

JACO CDM

Determination Report

Client: Mitsubishi Heavy Industries, Ltd.

Kaliakra Wind Power Project

Revision No.02

(Draft)

2007. 6. 22

Report No. GR07W0005D

JACO CDM., LTD

Determination Report

Date of first issue: 23 April, 2007	
Approved by: Nobuhisa ITO CEO, President of JACO CDM	UNFCCC Reference No.: 0047
Client: Client Name: Mitsubishi Heavy Industries, Ltd.	Client ref.: Mr. Yoshio Minato
<p>Summary:</p> <p>JACO CDM., Ltd has been ordered by Mitsubishi Heavy Industries, Ltd. (hereinafter MHI) to perform a determination of the Kaliakra Wind Power Project (hereinafter the Project). The purpose of the Project is to construct 35MW wind power station at the coast of the Black Sea near Kaliakra cape, Bulgaria, thus providing GHG free electricity to contribute to the energy security of the country. The emission reduction from the Project has been conservatively estimated to be 81,400 tonnes of CO₂ per year.</p> <p>The determination is the independent third party assessment of the project design, and is the requirement for JI projects under the JI Second Track. The JI Process in Bulgaria is following the rules and procedures for JI Second Track. The project's compliance with the relevant requirements has been determined.</p> <p>This determination report summarizes the determination regarding the project design and is prepared in order to make this report publicly available before the request for the letter of approval to Bulgarian government according to Bulgarian JI guidelines. Corresponding PDD/1A/ was made publicly available from 29 Mar. '07 to 27 Apr. '07. The comments received during the period and due accounts taken of them are included in this report.</p> <p>The determination consisted of the following three steps: i) desk review of the project design, the baseline and the monitoring plan etc., ii) follow-up interviews with project stakeholders and iii) the resolution of outstanding issues and issuance of the final determination report and the opinion.</p> <p>The responses to 3 CARs and 9 CLs to the initial PDDs(/1/, /1A/) were satisfactorily provided by the Project participants and the original PDDs were revised.</p> <p>In summary, it is JACO CDM's opinion that the Project as described in the revised PDD /1B/ meets all relevant UNFCCC requirements for the JI project provided that CAR.1 and CL 9 are resolved : i.e. the formal approvals from the Japanese government and the Bulgarian government are issued before the publication of the final determination report.</p>	

Report No.: GR07W0005D		
Report title: Determination Report Kaliakra Wind Power Plant Project,		
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Date of this revision 22 June, 2007	Rev. No.: 02	Number of pages: 19

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Validation Report

Abbreviations

BEF	Baseline Emission Factor
BM	Build margin
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CEF	Carbon Emission Factor
CL	Clarification Request
CM	Combined Margin
CMP	The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol
DNA	Designated National Authority
ERs	Emission Reductions
EIA	Environmental Impact Assessment
ERU	Emission Reduction Unit
GHG	Green House Gas(es)
IE	Independent Entity
IPCC	Intergovernmental Panel on Climate Change
JACO CDM	JACO CDM Co., Ltd
JBIC	Japan Bank for International Cooperation
JCF	Japan Carbon Finance, Ltd.
JI	Joint Implementation
JISC	Joint Implementation Supervisory Committee
KP	Kyoto Protocol
KWP	Kaliakra Wind Power AD (Project Company)
MHI	Mitsubishi Heavy Industries, Ltd.
MOEW	Ministry of Environment and Waters, Bulgaria
NGO	Non Governmental Organization
ODA	Official Development Assistance
OM	Operating Margin
PDD	Project Design Document
PPA	Power Purchase Agreement
RIEW-Varna	Regional Inspectorate on Environment and Waters in Varna, Ministry of Environment and Waters, Bulgaria
SPC	Special Purpose Company (Kaliakra Power AD)

Table of Contents		Page
1	INTRODUCTION	3
1.1	Objective	3
1.2	Scope	3
1.3	GHG Project Description	3
2	METHODOLOGY	4
2.1	Review of Documents	6
2.2	Follow-up Interviews	6
2.3	Resolution of Clarification and Corrective Action Requests	6
3	DETERMINATION FINDING	7
3.1	Participation Requirements	7
3.2	Project Design	8
3.3	Baseline	8
3.4	Monitoring Plan	11
3.5	Calculation of GHG Emissions	13
3.6	Environmental Impacts	14
3.7	Stakeholders' Comments	15
4	COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS	16
5	DETERMINATION OPINION	17
6	REFERENCES	18

Appendix A: JI Determination Protocol

Appendix B: Summary of comments received and the responses

Determination Report

1. INTRODUCTION

1.1 . Objective

Mitsubishi Heavy Industries, Ltd. (hereinafter MHI) has commissioned JACO CDM to make a determination of the Kaliakra Wind Power Project in Bulgaria with regard to the relevant requirements for JI project activities. The determination serves as design verification and is a requirement for all Client projects. The purpose of a determination is to have an independent third party assess the project design. In particular, the project's baseline, the monitoring plan (MP), and the project's compliance with relevant UNFCCC and host country criteria are validated in order to confirm that the project design as documented is sound and reasonable and meets the stated requirements and identified criteria. Determination is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of emission reduction units (ERUs).

UNFCCC criteria refer to the Kyoto Protocol Article 6 criteria and the Guidelines for the implementation of Article 6 of the Kyoto Protocol as agreed in Decision 9/CMP.1.

This determination report summarizes the determination regarding the project design and is prepared in order to make this report publicly available before the request for the letter of approval to Bulgarian government according to "Bulgarian JI guidelines". Corresponding PDD /1A/ was made publicly available from 29 March, 2007 to 27 April, 2007. The comments received during the period and due accounts taken of them are included in this report.

1.2. Scope

The determination scope is defined as an independent and objective review of the project design document (PDD), the project's baseline study and monitoring plan and other relevant documents. The information in these documents is reviewed against Kyoto Protocol requirements, UNFCCC rules and associated interpretations. JACO CDM has, based on the recommendations in the Validation and Verification Manual employed a risk-based approach in the determination, focusing on the identification of significant risks for project implementation and the generation of ERUs.

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

The determination was conducted by the following team through the assessment of the PDD and the additional documents listed in the Chapter 6 "References", also by the interviews with persons listed in the same Chapter.

The result of determination team activity was reviewed by the internal verifiers.

Determination Team

Osamu KOBAYASHI	Senior Chief Engineer of JACO CDM, team leader
Teruo FUKUDA	Senior Chief Engineer of JACO CDM, team member
Hideki KOBAYASHI	Senior Chief Engineer of JACO CDM, team member
Yumi GOSEKI	JACO CDM team member
Teiichi TAMATSUKURI	expert(wind power generation)

Internal Verifiers

Yoshihiro OTSUKA	Board Director and General Manager of JACO CDM
Shigekazu OKA	Manager of Audit Department of JACO CDM

1.3. GHG Project Description

Determination Report

The Kaliakra Wind Power Project is a 35MW wind power generation project located on the coast of Black Sea at the Kaliakra cape about 420km northeast of capital city of Sofia, Bulgaria.

The plant, located in an area with favorable wind conditions, has an expected capacity factor of 25.86%, resulting in 79,284MWh of electricity annually. The project will be developed jointly by MHI and INOS-1OOD. The expected operational lifetime of the project is 20 years. The project will contribute to the Bulgarian energy security and the global environment by providing zero greenhouse gas (GHG) emission power to the national power grid system. The wind-generated electricity produced by the project is to displace the grid electricity contributing to GHG reductions of 81,400 tCO₂e (tones of carbon dioxide equivalent) per year for the duration of the project activity. In the initial 5-year crediting period, the project is expected to reduce approximately 406.9ktCO₂e, generating the equivalent amount of Emission Reduction Units (ERUs).

2. METHODOLOGY

The determination consists of the following three phases:

- I a desk review of the project design documentation
- II follow-up interviews with project stakeholders
- III the resolution of outstanding issues and the issuance of the final determination report and opinion.

In order to ensure transparency, the determination protocol was customized 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 determination protocol serves the following purposes:

- It organizes, details and clarifies the requirements a JI project is expected to meet;
- It ensures a transparent determination process where the independent entity will document how a particular requirement has been validated and the result of the determination.

The determination protocol consists of three tables. The different columns in these tables are described in Figure 1.

The completed determination protocol is enclosed in Appendix A to this report.

Findings established during the determination can either be seen as a non-fulfillment of determination protocol criteria or where a risk to the fulfillment of project objectives is identified. Corrective Action Requests (CAR) is issued, where:

- i) Mistakes have been made with a direct influence on project results
- ii) Determination protocol requirements have not been met; or
- iii) There is a risk that the project would not be accepted as a JI project or that emission reductions will not be verified.

The determination team may also use the term Clarification, which would be where:

- iv) Additional information is needed to fully clarify an issue.

← 書式変更 : 箇条書きと段落番号

Determination Report

Determination Protocol Table 1: Mandatory Requirements			
Requirement	Reference	Conclusion	Cross reference
The requirements the project must meet.	Gives reference to the legislation or agreement where the requirement is found.	This is either acceptable based on evidence provided (OK), or a Corrective Action Request (CAR) of risk or non-compliance with stated requirements. The corrective action requests are numbered and presented to the client in the Determination Report.	Used to refer to the relevant checklist questions in Table 2 to show how the specific requirement is validated. This is to ensure a transparent determination process.

Determination Protocol Table 2: Requirement checklist				
Checklist Question	Reference	Means of verification (MoV)	Comment	Draft and/or Final Conclusion
The various requirements in Table 1 are linked to checklist questions the project should meet. The checklist is organized in six different sections. Each section is then further sub-divided. The lowest level constitutes a checklist question.	Gives reference to documents where the answer to the checklist question or item is found.	Explains how conformance with the checklist question is investigated. Examples of means of verification are document review (DR) or interview (I). N/A means not applicable.	The section is used to elaborate and discuss the checklist question and/or the conformance to the question. It is further used to explain the conclusions reached.	This is either acceptable based on evidence provided (OK), or a Corrective Action Request (CAR) due to non-compliance with the checklist question (See below). Clarification is used when the independent entity has identified a need for further clarification.

Determination Protocol Table 3: Resolution of Corrective Action and Clarification Requests			
Draft report clarifications and corrective action requests	Ref. to checklist question in table 2	Summary of project owner response	Determination conclusion
If the conclusions from the draft determination are either a Corrective Action Request or a Clarification Request, these should be listed in this section.	Reference to the checklist question number in Table 2 where the Corrective Action Request or Clarification Request is explained.	The responses given by the Client or other project participants during the communications with the independent entity should be summarized in this section.	This section should summarize the independent entity's responses and final conclusions. The conclusions should also be included in Table 2, under "Final Conclusion".

Figure 1 Determination protocol tables

Determination Report

2.1. Review of Documents

The Project Design Document submitted by MHI and additional background documents related to the project design and baseline were reviewed.

Documents reviewed are listed in Chapter 6 "References".

The determination findings stated hereafter are based on the PDD /1/ (version 0.5, dated 07 June, 2006) and the revised PDD/1A/ (version 1.0, dated 01 November, 2006).

