

2nd VERIFICATION REPORT OF BAESA PROJECT

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Summary:

BUREAU VERITAS CERTIFICATION has made the second monitoring period verification of the 708 MW BAESA project Hydro Power Plant (HPP), located in the Southern Region of Brazil, between the cities of Anita Garibaldi, State of Santa Catarina and Pinhal da Serra, State of Rio Grande do Sul, Brazil.

The verification scope is defined as a periodic independent and objective review and an ex-post determination of the monitored reductions in GHG emissions during defined verification period and consisted of the following three phases: i) desk review of the project design, baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final verification report and opinion. The overall verification, from Contract Review to verification Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.

The first output of the verification process is a list of Clarification and Corrective Actions Requests (CL and CAR), presented in the Verification Report. Taking into account this output, the project proponent revised its Monitoring Report Document (Version 04). In summary, it is BUREAU VERITAS CERTIFICATION's opinion that the project correctly applies the baseline and monitoring methodology ACM0002 version 07 and meets the relevant VCS v.3 requirements, and local legislation. In the course of the verification, Corrective Action Requests (CAR) and Clarification Requests (CL) were raised and successfully closed.

As the result of the 2nd periodic verification, the verifier confirms that the GHG emission reductions are calculated without material misstatements in a conservative and appropriate manner. BUREAU VERITAS CERTIFICATION herewith confirms that the project has achieved emission reductions in the above mentioned reporting period as follows:

Reporting period: 01st January, 2009 to 31st December, 2010.

Period	BE _y (baseline emissions in tCO ₂ e)	PE _y (project emissions in tCO ₂ e)	ER _y (tCO ₂ e)
01-January-2009 to 31-December-2009	487,868	277,792	210,076
01-January-2010 to 31-December-2010	1,289,164	387,028	902,136
Total: 01-January-2009 to 31-December-2010	1,777,032	664,820	1,112,212

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1 INTRODUCTION

1.1 Objective

Energética Barra Grande S/A BAESA has commissioned Bureau Veritas Certification to verify the emission reductions of its VCS “BAESA Project”.

This report summarizes the findings of the second periodic verification of the project, performed on the basis of VCS – Verified Carbon Standard version 3 criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

Verification is the periodic independent review and ex-post determination of the monitored reductions in GHG emissions during defined verification period.

The objective of the periodic verification is to verify that actual monitoring systems and procedures are in compliance with the monitoring systems and procedures described in the monitoring plan; furthermore, the periodic verification evaluates the GHG emission reductions data and express a conclusion with a high, but not absolute, level of assurance about whether the reported GHG emission data is free of material misstatements; and verifies that the reported GHG emission reductions data is sufficiently supported by evidence, i.e. monitoring records.

The verification shall consider both quantitative and qualitative information on emission reductions.

Quantitative data comprises the monitoring reports submitted to the verifier by the project entity.

Qualitative data comprises information on internal management controls, calculation procedures and procedures for transfer, frequency of emissions reports and review of calculations/data transfers.

The verification is based on criteria set by VCS – Verified Carbon Standard version 3.

1.2 Scope and Criteria

The verification scope is defined as an independent and objective review of the project description, the project’s baseline study and monitoring plan and other relevant documents. The information in these documents is reviewed against VCS – Verified Carbon Standard version 3.

The verification is not meant to provide any consulting towards the Client. However, stated requests for forward actions and/or corrective actions may provide input for improvement of the project monitoring towards reductions in the GHG emissions.

1.3 Level of assurance

During the verification process, the GHG team assessed the monitoring report, the calculation spreadsheets and supporting documents.

Based on this assessment, the verification team can express a reasonable level of assurance, stating that the GHG emission reductions:

- Are materially correct and are a fair representation of the GHG data, and
- Are prepared in accordance with the relevant International Standard on GHG quantification, monitoring and reporting, and with relevant national standards.

1.4 Summary Description of the Project

The project activity consists on the supply of clean hydroelectric energy to the Brazilian National Interconnected System (SIN) through the implantation and operation of Hydro Power Plant (HPP) Barra Grande, located in the Southern Region of Brazil, between the cities of Anita Garibaldi, state of Santa Catarina and Pinhal da Serra, state of Rio Grande do Sul, with an installed capacity of 708 MW, using a small reservoir, with low environmental impact related to its installed capacity.

Baseline scenario establishes that electricity delivered to the grid by the project activity would have been generated otherwise by the operation of a grid-connected power plant and by the addition of new generating sources, as reflected in the combined margin (CM) calculations described in the “Tool to calculate the emission factor for an electricity system”.

The alternative scenarios to the project activity are two situations which reflects the calculation of the combined margin of baseline scenario: (i) the continuity of the present scenario, with electricity generation happening according to the current generation composition of the National Interconnected System, more specifically of the South Subsystem and (ii) the construction of a new mineral coal thermoelectric power plant.

BAESA Project makes use of three generator units with three specific meters (for each unit), destined to measure the Project's generation of energy. The project activity reduces the emission of greenhouse gases (GHGs) through the use of renewable sources of energy and making use of clean technology, avoiding the generation of electricity via sources of fossils fuels with consequent emissions of CO₂, that would be generated if the project did not exist. The reservoir of HPP Barra Grande is responsible for emissions of CH₄ which were accounted for and reduced from the total project emission reduction.

The Crediting period is from 01/01/2006 to 31/12/2015. Project crediting period is 10 years renewed at most two times, while the project star date is 11/01/2005 (Operation Starting Date of the First Turbine).

The emission reductions due to the renewable energy generated and dispatched to the grid by Baesa project resulted in **1,112,212 tCO₂e**, during this 2nd monitoring period, from 01st January, 2009 to 31st December, 2010.

2 VALIDATION PROCESS, FINDINGS AND CONCLUSION

2.1 Validation Process

- Method and Criteria

According to the Validation Report N°BRAZIL-VAL/03615/2008 Version 03, issued in February 9th 2009, by Bureau Veritas Certification Holding SAS:

The validation scope is defined as an independent and objective review of the project design document, the project's baseline study and monitoring plan and other relevant documents. The information in these documents is reviewed against Kyoto Protocol requirements, VCS rules and associated interpretations. and consisted of the following three phases: i) desk review of the project design and the baseline and monitoring plan (October 2008); ii) follow up interviews and on site visit (October 2008); iii) resolution of outstanding issues and the issuance of the final validation report and opinion (February, 2009).

