## Replies to Review Request for "BCML Haidergarh Bagasse Co-generation Project (Project-1069)"

## Reason for Request 1

ACM0006 v4 is only applicable to specific combinations of project types and baseline scenarios. The project participant has used scenario 4 which requires that biomass residues in the baseline are used only for heat and/or electricity generation at the project site. However, the baseline also includes that biomass residues are burnt in an uncontrolled manner without being utilized for energy purposes. A deviation does not appear to have been requested. In addition, ACM0006 v4 states that where a combination of project activity and baseline scenario is not covered by the methodology, project participants are encouraged to submit proposals for revision or further amendment of this consolidated methodology.

## Replies from Project Proponent

With regards to the Executive Board members' concern regarding the applicability of ACM0006/ Version 04 only to specific combination of project types and baseline scenarios, the project proponent provides further justification on its selection of the approach to use two baseline scenarios:

1. The Project Design Document for the HCM project activity under consideration has been developed in accordance with the guidance provided in ACM0006/ Version 04. There was no specific clause/condition in this version of the methodology that restricts the project proponent from using a combination of two baseline scenarios available in the methodology for a single project activity<sup>1</sup> when the DOE submitted the request for registration of the project activity *i.e.* 31<sup>st</sup> March 2007<sup>2</sup>.

In view of the above, the project proponent opted for a combination of two baseline scenarios, available in ACM0006/ Version 04 to determine the baseline scenario and compute the emission reductions resulting from the HCM project activity under consideration.

2. The project activity meets the criteria for both the baseline scenarios and the same is illustrated below. The Project Design Document has been developed as per the guidance provided in both the baseline scenarios (*i.e.* Scenario 4 and Scenario 3).

It is to be noted that annual operation of any sugar plant can be divided into two seasons- crushing season and non-crushing season. The bagasse generated in the crushing season can be consumed partially in a low efficiency<sup>3</sup> co-generation plant (*i.e.* reference plant) to generate steam and power that will cater to the process requirement of the sugar plant in the crushing season (*i.e.* Scenario 4 elements). Since the low efficiency co-generation plant will not have the provision to export power to the grid (because of the barriers associated with export of surplus power, as detailed in Section B.5 of the Project Design Document), the entire bagasse generated in the crushing season can not be consumed in the co-generation

<sup>&</sup>lt;sup>1</sup> The condition was made available in the 31<sup>st</sup> Meeting of the Executive Board of UNFCCC (dated 2<sup>nd</sup>-4<sup>th</sup> May 2007).

<sup>&</sup>lt;sup>2</sup> 31<sup>st</sup> March 2007 was the last date for the DOEs to request for registrations in order to obtain retroactive credits for project activities.

<sup>3</sup> The word 'efficiency' is to be read as power generation efficiency. The heat generation efficiency remains same both in the reference plant and in the HCM co-generation plant.

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plant and surplus bagasse will be available (*i.e.* Scenario 3 elements).

Furthermore the power requirement of the sugar plant in the non-crushing season will be minimal. Since operation of the co-generation plant at very low load will not be technically feasible, the surplus bagasse of the crushing season will not be consumed in the non-crushing season to generate power. Instead, the power requirement of the sugar plant in the non-crushing season will be met by importing power from the grid. Therefore operation of the lower efficiency reference plant will result in surplus bagasse availability which would have been burnt in an uncontrolled manner without utilizing it for energy purposes (*i.e.* Scenario 3 elements).

On the other hand, the HCM project activity entails installation of a new bagasse fired co-generation plant of higher efficiency that will have the provision to utilize the entire bagasse generated in the HCM sugar plant<sup>4</sup> to generate steam and power. The steam and power will be utilized to meet the process requirement of the HCM sugar plant and the surplus power will be exported to the grid.

Therefore the emission reductions resulting from the project activity can be attributed to:

- i) Increased power generation resulting from a higher power generation efficiency of the HCM co-generation plant than that of the reference plant- The same bagasse input as that of the reference plant will generate more electrical energy in the HCM co-generation plant that can be exported to the grid. Therefore the project proponent has selected Baseline Scenario 4 of ACM0006/ Version 04 to compute the emission reductions resulting from higher power generation efficiency of the HCM co-generation plant.
- ii) Increased power generation by utilizing the surplus bagasse of the HCM sugar plant- The surplus bagasse that would be available at the reference plant in the crushing season (after meeting the process steam and power requirement of the HCM sugar plant) would be utilized in the HCM co-generation plant to generate electrical energy that will be exported to the grid. In absence of the project activity, this surplus bagasse would have been burnt in an uncontrolled manner without utilizing it for energy purposes. Therefore the project proponent has selected Baseline Scenario 3 of ACM0006/ Version 04 to compute the emission reductions resulting from utilization of surplus bagasse in the HCM co-generation plant.

The above discussion clearly justifies the selection of a combination of two baseline scenarios for the HCM project activity under circumstances where no specific clause/condition of the methodology restricts the project proponent from selecting a combination of two baseline scenarios for a single project activity.

3. All application criteria and methodological guidance for both the baseline scenarios have been adopted in the context of the HCM project activity with no deviations. The computation of emission reductions from both the measures have been elaborated transparently in Section B.6.1, 'Annex-3: Baseline Information' and 'Annex-4: Monitoring Information' of the Project Design Document.

<sup>4</sup> Bagasse from Babhnan Unit of BCML is also utilized in the HCM co-generation plant to generate electrical energy that can be exported to grid. However the same is excluded from consideration following the guidance of the Meth Panel of UNFCCC.

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4. In the methodology guidance in F-CDM-AM-Rev\_Resp\_ver 01 - AM\_REV\_0013, meth panel suggested the following,

"Project participants may also consider to only claim emission reductions for using a more efficient boiler in the project case than in the reference plant [Scenario 4 elements] (and thus not accounting for emission reductions due to a higher capacity and increased electricity / steam generation) and for using biomass that would otherwise be dumped and/or left to decay [Scenario 3 elements] – thus not claiming emission reductions for biomass quantities that are diverted from feedstock uses to the project plant."

Based on the above mentioned inputs the project proponent developed the Project Design Document combining two baseline scenarios (*i.e.* Scenario 4 & Scenario 3) available in ACM0006/ Version 04.

However the project proponent requests EB to decide on the next course of action which could either entail

i) Claiming emission reductions for the combination of two baseline scenarios 4 & 3- As per the submitted Project Design Document

OR

ii) Claiming emission reductions from installation of a more efficient co-generation plant in the project case than in the reference plant only as per Scenario 4 thus not accounting for emission reductions for using surplus bagasse that would otherwise be burnt in an uncontrolled manner without utilizing for energy purposes as per Scenario 3 thereby adopting a conservative approach for emission reduction computation - The Project Design Document may be revised with Scenario 4 as the baseline scenario.