2.2. Follow-up Interviews

In the period of June 19, 2006 to June 22, 2006 JACO CDM performed interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of Ministry of Environment and Water(MOEW; Climate Change Dept. and EIA Dept.), Regional Inspectorate on Environment and Water in Varna of MOEW, Ministry of Economy and Energy, Natsionalna Elektricheska Kompania EAD, INOS 1 Ltd., and Mayor of Municipality of Kavarna as one of local stakeholders were interviewed. Interviews with MHI were held several times from April 13, 2006 to May 23, 2007. The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organisation	Interview topics
MHI (Project participant)	<ul style="list-style-type: none"> ➤ Project Overview ➤ Feasibility Study ➤ Project Design ➤ Public comments received and the lawsuit of migrant birds
INOS 1 Ltd. (Project participant)	<ul style="list-style-type: none"> ➤ Roles and Responsibility among MHI, INOS and KWP ➤ Project design issues including additionality(expected electricity tariff) ➤ Management system of KWP including Monitoring plan ➤ Environmental Impacts Assessment ➤ Stakeholder comments including the lawsuit of migrant birds
MOEW (Climate Change Dept. and EIA Dept.)	<ul style="list-style-type: none"> ➤ National guidelines and procedures for approving JI Project ➤ Schedule of the submission of the eligibility report to UNFCCC ➤ EIA legislation and the conditions of the EIA of the project ➤ Supreme court decision and the prospect of the district court(lawsuit of the migrant birds) and the relationship with the approval of the project
Regional Inspectorate on Environment and Water in Varna, MOEW	<ul style="list-style-type: none"> ➤ EIA of the project of the migrant birds ➤ Prospect of the lawsuit of the migrant birds
Ministry of Economy and Energy	<ul style="list-style-type: none"> ➤ Bulgarian basic stance for the JI Project ➤ Establishment of CEF for JI Projects in Bulgaria and the disclosure of the data of CEF
Natsionalna Elektricheska Kompania EAD	<ul style="list-style-type: none"> ➤ Methodology of determining the CEF of JI Project in Bulgaria ➤ Measurement of electricity and grid connection contract
Mayor of Municipality of Kavarna	<ul style="list-style-type: none"> ➤ Policy of the Municipality for the Project ➤ Opinions of the communities for the Project

2.3. Resolution of Clarification and Corrective Action Requests

The objective of this phase of the determination is to resolve the requests for corrective actions and clarifications and any other outstanding issues which needed to be clarified for JACO CDM's positive conclusion on the project design. The Corrective Action Requests and

Determination Report

Clarification Requests raised by JACO CDM have been almost resolved during communications between the Client and JACO CDM.

To guarantee the transparency of the determination process, the concerns raised and responses given are summarized in chapter 3 below and documented in more detail in the determination protocol in Appendix A.

Since modifications to the project design document were necessary to resolve JACO CDM's concerns, the Client revised the documentation satisfactorily. However, as there still remains 2 points to be resolved, JACO CDM will issue the final determination report and opinion after confirming the formal approvals of Bulgarian and Japanese governments.

3. DETERMINATION FINDINGS

In the following sections the findings of the determination are stated. The determination findings for each determination subject are presented as follows:

1) The findings from the desk review of the original project design documents and the findings from interviews during the follow up visit are summarized. A more detailed record of these findings can be found in the Determination Protocol in Appendix A.

2) Where JACO CDM had identified issues that needed clarification or that represented a risk to the fulfillment of the project objectives, a Clarification or Corrective Action Request, respectively, have been issued. The Clarification and Corrective Action Requests are stated, where applicable, in the following sections and are further documented in the Determination Protocol in Appendix A.

The determination of the Project based on the PDD /1/ (version 0.5, dated 07 June, 2006) and the revised PDD/1A/ (version 1.0, dated 01 November, 2006) resulted in three Corrective Action Requests, nine Clarifications.

3) Where Clarification or Corrective Action Requests have been issued, the exchanges between the Client and JACO CDM to resolve these Clarification or Corrective Action Requests are summarised.

4) The conclusions of the determination are presented.

The final determination findings (1 CAR and 1 CL) relates to the project design as documented and described in the revised and resubmitted project design documentation (PDD /1B/: version 1.2, dated 01 May, 2007).

3.1. Participation Requirements

3.1.1. Discussion

The project participants are MHI(Japan), Japan Carbon Finance, Ltd.(Japan), Kaliakra Wind Power AD(Bulgaria) and INOS-1 OOD(Bulgaria). According to the Bulgarian JI Guidelines (2006, September), the project participants have to apply for the formal approval of the JI project to Bulgarian government with the Determination report issued by the AIE. So the participants are going to apply for the approval with this Determination report. The project participants are also considering to get the approval from Japanese government after the procedure above.

The formal approvals of the JI project from Bulgarian and Japanese governments have not been submitted to JACO CDM yet. **(CAR 1)**

3.1.2. Findings

Corrective Action Request 1.

The formal approvals of JI project from Bulgarian and Japanese governments shall be submitted to the determination team before publication of the determination.

Response

Determination Report

The project participants are going to apply for the formal approval of the project to the Bulgarian government with this Determination report by JACO CDM in accordance with the Bulgarian JI Guidelines (2006, September). Project participants are also going to get the approval from Japanese government after the procedure above.

3.1.3 Conclusion

This report was prepared for the application for the approval of JI Project to the Bulgarian government in accordance with the Bulgarian JI Guidelines. So, the project participant's response is acceptable at this moment. However, the formal approvals from both Parties shall be submitted to JACO CDM before publication of the final determination report.

3.2. Project Design

3.2.1 Discussion

(1) Technology used

The Project uses the well established wind power technology, which is very standard for wind farm project throughout the world. 35 generators of 1000kW are to be constructed. To date, more than 400 units of the same generator are in service worldwide. However, there are no commercial wind farm projects in Bulgaria, and the project will be the first large scale wind farm in the country.

Extensive feasibility study was carried out for the Project and the Feasibility Study Report (6.Reference; Document /10/) was submitted to the determination team. The generator starts from 3 m/s and shut down at 25 m/s, its rated speed being about 12.5 m/s. Each unit generates 2.27 million kWh per year under expected capacity factor of 25.86% which is equivalent to the annual electricity needs of about 700 households.

(2) Endorsement by host country focal point

The project participants have received the Endorsement Letter by Bulgarian Government (Ministry of Environment and Water) as attached in the PDD (Annex 4), however they have not yet received the formal approvals of JI project from Bulgarian government and Japanese governments. **(CAR 1)**

In accordance with the Bulgarian JI Guideline (2006, September), the project participants are going to apply for the approval with this Determination report issued by JACO CDM in order to get the Letter of Approval from the Ministry of Environment and Water.

(3) Project duration and crediting time

The expected operational lifetime of the project is 20 years. The length of the crediting period is set to be 5 years, however the crediting period may be prolonged or would be renewed in the future based on the discussion with Bulgarian government.

3.2.2. Findings

Corrective Action Request 1.

Same as 3.1.2.

Response

Same as 3.1.2.

3.2.3. Conclusion

Same as 3.1.3.

3.3. Baseline

3.3.1. Discussion

(1) Baseline calculation

Determination Report

The Project will offset greenhouse gas(GHG) emissions that otherwise would be generated by fossil-fuel fired thermal power plants in Bulgaria.

- a) For the calculation of baseline emissions (Emission reductions), the Carbon Emission Factor (CEF) of the Bulgarian Power Grid provided by MOEW /11/ is used in the initial PDD /1/ (version 0.5, dated 07 June, 2006). The CEF is calculated on yearly basis (2000-2012) by using the method of ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" and the past data as well as the forecast information derived from the Bulgarian planning method "IRP- Manager model". However, in the initial PDD, neither the input and output data of the calculation by IRP- Manager nor the calculation results of Operating Margin and Build Margin with the used database of each plant were demonstrated (**CL 1, 2**). Also, inconsistency with the latest version of ACM0002 was observed in the calculation of combined margin (**CAR 2**).
- b) In the revised PDD/1A/ (version 1.0, dated 01 November, 2006), these findings (CL 1, 2 and CAR 2) were resolved as described below. However, In spite of the forecast CEF data provided by the Bulgarian government, the project participants changed the stance, in the PDD/1A/, to determine the fixed value *ex ante* CEF by calculating combined margin of the three year full generation weighted average of the simple adjusted OM (from 2003 to 2005) and the latest BM (2005) in accordance with the latest version of ACM0002 (ver.06, 19 May 2006)/2/. And later the project participants changed the value of CEF from 1.071 tCO₂/MWh (in the PDD/1A/) to 1.026 tCO₂/MWh precisely and conservatively in the PDD/1B/, as a result of the modification of the CEF calculation method in Annex 2, which was confirmed to be reasonable.

(2) Additionality

The baseline scenario was appropriately demonstrated in the PDD to be the "continuation of current practice" as the result of the additionality analysis in accordance with the procedure of "Tools for demonstration and assessment of additionality" /3/.

-Investment analysis: The project IRR calculated based on the assumptions is between 0.88% (for 10 years) and 7.63% (for 20 years), and the IRR for 20 years calculated in the sensitivity analysis fluctuates between 6.52% and 8.84%. These figures are much less than the benchmark (12.8%) derived from government bond rates (risk free rate: 5.6%) increased by a suitable risk premium (7.2%), demonstrating that the project is economically or financially less attractive even without consideration of uncertain circumstances as shown in the barrier analysis. However the data source about the 5.6% (risk free rate) and the 7.2% (market risk premium) are to be clarified (**CL 3**).

-Barrier analysis: As one of the investment barriers, there exists the uncertainty in the level of tariff under the renewable off take obligation and the introduction of the Green Certificate scheme for which Bulgarian government has not yet prepared the firm institutional framework to promote renewable power generation.

-Common practice analysis: The development of wind power in Bulgaria is at a very early stage, with no commercial wind turbines currently in operation. Some wind power project under proposal is planned as a JI Project (e.g. "Pool of Small Hydro Power Stations and Wind Energy Parks Project"< Reference No. 0002>).

3.3.2. Findings

Corrective Action Request 2

Unless otherwise justified, the default weights of 50/50 % between Operating margin and Build margin described in the PDD shall be changed to 75/25 % in accordance with the latest version of ACM0002(19 May 2006).

Response

The default weight in the PDD was revised to 75/25 % in the revised version of PDD /1A/ (version 1.0, dated 01 November, 2006) in accordance with the latest version of ACM0002 based on the calculation results and the database of each plant of operating margin and

Determination Report

build margin for 2000-2012 provided by the Bulgarian government /12/ (Baseline Study 210906 final. xls).

Clarification1

[CEF calculation]

Input data for the IRP Manager used in the CEF calculation as well as the output (results) of the analysis are to be clarified.

Response

"Baseline information and related spread sheet " /12/ were submitted to JACO CDM. Their summary was attached to revised PDD /1A/ as a part of Annex2, which included the summary of the calculation of IRP Manager based on the electricity demand forecast (both maximum and minimum considered), and development prospects of generating capacity (input) , as well as the classification of each plant into Marginal, Low cost, Must run or Build margin plant, yearly generation of each plant based on the Least-Cost Planning Analysis (output).

Baseline Emission Factors for 2000-2012 were calculated based on this scenario, and these calculation results were also included.

Clarification2

The calculation results of Operating Margin and Build Margin with the database used for each plant are to be clarified.

Response

The calculation results of Operating Margin, Build Margin and the database of each plant for the calculation were provided for the period 2005-2012 by the same documents /12/ above.

Fuel type, fuel consumption, net calorific value, carbon content of fuel, un-oxidized fraction of carbon and auxiliary power loss were specified for each plant.

All the Operating Margins of ACM0002 except dispatch data analysis OM, and related combined margins were calculated and presented.

PDD /1A/ was revised to determine the fixed value *ex ante* CEF by calculating combined margin of the three year full generation weighted average of the simple adjusted OM (from 2003 to 2005) and the latest BM (2005).

Clarification 3

The data source about the 5.6% (risk free rate) and the 7.2% (market risk premium) are to be clarified.

Response

Risk free rate(5.6%) was demonstrated as the average of adjusted interest rates of 10-year bond of 8 countries of eastern Europe, calculated as follows by using the data from Bloomberg:

(a) as for the countries with 10-year government bond, the interest rate was adjusted by the inflation difference between the US and each country,

(b) as for the countries without 10-year government bond, the interest rate was introduced by adding the yield spread of the bond with the period closest to 10-year between the US and each country to the interest rate of 10-year bond of the US.

Market risk premium(7.2%) is from the US long-horizon equity risk premium estimated by data spanning 1926-2004 in Ibbotson's *Stocks, Bonds, Bills and Inflation Yearbook Valuation Edition /23/*.

3.3.3. Conclusion

CAR 2:

The Revised version of the PDD /1A/ (version 1.0, dated 01 November, 2006) applied the 75/25 % in accordance with the latest version of ACM0002(19 May 2006). CAR 2 was resolved

Determination Report

CL 1:

Summary of the calculation of IRP Manager was presented with the calculation sheets of BEF by the Bulgarian government.
Each assumption was demonstrated. CL 1 was resolved.

