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Att: CDM Executive Board

Your ref.:
CDM Ref 1141

Our ref.:
MRSA/MLEH

Date:
24 October 2007

Response to request for review Amurang Biomass Generation Project (1141)

Dear Members of the CDM Executive Board,

We refer to the requests for review raised by three Board members concerning DNV's request for registration of the project activity entitled "Amurang Biomass Generation Project" (1141), and we would like to provide the following response to the issues raised by these requests for review.

1. The PP shall further demonstrate the additionality of the project activity.

DNV Response:

The additionality of the project is demonstrated in line with the attachment A to the appendix B of the "Simplified modalities and procedures for small scale CDM project activities" based on the existence of technological barriers and prevailing practices barriers.

We refer to the response to the requests for review submitted by the project participants where Section B.3 of the PDD has been revised to provide further information on the technological and prevailing practice barriers which the project faces. Three baseline scenarios have been identified in the revised PDD, namely a) continuation of the current situation of generating heat and electricity using diesel oil, b) generation of heat using diesel and purchasing electricity from the national PLN grid and c) the project activity undertaken without being registered as a CDM project activity. All baseline scenarios identified are possible baseline scenarios. These scenarios are also complying with the local prevailing regulatory requirements. However, due to limited grid electricity being available, the generation of heat using diesel and purchasing electricity from the national PLN grid is not considered a plausible baseline scenario. The technological barriers and barriers due to prevailing practise presented in the PDD have been reviewed and in the opinion of DNV, the barriers are sufficiently justified, especially for a biomass fired cogeneration plant in Indonesia and especially in North Sulawesi. The technological barriers were presented to us from the technology provider during the site visit. Furthermore, the scarcity of such project types was confirmed by the local DNA during a meeting with the DNA. Thus, it is DNV opinion that the project activity faces barriers which prevent its implementation. These barriers are not faced by the other plausible baseline scenario, i.e. the generation heat and electricity using diesel oil.

2. As the baseline plant was not operational prior to the project activity, further clarification is required on how the baseline has been validated with reference to paragraph 6 of the applied methodology, including clarification that the diesel generators would continue to operate in the absence of the project activity.

DNV Response:

Paragraph 6 of AMS.I.D version 09 states “for renewable energy technologies that displace technologies using fossil fuels, the simplified baseline is the fuel consumption of the technologies that would have been used in the absence of the project activity times an emission coefficient for the fossil fuel displaced. IPCC default values for emission coefficients may be used”.

PT Cargill Indonesia has provided a letter to demonstrate that the facility re-opened on 27 April 2006, which is included in the project participant’s response. DNV can confirm that during the site visit carried out as part of the validation process in December 2006, the plant was using diesel oil to run its generator sets and boiler. The historical data provided to support the baseline scenario is from April 2006. Furthermore, considering that the common practise in Indonesia is the use of fossil fuels and the technological barriers faced by the biomass cogeneration, it is DNV’s opinion that the most likely baseline scenario is the continuation of the diesel based generation.

3. In addition, as the plant was not operating at the time the project activity began, no fossil fuel was being consumed and therefore the project activity would not bring about any real emissions reductions. Furthermore, no information is provided as to when the existing facility ceased operations and what the plans were to start it up again. The only additional information given is that the previous owners of the plant had financial difficulties. There is no indication that the new owner, Cargill, ever planned to operate the plant using diesel.

DNV Response:

We refer to the response to the requests for review submitted by the project participants. Based on the letter provided by PT Cargill Indonesia, the plant was bought in October 2005 and production re-started on 27 April 2006. Furthermore, it should be noted that as per the paragraph 6 of the applied methodology AMS-I.C the simplified baseline is “the fuel consumption of the technologies that would have been used in the absence of the project activity times an emission coefficient for the fossil fuel displaced” and thus it is not necessarily based on the historical practices in the plant or the fact that the plant was not in operation for a certain period of time. As already stated, during the site visit carried out as part of the validation process in December 2006, DNV was able to confirm that the plant was using diesel oil to generate power. The purchase data of diesel for the generators was made available for review. It is confirmed and deemed sufficient to demonstrate that Cargill has been operating and, in absence of the project activity, will continue to operate the plant using diesel.

4. Further, a barrier is claimed related to the risk associated with the long term supply of biomass since there is “no guarantee of a long term supply”. Page 9 of the PDD claims that there is a continued risk of shortage of the supply of biomass residues due to uncontrollable circumstances such as natural disasters or pests. However, it is also claimed that there is a surplus of supply of biomass so that potential leakage from competing uses of biomass can be neglected. In the validation report (page 12) the DOE states that: the analysis of the quantity of available biomass in the region (e.g. 50 km radius) has shown that there is a surplus of at least 50,000 tonne/year of biomass from the two regions where the copra will be sought, that is at least 25% larger than the quantity of biomass that is utilized including the project activity. Further clarification is required on these inconsistencies, including the statement that when there is a scarcity of supply the diesel generator will be used as a back-up.

