

## **RESPONSE TO THE REQUEST FOR REVIEW**

To: CDM Team

Attention: Daniele Violetti, Officer-in-Charge CDM and Secretary to the CDM Executive Board

## **References:**

- 1- E-mail: Request for review: 0211 Usinas Itamarati Cogeneration Project. of 03/30/2009 06:36
- 2- E-mail: Request for review: 0211 Usinas Itamarati Cogeneration Project. of 03/31/2009 05:16

Dear CDM Team , regarding the above mentioned references , Bureau Veritas Certification , BVC Holding SAS , had performed the  $2^{nd}$  and  $3^{rd}$  Verifications of the CDM Project 211 : " Usinas Itamarati cogeneration project ", concerning the period of June 1, 2006 to July 31, 2007 ( $2^{nd}$  verification) and August 1, 2007 to August 31, 2008 ( $3^{rd}$  verification). Subsequently, have been issued 3 requests for review, for each Verification process , where all of them have the same description, for the  $2^{nd}$  and  $3^{rd}$  Verification , as follows:

## 2<sup>nd</sup> Verification Process

The DOE is requested to clarify the reason for the increase in emission reduction from 8,513 (for 12 months) as estimated in PDD to 15,629 (also for 12 months excluding March 2007) during this monitoring period, in particular, the changes in the gross electricity generation from the project, electricity supplied for consumption in the mill and net electricity supplied to the grid.

## 3<sup>rd</sup> Verification Process

The DOE is requested to clarify the reason for the significant increase of the emission reduction claimed during this monitoring period (2.5 times) compared to the PDD estimation, in particular, the changes in the gross electricity generation from the project, electricity supplied for consumption in the mill and net electricity supplied to the grid.

Considering that the results and conclusions of these requests for review are essentially the same , and in order to give a more clear , concise and transparent approach to the analysis , we included both requests in this same document . It is a pleasure to inform you Bureau Veritas Certification 's response for these issues as defined below, where



we describe all actions taken to properly handle the analysis of the situation and give the right answer to them .

As described in the registered PDD of Usinas Itamarati Cogeneration Project, version 2 B of December 22, 2005, the estimated emission reductions were based on the energy exported to the grid, according to the Power Purchase Agreement (PPA) signed on July 30, 2001 between Usinas Itamarati and CEMAT-REDE, the local power utility Company. As mentioned in the registered PDD (page 2), the PPA establishes 31,800 MWh during the season of electricity that Usinas Itamarati has to sell to CEMAT-REDE. Conservatively, estimated emission reductions made in the PDD were based on guaranteed 31,800 MWh during the season.

According to section B.2 of the PDD, although the technical characteristics of the project (see table below from PDD section B.2), where the total installed capacity is of 42 MW and considering the capacity factor of the boilers, the available capacity of electric generation is 25 MW, only 7 MW were dedicated to export 31,800 MWh during the season to the Grid, based on the PPA signed with CEMAT-REDE, because it was the only customer of Usinas Itamarati energy. Therefore, although Usinas Itamarati had offered the still available energy capacity to CEMAT-REDE, they did not show any interest in the purchasing of more energy than the quantity established in the PPA. In other words, Usinas Itamarati has had the capacity to generate more electricity than the established in the PPA since the beginning of the project activity operation started but it did not do it due to the lack of interested buyers and commercial efforts of the project owners. The balance of 18 MW was only partially necessary to supply the internal needs of Usinas Itamarati, which utilizes steam at a pressure of 1.5 Kgf/cm2.

Years	Total installed capacity (MW)	Capacity factor	generation	Capacity (MW) to	Installed Capacity (MW) to export to the grid	Capacity Factor %	operation	MWh year exported to the grid
Ano 1_2001	42	60%	25	18	7	90%	2.359	14.862
Ano 2_2002	42	60%	25	18	7	72%	6.240	31.616
Ano 3_2003	42	60%	25	18	7	81%	6.240	35.474
Ano 4_2004	42	60%	25	18	7	72%	6.240	31.586
Ano 5_2005	42	60%	25	18	7	73%	6.240	31.800
Ano 6_2006	42	60%	25	18	7	73%	6.240	31.800
Ano 7_2007	42	60%	25	18	7	73%	6.240	31.800