CL 2:

The requested information was made clear.
The selection of simple adjusted OM is acceptable. Simple OM cannot be applied since low cost / must run plant constitute more than 50% of total grid generation. Dispatch data analysis OM cannot be applied since IRP manager cannot handle every hourly data in full detail. Although average OM can be applicable, simple adjusted OM is preferable from the view point of conservativeness.
The selection of *ex ante* CEF is acceptable, when considering ACM0002 specifies no restrictions in choosing *ex ante* or *ex post* CEF. Project participant also asserts certainty of business as well as uncertainty to obtain annual *ex post* CEF data.
Combined margin is calculated following the procedure specified by ACM0002.
CL 2 was resolved.

CL 3:

The data source and the way of calculation of risk free rate (5.6%) and market risk premium(7.2%) were properly demonstrated. This finding was resolved.

3.4. Monitoring Plan

3.4.1. Discussion

(1)Electricity generated

Electricity generated and supplied to the national grid is continuously metered electronically by Kaliakra Wind Power AD (KWP). Monitoring Plan in the latest version of PDD /1A/ (version 1.0, dated 01 November, 2006) properly stipulates the operational and management plan including equipment to be used, personnel and training, roles and responsibilities, management structure with review and internal audit, recording and reporting, verification and QC/QA. General Manager of KWP is responsible to develop the monitoring manual and the procedure.

As the initial PDD /1/ (version 0.5, dated 07 June, 2006) has no clear descriptions about the responsibility for monitoring (CL 4), the training program (CL 5) and the procedure for project performance review (CL 6), JACO CDM pointed out three findings as clarifications.

(2)Information on environmental impacts

KWP will conduct all necessary monitoring and archiving of information on environmental impacts in accordance with the conditions of EIA approved by RIEW-Varna of MOEW. The information includes bird migration which shall be monitored and recorded by Radar system and noise which shall be checked at points designed by the conditions of EIA. The General Manager of KWP has the responsibility to develop the environmental manual based on the conditions of approved EIA.

Particularly, according to the "Preliminary Environmental Management Plan for Kaliakra Wind Power Project" (May 2006) /31/ made by the project participants, the radar system is scheduled to be established so that the wind turbines can be automatically stopped while the birds are flying through the site in accordance with the EIA approval condition of RIEW-Varna.

As the initial PDD /1/ (version 0.5, dated 07 June, 2006) described that there were no needs to collect environmental record required by Bulgarian law/regulation, JACO CDM pointed out this point as a corrective action request (CAR 3). And also JACO CDM pointed out that the stipulations of the training program (CL 5) and performance review (CL 6) were not clear.

Determination Report

3.4.2 Findings

Corrective Action Request 3

The sentence of "No need to collect environmental record required by Bulgarian law/regulation " in D.1.5. of the initial PDD /1/ is not correct and inappropriate, because the EIA was conducted based on the Environment Protection Act and it was approved with the conditions of monitoring the noise, the ornitofauna, etc. Proper modification is required.

And also much more detailed descriptions are essential regarding the monitoring of the condition of ornitofauna, considering the social background as described in G.I.

Response

The sentence of D.1.5 was modified as follows in the revised version of PDD /1A/ (version 1.0, dated 01 November, 2006) ;

"The KWPP shall conduct all necessary monitoring, collection and archiving of information on environmental impact in accordance with the conditions of EIA approved by RIOS-Varna of MOEW. This information include bird migration which shall be monitored and recorded by the Radar system and the noise which shall be checked at the points designated by the conditions of EIA."

And the following sentence was added in 10. of Annex 3;

"The general manager of Kaliakra Wind Power AD will develop the environmental manual based on the conditions of the approved EIA, preliminary environmental management plan and other documents related to the environmental protection, based upon which the necessary monitoring of non-GHG factors shall be conducted by Kaliakra Wind Power AD."

Clarification 4

The authority and responsibilities among Kaliakra Wind Power AD, INOS-1 OOD and MHI are not clearly described in the PDD.

And the responsibilities of monitoring and others described in Annex 3 are not clear if they belong to Kaliakra Wind Power AD.

Response

In the revised version of PDD /1A/ (version 1.0, dated 01 November, 2006), the following sentences were added;

(a) In A.3.; "INOS and MHI are jointly developing this Kaliakra project and invest jointly to the Special Purpose Company, Kaliakra Wind Power AD (SPC) in order to execute this project. This ratio of the investment is MHI:INOS=70:30."

(b) In 1.Objective in Annex 3; "As the project company established by MHI and INOS, Kaliakra Wind Power AD is responsible to conducting necessary monitoring in accordance with this monitoring plan.

Clarification 5

The training program for the monitoring personnel is mentioned in Annex 3. The program and the procedures established are to be clarified.

Response

Project participants responded that KWP AD would establish the training program and by the start of commissioning after the completion of the site construction.

In addition, the following sentences were added in the latest version of PDD /1A/ (version 0.5, dated 07 June, 2006).

(a) in 7. of Annex 3; "General Manager will develop the monitoring manual "

(b) in 10. of Annex 3.; "The general manager of KWP AD will develop the environmental manual based on the conditions of approved EIA , preliminary environmental management plan and other documents related to the environmental protection, based on which the necessary monitoring of non-GHG factors shall be conducted by KWP AD."

Clarification 6

It is not clear if the procedure for project performance review is established, although it is

Determination Report

described in Annex 3 that the GM is responsible to review the results of calculation, and also there exists the stipulation in the "Preliminary Environmental Management Plan" that "GM appointed by the board of SPC shall be responsible to all environmental management including documentation, execution and reporting."

Response

The project participants responded that the procedure would be established based on the manual. And also the following sentences were added in the revised version of PDD /1A/ (version 1.0, dated 01 November, 2006);

- (a) in 6 of Annex 3; " For generated electricity, he/she may undertake a review if it is judged so. "
- (b) in 10. of Annex 3.; "The general manager of KWP will develop the environmental manual based on the conditions of approved EIA, preliminary environmental management plan and other documents related to the environmental protection, based upon which the necessary monitoring of non-GHG factors shall be conducted by KWP.

3.4.3 Conclusion

CAR 3:

The monitoring plan for environmental impacts was properly modified in the PDD to specify the relevant data and the procedure to be established for collecting them. This finding was resolved.

CL 4:

The responsibility of project management as well as monitoring, etc. has been clearly described in the PDD. This finding was resolved.

CL 5:

KWP AD will carry out the continuous training to the personnel concerned as described in Annex 3, by using the environmental manual including the monitoring plan approved by RIEW-Varna. This finding was resolved.

CL 6:

It can be considered that the General Manager has the responsibility of reviewing overall performance of the project, as he/she has the responsibilities of monitoring and reviewing of electricity generated, developing the environmental manual both for electricity and non-GHG factors as well as developing the procedures for internal audit and preventive actions. This finding was resolved.

3.5. Calculation of GHG Emissions

3.5.1. Discussion

Since the project is the renewable energy source generation, there are no project emissions, and leakage consideration are required. Emission reduction is calculated as CEF multiplied by the amount of electricity sent to the grid by the project.

As described in 3.3.1 (1), the ex-post CEF was calculated at first in the initial PDD /1/, and then in the revised PDD /1A/, the ex-ante CEF was chosen in accordance with the revised version of ACM0002, although the CAR 2, CL 1, CL 2 were resolved.

Lastly in the PDD/1B/, the CEF was set more precisely and conservatively than the one used in the PDD/1A/ by deriving each year's OM and BM (2003, 2004 and 2005) from the published data and calculating combined margin of 3-year weighted OM and the latest BM, which was confirmed to be reasonable.

3.5.2. Findings

None

3.5.3. Conclusion

Determination Report

The formula and calculation is correct and the assumption of the electricity generation is proper.

3.6. Environmental Impacts

3.6.1. Discussion

(1) EIA under the Bulgarian regulation

The project participants conducted the environmental impact assessment (EIA) in accordance with the Bulgarian "Environmental Protection Act". Taking into account of the results of the EIA, the Regional Inspectorate for the Environment and Water in Varna (RIEW) approved the project by the Resolution(No.2573) with 33 conditions on 23 June 2005 /26/, and stated that the project would not lead to any significant and permanent negative impact on the environment if the measures required in the decision are strictly observed. And this resolution was confirmed by the Ministry of Environment and Water(MOEW) by the Resolution(No.128) on 25 July 2005 /27/.

In order to comply with the 33 conditions above and all Bulgarian environmental regulations, the project participants established "Preliminary Environmental Management Plan for Kaliakra Wind Power Project" /31/ and the detailed manual is to be made step by step depending on the nature of the condition under the direction of RIEW.

The validity of the governmental approval of the EIA is still in litigation with respect to the issue of migrant birds as described in 3.7.1 below, and JACO CDM is concerned about its final judicial conclusion.

As there were some insufficient and inappropriate descriptions about the Bulgarian environmental regulation in the previous PDDs [/1/ (version 0.5, dated 07 June, 2006), /1A/ (version 1.0, dated 01 November, 2006)], JACO CDM pointed out the findings (**CL 7, CL 8**).

(2) Environmental Review by JBIC

The project participants submitted to JBIC for the Environmental Review the same EIA report /36/ which was submitted to the Bulgarian government in accordance with JBIC Guidelines for Confirmation of Environmental and Social Considerations. The Environmental Check Report was made publicly available on the JBIC website on 20 March, 2007.

This Report has taken note of the Bulgarian government approval of the EIA and the monitoring system for noise, vibration, electromagnetic field and migrating birds scheduled by the project participants.

3.6.2. Findings

Clarification 7

Although the EIA was conducted based on the Bulgarian regulation, the description of the EIA in the PDD/1A/ is not sufficient to understand the following points.

- (1) The relationship between the "EIA report" submitted to the Bulgarian government and "Environmental Checklist" for JBIC,
- (2) The major result of the EIA including the impact to the migrating birds,
- (3) The overall EIA process including the public consultation,
- (4) The basis and conditions of the approval of the EIA, and
- (5) The relationship between the EIA and the Environmental Review by JBIC. .

Response

The response to each point in the CL 7 from the project participants is as follows;

- (1) It was described in F.1. of the PDD/1B/ (Version 1.2, dated 01 May 2007) that "Environmental Checklist for Kaliakra Wind Power" is the rearrangement of the EIA report according to JBIC checklist questions. EIA report was also submitted to the independent entity.
- (2) The project participant added the description that RIEW-Varna admitted
 - a) EIA report has reviewed the existing state of environment and all expected impacts

Determination Report

of the project. Significant and permanent negative impacts are unlikely.

b) The quantitative assessment of the risk for the birds were carried out. The radar system provided by the project for early warning and location of migrating birds will prevent the collision of the birds with the turbines.

- (3) The procedure of making EIA in the Ordinance including the public discussion of the EIA report was briefly described in the PDD/1B/.
- (4) The project participant modified the description of the EIA in the PDD/1B/ by stressing the following points.
- a) the public discussion was held in accordance with the procedure above,
 - b) the EIA was approved considering the EIA report and the public discussion, and
 - c) the EIA was approved with several conditions to be observed such as one-year monitoring of migrating birds at the site, and continuous work of radar system of stopping the turbines while birds are flying through the site.
- (5) The project participant added the following points in the F.1. of the PDD/1B/.
- a) The same EIA report which was submitted to Bulgarian government was submitted to JBIC for Environmental reviews,
 - b) The result of the review was made publicly available on 20 March on JBIC website,
 - and c) No additional requirements for monitoring were raised other than the conditions of EIA approval by the Bulgarian government.

Clarification 8

The Decision of the approval of EIA states that the project will not lead to any significant and permanent negative impact on the environment under the condition that the measures required in the Decision are strictly observed.

The countermeasures are being prepared by the project participants.

In this context, the phrase of "The Bulgarian laws/regulations do not force some measures." in F.2. in the PDD /1/ is incorrect and inappropriate. The reason of this sentence is to be clarified.

Response

The sentence of F.2. was modified in the revised version of PDD /1A/ (version 1.0, dated 01 November, 2006) by deleting the sentence "The Bulgarian laws/ regulations do not force some measures", etc. and by adding the sentence "The Decision of the approval of EIA states that the project will not lead to any significant and permanent negative impact on environment under the condition that the measures required in the Decision are strictly observed."