DNV Response:

We refer to the response to the requests for review submitted by the project participants which demonstrates that there is an excess of coconut shells in the region, as demonstrated through surveys conducted by Cargill in 2006. The survey was carried out to assess the existing

availability of coconut shells in the two regions where the copra will be sought. This survey and surveys of the excess availability of coconut husks and palm kernel shells in the region has demonstrated that there is at least 25% more biomass than what is utilized including the project activity.

The availability of biomass is however no guarantee for a reliable supply of biomass which requires a biomass supply infrastructure for transporting, storing, pre-treatment and handling of biomass. The fact that there is a surplus of biomass which is available in the region is thus in our opinion not inconsistent with the fact that there is a risk of shortage of biomass supply associated to natural disasters, pests and diseases attacks. Literature reference was used to demonstrate the risks associated with copra supply (*Nair, M. K.; Rajesh, M. K. (2001) *Coconut Production and Productivity*. Indian Coconut Journal 32(2) 2-12. and *Ganoderma Diseases of Perennial Crops*. British Society for Plant Pathology). The coconut palm trees are susceptible to the diseases mentioned by the project participants, while there is also possibility that palm oil trees can be infected as well. The argument presented by the project participants to prepare for such a possibility has been reviewed and accepted by DNV and we have highlighted in our validation report that the more important approach would be to establish a good long term relationship with the suppliers. This was stated in Section B.2.1 of the validation protocol in our validation report, which states that: *“There is a continued risk of shortage of the supply of biomass residues due to uncontrollable circumstances such as natural disasters or pests. The Project activity will not be able to continue if there is not a sufficient amount biomass residues available. It is therefore important to establish a good long term relationship with the suppliers.”* Furthermore, in line with the Attachment C (*information on leakage in biomass project activities*), the excess of biomass residues in the region will be monitored on an annual basis and if there is not an excess of residues in the region, this will be accounted for in the verification of the project activity. As stated in the PDD submitted for registration, in the case that diesel would have to be used to supplement the power supply, then these emissions would be accounted for.

5. Since the thermal capacity of the boiler is less than the 45 MW thermal threshold for cogeneration systems, the application of small-scale methodology I.C is appropriate. Under this methodology the baseline is the fuel consumption of the technologies that would have been used in the absence of the project activity times an emission coefficient for the fossil fuel displaced. The project activity determines baseline emissions assuming that diesel fuel was used in the absence of the project activity, and under this assumption the methodology is applied correctly, using default emission coefficients for diesel, and both for heat and for electricity (according to AMS I.D). However, if the facility has not been operating in recent years, and no fossil fuel was being used in the absence of the project activity, then no fossil fuel is in fact being displaced, and the baseline is actually zero emissions.

DNV Response:

As already pointed out in our answer to comment 3 above, as per the applied methodology the simplified baseline is *“the fuel consumption of the technologies that would have been used in the absence of the project activity times an emission coefficient for the fossil fuel displaced”*. The baseline is thus not necessarily based on historical data or the situation of the plant at the moment the decision was made, but on the technologies that would have been used in absence of the project activity. It has been sufficiently demonstrated that the plant would have been using diesel. Moreover, as stated above, the plant has been using diesel in 2006 and 2007 and this was confirmed during DNV’s visit to the plant in December 2006.

6. Information should be provided regarding when the facility ceased to operate and for what reasons, as well as if there were plans to restart operations using fossil fuel.

DNV Response:

We refer to the response to the requests for review submitted by the project participants which indicates that the facility ceased operation in 12 May 2005 (as demonstrated by a letter provided from PT Kamanta Vegetable Oil Ltd).

7. The DOE shall further clarify under what rationale and how they have validated the fact that the plant is not being operational.

DNV Response:

The plant was confirmed to be not operational during May 2006 to April 2006 through interviews with Cargill in December 2006. Nonetheless, as stated above, operation started again in April 2006 and during DNV visit to the plant in December 2006 DNV was able to confirm that the plant was in operation since April 2006 by reviewing purchases receipts of diesel that were dated in late April 2006 and records showing that employees were hired or transferred from other PT Cargill offices in Indonesia.

We sincerely hope that the Board accepts our above explanations.

Yours faithfully

for DET NORSKE VERITAS CERTIFICATION AS

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Michael Lehmann

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