

JI DETERMINATION REPORT FORM (F-JI-DRep) - Version 01

(By submitting this form, an accredited independent entity requests the publication of a determination pursuant to paragraph 33 of the JI guidelines in accordance with paragraph 34 of the JI guidelines.)

Name of accredited independent entity (AIE)	Det Norske Veritas Certification AS
Proposed	JI Project
Title and reference number of project	Sreden Iskar Cascade HPP Portfolio Project (0063)
Host Party(ies)	Bulgaria
Parties involved in the project	Netherlands
(Authorised) project participants	Vez Svoghe OOD European Bank for Reconstruction and Development (EBRD)
Small-scale project (yes/no)	No

Brief description of project

The project involves the installation and commissioning of 9 small run-of-the-river hydro power plants on the river Iskar near the town of Sofia in Bulgaria. The total installed capacity of the project is 25.65 MW. The project is expected to generate 415.5 GWh of electricity over the entire crediting period starting from 1 January 2008 and extending to 31 December 2012 and is likely to reduce an average 74 194 t CO2 emissions per year by displacing electricity produced by existing and upcoming fossil fuel fired power plants connected to the electrical grid.

Determination report

General information on determination

(Please describe:

- > The scope of the determination process, including all documentation that has been reviewed and the names of persons interviewed during the determination process, as applicable;
- > The AIE's determination team, including a list of all persons involved in the determination process and a description of the functions assumed.)

The determination scope is defined as an independent and objective review of the Project Design Document (PDD) and other relevant documents. The information contained in these documents is reviewed against the Kyoto Protocol requirements for Joint Implementation (JI) projects, the guidelines for the implementation of Article 6 of the Kyoto Protocol (Decision 16/CP.7) as agreed in the Marrakech Accords, in particular the verification procedures under the JI supervisory committee, and decisions adopted by the JI supervisory committee.

The following documents have been reviewed:

- MWH S.p.A.: Project Design Document for the "Sreden Iskar Cascade HPP Portfolio Project" in Bulgaria, Rev.0, dated 08 August 2006 and Rev. 1, dated 08 November 2006 and Rev. 02 dated 15 October 2007.
- MWH S.p.A.: Monitoring Plan for "Sreden Iskar Cascade HPP Portfolio Project" in Bulgaria Excel Spreadsheets
- MWH S.p.A.: Emission reduction calculation Excel Spreadsheets
- Petrol Villa Group: Energy Production Analysis
- NEK: Study on HPPs titled "Small Hydro Power Plants Investment for the Future"
- Ministry of Environment and Water of Bulgaria: Letter of Approval dated 1 August 2007
- Ministry of Economic Affairs of the Netherlands: Declaration of Approval dated 28 November 2007
- International Emission Trading Association (IETA) & the World Bank's Prototype Carbon Fund (PCF): Validation and Verification Manual. http://www.vvmanual.info
- CDM Executive Board: Tool for the demonstration and assessment of additionality. Version 02 of 28 November 2005.
- CDM Executive Board: ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources", version 6 of 19 May 2006.

The following persons were interviewed

- Eugenio Ferro, Leader, Energy Department, MWH S.p.A, Italia
- · Marco Vivaldelli, Energy Department, Vez Svoghe OOD, Bulgaria
- Plamen Dilkov, Director, Vez Svoghe OOD, Bulgaria
- Patrick Pauletto, Project Manager, Vez Svoghe OOD, Bulgaria

The determination team consisted of the following personnel:

Mr Michael Lehmann DNV Norway Project manager, JI validator & sector expert

Mr Soumik Biswas DNV India GHG auditor
Mr Mario Voros DNV Slovakia JI validator

Mr Einar Telnes
DNV Norway
Technical reviewer

Description of determination process

(Please refer to:

- > The review of the JI PDD and additional documentation attached to it:
- The assessment against JI requirements, e.g. by using a determination protocol;
- > The report of findings by the AIE, including the use of different types of findings (e.g. corrective action requests, clarifications or observations etc.).

Statements or assessments should be included in section "Conclusions, final comments and determination opinion" below.)

The determination of the project commenced in August 2006. The determination 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 determination report and opinion..

