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 (DNV Certification)
Title of the proposed CDM project activity (Section A.2 of the attached CDM-PDD) submitted for registration	Rickli Biomass Electricity Generation Project
Project participants (Name(s))	Madeireira Rickli Ltda. (Brazil) EcoSecurities Ltd. (UK)
Sector in which project activity falls	Energy industries (renewable - / non-renewable sources) and 13 (Waste handling and disposal)
Is the proposed project activity a small-scale activity?	Yes

Section 2: Validation report	
List of documents to be attached to this validation report (please check mark)*:*	

- ☑ 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;
- ❑ 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:
  - (Attach a list of all Parties involved and attach the approval(in alphabetic order))
- ☑ Other documents, including any validation protocol used in the validation.
  - Preliminary Validation Report of 14 March 2005 (DNV report 2005-0172, rev. 02), including a validation protocol and a list of person interviewed by DOE 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 objective of the Rickli Biomass Electricity Generation Project is the construction of a new biomass electricity co-generation unit with 5MW of installed capacity using climate change neutral biomass (wood chips and wood residue) as fuel, supplying all of Rickli sawmill's demand and exporting the surplus to the grid. The electric power generation capacity is 5 MW. In house power demand is 0,5 MW, resulting in 4,5 MW generation capacity of electricity exports to the local electricity grid. Part of the biomass used to generate electricity are residues from Rickli, while the remaining biomass will be sourced from third parties. The project is located within the premises of the Rickli sawmill company, located in Carambei, Paraná. Rickli is a sawmill and its core business is the production of doors to be exported.

Emission reductions are generated by displacing fossil-fuel based grid-electricity and burning of biomass that would otherwise have been left to decay. Hence, the project also involves methane avoidance from biomass not being landfilled. Total emission reductions from the electricity and methane components are estimated to be 2 687 265 tCO2e over 21 years, which means an average annual emission reduction of 127 965 tCO2e.

The project participants are Madeireira Rickli Ltda, EcoSecurities Ltd, and UK as an Annex 1 Country.

The validation scope is defined as an independent and objective review of the project design document (PDD). The PDD is reviewed against the criteria stated in Article 12 of the Kyoto Protocol, the CDM modalities and procedures as agreed in the Marrakech Accords and the relevant decisions by the CDM Executive Board. The validation team has, based on the recommendations in the Validation and Verification Manual, employed a risk-based approach, focusing on the identification of significant risks for project implementation and the generation of CERs.

The validation team consisted of the following personnel:

Susanne Haefeli	DNV Norway	Team Leader, GHG auditor
Cintia Dias	DNV Brazil	GHG auditor
Luis Filipe Tavares	DNV Brazil	GHG auditor
Michael Lehmann	DNV Norway	Internal verifier, Energy sector expert

The following documents were reviewed:

- Ecosecurities, PDD of the Rickli biomass electricity generation project, January 2005
- Ecosecurities, PDD of the Rickli biomass electricity generation project, February 2005
- Ecosecurities, PDD of the Rickli biomass electricity generation project, March 2005
- Ecosecurities, Emission Calculations, Excel sheets, 17 February 2005
- Ecosecurities, Monitoring and data tables, Excel sheets, 17 February 2005
- Ecosecurities, Emission Calculations, Excel sheets, 11 March 2005
- Bosi, M. et al. 2002. Road-Testing Baselines for Greenhouse Gas Mitigation Projects in the Electric Power Sector, OECD and IEA Information Paper COM/ENV/EPOC/IEA/SLT - 2002 6, Paris, available at: http://www.oecd.org/env/cc (4 February 2005)
- Indicative simplified baseline and monitoring methodologies for selected small-scale CDM project activity categories, version 05 of 23 February 2005.

- IPCC, Good Practise Guidance and Uncertainty Management in National Greenhouse Gas Inventories. 2000
- International Emission Trading Association (IETA) & Prototype Carbon Fund (PCF) Det Norske Veritas (DNV), Validation and Verification Manual, available at: www.vvmanual.info

The following persons were interviewed:

- Marcelo Los Rickli – Madereira Rickli –Administrative Director
- Luis C. Figueiredo – Madereira Rickli – Production Manager
- Flavia Resende – Ecosecurities – Consultant

For further details, please refer to the "Introduction" Section of DNV Certification's Preliminary Validation Report (DNV report 2005-0172, 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 of the project started in December 2004. The validation consisted of the following three phases:

i) a desk review of the project design and the baseline and monitoring plan;

ii) follow-up interview with project stakeholders;

iii) the resolution of outstanding issues and the issuance of a preliminary validation report and opinion.

The initial Project Design Document (PDD) for the Rickli Biomass Electricity Generation Project of January 2005 and the revised versions of the PDD of February 2005 and March 2005, Excel sheets with regard to the data monitoring and emissions calculations /submitted by EcoSecurities and two comments received by stakeholders during the period of call for inputs were reviewed.

On 11 January 2005 DNV performed site visits and interviews with Rickli and EcoSecurities in Carambei, Paraná State, 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.

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

The validation has identified six Corrective Action Requests and two requests for Clarification. These requests were presented to the project participants in DNV's draft validation report of 4 February 2005 (DNV Report 2005-0172, rev. 01). To address the issues raised by DNV, the project participants provided clarifications and additional information submitted in two revised versions of the PDD. The clarifications and additional information provided by the project participants resolved all Corrective Action Requests and request for Clarification with the exception of the Corrective Action

Request with regard to the approvals by the DNAs of the participating Parties.