3.6.3. Conclusion

CL 7:

The project participants modified the description of the EIA in F.1. of the PDD/1A/ by stressing the following points in the final PDD/1B/ (Version 1.2, dated 01 May 2007), considering the circumstances of the continuing court case for the impact of migrating birds as well as the comments received from the NGOs during the public comment period;

- a) The EIA was conducted in accordance with the procedure including the public discussion,
- b) The EIA was approved with the conditions, particularly with respect to the preventive.

radar system of stopping the turbines while birds are flying through the site

No further actions required.

CL 8:

The description of F.2. of the PDD /1/ was appropriately modified. This finding was resolved.

3.7. Stakeholders' Comments

3.7.1. Discussion

Determination Report

In the process of EIA, the public discussion on environmental impact of the project took place on 31 May 2005, and it was reported that the majority of the opinions were found favorable to the project, while some concerns were raised by certain NGOs with respect to the issues of noise, wild life and migrant birds. The project participants gave written responses to these concerns /25/.

During the interview to the mayor of the Municipality of Kavarna by the determination team members, he replied that the local congress was supporting the project with no negative speeches so far, and also commented that there were supporting speeches from the local people in the public hearing of EIA conducted in the city, although there were some negative speeches from NGOs.

One appeal was filed with Bulgarian Supreme Administrative Court by certain NGOs against the Resolution by MOEW with respect to the issue of migrant birds on 16 August 2005 /29/, however the Supreme Court decided to stop the case processing and to send the case to the District Court of Varna /30/. On 27 October 2006, the District Court decided to terminate this case proceeding due to inadmissibility of the claim filed in its delay of term /33/.

However, on 16 March 2007, the Supreme Administrative Court abolished this District Court decision and returned the case to the court for the resumption of the procedural actions /34/. JACO CDM requested the project participants to notify the final judicial conclusion for the EIA upon issuance (CL 9).

3.7.2. Findings

Clarification 9

RIEW-Varna approved the project by the decision on EIA on 23 June 2005 and MOEW confirmed this decision on 25 July 2005 (Resolution No.128) by rejecting the appeal from the Bulgarian Society for the Protection of Birds, etc.

The NGOs above filed the complaint to the Supreme Administrative Court on 16 August 2005 requesting the repeal of the Resolution above.

On 15 May 2006 the Supreme Court decided to stop the case processing and to send the case to the District Court of Varna. On 27 October, 2006 the District Court decided to terminate this case proceeding due to inadmissibility of the claim filed in its delay of term.

However, on 16 March 2007, the Supreme Administrative Court abolished this District Court decision and returned the case to the court for the resumption of the procedural actions.

The final judicial conclusion for the EIA of the project has to be clarified upon issuance.

Response

The final judicial conclusion for the EIA of the project has not been informed to JACO CDM by the project participants yet.

3.7.3. Conclusion

CL 9: JACO CDM confirmed that the EIA was conducted in accordance with the Bulgarian legislative requirements and approved by the administrative authorities concerned.

However JACO CDM is also concerned about the final judicial conclusion for the EIA, because this is closely related with the possibility of the Bulgarian government approval of the project as described in the Endorsement Letter by MOEW (September 14, 2005).

4. COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS

JACO CDM published the PDD /1A/ (version 1.0, dated 01 November, 2006) on its website linked with UNFCCC web site on 29 March, 2007 and invited comments until 27 April, 2007 by Parties, stakeholders and UNFCCC accredited observers

Two comments were received. These are referred to and further discussed in appendix B of this report.

Determination Report

5. DETERMINATION OPINION

JACO CDM has performed a determination of the Kaliakra Wind Power Project in Republic of 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. UNFCCC criteria refer to Article 6 of the Kyoto Protocol, the JI guidelines and subsequent decisions by the Joint Implementation Supervisory Committee.

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.

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.

Emission reduction has been conservatively estimated to be 81,400 tonnes of CO₂ per year.

An analysis of the investment and technological 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.

In summary it is JACO CDM's opinion, that the project meets all relevant UNFCCC requirements for the JI project and all relevant host country criteria provided that the formal approvals from the Bulgarian government following the Bulgarian JI Guidelines and Japanese government are issued, and also the final judicial conclusion of the court case is confirmed, before the final publication of this report.

Determination Report

6. REFERENCES

Category 1 Documents:

Documents provided by the Client that relate directly to the GHG components of the project,

- /1/ PDD version 0.5, June 07, 2006
- /1A/ PDD version 1.0, November 01, 2006
- /1B/ PDD version 1.2, May 01, 2007
- /2/ ACM0002/Version06 Consolidated baseline(monitring) methodology for grid-connected electricity generation from renewable sources
- /3/ Tool for the demonstration and assessment of additionality (version 02)
- /4/ Bulgarian JI Guidelines, 2006, September
- /5/ Greenhouse Gas Emissions in Republic of Bulgaria 1988, 1990-2004, National Inventory Report 2004, Submission 2006
- /6/ Republic of Bulgaria, Third National Communication on Climate Change, United Nations Framework Convention on Climate Change, Sofia, 2002
- /7/ Approval of a CDM project under the Kyoto Protocol, the Government of Japan
- /8/ Approval of a CDM project under the Kyoto Protocol by Bulgarian Government
- /9/ The Japanese national guidelines and procedures for approving JI projects, 21 Feb.2007
- /10/ The Feasibility Study on 33MW Kaliakra Wind Power Plant Project on IPP Concept at Kavarna, Republic of Bulgaria, March 2006 Japan Bank of International Cooperation
- /11/ Baseline Study of Joint Implementation Project in The Bulgarian Energy Sector
- /12/ Baseline Study of Bulgarian Power System;
(1) Baseline information(Annex 2); (2) Summary Table(2000-2012) 29.05.2006;
(3)Baseline Scenario of each plant(2005-2012) 29.05.2006; (4)Calculation table of CEF of each plant(2005-20012) 29-30.05.2006

Category 2 Documents:

Background documents related to the design and/or methodologies employed in the design or other reference documents.

- /21/ The details of the calculation of IRR(spread sheet) with input assumptions
- /22/ Estimation of Risk Free Rate in Eastern Europe(Table)
- /23/ International Equity Risk Premia Report 2005
- /24/ Resolution No. II -013, State Committee for Energy and Water Regulation, 28 June 2006
- /25/ Replies to the questions for the Report on Environmental Impact submitted during the public discussion held on 31.05.2005 in the hall of Kavarna Municipality
- /26/ Decision on Environmental Impact Assessment No. 2-2(101) 2005, Regional Inspectorate on Environment and Waters-Varna, Ministry of Environment and Waters, 23.06.2005
- /27/ Resolution No. 128, Sofia, 25 July 2005, Ministry of Environment and Waters, Republic of Bulgaria
- /28/ Resolution N0.1-2-2(101)2005/09.08.2005, Regional Inspectorate of Environment and Waters-Varna, Ministry of Environment and Waters
- /29/ Complaint to the Supreme Administrative Court of the Republic of Bulgaria against

Determination Report

- Resolution No.128 from the Bulgarian Association for the Protection of Bird, etc., 15.08.2005
- /30/ Protocol by the Supreme Administrative Court of Republic of Bulgaria, May 15, 2006
 - /31/ Preliminary Environmental Management Plan for Kaliakra Wind Power Project, May 2006
 - /32/ Environmental Check List "Kaliakra Wind Power" AD Feb.2006
 - /33/ Protocol by District Court of Town of Varna, October 27, 2006
 - /34/ Decision No.2761 by the Supreme Administrative Court of Republic of Bulgaria, March 16, 2007
 - /35/ Resolution No.122, Council of Ministers, Republic of Bulgaria, 2 March 2007
 - /36/ Environmental Impact Assessment Report: CCSD GEOPONT-INTERCOM LTD, April, 2005

Persons interviewed:

Persons interviewed during the determination, or persons contributed with other information that are not included in the documents listed above.

- /41/ Mrs. Ivona Grozeva: Head of Climate Change Dept., Ministry of Environment and Water, Bulgaria
- /42/ Mrs. Jaquelinne Metodieva: Head of EIA Dept., Ministry of Environment and Water, Bulgaria
- /43/ Mr. Sinan Mehmed: Director, Regional Inspectorate on Environment and Water in Varna, Ministry of Environment and Water, Bulgaria

- /44/ Mr. Tsonko Tsonev: Mayor, Municipality of Kavarna
- /45/ Mrs. Kostadinka Todorova: Director, Ministry of Economy and Energy, Bulgaria
- /46/ Mr. Christo Schwabski: Power Generation Dept., Natsionalna Elektricheska Kompania EAD
- /47/ Mr. George Petkov: Managing Director, INOS 1 Ltd.
- /48/ Dr. Naoki Matsuo : Climate Experts Ltd.
- /49/ Mr. Mikio Ishibashi : Mitsubishi Heavy Industry Co.,Ltd.
- /50/ Mr. Yoshio Minato : Mitsubishi Heavy Industry Co.,Ltd.

APPENDIX A JI DETERMINATION PROTOCOL

Table 1 Mandatory Requirements for Joint Implementation (JI) Project Activities As of June 2007

REQUIREMENT	REFERENCE	CONCLUSION	Cross Reference / Comment
1. The project shall have the approval of the Parties involved	Kyoto Protocol Article 6.1 (a)	CAR 1	See CAR .1 in Table 3
2. Emission reductions, or an enhancement of removal by sinks, shall be additional to any that would otherwise occur	Kyoto Protocol Article 6.1 (b)	OK	Table 2, Section B.2
3. The sponsor Party shall not acquire emission reduction units if it is not in compliance with its obligations under Articles 5 & 7	Kyoto Protocol Article 6.1 (c)	OK	Japan has submitted its initial report on 30 Aug. '06 as well as 4 th National communication on 6 Feb. '06, and is on the way to comply with these obligations.
4. The acquisition of emission reduction units shall be supplemental to domestic actions for the purpose of meeting commitments under Article 3	Kyoto Protocol Article 6.1 (d)	OK	The project is additional to domestic actions in Japan.
5. Parties participating in JI shall designate national focal points for approving JI projects and have in place national guidelines and procedures for the approval of JI projects	Marrakech Accords, JI Modalities, \$20	OK	According to the UNFCCC website, both Parties have already established the national focal points and the national guidelines and procedures for approving JI projects. <u>Bulgaria:</u> -Head of Climate Change Policy Department, Ministry of Environment and Water

REQUIREMENT	REFERENCE	CONCLUSION	Cross Reference / Comment
			<p>-Bulgarian JI Guidelines (2006, September) <u>Japan:</u> -The Liaison Committee for the Utilization of the Kyoto Mechanisms, Ministry of Foreign Affairs Climate Change Division International Cooperation Bureau -Related guidelines (2007.2.21)</p>
6. The host Party shall be a Party to the Kyoto Protocol	Marrakech Accords, JI Modalities, §21 (a)/24	OK	Bulgaria ratified the Kyoto Protocol on 15 August 2002.
7. The host Party's assigned amount shall have been calculated and recorded in accordance with the modalities for the accounting of assigned amounts	Marrakech Accords, JI Modalities, §21 (b)/24	OK	The National Inventory Report 2004 (Submission 2006) has already been submitted on 25 May 2006 by Bulgaria. Although the Initial Report has not been submitted yet, it is described the assigned amount is to be calculated based on the data of 1988 (base year) in the Inventory Report above.
8. The host Party shall have in place a national registry in accordance with Article 7, paragraph 4	Marrakech Accords, JI Modalities, §21 (d)/24	OK	The Initial Report has not been submitted yet by Bulgaria, however, according to the following information, the project

