

## CDM Project Activity Registration and Validation Report Form

(By submitting this form, designated operational entity confirms that the proposed CDM project activity meets all validation and registration requirements and thereby requests its registration)

Section 1: Request for registration				
Name of the designated operational entity (DOE) submitting this form	Det Norske Veritas Certification Ltd. (DNV)			
Title of the proposed CDM project activity (Section A.2 of the attached CDM-PDD) submitted for registration	"Martinuv Espigão Hydroelectric Project" in Brazil.			
Project participants (Name(s))	Incomex - Indústria, Comércio e Exportação Ltda., Maurício Martinuv and EcoSecurities Ltd.			
Sector in which project activity falls	Energy Industry, renewable sources			
Is the proposed project activity a small-scale activity?		Yes		
Section 2: Validation report				
List of documents to be attached to this v (please check mark):	ralidation	report		

- ☑ The CDM-PDD of the Project activity
- An explanation by the submitting designated operational entity of how it has taken due account of comments on validation requirements received, in accordance with the CDM modalities and procedures, from Parties, stakeholders and UNFCCC accredited non-governmental organizations (Note: Included in DNV's Validation Report (DNV report No. 2006-1312, rev. 01);
- □ The written approval of voluntary participation from the designated national authority of each Party involved, including confirmation by the host Party hat the project activity assist it in achieving sustainable development:
  - o (Attach a list of all Parties involved and attach the approval(in alphabetic order))
- ☑ Other documents, including any validation protocol used in the validation.
  - DNV's Validation Report (DNV report No. 2006-1312, rev. 01), including a validation protocol and a list of persons interviewed by DNV validation team during the validation process.
- Information on when and how the above validation report is made publicly available.
- Banking information on the payment of the non-reimbursable registration fee.
- □ A statement signed by all project participants stipulating the modalities of communicating with the Executive Border and the secretariat in particular with regard to instructions regarding allocation of CERs at issuance.

## **Executive Summary and Introduction, including**

- Description of the proposed CDM project activity
- Scope of validation process (include all documentation that has been reviewed and name persons that have been interviewed as part of the validation, as applicable)
- DOE Validation team (list of all persons involved in the validation, describing functions assumed in the validation)

The "Martinuv Espigão Hydroelectric Project" is ,located at Pimenta Bueno River, Vilhena municipality (Martinuv hydropower plant) and Preto River, Espigão D'Oeste municipality (Espigão hydropower plant), Rondônia State, Brazil.

"Martinuv Espigão Hydroelectric Project" is a renewable energy project activity with an output capacity (3.9 MW) of less than 15 MW and is thus eligible as type I.D small-scale CDM project activity "Grid connected renewable electricity generation" / Type I – Renewable Energy Projects) as outlined in the "Appendix B of the "Simplified modalities and procedures for small-scale CDM project activities" - Indicative simplified baseline and monitoring methodologies for selected small-scale CDM project activities and Decision 17/CP.7.

The project consists of two run-of-river small hydropower plants with Francis turbines with an overall generation capacity of 3.9 MW (2.4 MW at Martinuv and 1.5 MW at Espigão). According to the Brazilian National Electricity Agency, ANEEL, the two hydropower plants are considered small hydropower plants as the area of the reservoir(s) is less than 3 km². The plants are connected to the Rondônia-Acre electricity system located in Rondônia State in the North Region of Brazil.

The validation scope is an independent and objective review of the Project Design Document (PDD). The PDD was reviewed against Kyoto Protocol criteria for the CDM, the CDM modalities and procedures as agreed in the Marrakesh Accords and relevant decision by the CDM Executive Board. The validation team has, based one the recommendation in the IETA/PCF Validation and Verification Manual, employed a risk-based approach, focusing on the identification of significant risks for the project implementation and the generation of CERs.

The following documents were reviewed:

Project Design Document for the "Martinuv Espigão Hydroelectric Project" – Version 01 of 20 June 2006.

Project Design Document for the "Martinuv Espigão Hydroelectric Project" – Version 02 of 03 July 2006.

Project Design Document for the "Martinuv Espigão Hydroelectric Project" – Version 03 of 31 August 2006.

Project Design Document for the "Martinuv Espigão Hydroelectric Project" – Version 04 of 13 September 2006.

EcoSecurities Ltd (EcoSecurities) – Datasheet to calculate the Combined Margin for Rondônia-Acre and Cone Sul Isolated Grids, Excel spreadsheets. Received on 15 September 2006.

