RESPONSE TO REQUESTS FOR REVIEW

Bureau Veritas Certification had performed the validation of the CDM Project No. **1148 DSM – ASMOLI BAGASSE COGENERATION PROJECT**

Subsequently, there have been four requests for review.

We thank the CDM Executive Board and the Secretariat for giving us the opportunity to clarify about our considerations in validating the said project.

We wish to clarify our stand for each of these issues as given below:

Sr.No	Review Comment	DOE Response
1	The PP shall further demonstrate the additionality of the project activity	PP has simultaneously undertaken to implement CDM projects in their plants at Dhampur and Asmoli with similar configuration. Both project activities face the similar barriers. The DSM management has undertaken higher risk by implementing these projects simultaneously. Validation team has accepted this as validation and site visits were carried out simultaneously by the team in both the sites. Further evidences are available in the purchase orders. (Please refer Annex 6 – Purchase orders)
2	The additionality section of the validation report states that “the most economically attractive alternative among the alternatives mentioned above has been selected as the baseline scenario”. However no economic analysis has been provided or referenced to support this statement.	The project additionality has been discussed through Technological and institutional barriers and barrier due to uncertainty in bagasse availability . This has been clearly recorded in the validation report vide section 5 under Validation opinion. However due to an editorial error , under section 3.2 , it was written as “Most economically attractive alternative”. Validation report will be revised accordingly. Based on the discussions presented in the validation report, the most credible alternative has been selected as the baseline scenario, - as the project proponent could have continued with the existing power generation set up at the project site.
3	Further confirmation is	The project’s additionality has been

	required regarding how the barriers presented in the PDD have been validated and how it has been concluded that they would prevent the implementation of this specific project activity.	demonstrated through presenting mainly Technological barriers, barrier due to uncertainty in bagasse availability . The project activity is first of its kinds with many inherent problems like size, bagasse handling and feeding for given size, attainment of super heater temperature with high moisture fuel like bagasse (No precedence available), the suitability of metallurgy of high pressure and temperature parts for bagasse, the high silica solubility and its control. These have been detailed in PDD and further elaborated in the validation report section 3.2. The project proponent does not have necessary expertise nor is available in sugar industry at present. This expertise would need to be developed in house. The fact that this is first of its kindis supported by confirmation from the supplier Ms/ Thermax, Babcock & Wilcox. (**Refer Annexure 1: Thermax letter)** The additionality has been appropriately demonstrated by use of the additionality tool "Tool for demonstration and assessment of additionality version 3." Validation of these barriers was done through review of PDD, site visit, interaction of personnel related to the projects and verification of relevant records and documents. The project barriers are based on technology related factors as well as due to uncertainty in bagasse availability. Validation team has verified each barrier diligently before arriving at the conclusion. To further support this barrier, the information available in the study report on "Removal of barriers to Biomass generation in India" has been applied. This study was carried out by UNDP (Project No: IND/02/G31/A/1G/99). This report has indicated that "High pressure and temperature configuration of 67 Kg/cm2 & 495ºC have been established in Bagasse cogen and biomass power sectors and extra high pressure

		configurations are being tried out". Note that this CDM project is aiming to install and operate with a configuration of 105 Kg/cm2 pressure and a high temperature of 540°C. The same report has also indicated the uncertainty in Bagasse availability as one of the possible barriers.(Refer **Annexure –2 :UNDP report –Extract)** Therefore, to provide better clarity , the validation report "section 3.2 Additionality" will be revised taking into account of the above points.
3	Scenario 12 of the approved methodology requires that "biomass residues would in the absence of the project activity be used for heat generation in boilers at the project site". Further conformation of how this requirement has been complied with is required. In particular it should be confirmed whether the new equipment will be used to supply heat demand at the project site, what would have happened to the biomass used in the project activity in the baseline, and the effect of this on the Operation of the existing equipment.	In the absence of project activity, the biomass residues would be used for heat generation in boilers at project site as it is used till the time of site visit by validation team. This has been established through Bagasse balance. (**Refer Annexure–3 : Bagasse Balance Asmoli**). From the Bagasse balance it can be seen that the total consumption of Bagasse before and after the project is same for the whole year. It is to be noted that any surplus bagasse in working season will be consumed in the off-season. It can also be seen that project proponent has undertaken efficiency improvement in the existing boilers to configure this project activity. The validation team could access the energy efficiency measures taken.(**Annexure –5 note on Efficiency improvements)** Without the project activity, the heat would be generated in the present configuration of existing boilers without any export of power. After the implementation of the project activity, the heat demand for the sugar plant will be met through the existing boilers while that of chemical plant (which now passes through PRDS) through project activity. Refer the attached Annexure-3 Bagasse Balance Asmoli. As explained above the existing boilers will be running in conjunction with new boiler. The technical operating life of the existing boiler was determined to be 15 years Further, the confirmation of

		Technical life by a competent engineer is also referred in the validation report.(**Refer Annexure-4a:- Inspection certificate Boiler & Annexure 4b:- Inspection certificate Turbine**): The validation team had re-verified bagasse balance. Also it was re-confirmed by the PP that the existing boiler would be running in conjunction with the new boiler. Section 3.2 of Validation report will be revised accordingly to provide better clarity and inclusion of the above points.

The project proponent along with their response has provided all the necessary evidences. We have verified all the evidences and confirm that they are reliable and in accordance with the requirements.

We hope that the explanation provided above is satisfactory and request you to kindly register the project.