REQUIREMENT	REFERENCE	CONCLUSION	Cross Reference / Comment
			<p>for the establishment of national registry (by DEPA) has been initiated with the deadline of the end of 2006.</p> <p>-JI INFRASTRUCTURE AND POTENTIAL IN BULGARIA (Madrid, Oct.21, 2005) by Mrs. Ivona Grozeva, Ministry of Environment and Water.</p>
<p>9. Project participants shall submit to the independent entity a project design document that contains all information needed for the determination</p>	<p>Marrakech Accords, JI Modalities, §31</p>	<p>OK</p>	<p>PDD /1/ (Version 0.5; 07/06/2006), PDD /1A/ (Version 1.0; 01/11/2006) with additional documents were submitted to the determination team.</p>
<p>10. The project design document shall be made publicly available and Parties, stakeholders and UNFCCC accredited observers shall be invited to, within 30 days, provide comments</p>	<p>Marrakech Accords, JI Modalities, §32</p>	<p>OK</p>	<p>The PDD /1A/ was made publicly available at the UNFCCC JI website under http://ji.unfccc.int/JI_Projects/Verification/PDD/index.html from 29 Mar. 07 to 27 Apr. 07.</p>
<p>11. Documentation on the analysis of the environmental impacts of the project activity, including transboundary impacts, in accordance with procedures as determined by the host Party shall be submitted, and, if those impacts are considered significant by the project participants or the Host Party, an environmental impact assessment in accordance with procedures as required by the Host Party shall be carried out</p>	<p>Marrakech Accords, JI Modalities, §33(d)</p>	<p>OK</p>	<p>Table 2, Section F</p>
<p>12. The baseline for a JI project shall be the scenario that reasonably represents the GHG emissions or removal by sources that would occur in absence of the proposed project</p>	<p>Marrakech Accords, JI Modalities,</p>	<p>OK</p>	<p>Table 2, Section B.2</p>

REQUIREMENT	REFERENCE	CONCLUSION	Cross Reference / Comment
13. A baseline shall be established on a project-specific basis, in a transparent manner and taking into account relevant national and/or sectoral policies and circumstances	Appendix B Marrakech Accords, JI Modalities, Appendix B	OK	Table 2, Section B.1., B.2.
14. The baseline methodology shall exclude to earn ERUs for decreases in activity levels outside the project activity or due to force majeure	Marrakech Accords, JI Modalities, Appendix B	OK	Table 2, Section B.2
15. The project shall have an appropriate monitoring plan	Marrakech Accords, JI Modalities, §33(c)	OK	Table 2, Section D

Table 2 Requirements Checklist

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
<p>A. General Description of Project Activity The project design is assessed.</p>					
<p>A.1. Project Boundaries Project boundaries are the limits and borders defining the GHG emission reduction project.</p>					
<p>A.1.1. Are the project's spatial (geographical) boundaries clearly defined?</p>	/1/ /1A/ /1B/ /10/ /46/- /50/	DR I	Yes, the site boundary is clearly defined in the PDD. The Kaliakra Wind Power Project (KWPP) site is near the village of Bulgarevo, approx. 420km north eastern of the capital city of Sofia and 4km from the coast of the Black Sea at the Kaliakra cape. A map showing the location of 35 turbines is inserted in the PDD.	OK	OK
<p>A.1.2. Are the project's system (components and facilities used to mitigate GHGs) boundaries clearly defined?</p>	/1/ /1A/ /1B/	DR	Yes, in PDD B.3. it is described that project's system boundaries are the equipment and systems within the project site and the whole generation plants connected through national grid.	OK	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
<p>A.2. Technology to be employed Validation of project technology focuses on the project engineering, choice of technology and competence/maintenance needs. The validator should ensure that environmentally safe and sound technology and know-how is used.</p>					
<p>A.2.1. Does the project design engineering reflect current good practices?</p>	/1/ /1A/ /1B/ /10/ /46/ /50/	DR I	Yes, the project design engineering reflect current good practice.	OK	OK
<p>A.2.2. Does the project use state of the art technology or would the technology result in a significantly better performance than any commonly used technologies in the host country?</p>	Ditto	DR I	Yes, the project uses the state of the art technology. There are no commercial wind farm projects to date in Bulgaria.	OK	OK
<p>A.2.3. Is the project technology likely to be substituted by other or more efficient technologies within the project period?</p>	Ditto	DR I	No, the wind turbines can be expected to run for the whole project period and it cannot be expected to be substituted by other or more efficient technologies.	OK	OK
<p>A.2.4. Does the project require extensive initial training and maintenance efforts in order to work as presumed during the project period?</p>	Ditto	DR I	Yes, the project is the first commercial wind farm project and requires initial training and maintenance efforts.	OK	OK
<p>A.2.5. Does the project make provisions for meeting training and maintenance needs?</p>	Ditto	DR I	Yes, the project participants make provisions for meeting training and maintenance needs as indicated in the FS.	OK	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
<p>B. Project Baseline The validation of the project baseline establishes whether the selected baseline methodology is appropriate and whether the selected baseline represents a likely baseline scenario.</p>					
<p>B.1. Baseline Methodology It is assessed whether the project applies an appropriate baseline methodology.</p>					
<p>B.1.1. Is the discussion and selection of the baseline methodology transparent?</p>	/1/- /3/ /10/- /12/ /45/- /50/	DR I	<p>The methodology used is the one recommended by the Bulgarian government (/11/ Baseline Study of JI Project in The Bulgarian Energy Sector).</p> <p>The methodology is the elaboration of the CDM methodology ACM0002 /2/.</p> <p>Combined margin of the simple OM and build margin (denoted as simple OM EF), combined margin of the simple adjusted OM and build margin (denoted as simple adjusted OM EF), and other CMs are specified considering both maximum and minimum electricity demand forecast for every year.</p> <p>Since ACM0002 was developed for renewable power generation connected to the grid, the selection of the methodology is acceptable.</p>	OK	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
variables used (e.g. fuels used, fuel consumption rates, etc)?		I		CL.2	OK
B.1.5. Does the baseline methodology specify the spatial level of data (local, regional, national)?	Ditto	DR I	Ditto.	CL.1, CL.2	OK OK
B.2. Baseline Determination The choice of baseline will be validated with focus on whether the baseline is a likely scenario, whether the project itself is not a likely baseline scenario, and whether the baseline is complete and transparent.					
B.2.1. Is the application of the methodology and the discussion and determination of the chosen baseline transparent?	/1/- /3/ /10/- /12/ /45/- /50/	DR I	Among the various combined margins specified in the methodology, Dispatch data adjusted OM (identical to combined margin of the simple adjusted OM and build margin of ACM0002) averaged for maximum and minimum demand forecasted was selected. PDD /1/ states this is due to the unclarity of calculation procedure and conservativeness of the calculated value. The same comments as are described in B.1.1 apply. (CL.1, 2, CAR.2)	CL.1, CL.2 CAR.2	OK OK OK
B.2.2. Has the baseline been determined using conservative assumptions where possible?	Ditto	DR I	Ditto	Ditto	OK
B.2.3. Has the baseline been established on a project-specific basis?	Ditto	DR I	Yes, the baseline has been established on a project specific basis.	OK	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
<p>B.2.4. Does the baseline scenario sufficiently take into account relevant national and/or sectoral policies, macro-economic trends and political aspirations?</p>	<p>/1/- /3/ /10/- /12/ /21/- /24/ /44/- /50/</p>	<p>DR I</p>	<p>Tools for the demonstration of additionality / 3 / is applied to determine the baseline scenario.</p> <p>It is concluded that the baseline scenario is the “continuation of current practice” based on the following analyses:</p> <p>(1) Barrier analysis: Bulgarian government has not yet prepared the firm institutional framework for the level of tariff, off-take obligation, the Green Certificate scheme.</p> <p>(2) Investment analysis: The project IRR calculated is between 0.88% (10 years) and 7.63% (20 years) and the IRR for calculated in the sensitivity analysis (20 years) fluctuates between 6.52% and 8.84%. These figures are much less than the benchmark (12.8%) derived from government bond rates (risk free rate: 5.6%) increased by a suitable risk premium (7.2%).</p> <p>(3) Common practice analysis: No commercial wind turbines in Bulgaria are currently in operation. Some wind power projects are currently in the proposal or planning stage, however the sites coincide with major bird migration routes.</p> <p>Discussions above described in the PDD are acceptable, but the followings should be clarified.</p>		

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
B.2.5. Is the baseline determination compatible with the available data?			Clarification 3 The data source about the 5.6%(risk free rate) and the7.2%(market risk premium) are to be clarified.	CL.3	OK
B.2.6. Does the selected baseline represent a likely scenario in the absence of the project?	Ditto	DR I	Project's generation is clearly defined based on the Feasibility study. For the CEF portion the same comments as B.1.2 apply. (CL.1,2, CAR.2)	CL1, CL.2 CAR.2	OK OK OK
B.2.7. Is it demonstrated that the project activity itself is not a likely baseline scenario (e.g. through (a) a flow-chart or series of questions that lead to a narrowing of potential baseline options, (b) a qualitative or quantitative assessment of different potential options and an indication of why the non-project option is more likely, (c) a qualitative or quantitative assessment of one or more barriers facing the proposed project activity or (d) an indication that the project type is not common practice in the proposed area of implementation, and not required by a Party's legislation/regulations)?	Ditto	DR I	Yes, the selected baseline scenario is the continuation of current practice, which is likely based on the results of the additional assessment, although there are some points to be clarified as described above. Yes, it is demonstrated in the additional assessment that the wind farm project in Bulgaria is not likely scenario indicating (1) Uncertainties on the governmental promotion scheme for renewable energy in Barrier analysis, (2) Insufficient IRR derived from Investment analysis (3) No commercial wind turbines in Bulgaria, Some wind power project under proposal is planned as a JI Project (e.g. "Pool of Small Hydro Power Stations and Wind Energy Parks Project"< Reference No.	OK	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
			02>).		
B.2.8. Have the major risks to the baseline been identified?	Ditto	DR I	No major risks are identified.	OK	OK
B.2.9. Is all literature and sources clearly referenced?	Ditto	DR I	Refer to B.1.2 (CL.1, 2),	CL.1,2	OK
C. Duration of the Project/ Crediting Period It is assessed whether the temporary boundaries of the project are clearly defined.					
C.1.1. Are the project's starting date and operational lifetime clearly defined and reasonable?	/I/ /1A/ /1B/	DR	Yes, the project's starting date and operational lifetime are clearly defined and reasonable.(2008.1.1; 20 years)	OK	OK
C.1.2. Is the length of the period within which emission reduction units are to be earned clearly defined?	Ditto	DR	Yes, the length of the crediting period of 5 years is clearly defined.(2008-2012). Depending on the result of the discussion with Bulgarian Government, the crediting period would be changed in the future)	OK	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
<p>D. Monitoring Plan The monitoring plan review aims to establish whether all relevant project aspects deemed necessary to monitor and report reliable emission reductions are properly addressed.</p>					
<p>D.1. Monitoring Methodology It is assessed whether the project applies an appropriate baseline methodology.</p>					
<p>D.1.1. Does the monitoring methodology reflect good monitoring and reporting practices?</p>	/1/- /2/ /10/- /12/ /45/- /50/	DR I	<p>In the initial PDD /1/, Monitoring methodology is described in Annex 3 as follows; (1) Electricity sent to the grid is metered at substation of NEK (2) CEF is obtained from document by MOEW annually Since CEF is directly specified by MOEW, the monitoring methodology practically covers the whole information required by the ACM0002 monitoring methodology. In the revised PDD /1A/, ex ante CEF was chosen and the CEF monitoring became unnecessary.</p>	OK	OK
<p>D.1.2. Is the selected monitoring methodology supported by the monitored and recorded data?</p>	Ditto	DR I		OK	OK
<p>D.1.3. Are the monitoring provisions in the monitoring methodology consistent with the project</p>	Ditto	DR I	Yes.	OK	OK