- Document Review

According to the Validation Report N°BRAZIL-VAL/03615/2008 Version 03, issued in February 9th 2009, by Bureau Veritas Certification Holding SAS:

The Project Description Template of the BAESA project was reviewed and compared with the Project Description Template, of 19 November 2007. The methodologies used are:

- Approved consolidated baseline and monitoring methodology ACM0002, "Consolidated baseline methodology for grid-connected electricity generation from renewable sources", version 7,
- "Tool for the demonstration and assessment of additionality", version 05.2,
- "Tool to calculate the emission factor for an electricity system", version 01.1.

Documents provided by the company that relate directly to the GHG components of the project.

1. PD BAESA project, version 01, of August 27, 2008.
2. PD BAESA project, version 02, of October 20, 2008.
3. PD BAESA project, version 03, of November 20, 2008.
4. PD BAESA project, version 04, of February 03, 2009.
5. Approved consolidated baseline and monitoring methodology ACM 0002, version 7.
6. Methodological Tool "Tool for the demonstration and assessment of additionality", version 05.2.
7. Annex 12, EB 35 Report - Methodological Tool "Tool to calculate the emission factor for an electricity system, version 01.1.
8. VCS PD Template – 19 November 2007.
9. VCS Validation Report Template – 19 November 2007.
10. Voluntary Carbon Standard 2007.1.
11. Calculation Excel Spreadsheets.
12. Resolução Interministerial 01, Comissão Interministerial de Mudança Global do Clima, September 2003.
13. Resolução Interministerial 07, Comissão Interministerial de Mudança Global do Clima, March 2008.
14. Kyoto Protocol to the United Nations Framework Convention on Climate Change. United Nations, Dec, 1997.

15. ISO 14064-2:2006, ISO 14064-3:2006 and ISO 14065:2007.
16. Operation License (LO) # 447/2005, Renewed on: January 14, 2008.
17. Financial Demonstrations and Calculations.

- Interviews

According to the Validation Report N°BRAZIL-VAL/03615/2008 Version 03, issued in February 9th 2009, by Bureau Veritas Certification Holding SAS:

On October 16, 2008, Bureau Veritas Certification performed interviews with persons of Energética Barra Grande S/A – BAESA and Enerbio Consultoria Ltda, related to project specific questions and emission factor. Persons interviewed were:

From Baesa: Ana Cristina Karl, Hamilton Garboggini and João Rezeck Junior.

From Enerbio: Eduardo Baltar.

- Site Inspections

According to the Validation Report N°BRAZIL-VAL/03615/2008 Version 03, issued in February 9th 2009, by Bureau Veritas Certification Holding SAS:

The validation serves as project design verification and is a requirement of all projects. The validation is an independent third party assessment of the project design. In particular, the project's baseline, the monitoring plan (MP), and the project's compliance with relevant VCS criteria which are validated in order to confirm that the project design, as documented, is sound and reasonable, and meets the stated requirements and identified criteria.

In this regarding, an on-Site assessment was conducted on October 2008 by Bureau Veritas Certification Holding SAS:

- Resolution of Any Material Discrepancy

According to the Validation Report N°BRAZIL-VAL/03615/2008 Version 03, issued in February 9th 2009, by Bureau Veritas Certification Holding SAS:

The first output of the validation process is a list of Clarification and Corrective Actions Requests (CL and CAR), presented in the Validation Report, version 03. Taking into account this output, the project proponent revised its project design document, originating the PD version 04, of February 03, 2009.

05 CARs and 1 CL were found during validation. Please refer to Section 3 of the Validation report.

2.2 Validation Findings

2.2.1 Gap Validation

There is no additional project description. All the supporting documents have been listed in Section 5. References of the Validation Report.

2.2.2 Methodology Deviations

There have been no methodology deviations.

2.2.3 New Project Activity Instances

Not applicable, once this is not a grouped project.

2.3 Validation Conclusion

According to the Validation Report N°BRAZIL-VAL/03615/2008 Version 03, issued in February 9th 2009, by Bureau Veritas Certification Holding SAS:

Bureau Veritas Certification has performed the Validation of “BAESA Project” Hydro Power Plant (HPP) Barra Grande, located in the Southern Region of Brazil, between the cities of Anita Garibaldi, state of Santa Catarina and Pinhal da Serra, state of Rio Grande do Sul, with an installed capacity of 708 MW, using a small reservoir, with low environmental impact related to its installed capacity.

The validation was performed on the basis of VCS criteria and host country criteria and also on the criteria given to provide for consistent project operations, monitoring and reporting. The validation consisted of the following three phases:

- i) A desk review of the project design and the baseline and monitoring plan (October 2008);
- ii) Follow-up interviews and on site visit (October 2008);
- iii) The resolution of outstanding issues and the issuance of the final validation report and opinion (February 2009).

Project participants used the latest tool for demonstration of the additionality. In line with this tool, the PD provides analysis of investment and prevailing barriers to determine that the project activity itself is not the baseline scenario.

By generating electricity using renewable energy, the project is likely to result in reductions of GHG emissions partially displacing the electricity that would have been generated using fossil fuels. An analysis of the investment barrier demonstrates that the proposed project activity is not a likely baseline scenario. Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity. Given that the project is implemented and maintained as designed, the project is likely to achieve the estimated amount of emission reductions. The review of the Project Description (Version 01 dated August 27, 2008) and the subsequent follow-up interviews have provided Bureau Veritas Certification with sufficient evidence to determine the fulfillment of stated criteria. The Project Description was subsequently revised as Version 02 dated October 20, 2008, Version 03 dated November 20, 2008 and Version 04 dated February 03, 2009 to resolve the issues that rose during the interviews and subsequent interactions.

In our opinion, the project correctly applies and meets the relevant VCS requirements and the relevant host country criteria. The validation is based on the information made available to us and the engagement conditions detailed in this report.

3 VERIFICATION PROCESS

3.1 Method and Criteria

This second verification comprises the period from 01st January, 2009 to 31st December, 2010.

Thus verification report were prepared between 25th October, 2011 and 22nd March, 2012 . This period encompass the site visit preparation, site visit, preliminary report, final report, internal technical review (ITR) and final report adjustments.

