



## 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

<b>Name of the designated operational entity (DOE) submitting this form</b>	Det Norske Veritas Certification Ltd. (DNV)
<b>Title of the proposed CDM project activity (Section A.1 of the attached CDM-PDD) submitted for registration</b>	El Canadá Hydroelectric Project
<b>Project participants (Name(s))</b>	<ul style="list-style-type: none"> <li>➤ Generadora de Occidente Ltda. (GdO)</li> <li>➤ International Bank for Reconstruction and Development (IBRD)</li> <li>➤ Canada</li> <li>➤ Netherlands</li> </ul>
<b>Sector in which project activity falls</b>	Sectoral Scope Nr. 1
<b>Is the proposed project activity a small-scale activity?</b>	Yes / <u>No</u> (underline as applicable)

### Section 2: Validation report

<b>List of documents to be attached to this validation report (please check mark):</b>	
<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> The CDM-PDD of the project activity</li> <li><input checked="" type="checkbox"/> 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;</li> <li><input checked="" type="checkbox"/> The written approval of voluntary participation from the designated national authority of each Party involved, including confirmation by the host Party that the project activity assists it in achieving sustainable development: <ul style="list-style-type: none"> <li>○ (Attach a list of all Parties involved and attach the approval (in alphabetical order))</li> </ul> </li> <li><input checked="" type="checkbox"/> Other documents, including any validation protocol used in the validation <ul style="list-style-type: none"> <li>○ Validation Report including a validation protocol and a list of persons interviewed by the validation team during the validation process</li> </ul> </li> <li><input checked="" type="checkbox"/> Information on when and how the above validation report is made publicly available.</li> <li><input checked="" type="checkbox"/> Banking information on the payment of the non-reimbursable registration fee</li> <li><input checked="" type="checkbox"/> A statement signed by all project participants stipulating the modalities of communicating with the Executive Board and the secretariat in particular with regard to instructions regarding allocations of CERs at issuance.</li> </ul>	

### **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)**

- **Description of the proposed CDM project activity:**

The “El Canadá Hydroelectric Project” consists of a 43 MW run-of-the river hydroelectric plant located on the Samala River on the West coast of Guatemala, near the town of Santa Maria de Jesus. Construction of the project began in February 2002; the annual electricity generation is projected to an average of 175 GWh. The project intends to sell its electricity to Guatemala’s largest commercial distributor, COMEGSA, under a 10-year Power Purchase Agreement (PPA).

- **Scope of validation process:**

The validation scope is defined as an independent and objective review of the project design document (PDD). The PDD is reviewed against Kyoto Protocol criteria for the CDM, the CDM rules and modalities as agreed in the Marrakech Accords and relevant decisions by the CDM Executive Board. The validation team has employed, based on the recommendations in the Validation and Verification Manual, a risk-based approach, focusing on the identification of significant risks for project implementation and the generation of CER’s.

The validation is not meant to provide any consulting towards the project participants. However, stated requests for clarifications and corrective actions may provide input for improvement of the project design.

- **Documents reviewed:**

- The World Bank Carbon Finance Unit: *CDM-PDD for the El Canadá Hydroelectric Project*, draft version of April 2003 (applying NM0006) and version 2 of 7 November 2005 and version 3 of 30 August 2006 (both applying ACM0002).
- DNA of Guatemala: *Letter of Approval*, dated 28 November 2005
- DNA of Canada: *Letter of Approval*, dated 18 November 2005
- DNA of the Netherlands: *Declaration of Approval*, dated 01 December 2005
- The World Bank Carbon Finance Unit: *Capacidad Instalada en el sistema eléctrico Nacional. AMM generation and capacity data*, Excel file. August 2006
- *Background documents related to the design and/or methodologies employed in the design or other reference documents:*
- International Emission Trading Association (IETA) & the World Bank’s Prototype Carbon Fund (PCF): *Validation and Verification Manual*.
- CDM EB: *ACM0002 - Consolidated baseline methodology for grid-connected electricity generation from renewable sources*, version 6 of 19 May 2006.
- CDM EB, *Tool for the demonstration and assessment of additionality*, version 02

**Persons interviewed during the validation**

- GdO, Carlos Esquivel / Juan Carlos Mendez / Alden Kitson.
- OGIC, Eduardo Alvarez.

- Ministry of Environment, Ervin Gomez/Ruth Portillo.
- Ministry of Energy, Marco Davila.
- AMM, Yuri Omar Urbina.
- PCF Consultant, Hernan García.

• **DOE Validation team:**

Einar Telnes	DNV Certification Norway	Project Manager, Energy sector expert
Gustavo Godinez	DNV Certification Mexico	GHG Auditor
Anjana Vasudev	DNV Certification India	GHG Auditor
Susanne Haefeli	DNV Certification Norway	Technical Reviewer

For further details, please refer to the "Introduction" and "References" Section of DNV's Validation Report (DNV Report 2005-1508, rev. 02).

