

 <p style="text-align: center;"><b>CDM Project Activity Registration and Validation Report Form</b> (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)</p>	
<b>Section 1: Request for registration</b>	
<b>Name of the designated operational entity (DOE) submitting this form</b>	JACO CDM., LTD.
<b>Title of the proposed CDM project activity (Section A.2 of the attached CDM-PDD) submitted for registration</b>	e7 Bhutan Micro Hydro Power CDM Project (e7 Bhutan Project)
<b>Project participants (Name(s))</b>	e7 Fund for Sustainable Energy Development National Environment Commission Secretariat, Royal Government of Bhutan Department of Energy of Ministry of Trade & Industry, Royal Government of Bhutan
<b>Sector in which project activity falls</b>	Energy industries (renewable-/non renewable sources)
<b>Is the proposed project activity a small-scale activity?</b>	<u>Yes</u> / No (underline as applicable)
<b>Section 2: Validation report</b>	
<b>List of documents to be attached to this validation report (please check mark):</b>	
<input checked="" type="checkbox"/> The CDM-PDD of the project activity <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; ( Note: Included in JACO CDM's Validation Report (Report No. GR04W0001D, Rev.02)) <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>○ Royal Government of Bhutan: Letter of Approval by DNA of Royal Government of Bhutan of 27 February 2004.</li> <li>○ Japan: Letter of Approval by DNA of Japan of 29 July 2003.</li> <li>○ List of the Parties involved.</li> </ul> <input checked="" type="checkbox"/> Other documents, including any validation protocol used in the validation <ul style="list-style-type: none"> <li>○ Validation protocol is included in JACO CDM's Validation Report (Report No. GR04W0001D, Rev.02.)</li> <li>○ Comprehensive list of documents</li> <li>○ List of persons interviewed by DOE validation team during the validation process</li> </ul> <input checked="" type="checkbox"/> Information on when and how the above validation report is made publicly available.	

- ❑ Banking information on the payment of the non-reimbursable registration fee
  - Registration fee will be sent after receiving the individual reference number.
- ❑ 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

### **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)**

- **Proposed CDM activity**

The purpose of the “e7 Bhutan Micro Hydro Power CDM Project” (hereinafter, “e7 Bhutan Project”) is to reduce GHG emissions and to contribute to the sustainable development of the community by constructing a hydroelectric power station with a power generation capacity of 70kW in an un-electrified Chendebji village where the geographical condition is very severe. This power station is not connected to the external power grid and the project is not a part of the other big project. The host country approved this project as a CDM project and it is understood that the purpose of this project well meets the mission to promote sustainable development of this district.

The project is a small-scale activity of Type I and Category I.A. “Electricity Generation by the User” according to the Appendix B of the “Simplified modalities and procedures for small-scale CDM project activities”.

The project is funded by e7 Fund for Sustainable Energy Development (hereinafter, “e7 Fund”) and there is no relation with public fund such as ODA.

For the e7 Bhutan Project, the Kansai Electric Power, Co., Inc. of Japan is representing e7 Fund.

Construction work of this hydroelectric power station is planned to start on July 2004 and the operation of the station is planned to start on May 2005. CER is to be issued in 2005 and afterwards.

Expected operational lifetime of the project activity is 25 years.

Calculated GHG emission reduction is 524t-CO<sub>2</sub>/year.

Starting date of the first crediting period is 1<sup>st</sup> May 2005 and the length of the first crediting period is 7years.

- **Scope of validation process**

Scope of Assessment:

JACO CDM assessed the project design document (PDD) as an independent third party against Kyoto Protocol, Marrakech Accord and relevant decisions by the CDM Executive Board.

The validation team has, based on the recommendations in the IETA/PCF validation and Verification Manual, employed a risk-based approach, focusing on the identification of significant risks for project implementation and the generation of CERs.

Interviews:

JACO CDM performed interviews with the Kansai Electric Power Co., Inc. in June and July 2004.

Name of persons interviewed:

a) Takao SHIRAISHI General Manager / International Network Group / Corporate Planning Department / The Kansai Electric Power Co., Inc.

b) Toru YAMANAKA Senior Manager / Environmental Planning / Office of Environment / The Kansai Electric Power Co., Inc.

c) Hirofumi KAZUNO Manager / Global Environment Group / Office of Environment / The Kansai Electric Power Co., Inc.

d) Keiji FUJIMOTO Global Environment Group / Office of Environment / The Kansai Electric Power Co., Inc.