EcoSecurities Ltd (EcoSecurities) – Datasheet to calculate the emission reduction, Excel spreadsheets. Received on 15 September 2006.

Eletrobras-GTON Isolated Systems Operational Plan for 2005.

http://www.eletrobras.gov.br/img/menu/01 ccc off.gif

ANEEL "Small Hydroelectric Units Accompaniment", issued on 15/10/2005. http://www.aneel.gov.br/37.htm

ANEEL Resolution number 157 of 05/03/2004 - "Authorization for installation of 900 kW in Espigão hydropower plant".

ANEEL Resolution number 962 of 26/11/2004 - "Authorization for installation of 920 kW in

Martinuv hydropower plant".

ANEEL Resolution number 442 of 23/12/2004 - "Authorization for reduction of 50% at the taxes values for Espigão".

ANEEL Resolution number 251 of 27/06/2005.

International Emission Trading Association (IETA) & the World Bank's Prototype Carbon Fund (PCF): *Validation and Verification Manual*. <a href="http://www.vvmanual.info">http://www.vvmanual.info</a>

"Appendix B of the "Simplified modalities and procedures for small-scale CDM project activities" - Indicative simplified baseline and monitoring methodologies for selected small-scale CDM project activities: AMS-I.D – "Grid connected renewable electricity generation" for Type I – Renewable Energy Projects. Version 9 of 28 July 2006.

Attachment A to the "Appendix B of the "Simplified modalities and procedures for small-scale CDM project activities" - Indicative simplified baseline and monitoring methodologies for selected small-scale CDM project activities. Version 06 of September 2005.

The following persons were interviewed:

Mr. Leandro Schwartz Noel, EcoSecurities, Rio de Janeiro, Brazil.

Mr. Pablo Fernandez, EcoSecurities, Rio de Janeiro, Brazil.

The validation team consisted of the following personnel:

Mr. Vicente San Valero

Mr. Mario Epstein

Mr. Raphael de Souza

DNV Rio de Janeiro

CDM auditor

DNV Rio de Janeiro

CDM auditor

Mr. Michael Lehmann DNV Oslo Energy sector expert

Mrs. Susanne Haefeli-Hestvik DNV Oslo Technical reviewer

For further details, please refer to the "Introduction" and "References" Sections of DNV's Validation Report (DNV Report No. 2006-1312, rev. 01).

## Description of methodology for carrying out validation

- Review of CDM-PDD and additional documentation attached to it
- Assessment against CDM requirements (e.g. by use of a validation protocol)
- Report of findings by the DOE, e.g. by use of type of findings (e.g. corrective action requests, clarifications or observations). Please explain the way findings are "labelled" during validation.
- Include statements or assessments in the section "Conclusions, final comments and validation opinion" below.

The validation consisted of the following three phases:

- i) a desk review of the project design, baseline and monitoring plan;
- ii) follow-up interviews with project stakeholders;
- iii) the resolution of outstanding issues and the issuance of the final validation report and opinion.

The original and revised versions of the project design document (PDD) submitted by the project participants were reviewed. Additional background documents related to the project design and the baseline were also consulted.

Between 28 and 31 July 2006, DNV performed interviews with representatives of EcoSecurities, to confirm and to resolve issues identified in the document review.

In order to ensure transparency, a validation protocol has been customized for the project, according

to the Validation ad Verification Manual. The protocol shows, in a transparent manner, criteria (requirements), means of verification and the results from validation the identified criteria.

Findings established during the validation can either be seen as a non-fulfilment of validation criteria or where a risk to the fulfilment of project objectives is identified. Such findings are termed *corrective action requests* (CARs). The term *clarification* (CL) may be used where additional information is needed to fully clarify an issue. The *corrective action requests* and requests for *clarification* raised by the validation team were resolved through communications with the project participants. To guarantee the transparency of the validation process, the concerns raised by DNV and the response provided by the project participants are documented in Table 3 of the Validation Protocol in Appendix A of DNV's Validation Report. (DNV Report No. 2006-1312, rev. 01).

