



São Paulo - Brazil, September 24th, 2007.

PP Comments on request for review of Project: 0203 Cerradinho Bagasse Cogeneration Project (CBCP) - Issuance Request

Reason for Request:

1. The changes from one 30 MW unit to 2x25 MW units suggest that more bagasse was available to be used in the facility. Since both units were installed after the project activity was registered, clarification is required as to how the requirements of AM0015 have been complied with by the project activity, i.e. that:

- The bagasse to be used as the feedstock for cogeneration shall be supplied from the same facility where the project is implemented;

- The implementation of the project shall not increase the bagasse production in the facility.

The Project Participants (PP) affirm that all the bagasse utilized by Cerradinho is only produced internally and used in its cogeneration facility (boilers and steam turbines) for steam and power generation. All the bagasse internally produced by Cerradinho is internally transported to its cogeneration facility through electrical and/or mechanical conveyor belts which operate using electricity and/or steam generated in the biomass residue cogeneration facility of the own mill. Therefore, all the bagasse used as the feedstock for cogeneration is supplied from the same facility where the project is implemented.

The increase of the bagasse is strictly connected to the enlargement of the sugar cane crushed by Cerradinho mill, which has been occurring due to the expansion of the market demand in the sugar and alcohol industry. Any increases in the bagasse production could not be attributed to the implementation of the Cerradinho Bagasse Cogeneration Project. This project does not have an impact in processing capacity; Cerradinho will not increase their installed capacity because of this project, but due to the recent and remarkable expansion of the sugar, and mainly, of the ethanol market in Brazil. The offer of ethanol in the Brazilian market is not supplying the rapid increasing demand mainly caused by the use of flex-fuel cars, which can run using gasoline, ethanol or any blend of the two. Therefore, the implementation of CBCP by itself did not increase the bagasse production in the facility.

These explanations will be incorporated in the new revised version of the Monitoring Report (version 3), which will be available for the DOE (DNV – Det Norske Veritas AS), which was the DOE chosen for the current verification process.



2. Additional information is required on the cane crushing capacity prior to and after the implementation of the project activity.

The table below shows that the cane crushed by the mill for the production of sugar and alcohol has had an incrementing trend for years, even before the implementation of the project activity.

Data	Year	Sugar cane crushed (tonnes)
Historical Data	2000	1,336,471.44
	2001	1,620,417.71
	2002*	2,133,954.10
	2003	2,365,188.30
	2004	2,739,157.04
	2005	3,425,694.58
	2006	3,615,511.52
Projection	2007	3,741,654.76
	2008	3,979,779.92
	2009	3,951,106.55
	2010	3,945,597.64
	2011	3,948,502.17
	2012	3,989,064.12

(*) Starting year of the project activity.

The data presented in the table above demonstrates the incrementing trend of the cane crushed by the mill. This was only possible because Cerradinho has been implementing several small optimization actions in their process at the facilities of the mill, through the implementation of new and additional equipments and also by increasing the number of days per year of their crop season.

However, as already explained before, the progressive increase of the sugar cane crushing is due to market reasons and not for the development of the CBCP.

Therefore, the increase the cane crushed as well as the bagasse production in the facility can not be associated with the implementation of CBCP by itself.



3. The PDD states that the grid emission factor is to be calculated 'At the validation and yearly after registration', while the verification report indicates *ex-ante*. Clarification is required.

The combined margin emission coefficient for the South-Southeast-Midwest (S-SE-CO) grid was determined *ex-ante* in accordance with AM0015. At the time of the project's registration, the calculations were based on the available electricity generation data provided by the Brazilian Electricity Agency (ANEEL) and the National Electricity System Operator (ONS) for the electricity generated in the S-SE-CO grid in the years 2002-2004. For the determination of the operating margin (OM) emission coefficient average plant efficiencies for different power plant types established in the IEA study¹ on the Brazilian grid and IPCC carbon emission factors for specific fuels were applied to calculate plant specific emission coefficients. For the calculation of the build margin emission coefficient, the conservative plant efficiencies recommended by the CDM Executive Board at its 22nd meeting were applied. The resulting simple-adjusted OM emission coefficient was 0.4310 tCO₂e/MWh (applying an average λ of 0.5135) and the BM emission coefficient 0.1045 tCO₂e/MWh, resulting in a combined margin emission coefficient of 0.2677tCO₂e/MWh (weighted average of the build and operating margin).