The criteria of this verification include the relevant rules and steps as set out in the VCS v.3.

The verification process includes

- A desk review of the VCS PD and supporting documents with the use of the relevant sections of a customized protocol according to the VVM 01.2 ;
- A desk review of the Monitoring Report (MR) and additional supporting documents which the client submitted. The relevant sections of the above-mentioned customized protocol according to the VVM 01.2 were use;
- On-Site assessment;
- Background investigation and follow-up interviews with personnel of the project developer;
- Verification reporting (Draft Verification Report and Final Verification Report).

3.2 Document Review

The document review was conducted based in a desk review of the Monitoring Report (MR), calculation spreadsheets and additional supporting documents submitted by the client. The relevant sections of the above-mentioned customized protocol according to the VVM 01.2 were used.

Also the desk review of the VCS PD, supporting documents and methodology ACM0002 version 07 were done by using the relevant sections of a customized protocol according to the VVM 01.2.

All the relevant information and evidences regarding project description and monitoring process were assessed and validated by the verification team during the site visit and documentation review.

Reference Documents:

- VCS_PDD_V04.pdf
- Validation Report.pdf
- Monitoring Report.pdf (first monitoring period)
- VerifReport.pdf (first monitoring period)
- 2nd VCS Monitoring Report BAESA v.1.pdf
- 2nd VCS Monitoring Report BAESA_V02 semcontrole.pdf
- 2nd VCS Monitoring Report BAESA_V03 semcontrole.pdf
- 2nd VCS Monitoring Report BAESA_V03.1semcontrole.pdf

- VCS Monitoring Report BAESA_V.04_clear.pdf
- Monitoring BAESA.xlsx (calculus spreadsheet)
- Monitoring BAESA.v.03.1.xlsx (calculus spreadsheet)
- Monitoring BAESA v 04.xlsx (calculus spreadsheet)
- Monitoring Period Comparison.xlsx
- Calibration certificate CCR69209.pdf (meter PTS 3.3 n.s.29569)
- Calibration certificate n°11MW01001 (Usina UG3 gross meter)
- Calibration certificate n°11MW01002 (Usina UG2 gross meter)
- Calibration certificate n°11MW01003 (Usina UG1 gross meter)
- Calibration certificate n°11MW01004 (SE MPU1 net "principal" meter)
- Calibration certificate n°11MW01005 (SE MRU1 net "back up" meter)
- Calibration certificate n°11MW01006 (SE MPU2 net "principal" meter)
- Calibration certificate n°11MW01007 (SE MRU2 net "back up" meter)
- Calibration certificate n°11MW01008 (SE MPU3 net "principal" meter)
- Calibration certificate n°11MW01009 (SE MRU3 net "back up" meter)
- Operational license renewal n° 447/2005 (ofício n°2/2008 - COEND/CGENE/DILIC/IBAMA - 10th January 2008)
- <http://www.ccee.org.br> (Barra Grande official records of dispatched energy to the grid)
- Controle de calibração medidores faturamento.xlsx (Calibration control of net energy meters)
- Approved consolidated baseline and monitoring methodology ACM0002 version7.
- Methodological Tool "Tool for the demonstration and assessment of additionality", version 05.2.
- Annex 12, EB 35 Report - Methodological Tool "Tool to calculate the emission factor for an electricity system, version 01.1.
- VCS Monitoring Report Template, v3.0_0
- VCS Verification Report Template, v3.0
- VCS Standard version 3

3.3 Interviews

Background investigation and follow-up interviews with personnel of the project developer were conducted during the site visit October 28th, 2011.

During the site visit the Bureau Veritas Certification performed interviews with the project participants to confirm selected information and to resolve issues identified in the document review.

The following representatives of Energética Barra Grande S.A – BAESA, Central de Serviços compartilhados - CSC and Enerbio Consultoria Ltda, were interviewed:

- Damião Maciel Guedes - coordinator of the physical and biotic environment (Baesa)
- Jose Bertolacini - Plant manager (Baesa)
- Rafael Pereira - electrical maintenance technician (Baesa)
- Khadine Thatiane Appio - CSC employee
- Alice Falleiro - Project analyst (Enerbio)

Consultants have been interviewed. The main topics of the interviews were:

- Project Design and implementation;
- Technical Equipment and operation;
- Equipment calibration;
- Monitoring Plan;
- Monitored data;
- Data uncertainty and residual risks;
- GHG Calculation;
- Environmental Impacts;
- Compliance with National Laws and regulations;
- Licenses

3.4 Site Inspections

On-Site assessment was conducted in order to crosscheck all the relevant information and data provided by the PP, against to the physical documentation and registers, as well as to assess the project description, as per the MR and PD, to that observed in the field.

3.5 Resolution of Any Material Discrepancy

During the verification process some corrective action requests (CAR) and clarification requests (CL) identified by the verifier were raised in the verification protocol and submitted to the PP to be addressed before the conclusion of the verification process.

The resolution of CARs and CLs were carried out by the PP through adjustments in the project documentation, especially in the MR and calculus spreadsheet. In some cases this adjustments were supported by evidences, additional documentation or technical explanation.

No FAR was raised in the previous verification.

The objective of this phase of the verification is to raise the requests for corrective actions and clarification and any other outstanding issues that needed to be clarified for Bureau Veritas Certification positive conclusion on the GHG emission reduction calculation.

Findings established during the initial verification can either be seen as a non-fulfilment of criteria ensuring the proper implementation of a project or where a risk to deliver high quality emission reductions is identified.

Corrective Action Requests (CAR) is issued, where:

- (a) Non-conformities with the monitoring plan or methodology are found in monitoring and reporting, or if the evidence provided to prove conformity is insufficient;
- (b) Mistakes have been made in applying assumptions, data or calculations of emission reductions which would impair the estimate of emission reductions;

The Clarification Request (CL) is used if information is insufficient or not clear enough to determine whether the applicable VCS v.3 requirements have been met.

To guarantee the transparency of the verification process, the concerns raised are documented in more detail in the verification protocol found in the section 7, below.

4 VERIFICATION FINDINGS

4.1 Project Implementation Status

There are no pending CARs or CLs issued in the course of the verification that still needs to be properly addressed to get closed. Before issuance of the final verification report, these CARs and CLs were adequately answered by the project proponent, and are closed.