- **Validation team**

- |                    |                                   |                        |
|--------------------|-----------------------------------|------------------------|
| a) Osamu KOBAYASHI | Senior Chief Engineer of JACO CDM | validation team leader |
| b) Teruo FUKUDA    | Senior Chief Engineer of JACO CDM | validation team member |
| c) Yumi GOSEKI     | JACO CDM                          | validation team member |

- **Internal verifier**

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|---------------------|--|
| d) Yoshihiro Otsuka | General Manager of JACO CDM                |
| e) Shigekazu OKA    | Manager of Assessment Division of JACO CDM |

### 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 Feb. 2004 and was concluded in March 2005. The validation consisted of the following phases.

- i) a desk review of the PDD (February to October 2004)
- ii) interview with project participants (June to July 2004)
- iii) The resolution of outstanding issues and the issuance of the validation report and validation opinion. (June 2004 to March 2005)

- **Review of CDM-PDD and additional documentation attached to it**

The PDD and relevant document were reviewed against the Kyoto Protocol, Marrakech Accord and other UNFCCC criteria, especially "Simplified modalities and procedures for small-scale clean development mechanism project activities" (FCCC/CP/2002/7/Add.3 and its Appendix A, B & C.)

#### Reviewed documents

- a) Project Design Document "e7 Bhutan Micro Hydro Power CDM Project" Rev.01 & 02.
- b) Letter of Approval of the DNA of Royal Government of Bhutan, dated February 10, 2004.
- c) Letter of Approval of the DNA of Japan, dated July 29, 2003.
- d) Annex of PDD: Letter of Royal Government of Bhutan about Environmental Clearance for Construction dated 25 November 2003.
- e) EIA clearance condition and its mitigation measure included in the Bidding Document of the e7 Bhutan Project (Appendix 3 to the Validation Report (Rev 02)).
- f) Bidding Documents related above e)
- g) Power infrastructures in Royal Government of Bhutan (existing & future) (part of 8<sup>th</sup> & 9<sup>th</sup> 5year plan of Royal Government of Bhutan)
- h) Site survey report and videotapes of site survey
- i) Drawings of the power plant

- **Assessment against CDM requirements (e.g. by use of a validation protocol)**

In order to ensure transparency, assessment was conducted using Small Scale CDM Validation Protocol (Version 3.0) of IETA. This protocol is attached as Appendix 1 to the Validation Report (Rev 02).

• **Report of findings: type of findings**

Three different types of findings are defined. (1) Non-fulfilment of Validation Protocol criteria or where a risk of the fulfilment of project objectives is identified should be reported as a "Corrective Action Request". (2) Issues requiring further elaboration are highlighted as "Clarifications". (3) Issues on which a decision cannot be reached at this stage are termed as "Observations".

1) A "Corrective Action Request" (CAR) will be issued, where:

- i) mistakes have been made with a direct influence on project results;
- ii) validation protocol 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.

2) A "Clarification" (CL) will be issued, where:

Additional information is needed to fully clarify an issue.

3) An "Observation" (OBS) will be where:

An issue, which is of little significance currently, may assume greater significance in due course and should be observed in the project.

For the purpose of the transparency of the validation process, the concerns raised by the validation team, discussion between the project participants and the validation team, and the results are shown in the Validation Report (Rev. 02) and in the table 3 of the validation protocol attached to the Validation Report.

For further details, please refer to the "Methodology" section of JACO CDM's Validation Report and the IETA/PCF Validation and Verification manual.

• **Statements in the section "Conclusions, final comments and validation opinion"**

CARs, CLs and Observations are raised in the draft validation protocol.

CARs must be closed out and CLs should be clarified before an unconditional validation opinion in the validation report can be issued. CLs should be clarified during the project implementation and verified during the first Verification.

As a rule of JACO CDM to avoid conflict of interest, Certification Determination Committee of JACO CDM whose members are independent of JACO CDM makes the final decision on the results of assessment before submitting the project to the CDM Executive Board for the registration as a CDM project.

As for the e7 Bhutan Project, it is JACO CDM's opinion that the project, as described in the Validation Report Rev.02 of Mar. 2005, meets all relevant UNFCCC requirements for CDM and all relevant host country criteria and correctly applies the simplified baseline and monitoring methodology for category I.A small-scale CDM project activities. Hence, JACO CDM issued an unconditional validation opinion.