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 to DNV Certification's Preliminary Validation Report (2005-0172, rev. 02).

For further details, please refer to the "Methodology" Section of DNV Certification's Preliminary Validation Report (2005-0172, rev. 02) and the IETA/PCF Validation ad Verification Manual (*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 was published on http://www.dnv.com/certification/ClimateChange and stakeholders were through the UNFCCC CDM web site invited to provide comments from 4 February 2005 to 6 March 2005. Two comments were received.

The comments and an explanation of how DNV has taken due account of the comments received is given in "Comments by Parties, stakeholders and NGOs" Section of DNV Certification's Preliminary Validation Report (2005-0172, rev. 02).

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 (DNV Certification) has validated the Rickli Biomass Electricity Generation Project in Brazil (hereafter called "the project"). The validation was performed on the basis of UNFCCC criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to the Kyoto Protocol criteria for the CDM, the CDM modalities and procedures as agreed in the Marrakech Accords, the simplified modalities and procedures for small-scale CDM project activities and relevant decisions by the CDM Executive Board.

Being a renewable energy project activity with an output capacity of less than 15 MW and having less than 15 000 tCO2e project emissions, the project meets the criteria for Renewable electricity generation for the grid (Type I.D) and Methane avoidance (Type III.E) as defined in Appendix B of the simplified modalities and procedures for small-scale CDM project activities.

Category I.D comprises projects "that supply electricity to an electricity distribution system". The electric energy generated by the project will partly be used by the Rickli Plant and will reduce the imports from the grid electricity, thus, displacing energy from the grid. As this project activity reduces grid electricity imports and thus avoids marginal fossil fuel based electricity generation, DNV is in favour of the project being considered under Category I.D. This is, however, subject to the final acceptance of the CDM Executive Board.

The simplified modalities and procedures for small-scale CDM project activities give no further

guidance on which project emissions to include for determining whether the projects meet the small-scale eligibility threshold for type III small-scale CDM project activities. However, the selected definition of project emissions being the CH4 and N2O emissions due to incomplete combustion of biomass and the exclusion of biogenic CO2 emissions from the combustion of biomass is in line with other approved baseline and monitoring methodologies.

The project applies two of the simplified baseline methodologies proposed for this project activity category. The average of the approximate operating margin and the build margin is applied for the renewable electricity generation component of the project. The determination of the combined margin is based on an International Energy Agency (IEA) study for Brazil. Considering that such study was carried out recently and that the necessary data for determining the operating and build margin is not public available in Brazil, the use of the data from the IEA study are deemed adequate for calculating the combined margin. For the methane avoidance component of the project, the amount of methane produced from decay of biomass landfilled in absence of the project is determined using adequate IPCC default emission factors.

An analysis of relevant barriers demonstrates that the proposed project is not a likely baseline scenario and emission reductions are hence additional to any that would occur in its absence of this proposed CDM project activity. The additionality of the project is demonstrated through a barrier test. Upon request, an investment analysis considering all savings and expenses associated to the project was presented. DNV acknowledges that the project without CER revenues has an IRR lower than the levels regarded as acceptable for other investments in Brazil. Although Rickli already operates one old boiler, the new cogeneration system has different conditions of operation, using the wood waste which is not readily utilised to generate electricity. Hence, it is sufficiently demonstrated that the project is not a likely baseline scenario and that emission reductions attributable to the project are additional.

The project applies the simplified monitoring methodology described for category I.D and III.E small-scale CDM project activities. Detailed responsibilities and authorities for project management, monitoring procedures and QA/QC procedures have not been presented during interviews with Rickli. They are foreseen to be established during the second quarter of 2005 and their implementation should be checked during the first period verification of emission reductions.

By displacing fossil fuel-based electricity with electricity generated from a renewable source, the project results in reductions of CO2 emissions that are real, measurable and give long-term benefits to the mitigation of climate change. Total emission reductions from the electricity and methane components are estimated as 2 687 265 tCO2e over 21 years, which means an average annual emission reduction of 127 965 tCO2e.

The project design is sound and the project will use state of the art technology fully used in Brazil. Social and environmental impacts of the project have been previously addressed, allowing the permit of construction as well as the environmental permit by the environmental authority of Paraná. By promoting renewable energy and by using biomass residues from sawmill industries; the project will contribute to Brazil's sustainable development. However, the DNA of Brazil has not yet confirmed the project's contribution to sustainable development.

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

A local consultation process with relevant stakeholders has been conducted and no comments were received during the consultation process. This has been checked during site visit.

Parties, stakeholders and NGOs were invited to provide comments and all issues raised by stakeholders were taken into account during the validation.

In summary, the Rickli Biomass Electricity Generation Project meets all present and relevant UNFCCC criteria and the simplified modalities and procedures for small-scale CDM project activities. However, the project has not yet obtained approval by the participating Parties, including a confirmation by the host Party that the project contributes to sustainable development in Brazil.

For further details, please refer to the Section “Validation Findings” and Table 1 of Appendix A of DNV Certification's Preliminary Validation Report (Report No. 2005-0172, 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.	Note: The Rickli Biomass Electricity Generation Project has not yet obtained written approval of the participating Parties, including a confirmation by the host Party that the project assists in achieving sustainable development.		
Name of authorized officer signing for the DOE	Michael Lehmann		
Date and signature for the DOE	14 March 2005 Michael Lehma...		
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