated in the validation report and in the response to comment 1, DNV has been able to verify that there is a steep increase in biomass prices. DNV has not assessed this price increase against changes in the price of other fuels, such as coal. In our opinion, comparing the increase of the biomass price with changes in the price of coal is not a correct proposition.

The coal generated in India is mostly consumed by the government owned thermal power stations which are on a much larger scale compared to the small power plants in the renewable non conventional energy sector. Also, the coal forms a part of the controlled market and its prices and distribution are controlled by the government. As stated in response to the comment 1, the price increase of the biomass is purely based on demand and not due to inflation.

We would like to draw your attention to the fact that the regular fossil fuel power plants (coal fired plants like Vindhyachal, Singrauli, Ramagundam, and Korba) largely lie in the government domain. These units have their quota of the raw material fixed up by the linkages committee (please refer http://coal.nic.in/linkage.html). While they are also subjected to raw material price hikes, being in the government domain, the increased cost of generation due to a raw material price hike is often passed on to the customers, and therefore does not affect the operations of the units themselves.

The other fossil fuel fired power plants in the government and public domain are also not affected due to the higher capacities they operate in, certainly far more than the 6 MW capacity of the project activity. Hence a regular fossil fuel power plant would not face similar risks as a small independent biomass power producer.

Hence, from the above, it is in our opinion not appropriate to compare the observed increase of the biomass price with the price of coal that a fossil fired plant would have to pay.

Comment 3:

The explanation for the application of the methodology AMS I D is confusing. In the PDD it is said that the methodology used is AMS I D version 8. Nevertheless in annexure 3 of the PDD they have make reference to ACM 0004 methodology and the description of the methodology used is a mix of ACM 0002 including options of AMS ID

DNV Response:

The project activity is a grid connected renewable energy based power project having a capacity of 6 MW. The methodology applicable for the project is version 08 of AMS-I.D. For the estimation of the baseline grid electricity emission factor, the combined margin approach as described in more detail in ACM0002 was followed. The reference to ACM0004 in the Annexure 3 is an unfortunate typographical error, and DNV has requested the project participant to correct the PDD accordingly.

Comment 4:

Regarding leakage it is also said in the PDD that the biomass source is in a radii of 50 km maximum and that these emissions are not significant if compared with the amount of emission to transport the coal to generate the equivalent electricity. In the calculation of these emissions they used 50 km as the "average distance between the project site and biomass collection center". This has to be clarified because a radii of 50 km could represent distances by roam much larger that 50 km, than the figure used in the leakage calculation.

DNV Response:

DNV has verified the calculations of leakage due to transportation of biomass. The project plant is surrounded by a number of paddy processing mills within short radii. The distance considered for the leakage calculations is an average distance of 50 km and is deemed reasonable. Even if the distance for the leakage calculation was considered as twice (i.e. 100 km) the transport related project emissions will only be approximately 500t CO_2/year which would amount to only 2% of the annual emission reductions.

Comment 5:

The project is using many different sources of biomass, including permitted woody biomass (juli flora), which is considered to be renewable biomass by the EB. It was highlighted, in the validation report, that if any source of woody biomass is used that it should be verified by the verification team. Nevertheless in monitoring tables the biomass is considered as only one fuel. There is no possibility to identify the different types of biomass which come in to the plant. They will have to clarify how the monitoring system will control different sources of biomass in a way that it will be possible to the verification team identify woody non renewable biomass was used as a fuel in the plant.

DNV Response

It has been verified by DNV during the validation process that the project activity has a well established practice of monitoring and recording all kinds of biomass fuels entering and being used in the project activity. Hence, the monitoring of all fuels (both renewable and non-renewable) is possible with the same mechanism. Since the project has already started operation, there have been instances where the project used biomass which is non-renewable, and the verification of this was possible because of the practice of monitoring different biomass types separately. During the validation process DNV had raised a clarification request (CL-1) on this issue, to which the project proponent responded in a satisfactory manner.

However, DNV agrees with the fact that the monitoring of this aspect is not appearing separately in the monitoring plan, and DNV has requested the project participant to include this in the revised PDD.

Final comment:

It is not clear how the uncertainty on electrical prices is a barrier to the CDM project and not to the baseline scenario.

DNV Response

As outlined in DNV's response to comment 2, the uncertainty on electricity prices is only applicable to the non-conventional energy based projects. The revision of the tariffs structure by the Andhra Pradesh Electricity Regulatory Commission (vide order no. R.P.No.84 / 2003 in

O.P.No.1075 / 2000), specifically addresses the non conventional energy projects, and does not affect the thermal power plants in the baseline scenario. The link for the APERC order copy is provided for ready reference. http://www.ercap.org/OtherOrders/Order_RP_84_2003.doc.

We sincerely hope that the Board accepts our aforementioned explanations.

Yours faithfully
for DET NORSKE VERITAS CERTIFIACTION LTD

Michael Lehmann
Technical Director
International Climate Change Services

C Kumaraswamy
Manager – South Asia
Climate Change Services