***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 documents;
- II follow-up interviews with project stakeholders;
- III the resolution of outstanding issues and the issuance of the final validation report and opinion.

In order to ensure transparency, a validation protocol was customised for the project, according to the Validation and Verification Manual. The protocol shows, in a transparent manner, criteria (requirements), means of verification and the results from validating the identified criteria. The validation protocol serves the following purposes:

- It organises, details and clarifies the requirements a CDM project is expected to meet;
- It ensures a transparent validation process where the validator will document how a particular requirement has been validated and the result of the validation.

Findings established during the validation can be seen as either a non-fulfilment of validation criteria or where a risk to the fulfilment of project objectives is identified. *Corrective action requests (CAR)* are issued, where:

- i) mistakes have been made with a direct influence on project results;
- ii) CDM or host Party requirements have not been met; or
- iii) there is a risk that the project would not be accepted as a CDM project or that emission reductions will not be certified.

The term *Clarification* may be used where additional information is needed to fully clarify an issue.

*For further details, please refer to the "Methodology" Section of DNV's Validation Report (DNV*

Report 2005-1508, rev. 02) and the IETA/PCF Validation and Verification Manual ([www.vvmanual.info](http://www.vvmanual.info)).

**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)**

The PDD (version 2 of 7 November 2005) was made publicly available on DNV's climate change website ([www.dnv.com/certification/climatechange](http://www.dnv.com/certification/climatechange)) and Parties, stakeholders and NGOs were through the CDM website invited to provide comments during a 30 days period from 9 November to 8 December 2005. No comments were received

Also the draft PDD of April 2003 was made publicly available on DNV's climate change and stakeholders were through Climate-L invited to provide comments during a 30 days period from 11 April to 11 May 2003. Two comments were received during this comment period.

Please refer to the "Comments by Parties, Stakeholders and NGOs" Section of DNV's Validation Report (DNV Report 2005-1508, rev. 02) 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 met. 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 "El Canadá Hydroelectric Project" in Guatemala proposed as a CDM project activity. The validation is performed on the basis of UNFCCC criteria for CDM project activities, the requirements in the applied methodology ACM0002 as well as criteria given to provide for consistent project operations, monitoring and reporting. This validation report summarises the findings of the validation of the project design and the project's baseline and monitoring plan.

The project utilises the irrigation water from the existing Secacao dam in a run of river power plant construction. The project will contribute to sustainable development by displacing fossil fuel-based electricity generation with renewable energy in the Guatemalan grid.

The project participants are Generadora de Occidente of Guatemala and the International Bank for Reconstruction and Development as Trustee of the Prototype Carbon Fund, which participation is authorised by Canada and the Netherlands. The DNAs of Guatemala, Canada and the Netherlands have approved the project.

The validation did not reveal any information indicating that the project can be seen as a diversion of ODA funding towards Guatemala.

It is demonstrated 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. The determination of the baseline is transparent. The project applies the baseline and monitoring methodology ACM0002 (version 6). A combined margin is determined ex-ante for the first 7-year crediting period as the weighted average of the build and operating margin emission factor for the Guatemalan grid.

The monitoring plan provides for the monitoring of electricity generated by the project. Responsibilities and authorities for project management, monitoring and reporting and QA/QC procedures have also been addressed.

By displacing fossil-based electricity with hydropower 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. Project emissions are zero and the baseline emissions are forecasted using reasonable assumptions. Estimated annual emission reductions are 118 527t CO<sub>2</sub>e.

A local stakeholder consultation process has been carried out by the project participant. DNV has published the PDD on DNV's Climate Change website at two occasions and comments by Parties, stakeholders and UNFCCC accredited NGOs were invited through the CDM website in the second call. Two comments were received during the first call and considered by the validation. No comments were received during the second call.

In summary, it is DNV's opinion that the "El Canadá Hydroelectric Project", as described in the PDD of 30 August 2006, meets all relevant UNFCCC requirements for the CDM and all relevant host country criteria and correctly applies the baseline and monitoring methodology ACM0002 (version 6). Given that the project is implemented as stated in the project design document the project is likely to achieve the emission reductions as stated above. DNV thus requests the registration of the "El Canadá Hydroelectric Project" as a CDM project.

For further details, please refer to DNV's Validation Report (DNV Report 2005-1508, rev. 02).

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.

By submitting this validation report, the DOE confirms that all validation requirements are met.

Name of authorized officer signing for the DOE

Susanne Haefeli-Hestvik

Date and signature for the DOE

20<sup>th</sup> Sept 2006



#### 1.1.1.1 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

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