The implementation status of the project is as follows:

The project has a 10-year crediting period, twice renewable.

The first 10-year crediting period is from 01st January 2006 and ends on 31st December 2015. The total Emission Reductions forecasted for that period are 3,187,939 tCO₂e.

This is the second monitoring period, from 01st January, 2009 to 31st December, 2010, where the emission reductions were calculated in 1,112,212 tCO₂e.

The previous monitoring period encompassed the period from 01st January 2006 to 31st December 2008, generating 1,028,338 tCO₂e.

The BAESA Project start date is 11th January 2005, that refers to the Operation Starting Date of the First Turbine.

Project activity is in commercial operation since 11/01/2005. The amount of net electricity generation in 2009 was 2,984 GWh and in 2010 was 4,164 GWh.

The monitoring plan is in accordance with the approved methodology applied by the proposed VCS project activity.

The parameters required by the monitoring plan and the way the Verification Team has verified the values in the Monitoring Report Version 04 are described below:

Data Reported in Monitoring

Data Unit / Parameter:	Electricity Supplied to the Grid – Net Electricity (EGy)
Data unit:	MWh
Description:	Electricity supplied by the project activity to the grid
Source of data:	Project Activity Site (Meters).
Description of measurement methods and procedures to be applied:	Spreadsheets were used, obtained directly from the meters with information generated hourly, or according to what was programmed by CCEE (Câmara de Comercialização de Energia Elétrica/ Electric Power Commercialization Chamber). Monthly, the information was checked with the generation spreadsheets available at the CCEE's Website. Besides, information of generation can be checked by receipt of sales, if it is necessary to do so. Each Generation Unit has two specific meters located in the substation that registers the net electricity supplied to the System by the Unit.
Frequency of monitoring/recording:	Monthly, HPP Barra Grande operators collect, in the electricity meters mass memory, gross and net hourly generation data of generation unit referring to the previous month
Value monitored:	The values of EGy for each year are: Year 2009 - 2,984,606 MWh and Year 2010 - 4,164,863 MWh. Total EGy (2009-2010) value is 7,149,469.
Monitoring equipment:	Each Generation Unit has two specific meters located in the substation that registers the net electricity supplied to the Grid by the Unit. Each meter has the same model. The manufacturer is ZIV, model 5CTE-E5A-2F6402UC, serie numbers 490186, 490187, 490189, 490190, 490191 and 490192 with accuracy class 0.2%.
QA/QC procedures to be applied:	The uncertainty level for these data is low. They were used to calculate the emission reductions. The electricity generated was monitored by the project participants and checked by spreadsheets available at the CCEE's Website (information comparison between operation data and CCEE reports). All these meters were calibrated on 11th January 2011 by Metrowatt. Before this date, the meters were also calibrated on September 2008. The

	two meters of UG1 were calibrated on 18th September 2008; the two meters of UG2 were calibrated on 17th September 2008 and the two meters of UG3 were calibrated on 16th September 2008 by Metrowatt. ONS Grid Procedures (Sub-module 12.3) establishes calibration frequency and other maintenance procedures. By the time of completion of this document, the frequency of calibration is a maximum of two years, but in the case of any changes occurred in the ONS Grid Procedures, the project owners shall follow the rules from the relevant sector organizations (e.g. ONS, ANEEL, CCEE). In September 2010, the meters should be calibrated. However a new calibration was just carried out on January 2011. Therefore, in the period of September to December 2010, the meters were not calibrated. However, according to the <i>“Guidelines for assessing compliance with the calibration frequency requirements”, version 01, paragraph 04</i>, if during verification of a certain monitoring period, the DOE identifies that the calibration has been delayed and the calibration has been implemented after the monitoring period in consideration (i.e. the results of delayed calibration are available), the DOE may conclude its verification, provided the following conservative approach is adopted in the calculation of emission reductions: (a) Applying the maximum permissible error of the instrument to the measured values, if the results of the delayed calibration do not show any errors in the measuring equipment, or if the error is smaller than the maximum permissible error; or (b) Applying the error identified in the delayed calibration test, if the error is beyond the maximum permissible error of the measuring equipment. The company controls the information of net electricity generation in a consolidated way (considering the three generator units). Thus, during these four months, the net electricity generated by HPP BAESA was calculated according to the item b and with the table 02, appendix -1 of these same guidelines.
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Calculation method:	The electricity supplied to the grid is calculated in a direct way with information controlled by the meters. For the period of September to December/2010, the requirements of the <i>Guidelines for assessing compliance with the calibration frequency requirements</i> were followed once the meters were just calibrated on January/2011.
Any comment:	

Data Unit / Parameter:	Total Electricity Generated (Gross Electricity) (TEG _y)
Data unit:	MWh
Description:	Total electricity produced by the project activity, including the electricity supplied to the grid and the electricity supplied to internal loads, in year y.
Source of data:	Project Activity Site
Description of measurement methods and procedures to be applied:	Spreadsheets were used, obtained directly from the meters with information generated hourly or according to what was programmed by CCEE. CCEE's readings comprise the sum of the three generating units. Each Generation Unit has one specific meter located in the Powerhouse that registers gross electricity generated by the Unit.
Frequency of monitoring/recording:	Monthly, HPP Barra Grande operators collect, in the electricity meters mass memory, gross and net hourly generation data of generation unit referring to the previous month.
Value monitored:	This data was used to calculate the expected emission reduction just for project emissions calculation, more specifically for reservoir emission calculation. The values of TEG _y for each year are: Year 2009 - 3,086,577 MWh. Year 2010 - 4,300,312MWh. Total TEG _y (2009-2010) value is 7,386,889MWh.
Monitoring equipment:	Each Generation Unit has one specific meter located in the Powerhouse that registers gross electricity generated by the Unit. Each meter has the same model. The manufacturer is ZIV, model 5CTE-E5A-2F6402UC, series number 490182, 490183 and 490184 with accuracy class 0.2%. In February 05, 2010 the meter 490182 was replaced by meter 490185.