In October 2006, due to the decision of Usinas Itamaraty to commercialize the available additional energy capacity in the spot market, they contracted GRYM Energia Ltda as the energy service advisor to support them to commercialize electricity in the spot market, using the existing CEMAT-REDE's energy distribution system. This can be evidenced through the attached declaration from GRYM Energia Ltda (appendix 1) and part of GRYM contract with Usinas Itamaraty describing the scope of this work ( appendix 2 ). Then, since October 2006 Usinas Itamarati commercialize energy not only according to the PPA signed with CEMAT-REDE, but also in the spot market. Please, see CAR 03 from the 2<sup>nd</sup> periodic Verification where this subject has also been considered and analyzed.

In the second verification monitoring report, it can be noticed that, during the season months of October and November 2006, May, June and July 2007, it was possible to increase the electricity production because Itamarati was selling energy in the spot



market. The energy production was lower in the months of December 2006, which corresponds to the end of season and in April 2007, which is the beginning of the new season. In the 3<sup>rd</sup> Monitoring report it can be noticed that during the months of January, February and March of 2008 which correspond to the off season period it was possible to generate energy due to the existing sugar cane baggasse in the inventory, and also because it was possible to schedule preventive maintenance only to the month of December 2007, which was not possible during the months of January, February and March of 2007 due to the already scheduled preventive maintenance of the plant.

The DOE would like to emphasize that, according to the evidences seen in the two site visits made in the three periodic verification of the project (second and third periodic verification were made together), since the implementation of the project activity there were not any changes in the electricity production capacity of Usinas Itamarati (boilers and turbo-generators) and no relevant changes in the electricity consumption by the mill as can be seen at the spreadsheet with total electricity generation, internal consumption and electricity exported to the Grid, in the period from June 2006 to August 2008 (appendix 3), for which the DOE received the daily production reports to crosscheck the information presented . It is important to inform that the difference between the measurements made with Itamarati meters and with CEMAT meters is due to transmission line losses and the timing when the readings in the measurement equipments are made, at 0:00 a.m. at Itamarati and at 5:00 a.m. at CEMAT.

Harvest	Sugarcane production (ton)	Sugar production (SC 50kg)	Hydrated ethanol (thousand liters	Anhydrous ethanol (thousand liters	Hydrated and anhydrous ethanol (thousand liters)
2001/2002	5, 270,109	5,016,230	118,343	137,241	255,584
2002/2003	5,774,292	5,931,909	111,967	157,005	268,972
2003/2004	7,034,356	6,319,889	128,339	211,738	340,077
2004/2005	6,574,350	6,409,420	92,157	230,193	322,350
2005/2006	4,926,978	5,723,876	142,779	118,232	261,011
2006/2007	5,076,429	5,656,415	119,444	110,557	230,001
2007/2008	5,775,095	5,346,299	153,702	143,305	297,007
2008/2009	6,043,393	5,003,346	173,392	145,094	318,486
Average	5,809,375	5,675,923	130,015	156,671	286,686

In addition, no increase in sugarcane processing and bagasse production occurred due to the CDM project activity (see table 1).

Table 1 – Hydrated, anhydrous ethanol, sugar and sugarcane production of Usinas Itamarati (Source: Usinas Itamarati S/A)



This information was crosschecked through the site "União da Indústria de Cana-deaçúcar (UNICA)(Dados e cotações estatísticas. Ranking da produção de cana, açúcar e etanol das unidades da região Centro-Sul , available at: <u>http://www.unica.com.br/dadosCotacao/estatistica/</u>)

Table 1 and Figure 1 show Usinas Itamarati production indicators, confirming normal seasonal variations around the average in the crediting period. The fluctuation in the amount of sugarcane processed and, consequently, sugar and ethanol produced, is due to natural climate and crop conditions variation from year to year.



Figure 1 – Usinas Itamarati - sugarcane processing per season

Confident that the above comments will support you to adequately address the raised issues, the DOE remains available at any time for additional clarification.

Yours faithfully For Bureau Veritas Certification, BVC Holding SAS.

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