* MoV = Means of Verification, DR= Document Review, I= Interview

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
boundaries in the baseline study?					
D.1.4. Have any needs for monitoring outside the project boundaries been evaluated and if so, included as applicable?	Ditto	DR I	There are no needs for monitoring outside the boundaries.	OK	OK
D.1.5. Does the monitoring methodology allow for conservative, transparent, accurate and complete calculation of the ex post GHG emissions?	Ditto	DR I	Yes, if the Clarifications regarding B.1.2. are resolved, calculation of the GHG emission will be transparent.	OK	OK
D.1.6. Is the monitoring methodology clear and user friendly?	Ditto	DR I	Yes	OK	OK
D.1.7. Does the methodology mitigate possible monitoring errors or uncertainties addressed?	Ditto	DR I	According to FS /10/, two watt-hour meter of accuracy class 0.2 or better will be provided one for NEK and the other for project	OK	OK
D.2. Monitoring of Project Emissions					
It is established whether the monitoring plan provides for reliable and complete project emission data over time.					
D.2.1. Does the monitoring plan provide for the collection and archiving of all relevant data necessary for estimation or measuring the greenhouse gas emissions within the project boundary during the crediting period?	/I/ /1A/ /1B/	DR	Since the project is the renewable energy source generation, no project emission needs to be monitored.	OK	OK
D.2.2. Are the choices of project GHG indicators reasonable?	Ditto	DR	Ditto. This question does not apply to the project.	OK	OK
D.2.3. Will it be possible to monitor / measure the specified project GHG indicators?	Ditto	DR	Ditto	OK	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
D.2.4. Will the indicators enable comparison of project data and performance over time?	Ditto	DR	Ditto	OK	OK
D.3. Monitoring of Leakage It is assessed whether the monitoring plan provides for reliable and complete leakage data over time.					
D.3.1. Does the monitoring plan provide for the collection and archiving of all relevant data necessary for determining leakage?	/I/ /1A/ /1B/	DR	The project does not cause any leakage emissions.	OK	OK
D.3.2. Have relevant indicators for GHG leakage been included?	Ditto	DR	Ditto	OK	OK
D.3.3. Does the monitoring plan provide for the collection and archiving of all relevant data necessary for determining leakage?	Ditto	DR	Ditto	OK	OK
D.3.4. Will it be possible to monitor the specified GHG leakage indicators?	Ditto	DR	Ditto	OK	OK
D.4. Monitoring of Baseline Emissions It is established whether the monitoring plan provides for reliable and complete project emission data over time.					
D.4.1. Does the monitoring plan provide for the collection and archiving of all relevant data necessary for determining the baseline emissions during the crediting period?	/I/ /1A/ /1B/	DR	Yes, since ex ante emission factor was chosen in the revised PDD/1A, electricity sent to the grid is the only data required for baseline emission determination.	OK	OK
D.4.2. Is the choice of baseline indicators, in particular for baseline emissions, reasonable?	Ditto	DR	Ditto	OK	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
D.4.3. Will it be possible to monitor the specified baseline indicators?	Ditto	DR	Ditto	OK	OK
D.5. Monitoring of Environmental Impacts It is checked that choices of indicators are reasonable and complete to monitor sustainable performance over time.					
D.5.1. Does the monitoring plan provide for the collection and archiving of relevant data on environmental impacts?	/1/ /1A/ /1B/ /26/- /28/ /42/- /43/ /47/- /50/	DR I	Corrective Action Request 3 In the initial PDD /1/, the description “No need to collect environmental record required by Bulgarian law/ regulation” in D.1.5.of the initial PDD /1/ is not correct and inappropriate, because the EIA was conducted based on the Environment Protection Act and it was approved with the conditions of monitoring the noise, the ornitofauna, etc. Proper modification is required. And also much more detailed descriptions are essential regarding the monitoring of the condition of ornitofauna, considering the social background as described in G.1	CAR. 3	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
D.5.2. Will it be possible to monitor the specified environmental impact indicators?	Ditto	DR I	Ditto	CAR. 3	OK
D.6. Project Management Planning It is checked that project implementation is properly prepared for and that critical arrangements are addressed.					
D.6.1. Is the authority and responsibility of project management clearly described?	/1/ /1A/ /1B/ /10/ /47/- /50/	DR I	Clarification 4 The authority and responsibilities among Kaliakra Wind Power AD, INOS-1 OOD and MHI are not clearly described in the PDD.	CL.4	OK
D.6.2. Is the authority and responsibility for registration, monitoring, measurement and reporting clearly described?	Ditto	DR I	Monitoring plan is described in Annex 3. However the responsibilities of the monitoring and others described in Annex 3 are not clear if they belong to Kaliakra Wind Power AD for the same reason above.	Ditto	OK
D.6.3. Are procedures identified for training of monitoring personnel?	Ditto	DR I	Clarification 5 The training program for the monitoring personnel is mentioned in Annex 3. The program and the procedures established are to be clarified.	CL.5	OK
D.6.4. Are procedures identified for emergency preparedness where emergencies can result in	Ditto	DR I	No emergencies that can cause unintended emission are expected.	OK	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
unintended emissions?					
D.6.5. Are procedures identified for calibration of monitoring equipment?	Ditto	DR I	The monitoring equipment will be calibrated according to the regulation of NEK.	OK	OK
D.6.6. Are procedures identified for maintenance of monitoring equipment and installations?	Ditto	DR I	The equipment is owned by NEK and maintained by NEK.	OK	OK
D.6.7. Are procedures identified for monitoring, measurements and reporting?	Ditto	DR I	Annex 3 describes the procedures to be established.	OK	OK
D.6.8. Are procedures identified for day-to-day records handling (including what records to keep, storage area of records and how to process performance documentation)?	Ditto	DR I	Ditto	OK	OK
D.6.9. Are procedures identified for dealing with possible monitoring data adjustments and uncertainties?	Ditto	DR I	Annex 3, 8. and 9. describes them.	OK	OK
D.6.10. Are procedures identified for internal audits of GHG project compliance with operational requirements where applicable?	Ditto	DR I	Annex 3, 9. describes that the internal audit procedure will be developed by General Manager.	OK	OK
D.6.11. Are procedures identified for project performance reviews?	Ditto	DR I	Clarification 6 It is not clear if the General Manager has the responsibility of reviewing overall performance of the project, although it is described in Annex 3. that the GM is responsible to review the results of calculation.	CL.6	OK
D.6.12. Are procedures identified for corrective actions?	Ditto	DR I	Annex 3, 9. describes that the procedure of non-conformance and corrective /preventive	OK	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
			action will be developed by General Manager.		
E. Calculation of GHG Emissions by Source It is assessed whether all material GHG emission sources are addressed and how sensitivities and data uncertainties have been addressed to arrive at conservative estimates of projected emission reductions.					
E.1. Predicted Project GHG Emissions The validation of predicted project GHG emissions focuses on transparency and completeness of calculations.					
E.1.1. Are all aspects related to direct and indirect GHG emissions captured in the project design?	/1/ /1A/ /1B/	DR	Since the project is the renewable energy source generation, this question is not applicable to the project.	OK	OK
E.1.2. Are the GHG calculations documented in a complete and transparent manner?	Ditto	DR	Ditto	OK	OK
E.1.3. Have conservative assumptions been used to calculate project GHG emissions?	Ditto	DR	Ditto	OK	OK
E.1.4. Are uncertainties in the GHG emissions estimates properly addressed in the documentation?	Ditto	DR	Ditto	OK	OK
E.1.5. Have all relevant greenhouse gases and source categories listed in Kyoto Protocol Annex A been evaluated?	Ditto	DR	Ditto	OK	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
<p>E.2. Leakage Effect Emissions It is assessed whether there leakage effects, i.e. change of emissions which occurs outside the project boundary and which are measurable and attributable to the project, have been properly assessed.</p>					
E.2.1. Are potential leakage effects beyond the chosen project boundaries properly identified?	/1/ /1A/ /1B/	DR	The project yields no leakage; This question is not applicable to the project.	OK	OK
E.2.2. Have these leakage effects been properly accounted for in calculations?	Ditto	DR	Ditto	OK	OK
E.2.3. Does the methodology for calculating leakage comply with existing good practice?	Ditto	DR	Ditto	OK	OK
E.2.4. Are the calculations documented in a complete and transparent manner?	Ditto	DR	Ditto	OK	OK
E.2.5. Have conservative assumptions been used when calculating leakage?	Ditto	DR	Ditto	OK	OK
E.2.6. Are uncertainties in the leakage estimates properly addressed?	Ditto	DR	Ditto	OK	OK
<p>E.3. Baseline Emissions The validation of predicted baseline GHG emissions focuses on transparency and completeness of calculations.</p>					
E.3.1. Have the most relevant and likely operational characteristics and baseline indicators been	/1/ /1A/	DR	Yes, electricity generated and supplied to the grid (MWh) has been chosen as a	OK	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
chosen as reference for baseline emissions?	/1B/		baseline indicator.		
E.3.2. Are the baseline boundaries clearly defined and do they sufficiently cover sources and sinks for baseline emissions?	Ditto	DR	Yes, the boundaries of the project are Kaliakra site and the Bulgarian generation plants connected through the grid.	OK	OK
E.3.3. Are the GHG calculations documented in a complete and transparent manner?	Ditto	DR	The same comments as B.1.2. apply. (CL1, 2, CAR2)	CL1-2 CAR2	OK OK
E.3.4. Have conservative assumptions been used when calculating baseline emissions?	Ditto	DR	Ditto	CL1-2 CAR2	OK OK
E.3.5. Are uncertainties in the GHG emission estimates properly addressed in the documentation?	Ditto	DR	Ditto	CL1-2 CAR2	OK OK
E.3.6. Have the project baseline(s) and the project emissions been determined using the same appropriate methodology and conservative assumptions?	Ditto	DR	Ditto. Since there is no emission from the project, the latter question is not applicable.	OK	OK
E.4. Emission Reductions Validation of baseline GHG emissions will focus on methodology transparency and completeness in emission estimations.					
E.4.1. Will the project result in fewer GHG emissions than the baseline scenario?	/1/ /1A/ /1B/	DR	Yes, the project activity itself has no emissions, the baseline emission expressed as the product of electricity supplied to the grid and CEF will be reduced.	OK	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
F. Environmental Impacts Documentation on the analysis of the environmental impacts will be assessed, and if deemed significant, an EIA should be provided to the validator.					
F.1.1. Has an analysis of the environmental impacts of the project activity been sufficiently described?	/1/ /1A/ /1B/ /25/- /33/ /36/ /41/- /44/ /47/- /50/	DR I	Clarification 7 Although the EIA was conducted based on the Bulgarian regulation, the description of the EIA in the PDD/1A/ is not sufficient to understand the following points. (1) The relation between the "EIA report" submitted to the Bulgarian government and "Environmental Checklist" for JBIC , (2) The major result of the EIA including the impact to the migrating birds, (3) The overall EIA process including the public consultation, (4) the basis and conditions of the approval of the EIA, and (5) the relationship between the EIA and the Environmental Review by JBIC.	CL.7	OK
F.1.2. Are there any Host Party requirements for an Environmental Impact Assessment (EIA), and if yes, is an EIA approved?	Ditto	DR I		OK	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
F.1.3. Will the project create any adverse environmental effects?	Ditto	DR I	<p>RIEW-Varna /26/ and this decision was confirmed by MOEW on 25 July 2005 (Resolution No.128) /27/.</p> <p>The Decision of the approval of EIA states that the project will not lead to any significant and permanent negative impact on the environment under the condition that the measures required in the Decision are strictly observed.</p> <p>The countermeasures are being prepared by the project participants.</p> <p>Clarification 8 In this context, the phrase of "The Bulgarian laws/regulations do not force some measures." In F.2. is incorrect and inappropriate. The reason of this sentence is to be clarified.</p>	CL.8	OK
F.1.4. Are trans-boundary environmental impacts considered in the analysis?	Ditto	DR I	<p>Yes, the quantitative assessment of risks for the migrating birds was conducted in the EIA based on the data monitored.</p>	OK	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
F.1.5. Have identified environmental impacts been addressed in the project design?	Ditto	DR I	<p>Yes, the countermeasures to 33 conditions have been prepared in the "Preliminary Environmental Management Plan for Kaliakra Wind Power Project" /31/ and are scheduled to be implemented step by step according to the progress of the project.</p> <p>The radar system is originally planned in the project design to prevent the collision of migrating birds with the turbine by stopping the operation while the flock is passing.</p>	OK	OK
F.1.6. Does the project comply with environmental legislation in the host country?	Ditto	DR I	<p>RIEW-Varna approved the project by the decision on EIA on 23 June 2005 /26/ and MOEW confirmed this decision on 25 July 2005 (Resolution No.128) /27/ by rejecting the appeal from the Bulgarian Society for the Protection of Birds, etc.</p> <p>The Bulgarian Society for the Protection of Birds, etc. filed the complaint to the Supreme Administrative Court on 16 August 2005 requesting the repeal of the Resolution above.</p> <p>On 15 May 2006 the Supreme Administrative Court decided to stop the case processing and to send the case to the District Court of Varna.</p> <p>On 27 October, 2006 the District Court decided to terminate this case proceeding</p>		

