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Att: CDM Executive Board

Your ref.: CDM Ref 0761 Our ref.: MLEH/ETL Date: 16 January 2007

Response to request for review "Uruba Renewable Irrigation Project" (0761)

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 "Uruba Renewable Irrigation Project" (0761)" and would like to provide the following response to the issues raised by the requests for review.

Comment 1:

It is not clear whether the project activity is a replacement of old diesel fuel based motors with new electricity based motor for pumps or an addition of these new electricity based motors for the irrigation expansion purpose. More clarity should be provided, particular regarding lifetime of the replaced devices and leakage due to the operations on the irrigation purposes.

DNV Response:

The irrigation system is expanded at the project site and the project involves the installation of new electricity based irrigation pumps, while the baseline scenario is that diesel fuelled irrigation pumps would be installed in absence of the CDM project activity. The project activity will not replace the existing diesel fuelled irrigation pumps.

Comment 2:

Methodology AMS I.A. should have been used instead of AMS I.B. that is applicable in cases for which the renewable energy is transformed into mechanical energy for the user (case of windpowered pumps, water mills and wind mills). For this project, the renewable energy (biomass residues) is transformed into electricity for the user.

DNV Response:

DNV acknowledges that the project technology differs from the example technologies listed in AMS-I.B (i.e. wind-powered pumps, solar water pumps, water mills and wind mills) due to the fact that renewable energy is not directly converted into mechanical energy, but biomass (bagasse) is used to generate electricity and the electricity is used to power irrigation pumps. However, the technologies listed in AMS-I.B are examples only and AMS-I.B is not limited to these technologies only.

It must be emphasised that the objective of the project is to supply mechanical energy (pumping of irrigation water) and the project activity includes not only the installation of a 5 MW bagasse cogeneration plant to generate electricity, but also the installation of electricity lines along the

sugar cane fields and the acquisition of electricity based irrigation pumps. Therefore, the project meets the criteria of AMS-I.B which "comprises renewable energy generation units that supply individual households or users with a small amount of mechanical energy". AMS-I.A on the other hand, "comprises renewable energy generation units that supply individual households or users with a small amount of electricity". Hence, AMS-I.A would only cover the 5 MW bagasse cogeneration plant, but not the installation of electricity lines along the sugar cane fields and the acquisition of electricity based irrigation pumps.

Moreover, also the baseline scenario is the supply of mechanical energy only (i.e. diesel fuelled irrigation pumps) as stipulated by AMS-I.B and not the supply of electricity as suggested by AMS-I.A.

Finally, emission reductions are monitored and determined ex-post in accordance with AMS-I.B. The monitoring parameters are the number of irrigation pumps, the annual operation hours and the installed capacity of each installed irrigation device. The resulting power requirement of the electric irrigation pumps is multiplied with an emission coefficient for a diesel fuelled irrigation pumps. AMS-I.A would suggest metering the electricity generated by the 5 MW bagasse cogeneration plant and using this parameter to determine emission reductions. However, due to transmission losses the electricity generated by the 5 MW bagasse cogeneration plant (as stipulated by AMS-I.A) is larger than the actual electricity consumption of the electricity based irrigation pumps (as stipulated by AMS-I.B). Hence, applying AMS-I.A would result in a higher emission reduction estimate than applying AMS-I.B.

Hence, it is DNV's opinion that AMS-I.B is the most suitable methodology for the project activity. In particular, as AMS-I.B explicitly refers to "dieselfuelled pumps" that in absence of the project activity would provide the same mechanical energy as the project activity.

As demonstrated in the project participants' response to the requests for review, the project meets all applicability criteria of AMS-I.B.

We sincerely hope that the Board accepts our aforementioned explanations.

Yours faithfully for DET NORSKE VERITAS CERTIFICATION LTD

and helder

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