**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)**

• **Description of how and when the PDD was made publicly available**

JACO CDM published the project documents on its website from 2004/6/4 until 2004/7/4 and public comments were invited through UNFCCC website. (Refer to <http://cdm.unfccc.int/Projects/Validation/view.html?ProjectId=252918183339006486&OE=JACO>)

• **Description of how comments were received and made publicly available**

At the beginning of public comment period, the procedure for handling comments is not directly posted on web site but indicating an e-mail address of a contact person as a trigger to access the procedure.

Later the procedure was changed to a direct system by providing a button "Add Comment". One comment was received behind time limit.

- **Explanation of how due account has been taken of comments received**

The comment is about the potential environmental impact. As for the environmental impact of the project, JACO CDM recognises that suitable measures had been taken as shown in F "Environmental impact" of the PDD.

The comment has been kept publicly available in JACO CDM home page.

- **Compilation of all comments received**

Received comment is attached as Appendix 2 to the Validation Report (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**

- **Conclusions on each requirement under paragraph 37 of the CDM modalities and procedures:** Each requirement under paragraph 37 is satisfied as follows.

(a) Participation requirements are satisfied as follows.

(a-1) Voluntary participation:

DNA of Royal Government of Bhutan approved the e7 Bhutan Project as a CDM project.

DNA of Japanese Government approved the e7 Bhutan Project based on Kyoto Protocol Article 12 5(a) "Voluntary participation approved by each party involved"

(a-2) DNA:

Royal Government of Bhutan / "National Environment Commission Secretariat"

JAPAN / "The Liaison Committee for the Utilisation of the Kyoto Mechanisms"

(a-3) A Party not included in Annex I: Royal Government of Bhutan is a Party to the Kyoto Protocol

(b) Comments by local stakeholders and due account for them: Local stakeholders comments are invited by 3 processes such as interview to villagers, workshop and public consultation in Chendebji village and due account has been taken for these comments.

(c) Environmental Impacts: Suitable environmental assessment was conducted as required by the regulation of Royal Government of Bhutan and is suitably reflected into the project.

(d) Expected results in additional reduction in GHG: This project is an additional due to investment barrier and the fact that this project is not financially viable without e7 fund.

The reduction in GHG is expected to be 524t-CO<sub>2</sub>/year. (ex ante)

(e) Baseline and monitoring methodologies: Baseline and monitoring methodologies are clearly defined in accordance with the rule of small scale project Category I.A. as follows and this is appropriate to this project.

Baseline is option 2 of Category I.A. and the monitoring methodology is option (b).

(f) Provisions for monitoring and reporting: Monitoring methodology and plan is defined in accordance with decision 17/CP.7, present annex and relevant decisions of COP.

(g) The project activity conforms to all other requirements for CDM project activities in decision 17/CP.7, the present annex and relevant decisions of COP and the executive board.

By the validation of the original PDD, 3 CARs and 3 CLs had been issued. The responses to these CARs and CLs were satisfactorily provided by e7 Fund and the original PDD was revised to PDD Rev.02.

• **Final comments and validation opinion:**

The review of the project design documentation and the subsequent follow-up interviews have provided JACO CDM with sufficient evidence to determine the fulfilment of stated criteria.

JACO CDM confirmed by the letter of Royal Government of Bhutan that Royal Government of Bhutan had approved this project as a Clean Development Mechanism Project.

The e7 Bhutan Project is a small scale CDM project of Type I and Category I.A. and the PDD Rev.02 and additional documents satisfy the necessary conditions for it. An analysis of the investment barriers 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 as designed, the project is likely to achieve the estimated amount of emission reductions.

It is confirmed that the e7 Bhutan Project contributes not only to reduce the GHG emission but also to sustainable development of the Chendebji village because of various positive effects such as health, economic development, education, and environmental protection etc. This is well in accordance with the purpose of CDM.

In summary, it is JACO CDM's opinion that the project, as described in the Validation Report Rev.02 of April 2005, meets all relevant UNFCCC requirements for CDM and all relevant host country criteria and correctly applies the simplified baseline and monitoring methodology for category I.A small-scale CDM project activities. Hence, JACO CDM requests the registration of the "e7 Bhutan Micro Hydro Power CDM Project" as a CDM project.

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.

Nobuhisa Ito  
CEO, President  
JACO CDM., LTD

Name of authorized officer signing for the DOE

Date and signature for the DOE

April 08, 2005

*Nobuhisa Ito*

**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