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
			<p>due to inadmissibility of the claim filed in its delay of term.</p> <p>However, on 16 March 2007, the Supreme Administrative Court abolished this District Court decision and returned the case to the court for the resumption of the procedural actions.</p> <p>Clarification 9</p> <p>The final judicial conclusion for the EIA of the project has to be clarified upon issuance.</p>	CL9	
<p>G Stakeholder Comments</p> <p><i>The validator should ensure that a stakeholder comments have been invited and that due account has been taken of any comments received.</i></p>					
G.1.1. Have relevant stakeholders been consulted?	/1/ /1A/ /1B/ /25/ /42/- /44/ /47/- /50/	DR I	Yes, in the process of EIA, the public discussion took place on 31 May 2005 in the hall of Kavarna Municipality with the attendance of the officials of the Municipality, the habitants of local community, NGOs, etc.	OK	OK
G.1.2. Have appropriate media been used to invite comments by local stakeholders?	Ditto	DR I	Yes, the discussion meeting was held on 31 May 2005 as a step of EIA.	OK	OK

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
G.1.3. If a stakeholder consultation process is required by regulations/laws in the host country, has the stakeholder consultation process been carried out in accordance with such regulations/laws?	Ditto	DR I	Yes, refer to comments G.1.2. above.	OK	OK
G.1.4. Is a summary of the stakeholder comments received provided?	Ditto	DR I	Yes, in the public discussion above, some concerns were raised by certain NGOs with respect to the issues of noise, wild life, migrant birds, etc. After the meeting the project participants gave a written response /25/ to some concerns raised during the meeting, the copy of which was submitted to the determination team.	OK	OK
G.1.5. Has due account been taken of any stakeholder comments received?	Ditto	DR I	In the public discussion above, the majority of the opinions were found favourable to the project, in the interview to the mayor of the Municipality of Kavarna by the member of JACO CDM, the mayor replied that the local congress was supporting the project with no negative speeches and also there were supporting speeches from the local people in the public hearing of EIA. Taking those circumstances into consideration, RIEW-Varna approved the project as described in F.1.6.		

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl.	Final Concl.
			<p>The Bulgarian Society for the Protection of Birds, etc. filed the complaint to the Supreme Administrative Court on 16 August 2005 requesting the repeal of the Resolution above.</p> <p>On 15 May 2006 the Court decided to stop the case processing and to send the case to the District Court of Varna.</p> <p>On 27 October, 2006 the District Court decided to terminate this case proceeding due to inadmissibility of the claim filed in its delay of term.</p> <p>However, on 16 March 2007, the Supreme Administrative Court abolished this District Court decision and returned the case to the court for the resumption of the procedural actions.</p> <p>Clarification 9</p> <p>The final judicial conclusion for the EIA of the project has to be clarified upon issuance.</p>	CL9	

Table 3 Resolution of Corrective Action and Clarification Requests

Draft report clarifications and corrective action requests	Ref. to checklist question in table 2	Summary of project owner response	Determination conclusion
<p>CAR. 1 The formal approval of JI project from Bulgarian and Japanese governments shall be submitted to the determination team before publication of the determination.</p>	<p>(Table 1) 1</p>	<p>According to the Bulgarian JI Guidelines (2006, September), the project participant can apply for the approval of JI project after the issuance of Validation report by AIE, and the participant is now under the process of getting the Validation (Determination) report from JACO CDM. And the participant is also going to get the approval from Japanese government.</p>	<p>This report was prepared for the application for the approval of JI Project to the Bulgarian government based on the Bulgarian JI Guidelines. So, the project owner response is acceptable at this moment. However, the formal approvals from both Parties shall be submitted to JACO CDM before publication of the final determination report.</p>
<p>CAR. 2 Unless otherwise justified, the default weights of 50/50 % between Operating margin and Build margin described in the PDD shall be changed to 75/25 % in accordance with the latest version of ACM0002(19 May 2006).</p>	<p>B.1.2., B.2.1., B.2.5., B.2.9 E.3.3.– E.3.6.</p>	<p>The default weight in the PDD was revised to 75/25 % in the revised version of PDD /1A/(01/11/2006) in accordance with the latest version of ACM0002 based on the calculation results and the database of each plant of operating margin and build margin for 2000-2012 provided by the Bulgarian government. (Baseline Study 210906 final. xls)</p>	<p>The revised version of the PDD /1A/ (01/11/2006) applied the 75/25 % in accordance with the latest version of ACM0002(19 May 2006). CAR. 2 was resolved</p>

Draft report clarifications and corrective action requests	Ref. to checklist question in table 2	Summary of project owner response	Determination conclusion
<p>CAR. 3 The sentence of "No need to collect environmental record required by Bulgarian law/regulation " in D.1.5. of the initial PDD/1/ is not correct and inappropriate, because the EIA was conducted based on the Environment Protection Act and it was approved with the conditions of monitoring the noise, the ornitofauna, etc. Proper modification is required . And also much more detailed descriptions are essential regarding the monitoring of the condition of ornitofauna, considering the social background as described in G.I.</p>	<p>D.5.1., D.5.2</p>	<p>The sentence of D.1.5 of the initial PDD /1/ was modified as follows in the revised version of PDD/1A /01/11/2006); "The KWPP shall conduct all necessary monitoring, collection and archiving of information on environmental impact in accordance with the conditions of EIA approved by RIOS-Varna of MOEW. These information include bird migration which shall be monitored and recorded by the Radar system and the noise which shall be checked at the points designated by the conditions of EIA." And the following sentence was added in 10. of Annex 3; "The general manager of Kaliakra Wind Power AD will develop the environmental manual based on the conditions of the approved EIA, preliminary environmental management plan and other documents related to the environmental protection, based upon which the necessary monitoring of non-GHG factors shall be conducted by Kaliakra Wind Power AD.</p>	<p>The monitoring plan for environmental impacts was properly modified in the PDD/1A/ to specify the relevant data and the procedure to be established for collecting them. CAR. 3 was resolved</p>

Draft report clarifications and corrective action requests	Ref. to checklist question in table 2	Summary of project owner response	Determination conclusion
<p>Clarification 1. [CEF calculation] Input data for the IRP Manager used in the CEF calculation as well as the output (results) of the analysis are to be clarified.</p>	<p>B.1.2., B.2.1 B.2.5., B.2.9</p>	<p>“Baseline information and related spread sheet 7/12/ were submitted to the determination team. Their summary was attached to the revised PDD/1A/ as a part of Annex2, which included the summary of the calculation of IRP Manager based on the electricity power demand forecast (both maximum and minimum considered), and development prospects of generating capacity (input) , as well as the classification of each plant into Marginal, Low cost, Must run or Build margin plant, yearly generation of each plant based on the Least-Cost Planning Analysis (output). Baseline Emission Factors for 2000-2012 were calculated based on this scenario, and these calculation results were also included.</p>	<p>Summary of the calculation of IRP Manager was presented with the calculation sheets of CEF by the Bulgarian government. Each assumption was demonstrated. No further actions required.</p>
<p>Clarification 2. The calculation results of Operating Margin and Build Margin with the database used for each plant are to be clarified.</p>	<p>B1.2., B.1.4 B.2.1., B.2.5 B.2.8 , B.2.9 E.3.3., E.3.4. E.3.5</p>	<p>The calculation results of Operating Margin, Build Margin and the database of each plant for the calculation were provided for the period 2005-2012 by the same documents /12/ above. Fuel type, fuel consumption, net calorific value, carbon content of fuel, un-oxidized fraction of carbon and auxiliary power</p>	<p>The requested information was made clear.</p>

Draft report clarifications and corrective action requests	Ref. to checklist question in table 2	Summary of project owner response	Determination conclusion
		<p>loss were specified for each plant.</p> <p>PDD /1A/ was revised to determine the fixed value <i>ex ante</i> CEF by calculating combined margin of the three year full generation weighted average of the simple adjusted OM (from 2003 to 2005) and the latest BM (2005) .</p>	<p>The selection of simple adjusted OM is acceptable. Simple OM cannot be applied since low cost / must run plant constitute more than 50% of total grid generation. Dispatch data analysis OM cannot be applied since IRP manager cannot handle every hourly data in full detail. Although average OM can be applicable, from the view point of conservativeness, simple adjusted OM is preferable.</p> <p>The selection of <i>ex ante</i> CEF is acceptable, when considering ACM0002 specifies no restriction in choosing <i>ex ante</i> or <i>ex post</i> CEF. Project participants also asserts certainty of business, uncertainty to obtain annual <i>ex post</i> CEF data.</p> <p>Combined margin is calculated following the procedure specified by ACM0002.</p> <p>No further actions required.</p>
<p>Clarification 3. The data source about the 5.6%(risk free rate) and the7.2%(market risk premium)</p>	<p>B.1.2., B.2.1 B.2.5., B.2.9</p>	<p>Risk free rate(5.6%) was demonstrated as the average of adjusted interest rates of 10-year bond of 8 countries of eastern</p>	<p>The data source and the way of calculation of risk free rate(5.6%) and market risk premium(7.2%)</p>

Draft report clarifications and corrective action requests	Ref. to checklist question in table 2	Summary of project owner response	Determination conclusion
<p>are to be clarified.</p>		<p>Europe, calculated as follows by using the data from Bloomberg: (a) as for the countries with 10-year government bond, the interest rate was adjusted by the inflation difference between the US and each country, (b) as for the countries without 10-year government bond, the interest rate was introduced by adding the yield spread of the bond with the period closest to 10-year between the US and each country to the interest rate of 10-year bond of the US. Market risk premium (7.2%) is from the US long-horizon equity risk premium estimated by data spanning 1926-2004 in Ibbotson's <i>Stocks, Bonds, Bills and Inflation Yearbook Valuation Edition</i>.</p>	<p>were properly demonstrated.</p> <p>No further actions required</p>
<p>Clarification 4. The authority and responsibilities among Kaliakra Wind Power AD, INOS-1 OOD and MHI are not clearly described in the PDD. And the responsibilities of monitoring and others described in Annex 3 are not clear if they belong to Kaliakra Wind Power AD.</p>	<p>D.6.1., D.6.2</p>	<p>In the revised version of PDD/1A(01/11/2006), the following sentences were added; (a) in A.3.; "INOS and MHI are jointly developing this Kaliakra project and invest jointly to the Special Purpose Company, Kaliakra Wind Power AD (SPC) in order to execute this project. This ratio of the investment is</p>	<p>The responsibility of project management as well as monitoring, etc. has been clearly described in the PDD/1A).</p> <p>No further actions required</p>

Draft report clarifications and corrective action requests	Ref. to checklist question in table 2	Summary of project owner response	Determination conclusion
		<p>MHI:INOS=70:30.”</p> <p>(b) In 1.Objective in Annex 3;”As the project company established by MHI and INOS, Kaliakra Wind Power AD is responsible to conducting necessary monitoring in accordance with this monitoring plan.</p>	
<p>Clarification 5</p> <p>The training program for the monitoring personnel is mentioned in Annex 3. The program and the procedures established are to be clarified.</p>	<p>.D.6.3.</p>	<p>Project participant responded that KWP AD would establish the training program and by the start of commissioning after the completion of the site construction.</p> <p>In addition, the following sentences were added in the revised version of PDD /1A/ (01/11/2006).</p> <p>(a) In 7 of Annex 3; “General Manager will develop the monitoring manual “</p> <p>(b) In 10. of Annex 3.; “The general manager of KWP AD will develop the environmental manual based on the conditions of approved EIA , preliminary environmental management plan and other documents related to the environmental protection, based on which the necessary monitoring of non-GHG factors shall be conducted</p>	<p>KWP AD will carry out the continuous training to the personnel concerned as described in Annex 3, by using the environmental manual including the monitoring plan approved by RIEW-Varna.</p> <p>No further actions required</p>