The determination has been carried out in line with the verification procedure under the Article 6 supervisory committee, as well as, in line with determination process outlined in the Validation and Verification Manual.

In order to ensure transparency, a determination 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.

For further details please refer to section 2 of the Determination Report.

Comments received from Parties, stakeholders and UNFCCC accredited observers (Please:

- Summarise the comments received pursuant to paragraph 32 of the JI guidelines; and
- Provide a report of how due account was taken of these.)

The PDD of 8 November 2006 was made publicly available on the JI website and Parties, stakeholders and observers were through the UNFCCC Secretariat invited to provide comments during a 30 days period from 27 June 2007 - 26 July 2007. No comments were received.

Conclusions, final comments and determination opinion

(The requirements of Article 6 of the Kyoto Protocol and the JI guidelines and further relevant requirements defined by the COP/MOP or the JISC with regard to determinations pursuant to paragraph 33 of the JI guidelines have to be met.

Please provide:

- Conclusions on each of these requirements, describing how these requirements, in particular those referred to in paragraph 33 of the JI guidelines, have been met, including assessments and findings (e.g. corrective action requests, clarifications or observations) related to each requirement and statements on whether all issues raised have been addressed to the AIE's satisfaction;
- > Final comments and a determination opinion.)

Det Norske Veritas Certification AS (DNV) has performed a determination of the "Sreden Iskar Cascade HPP Portfolio Project" in Bulgaria. The determination was performed on the basis of UNFCCC criteria and host country criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

The review of the project design documentation and the subsequent follow-up interviews have provided DNV with sufficient evidence to determine the fulfilment of stated criteria. In our opinion, the project meets all relevant UNFCCC requirements for JI.

The project participants are the private entity Vez Svoghe OOD of Bulgaria and the European Bank for Reconstruction and Development (EBRD) for the account of the Netherlands. The Parties involved in this project are Bulgaria as the host Party and the Netherlands as the sponsor Party. The Parties involved meet the requirements to participate in the JI. The Focal Point of Bulgaria approved the project and authorised the participation of Vez Svoghe OOD through its Letter of Approval dated 1 August 2007. The Focal Point of the Netherlands approved the project and authorised the participation of EBRD through its Declaration of Approval dated 28 November 2007.

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. An analysis of the investment, lack of experience and common practice 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.

The baseline methodology for the project has been selected with reference to the approved CDM methodology ACM0002, version 06. The baseline scenario has been selected as power generation from the existing and upcoming power plants in the grid. The baseline methodology uses the algorithms and formulae prescribed in ACM0002. According to ACM0002, the baseline grid emission factor has been estimated using the combined margin approach. The operating margin has been estimated by the dispatch data analysis method by the National Elektricheska Kompania (NEK) using NEK data for the national grid. However, the actual emission factors will be monitored and calculated ex-post in the project scenario during the crediting period.

In summary, it is DNV's opinion that the project, as described in the project design document, revision 02 of 15 October 2007, meets all relevant UNFCCC requirements for the JI.

For further details please refer to section 3 of the Determination Report and the Determination Protocol in Appendix A.

All requirements of Article 6 of the Kyoto Protocol and the JI guidelines and further relevant requirements defined by the COP/MOP or the JISC with regard to determinations pursuant to paragraph 33 of the JI guidelines are met:

✓ Yes

□ No

List of documents attached to the determination report

(Please attach:

- ✓ The JI PDD of the project;
- ✓ Written approvals by all Parties involved in an alphabetical order; and
- ✓ Other relevant documents, e.g. any determination protocol used in the determination process, a list of persons interviewed by the AIE's determination team during the determination process; and

check mark below accordingly.)

- ☑ JI PDD of the project
- ☑ Written approvals by the Parties involved
- ☑ Other documents:
 - ☑ Determination report and protocol
 - □ List of persons interviewed
 - □ Any other documents (please list):

The AIE herewith declares that undertaking the determination for the proposed JI project referred to above does not constitute a conflict of interest which is incompatible with the role of an AIE under JI.

Name of authorized officer signing for the AIE

Michael Lehmann

Date and signature

4 January 2008 Michael Chman-