QA/QC procedures to be applied:	The uncertainty level for these data is low. The electricity generated was monitored by the project participants. All these meters were calibrated on 11th January 2011 by Metrowatt. Before this date, the meters were also calibrated on September 2008. The meter of UG1 was calibrated on 18th September 2008, the meter of UG2 was calibrated on 17th September 2008 and the meter of UG3 was calibrated on 16th September 2008, by Metrowatt. ONS Grid Procedures (Sub-module 12.3) establishes calibration frequency and other maintenance procedures. By the time of completion of this document, the frequency of calibration is a maximum of two years.. In September 2010, the meters should be calibrated. However a new calibration was just carried out on January 2011. The gross electricity meter of Generator Unit 01 (UG01) 490185 was put into operation in February 2010. The company does not have calibration certificate for this meter for this date. However, this meter was also calibrated in January 2011. According to the <i>“Guidelines for assessing compliance with the calibration frequency requirements”, version 01, paragraph 04</i>, if during verification of a certain monitoring period, the DOE identifies that the calibration has been delayed and the calibration has been implemented after the monitoring period in consideration (i.e. the results of delayed calibration are available), the DOE may conclude its verification, provided the following conservative approach is adopted in the calculation of emission reductions: (a) Applying the maximum permissible error of the instrument to the measured values, if the results of the delayed calibration do not show any errors in the measuring equipment, or if the error is smaller than the maximum permissible error; or (b) Applying the error identified in the delayed calibration test, if the error is beyond the maximum permissible error of the measuring equipment.
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	The company controls the information of gross electricity generation in a consolidated way (considering the three units), Therefore, in a conservative way, all gross electricity generated by HPP BAESA during period of February 2010 to December 2010, was calculated according to the item b and with the table 02, appendix -1 of this same guidelines.
Calculation method:	The gross electricity is calculated in a direct way with information controlled by the meters. For the period of February to December/2010, the requirements of the <i>Guidelines for assessing compliance with the calibration frequency requirements</i> were followed once the meters were just calibrated on January/2011. As the company did not present calibration certificate for meter 490185 when it got into operation (February 2010), the procedures recommended by the Guidelines were applied for the period February to December 2010. This meter was also calibrated in January/2011.
Any comment:	

Data Unit / Parameter:	$EF_{grid,CM,y}$ - Combined Margin CO ₂ Emission Factor
Data unit:	tCO ₂ /MWh
Description:	The combined margin CO ₂ emission factor for grid connected power generation in year y calculated using the latest version of the "Tool to calculate the emission factor for an electricity system". The combined margin CO ₂ emission factor used on BAESA Project was calculated based on data supplied for the National Interconnected System by Brazilian DNA.
Source of data:	<i>Ex-post</i> emission factor was calculated by project participants with data supplied by MCTI with the ONS data. The variables $EF_{grid,OM,y}$ and $EF_{grid,BM,y}$, necessary for $EF_{grid,CM,y}$ calculation, was also monitored and calculated by MCTI and ONS, through the Dispatch Data of the National Interconnected System.
Description of measurement methods and procedures to be applied:	As described in the most recent version of the "Tool to calculate the emission factor for an electricity system".
Frequency of monitoring/recording:	Annually

Value monitored:	The values of Combined Margin CO ₂ , Emission Factor EF _{grid,CM,y} are: Year 2009: 0.1635 tCO ₂ /MWh Year 2010: 0.3095 tCO ₂ /MWh.
Monitoring equipment:	Not applicable
QA/QC procedures to be applied:	As described in the most recent version of the "Tool to calculate the emission factor for an electricity system". The uncertainty level for these data is low.
Calculation method:	As per the "tool to calculate the emission factor for an electricity system". Dispatch Data Analysis OM is the Operation Margin Emission Factor method used and the build margin emission factor is updated annually. Both Operating Margin Emission Factor and Build Margin Emission factor are supplied by MCTI. The combined margin emission factor considers the default value of 0.5 for each Emission factor as recommended by the methodology.
Any comment:	

The DOE crosschecked all the information above, available on the Monitoring Report version 04, with the internal records data related to gross and net electric generation, official national grid emission factor issued by Brazilian DNA (<http://www.mct.gov.br/index.php/content/view/72764.html>), official electric generation report records issued by CCEE (<http://www.ccee.org.br/cceeinterdsm/v/index.jsp?vgnextoid=2e09a5c1de88a010VgnVCM100000aa01a8c0RCRD>).

Also the "Guidelines for assessing compliance with the calibration frequency requirements", version 01, and ONS Grid Procedures Sub-module 12.3 were analysed in order to assess the correct application of the procedures regarding energy calculation for meters that had their calibration delayed or had been replaced during the verification period.

The monitoring of the project activity is implemented in conformity with the Monitoring Plan described in the VCS PD v4. Therefore, the monitoring plan was followed properly.

No remaining issues from previous validation or verification were identified.

4.2 Accuracy of GHG Emission Reduction or Removal Calculations

The parameters used for the emission reduction calculation are: Electricity Supplied to the Grid – Net Electricity (EGy), EF_{grid,CM,y} - Combined Margin CO₂ Emission Factor - and TEGy - Total electricity produced by the project activity -.

For the first parameter (EGy), according to the technical specifications defined by ONS Grid Procedures, in HPP Barra Grande there is a SMF - Measurement Billing System. The communication of this SMF with CCEE occurs directly through a VPN (Virtual Private Network) and, consequently, SCDE - Electric Power Data Collection System for billing - has direct access to the mass memory of the electricity meters.

For the second parameter ($EF_{grid,CM,y}$), the input values (operating margin and build margin emission factors) are obtained from the official reports, issued periodically by the Brazilian DNA (<http://www.mct.gov.br/index.php/content/view/72764.html>).

The third parameter: TEGy (Total electricity produced by the project activity) is used to calculate the project emission. This parameter was crosschecked against Baesa internal official records (monthly records). Comparison between TEGy and EGy monthly values was done in order to identify any inconsistency.

In the first week of each month, HPP Barra Grande operators collect, in the electricity meters mass memory, gross and net hourly generation data of the generation units referring to the previous month. This data are compiled in a unique spreadsheet which is the HPP's internal control generation spreadsheet for the referred month under analysis.

Information of the internal control generation spreadsheet is checked with SCDE spreadsheets. However, for emission reductions calculation, it was used the electricity generation data of CCEE General Measurement Report, available in the CCEE website. This data consist of the net electricity generation minus the losses of National Interconnected System (approximately 2.5%), setting, therefore, a more conservative value.