The emission coefficient calculations were transparently presented in spreadsheets submitted to and verified by TÜV-SUD (TÜV Industrie Service GmbH TÜV SÜD Group), which was the DOE chosen for the validation process.

As Econergy Brasil, which is a project participant, was the entity responsible for determining the baseline, the emission factor of the grid applied for CBCP was calculated *ex-ante* and, therefore, the combined margin emission coefficient of 0.2677 tCO₂e/MWh (weighted average of the build and operating margin) was supposed to be applicable for the entire 7 years of the first crediting period.

However, Econergy Brasil, as a project developer, has been calculating the emission factor of the Brazilian grid systems along the last years. The last data available, based on electricity generation data provided by the Brazilian Electricity Agency (ANEEL) and the National Electricity System Operator (ONS), taken into account for calculating the *ex-post* emission factor of the S-SE-CO Brazilian grid system, which is the grid connected to CBCP, considers the year of 2006. Then, a table with the summarized conclusions of the analysis, with the emission factor calculation is displayed below.

¹ Bosi, M., A. Laurence, P. Maldonado, R. Schaeffer, A. F. Simoes, H. Winkler and J.- M. Lukamba: *Road testing baselines for greenhouse gas mitigation projects in the electric power sector*. OECD and IEA information paper, October 2002.



Prepared by AgCert, EcoAdvance, Ecoinvest, Econergy, Ecoscurities and MGM

Source: Operador Nacional do Sistema Elétrico, Centro Nacional de Operação do Sistema, Acompanhamento Diário da Operação do SIN (daily reports from Jan. 1, 2006 to Dec. 31, 2006)

Emission factors for the Brazilian South-Southeast-Midwest interconnected grid			
Baseline (including imports)	$EF_{OM,2006}$ [tCO ₂ /MWh]	EF_{2006}	Default EF_y
2006	0.8071	0.4185	[tCO ₂ /MWh]
	$EF_{OM, simple-adjusted}$ [tCO ₂ /MWh]	$EF_{BM,2006}$	0.2798
	0.4693	0.0903	
	Alternative weights	Default weights	Alternative EF_y
	$w_{OM} = 0.75$	$w_{OM} = 0.5$	[tCO ₂ /MWh]
	$w_{BM} = 0.25$	$w_{BM} = 0.5$	0.375

The spreadsheet containing all the detailed data and information for the calculation of the emission factor of the grid presented in the table above is also available with DNV, which is the DOE selected for this current verification process.

Therefore, the value of the combined margin emission coefficient of 0.2798 tCO₂e/MWh (weighted average of the build and operating margin), calculated ex-ante for 2006 only, shall be applicable for the revised version of the Monitoring Report (version 3), which considers the period from January 1st, 2006 to December 31st, 2006.

Therefore, as required by the three members of the EB on their “Request for Review²” related to the “Request for Issuance” in connection to the 2nd verification process of CBCP, the project participants are providing the revised Monitoring Report (version 3) and a corresponding revised Verification Report (to be provided by DNV – Det Norske Veritas AS, which was the DOE chosen for the current verification process) containing the additional information, corrections requested and clarifications presented in this document.

We sincerely hope that the Board accepts the aforementioned explanations.

Best Regards,

For Econergy Brasil Ltda.

Francesca Maria Cerchia
Managing Director

² Available on September 21st, 2007, at UNFCCC website: <http://cdm.unfccc.int/Projects/DB/TUEV-SUED1135260671.81/iProcess/DNV-CUK1175088720.03/view>