



Verification Checklist

This document is to be used during the verification.

The first section of this document contains the project details and details any key changes since the last verification

The second section of the document details the parameters of the project to be checked. Each parameter should be identified during the Strategic Review & Risk Assessment

Section 1: General information

Project title: Ceran's Monte Claro Run-of-River Hydro-power Plant CDM Project Activity	Project No: CDM.Ver0277
Date of site visit: 30 th – 31 st July 2007.	
Please describe any key changes to the project structure since the last verification (e.g. acquisitions, disposals, product changes, process changes) First periodic verification.	

Section 2: Parameters to be checked

1.1 Parameter: Electricity generation of the project delivered to grid

Significance score = **High** Level of verification effort = **High** Risk Score = **High**

Reported value: 512,615.78 MWh

Verified value: 512,615.78 MWh

Key assumptions: the value reported is the total of electricity delivered to the grid.

What to check	How to check it	Findings	Conclusion
Amount of electricity delivered to the grid	Verify the monthly report: CCEE and internal monthly CERAN report – “Energia produzida no mês” which presents the amount of energy exported to the grid. Check all reports/year and compare the total reported with the report from CPFL	All data is generated automatically. The meters generate the data continuously and send online to SDCE (Energy Data Collection System). In the first day of the month an operator technician collects the energy data from the system and archive in a file: G:\operacao\OPERAC	Ok

	<p>Identify consistency and any abnormal data and verify what may be happened. Check information in the control room and internal system of the plant.</p>	<p>ÁO\Registros SE-Medição Energia. The operation department consolidates the data and generates an internal report (Acompanhamento mensal de operação). The energy data for the monitoring period (2005-2006) were verified and cross checked against CCEE and CPFL report. Data is consistent with monitoring report.</p>	
Amount of electricity invoiced	<p>Verify the CPFL report in the monitoring period. Check amount of energy and date or period. Compare the information in the CPFL report and the data listed in the monitoring report.</p>	<p>The CPFL report was verified and the energy data complies with monitoring report.</p>	Ok
Calibration and maintenance of the meters	<p>Verify calibration certificate for the reporting period. Check if they are updated, if the calibration follow the required standards and what was the error verified during calibration. Ask copy of the calibration certificate. Verify meter maintenance records, if applicable. Verify if the meter is working during the site visit (by meter reading and internal system).</p>	<p>There are two meters installed on site.</p> <p>During site visit was presented the calibration certificates "PS1058806/04 (serial numbers 490006 and 490177)" issued on 21/12/2004. According to the calibration procedure issued by ONS (Manutenção do sistema de medição para faturamento, Submódulo 12.3 Anexo 1, 31/01/2007), the calibration of the meters should be carried out each 2 years; therefore, the calibration certificate is valid until 20/12/2006.</p>	Ok

		<p>Please, provide evidence that the meters were calibrated on the period 21/12/2006 until 31/12/2006. CAR 3 was raised.</p> <p>The Ceran's company provided a declaration from LACTEC that evidences the meters (5CTE-E5A-2F6402UC model, serial numbers 490006 and 490177) complies with standard of the National System Operator (ONS). CAR 3 was close out. The error verified in the calibration certificate < 1%.</p> <p>The error is in accordance with national standard INMETRO and RBC (Rede Brasileira de Calibração).</p> <p>Copy the calibration certificate was provided. Ref. 6 a and b.</p>	
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1.2 Parameter: CO2 emission factor of the grid

Significance score = low Level of verification effort= low Risk Score = low

Reported value: 0.2647 tonnes CO2/MWh

Verified value: 0.2647 tonnes CO2/MWh

Key assumptions: The emission factor is fixed ex-ante. The emission factor presented in the monitoring report is the same of the registered PDD. No monitoring will be necessary during this crediting period.

What to check	How to check it	Findings	Conclusion
Emission Factor	Verify the data fixed ex-ante in the registered PDD.	For this crediting period the value reported is that informed in the registered PDD.	Ok

Section 3: Summary

The site visit was carried out by the local assessor. Emissions reduction from electricity generation is calculated from total electricity generated * baseline emission factor (0.2647 tCO₂e).

Total electricity generated in the period 1st March 2005 to 31st December 2006 = 512,615.78 MWh.

Total emission reduction = 135,689 tCO₂e.