Both generation information, internally generated and through CCEE website, are electronically stored by the Operation and Maintenance Manager.

Periodically, the Information Technology Area makes a backup for all plant data through backup tapes.

All data collected as part of the monitoring was archived and will be kept for at least 2 years after the end of the last crediting period.

All the information related to the total electricity produced by the project activity, including the electricity supplied to the grid and the electricity supplied to internal loads, in year y (MWh), the net energy supplied to the grid and the calculation of the emission factors were checked by the validation team, according to the monitoring plan.

The verification team had access and verified the Calibration Certificates of all the energy measurement equipments.

The emission reductions for the second monitoring period were calculated as follow:

$$EF_{grid,CM,y} = EF_{grid,OM,y} \times W_{OM} + EF_{grid,BM,y} \times W_{BM} \quad (\text{Equation 1})$$

Where:

$EF_{grid,BM,y}$ = Build margin CO2 emission factor in year y (tCO2e/ MWh)

$EF_{grid,OM,y}$ = Operating Margin CO2 emission in year y (tCO2e/ MWh)

W_{OM} = Weighting of operating margin emissions factor (%) (0.5, as per tool for emission factor calculation)

W_{BM} = Weighting of build margin emissions factor (%) (0.5, as per tool for emission factor calculation)

$$PEy = EF_{Res} \times TEGy / 1000 \quad (\text{Equation 2})$$

Where:

PEy = Emission from reservoir expressed as tCO₂e/year;

EFRes = is the default emission factor for emissions from reservoirs, and the default value as per EB23 is 90 Kg CO₂e/MWh;

TEGy = Total electricity produced by the project activity, including the electricity supplied to the grid and the electricity supplied to internal loads, in year y (MWh).

$$ERy = BEy - PEy \quad (\text{Equation 3})$$

Where:

ERy = Emission Reduction in year y (t CO₂e/yr)

BEy = Baseline emissions in year y (t CO₂e/yr)

PEy = Project emissions in year y (t CO₂e/yr)

$$BEy = (EGy - EG_{\text{baseline}}) * EF_{\text{grid,CM,y}} \quad (\text{Equation 4})$$

Where:

BEy = Baseline Emission in year y (t CO₂e/year)

EGy = Electricity supplied by the project activity to the grid (MWh)

EG_{baseline} = Baseline electricity supplied to the grid in case of modified or retrofit facilities (MWh). For new power plants this value is taken as zero.

EF_{grid,CM,y} = Combined margin CO₂ emission factor for grid connected power generation in year y calculated using the latest version of the "Tool to calculate the emission factor for an electricity system".

The two parameters (EGy - Electricity Supplied to the Grid – Net Electricity and EF_{grid,CM,y} - Combined Margin CO₂ Emission Factor), used to calculate the baseline emission, were crosschecked by the verification team against the official records from CCEE (monthly records) and Brazilian DNA (monthly records), while the TEGy (Total electricity produced by the project activity), used to calculate the project emission, was crosschecked against Baesa internal records (monthly records). For the three main parameters, no discrepancy was found.

4.3 Quality of Evidence to Determine GHG Emission Reductions or Removals

The project proponent as evidence to determine emission reductions submitted several documents, as presented in section 3.2. above.

The evidences were assessed as of sufficient quantity and appropriate quality by DOE.

4.4 Management and Operational System

As presented in the Monitoring Report v04, section 3.3:

" HPP Barra Grande Operation and Maintenance Manager is responsible for the operation and maintenance activities of the plant and for the activities of consolidation and analysis of gross and net electricity. Measurements activities are carried out by the operators of the operation team".

Furthermore, the PP has explained that: *"Project Participants performs cross-check of electricity generation information and emission reductions calculations. BAESA has internal auditing process, once the company is certified ISO 9001 and ISO 14001. However, the company did not establish a formal procedure for emission reduction monitoring".*

The responsibilities and authorities for monitoring and reporting have been found to be in accordance with the monitoring plan, in the registered PD.

5 VERIFICATION CONCLUSION

Energética Barra Grande S.A – BAESA has commissioned BUREAU VERITAS CERTIFICATION to carry out the 2nd periodic verification of the Baesa project with regard to the relevant requirements for VCS project activities. The project reduces GHG emissions by supplying clean hydroelectric energy to the Brazilian National Interconnected System (SIN), that in a scenario without the project activity would have been generated by the operation of a grid-connected power plant and by the addition of new generating sources, some of them based in fossil fuel.

This verification covers the period from 01st January, 2009 to 31st December, 2010.

In the course of the verification, Corrective Action Requests (CAR) and Clarification Requests (CL) were raised and successfully closed. There were 01 CAR and 02 CL raised. No FARs were raised. The verification conclusion is based on the second Monitoring Report (Version 4, dated 15th March, 2012), the VCS PD (Version 04, dated 03rd February, 2009), Emission Reduction Calculation spreadsheet v04 and supporting documents made available to BUREAU VERITAS CERTIFICATION by the project participant.

As a result of this verification, the DOE confirms that:

- BUREAU VERITAS CERTIFICATION confirms that the project is implemented as planned and described in the Project Description. The monitoring plan is in place and the project is generating GHG emission reductions. The DOE concludes that all operations of the project are implemented and installed as planned and described as in the validated project description;
- The monitoring plan is in accordance with the applied approved CDM methodology, i.e., ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources", version 7, valid from 14th December 2007 to 04th December 2008;
- The monitoring system is in place and functional. The project has generated GHG emission reductions.

BUREAU VERITAS CERTIFICATION confirms that Monitoring Report v04 and Emission Reduction Calculation spreadsheet v04 are in accordance with the registered monitoring plan and all the calculations were based in reliable monitored data, in the case of non-monitored and pre-defined parameters, has correctly followed the parameters stated in the validated VCS PD Version 04, dated 03rd February, 2009.

The DOE also confirms that all the data and information used to elaborate this Verification Report are treated confidentially by BUREAU VERITAS CERTIFICATION.

Reporting period from 01st January, 2009 to 31st December, 2010.