For further details, please refer to the "Methodology" Section of DNV's Validation Report (DNV Report No. 2006-1312, rev. 01) and the IETA/PCF Validation ad Verification Manual (<u>www.vvmanual.info</u>)

Explanation by the submitting designated operational entity of how it has taken due account of comments on validation requirements received, in accordance with the CDM modalities and procedures, from Parties, stakeholders and UNFCCC accredited non-governmental organizations;

- Description of how and when the PDD was made publicly available
- Description of how comments were received and made publicly available
- Explanation of how due account has been taken of comments received
- Compilation of all comments received (Identify the submitter)

DNV published the PDD of 20 June 2006 on the DNV Climate Change web site (<a href="http://www.dnv.com/certification/ClimateChange">http://www.dnv.com/certification/ClimateChange</a>) and Parties, stakeholders and NGOs were through the UNFCCC CDM web site invited to provide comments during the period from 06 July 2006 to 04 August 2006. No comments were received.

Please refer to the "Comments by Parties, Stakeholders and NGOs" Section of DNV's Validation Report (DNV Report No. 2006-1312, rev. 01) and the above mentioned CDM website.

## Conclusions, final comments and validation opinion

- Provide conclusions on each requirement under paragraph 37 of the CDM modalities and procedures, describing how these requirements have been meet. This shall include assessments and findings (e.g. corrective action requests, clarifications or observations) in relation to each requirement, including a confirmation that all issues raised have been addressed to the satisfaction of the DOE.
- Final comments and validation opinion

Det Norske Veritas Certification Ltd. (DNV) has performed a validation of the "Martinuv Espigão Hydroelectric Project" in Brazil. The validation was performed on the basis of UNFCCC criteria for the Clean Development Mechanism and host country criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

The project participants are Incomex - Indústria, Comércio e Exportação Ltda., Maurício Martinuv and EcoSecurities Ltd. The participating Parties - Brazil as host Party and the United Kingdom as Annex I Party - meet all relevant participation requirements.

The project consists of two run-of-river small hydropower plants with Francis turbines with an overall generation capacity of 3.9 MW (2.4 MW at Martinuv and 1.5 MW at Espigão).

By promoting renewable energy, the project is in line with the current sustainable development priorities of Brazil.

The project correctly applies the simplified baseline methodology for selected small-scale CDM project activity categories, category I.D – Renewable electricity generation for a grid (AMS-I.D, Version 9 of 28 July 2006). The additionality of the project is demonstrated by applying the barrier

analysis contained in Attachment A to the simplified modalities and procedures for small-scale CDM project activities. The presented barriers demonstrate that the project is not a likely baseline scenario.

A combined margin emission coefficient of 0.8435 tCO<sub>2</sub>e/MWh for the Rondônia-Acre grid was calculated in accordance with the simplified baseline methodology for category I.D small-scale CDM project activities, i.e. the average of the approximate operating margin and the build margin. The determination of this combined margin emission coefficient is based on actual electricity generation data provided by Eletrobras Isolated Systems Operation Report for the Rondônia-Acre grid.

By promoting renewable energy and displacing fossil fuel-based electricity, the project results in reductions of CO<sub>2</sub> emissions that are real, measurable and give long-term benefits to the mitigation of climate change. Given that the project is operated as designed, the project is likely to achieve the estimated amount of emission reductions.

The project correctly applies the monitoring methodology AMS-I.D. The monitoring plan sufficiently specifies the monitoring requirements.

In summary, it is DNV's opinion that the "Martinuv Espigão Hydroelectric Project" as described in the revised and resubmitted project design document of 13 September 2006, meets all relevant UNFCCC requirements for the CDM and all relevant host country criteria and correctly applies the baseline and monitoring methodology for category I.D small-scale CDM project activities(AMS-I.D, Version 9 of 28 July 2006). Hence, DNV will request the registration of the "Martinuv Espigão Hydroelectric Project" as a CDM project activity.

For further details, please refer to the "Validation Findings" Section and Table 1 of the Validation Protocol in Appendix A of DNV's Validation Report (DNV Report No. 2006-1312, rev. 01).

The DOE declares herewith that in undertaking the validation of this proposed CDM project activity it has no financial interest related to the proposed CDM project activity and that undertaking such a validation does not constitute a conflict of interest which is incompatible with the role of a DOE under the CDM.

Prior to the submission of this validation report to the

CDM Executive Board, DNV will have to receive the

met.	Kingdom, includir	ng the confirmation by the DNA of oject assists in achieving sustainable		
Name of authorized officer signing for the DOE	Michael Lehmann			
Date and signature for the DOE	29 September 2006			
Section below to be filled by UNFCCC secretariat				
Date when the form is received at UNFCCC secretariat				
Date at which the registration fee has been received				
Date at which registration shall be deemed final				
Date of request for review, if applicable				
Date and number of registration		Date	Number	

By submitting this validation report, the DOE

confirms that all validation requirements are