Verified GHG emission reductions or removals in the above reporting period:

GHG Emission Reductions or Removals	tCO ₂ e
Baseline Emissions	1,777,032
Project Emissions	664,820
Leakage	0
Net GHG emission reductions or removals	1,112,212

The total value expected for the period was higher than that foreseen in the registered PD: 313,422.95 tCO₂e/year (years 2009, onwards) or 626,845.9 tCO₂e in 24 months (duration of the 2nd monitored period), this because the favourable hydrological conditions and rainfall in the region in 2009 has led the plant power generation to an increasing around 25% above the assured energy. Also the grid emission factor of that year was 0.3095 (approximately 39% above the medium emission factor of the 1st monitoring period).

6 VERIFIERS' CVS

BUREAU VERITAS CERTIFICATION Lead GHG Verifier

Diego Serrano - Is forest engineer graduated at ESALQ/USP, has master degree in Energetic System Planning by UNICAMP (State University of Campinas). His abilities include coordination, elaboration, validation and verification of PDD's in the scopes 1, 4, 13 and 14. He is qualified as Lead Verifier for GHG – Green House Gases projects and ISO 14001:2004.

BUREAU VERITAS CERTIFICATION Internal Technical Reviewer

Marcelo A. Porto – Qualified as Lead GHG Verifier, he is graduated in Electrical Engineering, with a graduate specialization in Quality Engineering and a Master's degree in Industrial Engineering. Quality management expert and auditor, he worked in the electro-electronic, mechanical, medical devices, leather and shoes industries. ISO 9001 and SA8000 auditor, he is also trained as ISO 14001 and OHSAS 18001 lead auditor.

7 VCS VERIFICATION PROTOCOL

Table 1 Verification requirements based on the Validation and Verification Manual (EB55 Annex 1)

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
1 Project implementation in accordance with the registered project design document					
It is assessed if there are any concerns related to the conformity of the actual project activity and its operation with the registered project design document	VVM	195			
a Are all physical features of the proposed CDM project activity proposed in the registered PDD in place?	VVM	196	Yes.	OK	OK
b Have the project participants operated the proposed CDM project activity as per the registered PDD?	VVM	196	Yes.	OK	OK
c Was an on-site visit conducted?	VVM	196	Yes. the site visit was conducted in 28th October 2011.	OK	OK
d If not, justify the rationale of the decision.	VVM	196	N/A	OK	OK
e Does the implementation or operation of CDM project activity conform with the description contained in the registered PDD?	VVM	197	CL 01: It is not clear the reason for the high monthly variability of the hydropower plant generation, that made the emission reductions presented in the second monitoring period (24 months), be greater than that achieved in the first monitored period (36 months), especially considering that the mean value for emission factor did not change significantly between both	CL 01	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			monitored periods (0,236 tCO ₂ e/MWh for the 2nd MP and 0,221 tCO ₂ e/MWh for the 1st MP).		

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
f If not, which are the potential impacts due to these changes, according to the relevant guidelines established by the Executive Board (EB48-§73)?	VVM	197	Please refer to CL 01, above	CL 01	OK
g Was a notification or a request for approval of changes from the project activity as described in the registered PDD submitted prior to the conclusion of the verification/certification for the corresponding?	VVM	197	N/A	OK	OK
2 Compliance of the monitoring plan with the monitoring methodology					
It is assessed if the monitoring plan of the proposed CDM project activity complies with the applied methodology	VVM	199			
a Is the validated monitoring plan in accordance with the approved methodology applied by the proposed CDM project activity?	VVM	200	Yes. All the procedures for the monitored parameters achievement are in accordance to the ACM0002 v.7	OK	OK
b If no, was a request for revision of the monitoring plan was done? (The DOE may request for revision of the monitoring plan covering the monitoring period under verification, for approval by the CDM Executive Board)	VVM	201	Not Applicable.	OK	OK
c Are there any monitoring aspects of the project activity that are not specified in the methodology, particularly in the case of small-scale methodologies (e.g. additional monitoring parameters, monitoring frequency and calibration frequency)?	VVM	202	No.	OK	OK
3 Compliance of monitoring with the monitoring plan					

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
It is assessed if monitoring of reductions in GHG emissions to result from the proposed CDM project activity is implemented in accordance with the monitoring plan contained in the registered PDD or the accepted revised monitoring plan.	VVM	204			
a Have the monitoring plan and the applied methodology been properly implemented and followed by the project participants?	VVM	205	Yes. the two main parameters, for emission reduction calculation, that need to be monitored are in accordance to the registered monitoring plan and the ACM0002 v.7	OK	OK
b Have all parameters stated in the monitoring plan, the applied methodology and relevant CDM Executive Board decisions been sufficiently monitored and updated as applicable, including:	VVM	205	-	-	-
i Project emission parameters?	VVM	205	All the project emission relevant parameters were monitored and are in accordance to the registered monitoring plan. In the particular case of the parameter " A_{PJ} " (Area of the reservoir measured in the surface of the water) required by the ACM0002 v.7, this was defined by the time of validation and stated in the registered VCS PD, thus do not need to be monitored during the first crediting period.	OK	OK
ii Baseline emission parameters?	VVM	205	All the baseline relevant parameters were monitored and are in accordance to the registered monitoring plan. In the particular case of the parameter " Cap_{PJ} " (Installed capacity of the hydro power plant), required by the ACM0002 v.7, this was defined by the time of validation and stated in	OK	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			the registered VCS PD, thus do not need to be monitored during the first crediting period.		

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
iii Leakage parameters?	VVM	205	Yes.	OK	OK
iv Management and operational system: the responsibilities and authorities for monitoring and reporting are in accordance with the responsibilities and authorities stated in the monitoring plan?	VVM	205	CL 02: It is not clear in the MR v.1 , who is the authority in charge of the parameter monitoring and reporting.	CL 02	OK
c Is the accuracy of equipment used for monitoring in accordance with the relevant guidance provided by the CDM Executive Board and are equipment controlled and calibrated in accordance with the monitoring plan?	VVM	205	Yes. the equipment used for monitoring is "ZIV, model 5CTE-E5A-2F6402UC, series number 490184 with accuracy class 0,2%... The meters that generated data were calibrated on 11th January 2011 and 19th November 2009... All meters was calibrated and are according to the specifications of ONS. The standard utilized in these calibrations is calibrated in regular intervals, in INMETRO and/or in accrediting agency by the same, with the calibration Brazilian Network Seal"	OK	OK
i Are monitoring results consistently recorded as per approved frequency?	VVM	205	Yes, as follow: "Monthly, HPP Barra Grande operators collect, in the electricity meters mass memory, gross and net hourly generation data of generation unit referring to the previous month".	OK	OK
ii Have quality assurance and quality control procedures been applied in accordance with the monitoring plan?	VVM	205	Yes, as presented in the registered PD and the MR v.1: " <i>The uncertainty level for these data is low... The electricity generated will be monitored by the project participants and it will be checked by spreadsheets available at the CCEE's Website (information comparison between operation data and CCEE reports)</i> ".	OK	OK
4 Assessment of data and calculation of greenhouse gas emission reductions					

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
It is assessed if GHG emission reductions achieved by / resulting from the proposed CDM project activity are calculated applying the selected methodology	VVM	207			
a Is a complete set of data for the specified monitoring period is available? (If no, i.e., only partial data are available because activity levels or non-activity parameters have not been monitored in accordance with the registered monitoring plan, the DOE shall opt to either make the most conservative assumption theoretically possible in finalizing the verification report, or raise a request for deviation prior to submitting request for issuance, if appropriate).	VVM	208	yes	CAR 01	OK
b Has information provided in the monitoring report been cross-checked with other sources such as plant log books, inventories, purchase records, laboratory analysis?	VVM	208	Yes. Information provided in the monitoring report has been cross-checked against: CCEE website data registers, Emission Reduction Calculation spreadsheet, Brazilian DNA emission factor for national grid, valid operational licence and its conditions, first period verification report (01/2006-12/2008) and the registered PD v4	OK	OK
c Have calculations of baseline emissions, proposed CDM project activity emissions and leakage, as appropriate, been carried out in accordance with the formulae and methods described in the monitoring plan and the applied methodology document?	VVM	208	Yes, however: CAR 01: In the calculus spreadsheet the generated electrical energy unit is presented in MW and not in MWh. Also the section 2.1 of the MRv1 the net electricity generation was presented in MW, instead of GWh.	CAR 01	OK

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
d Have any assumptions used in emission calculations been justified?	VVM	208	Yes. please refer to section below	OK	OK
e Have appropriate emission factors, IPCC default values and other reference values been correctly applied?	VVM	208	Yes. the BM and OM emission factor, were correctly based in the official national data issued by Brazilian DNA (MCT), while the emission factor for emissions from reservoirs was defined ex-ante based in the EB 23 (90 kgCO ₂ e/MWh.)	OK	OK

Table 2 – Resolution of Corrective Action / Forward Action / Clarification Requests

Draft report clarifications and corrective action requests by verification team	Reference to checklist question in Periodic Verification Checklist	Summary of project owner response	Verification team conclusion
CAR 01: In the calculus spreadsheet the generated electrical energy unit is presented in MW and not in MWh. Also the section 2.1 of the MRv1 the net electricity generation was presented in MW, instead of GWh.	VVM 208	In the calculus spreadsheet the generated electrical energy unit was modified to MWh and in the section 2.1 net electricity generation unit was modified to GWh.	OK, the MR v.2 was adjusted. CAR 01 is closed

Draft report clarifications and corrective action requests by verification team	Reference to checklist question in Periodic Verification Checklist	Summary of project owner response	Verification team conclusion
CL 01: It is not clear the reason for the high monthly variability of the hydropower plant generation, that made the emission reductions presented in the second monitoring period (24 months), be greater than that achieved in the first monitored period (36 months), especially considering that the mean value for emission factor did not change significantly between both monitored periods (0,236 tCO₂e/MWh for the 2nd MP and 0,221 tCO₂e/MWh for the 1st MP).	VVM 197	The reason for the high monthly variability of the hydropower plant generation is directly linked to the hydrological conditions and rainfall in the region. This scenario affects directly the net electricity generation of BAESA Project. In the 1st MP the net electricity generated was 22% less than assured energy. During 2006 and 2008, the Hydro Plant generated below the estimated assured energy (59.3% and 14.3%, respectively). In the 2nd MP the net electricity generation was 7.4% above the assured energy. One factor very important that contributed to achieve higher emission reductions during the 2nd MP is that during 2009 the net electricity generation was 25.2% above the assured energy and the grid emission factor of this year was 0.3095 (approximately 39% above the medium emission factor of the 1st MP). Therefore, the emission reductions achieved during this specific year was significantly higher	OK, the PP has explained that, despite of the number of months considered in each monitoring period, the power generation variability between both monitored periods was defined by the climate conditions (higher or lower precipitation), what is common in hidropower plants. In the case of emission reductions it was also influenced by the higher grid emission factor in the year of 2009. The validator understands the situation and agree with this explanation. CL 01 is closed.

Draft report clarifications and corrective action requests by verification team	Reference to checklist question in Periodic Verification Checklist	Summary of project owner response	Verification team conclusion
		that what was observed in the first monitoring period due to two reasons (i) higher emission factor and (ii) more electricity generation. It is important to highlight that it is electricity generation variability is normal once it is highly associated to rainfall regime. Moreover, it is important to highlight that comparing the total net electricity generation of the two monitoring periods with the assured energy of the project, this net electricity generation is 10.3% below that what was projected accordingly the assured energy. Therefore, emissions reductions are directly connected to the hydraulic generation of energy, which depends significantly on the volume of water in the basin of the rivers in which it is located. Scarce rains, floods, or any other natural factor may cause an impact on the generation capacity of the project and, consequently, may	

Draft report clarifications and corrective action requests by verification team	Reference to checklist question in Periodic Verification Checklist	Summary of project owner response	Verification team conclusion
		affect the emission reductions provided by it.	
CL 02: It is not clear in the MR v.1 , who is the authority in charge of the parameter monitoring and reporting.	VVM 205	The HPP Barra Grande Operation and Maintenance Manager is responsible for the operation and maintenance activities of the plant and for the activities of consolidation and analysis of gross and net electricity. Measurements activities are carried out by the operators of the operation team. Emission reductions calculation are carried out by Enerbio team.	In the MR v.2 the PP explains that the parameters monitoring (measurement activities) is done by the BAESA operation team, while the monitoring report is prepared by the consultancy Enerbio. CL 02 is closed.