Draft report clarifications and corrective action requests	Ref. to checklist question in table 2	Summary of project owner response	Determination conclusion
<p>Clarification 6. It is not clear if the procedure for project performance review is established, although it is described in Annex 3 that the GM is responsible to review the results of calculation, and also there exists the stipulation in the "Preliminary Environmental Management Plan" that "GM appointed by the board of SPC shall be responsible to all environmental management including documentation, execution and reporting."</p>	D.6.11..	<p>by KWP AD."</p> <p>The project participant responded that the procedure would be established based on the manual.</p> <p>And also the following sentences were added in the revised version of PDD/1A/ (01/11/2006);</p> <p>(a) in 6 of Annex 3; " For generated electricity, he/she may undertake a review if it is judged so. "</p> <p>(b) in 10. of Annex 3.; "The general manager of KWP will develop the environmental manual based on the conditions of approved EIA , preliminary environmental management plan and other documents related to the environmental protection, based upon which the necessary monitoring of non-GHG factors shall be conducted by KWP.</p>	<p>It can be considered that the General Manager has the responsibility of reviewing overall performance of the project, as he/she has the responsibilities of monitoring and reviewing of electricity generated, developing the environmental manual both for electricity and non-GHG factors as well as developing the procedures for internal audit and preventive actions.</p> <p>No further actions required</p>

Draft report clarifications and corrective action requests	Ref. to checklist question in table 2	Summary of project owner response	Determination conclusion
<p>Clarification 7.</p> <p>Clarification 7</p> <p>Although the EIA was conducted based on the Bulgarian regulation, the description of the EIA in the PDD/1A/ is not sufficient to understand the following points.</p> <p>(1) The relationship between the "EIA report" submitted to Bulgarian government and "Environmental Checklist" for JBIC,</p> <p>(2) The major result of the EIA including the impact to the migrating birds,</p> <p>(3) The overall EIA process including the public consultation,</p> <p>(4) The basis and conditions of the approval of the EIA, and</p> <p>(5) The relationship between the EIA and the Environmental Review by JBIC.</p>	<p>F.1.1</p>	<p>The response to each point in the CL 7 from the project participants is as follows;</p> <p>(1) It was described in F.1. of the PDD/1B/ (Version 1.2, dated 01 May 2007) that "Environmental Checklist for Kaliakra Wind Power is the rearrangement of the EIA report according to JBIC checklist questions. EIA report was also submitted to the independent entity.</p> <p>(2) The project participant added the description that RIEW-Varna admitted</p> <p>a) EIA report has reviewed the existing state of environment and all expected impacts of the project. Significant and permanent negative impacts are unlikely.</p> <p>b) The quantitative assessment of the risk for the birds were carried out. The radar system provided by the project for early warning and locating of the migrating birds will prevent the collision of the birds with the tubines.</p> <p>(3) The procedure of making EIA in the Ordinance including the public</p>	<p>The project participants modified the description of the EIA in F.1. of the PDD/1A/ by stressing the following points in the final PDD/1B/ (Version 1.2, dated 01 May 2007), considering the continuing court case for the impact of migrating birds as well as the comments received from the NGOs during the public comment period;</p> <p>a) The EIA was conducted in accordance with the procedure including the public discussion,</p> <p>b) The EIA was approved with the conditions, particularly with respect to the preventive radar system of stopping the turbines while birds are flying through the site.</p> <p>No further actions required</p>

Draft report clarifications and corrective action requests	Ref. to checklist question in table 2	Summary of project owner response	Determination conclusion
		<p>discussion of the EIA report was briefly described in the PDD/1B/.</p> <p>(4) The project participant modified the description of the EIA in the PDD/1B/ by stressing that</p> <ul style="list-style-type: none"> a) the public discussion was held in accordance with the procedure above, b) the EIA was approved considering the EIA report and the public discussion, and c) the EIA was approved with several conditions to be observed such as one-year monitoring of migrating birds at the site, and continuous work of radar system of stopping the turbines while birds are flying through the site. <p>(5) The project participant added the following points in the F.1. of the PDD/1B/.</p> <ul style="list-style-type: none"> a) The same EIA report which was submitted to Bulgarian government was submitted to JBIC for Environmental reviews, b) The result of the review was made publicly available on 20 March on 	

Draft report clarifications and corrective action requests	Ref. to checklist question in table 2	Summary of project owner response	Determination conclusion
		<p>JBIC website, and</p> <p>c) No additional requirements for monitoring were raised other than the conditions of EIA approval by the Bulgarian government.</p>	

Draft report clarifications and corrective action requests	Ref. to checklist question in table 2	Summary of project owner response	Determination conclusion
<p>Clarification 8.</p> <p>The Decision of the approval of EIA states that the project will not lead to any significant and permanent negative impact on the environment under the condition that the measures required in the Decision are strictly observed.</p> <p>The countermeasures are being prepared by the project participants.</p> <p>In this context, the phrase of "The Bulgarian laws/regulations do not force some measures." In F.2. is incorrect and inappropriate. The reason of this sentence is to be clarified.</p>	<p>F.1.3.</p>	<p>The sentence of F.2. was modified in the revised version of PDD/1A/(01/11/2006) by deleting the sentence "The Bulgarian laws/ regulations do not force some measures", etc. and by adding the sentence "The Decision of the approval of EIA states that the project will not lead to any significant and permanent negative impact on environment under the condition that the measures required in the Decision are strictly observed."</p>	<p>The description of F.2. was appropriately modified in the PDD/1A/.</p> <p>No further actions required.</p>

Draft report clarifications and corrective action requests	Ref. to checklist question in table 2	Summary of project owner response	Determination conclusion
<p>Clarification 9</p> <p>RIEW-Varna approved the project by the decision on EIA on 23 June 2005 and MOEW confirmed this decision on 25 July 2005 (Resolution No.128) by rejecting the appeal from the Bulgarian Society for the Protection of Birds, etc.</p> <p>The NGOs above filed the complaint to the Supreme Administrative Court on 16 August 2005 requesting the repeal of the Resolution above.</p> <p>On 15 May 2006 the Supreme Court decided to stop the case processing and to send the case to the District Court of Varna.</p> <p>On 27 October, 2006 the District Court decided to terminate this case proceeding due to inadmissibility of the claim filed in its delay of term.</p> <p>However, on 16 March 2007, the Supreme Administrative Court abolished this District Court decision and returned the case to the court for the resumption of the procedural actions.</p> <p>The final judicial conclusion for the EIA of the project has to be clarified upon issuance.</p>	<p>F.1.6</p>	<p>The final judicial conclusion for the EIA of the project has not been informed to JACO CDM by the project participants yet.</p>	<p>JACO CDM confirmed that the EIA was conducted in accordance with the Bulgarian legislative requirements and approved by the administrative authorities concerned. However JACO CDM is also concerned about the final judicial conclusion for the EIA, because this is closely related with the Bulgarian government approval of the project as stipulated in the Endorsement Letter by MOEW (September 14, 2005).</p>

Draft report clarifications and corrective action requests	Ref. to checklist question in table 2	Summary of project owner response	Determination conclusion
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APPENDIX B SUMMARY OF COMMENTS RECEIVED AND RESPONSES

JACO CDM published the project documents on its website linked with UNFCCC web site on 29 Mar. '07 and invited comments until 27 Apr. '07 from Parties, stakeholders and UNFCCC accredited observers
Two comments were received from

- (1) BirdLife International – European Division Office and BSPB/BirdLife Bulgaria on 25 April 2007, and
- (2) Association of Parks in Bulgaria on 24 April 2007

regarding the Environmental Impact Assessment particularly for the impacts on migrating birds.

The full texts of both comments are available in the UNFCCC JI website:

http://ji.unfccc.int/JI_Projects/DB/IVNJ4RGFC2LRZNHQXJNACZY8VM3HKJ/PublicPDD/GQCN19EXVOKH275AXWIC1J0QN14H2X/view.html

JACO CDM requested the project participant to respond these comments and received its responses on 05 May 2007.
The comments received and the responses are to be summarized point by point as follows;

1. The summary of the comments received and the responses from the project participant

<p>Points of Comment from BirdLife International-European Division Office and BSPB/BirdLife Bulgaria dated 25 April 2007</p>	<p>Response from the project participant dated 05 May 2007</p>
<p>1. Incomplete disclosure of project information Section F of the PDD contains insufficient information with only a short and general conclusion of the EIA. The EIA report is not made publicly available, although it shall not</p>	<p>1. Incomplete disclosure of project information Section F of the PDD is not meant to be an exhaustive compilation of all environmental assessment. The EIA Report was made publicly available in accordance with the</p>

be considered as confidential according to the JI Guidelines. And also the results and the "check sheet" of the internal assessment on environment conducted by JBIC based on its Guideline should be available to the public for comments

2. Insufficient public consultation

As the PDD document is insufficient concerning potential environmental issues, there has not been an adequate opportunity for public consultation on the potential environmental impacts of the project. We would request that the JI Supervisory Committee (JISC) allows a further period for public comments after the disclosure of the EIA and checklist documents.

3. Potential impacts on birds and their habitats

The location of this project is within a site of international importance for biodiversity and we have very serious concerns that the project planning process does not comply with the Bern Convention or European Union nature conservation law. These

Bulgarian Law of Environment. Further BSPB had full access to all the materials concerned as it was invited to be a member of the Environmental Expert Council which has reviewed the EIA. If you have any evidence of having been denied access to the EIA Report, we will review it accordingly.

We are extremely careful about applying JBIC Guidelines and give a due attention to the legality of all our actions.

2. Insufficient public consultation

It is always possible to add a new comment or make a new proposal, although the project has been subjected to public consultation for more than two years.

We understand that the goal of all public consultations is to minimize the environmental impact and improve the quality of the project and not to prolong endlessly its approval and make its implementation practically impossible. It is for this reason that legal rules and procedures have been developed, on national and on international level, stipulating terms and conditions for all actions to be taken and it is our duty to comply with them.

3. Potential impacts on birds and their habitats

We agree with you that the location is very important but we also believe that it is the EIA procedure to assess the environmental impact.

We have taken a clear note of the questions you have raised and

<p>concerns are shared by the Bern Convention and European Commission who are looking at the project and are the subject of an ongoing court case in Bulgaria.</p> <p>In light of this situation and the requirements of Article 4.1 (f) of the UNFCCC, we do not believe that the project is suitable for approval through the JI mechanism.</p> <p>Site of international biodiversity importance</p> <p>The Bulgarian Black Sea coast area are on the second busiest bird migration route in Europe (known as Via Pontica) which is used by thousands of migratory birds. The area of Kaliakra qualifies as an Important Bird Area (IBA) as it is a globally important bottleneck site for migratory birds. And the project site is entirely covered by unique steppe habitat on which some breeding birds are strictly dependent with the neighbouring Cape Kaliakra reserve.</p> <p>Bulgaria is under international responsibilities to protect the migration route on behalf itself and other countries.</p> <p>We believe that this project site is not suitable in light of the biodiversity protection and requirements of Art 4.1 (f) of the UNFCCC and the other international agreements.</p> <p>Inadequate EIA</p> <p>Although the EIA report was “approved” by the Bulgarian authorities, there are very serious concerns about its quality.</p>	<p>giving them our full attention. We hope the Bern Convention Secretariat and the EU Commission will respond to you in due time.</p> <p>Site of international biodiversity importance</p> <p>We think that this issue should, and has been dealt with, in the EIA report. We are aware of the discrepancies between the monitoring data submitted by the Institute of Zoology of Bulgarian Academy of Sciences and by the Bulgarian Society for the Protection of Birds but we believe that the Bulgarian competent authority has attended this matter and has taken a correct decision.</p> <p>Inadequate EIA</p> <p>The EIA team consists of well known and reputable Bulgarian experts who have positions in international bodies and committees.</p>
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<p>For example, the EIA does not contain any research on autumn migration or wintering birds but only a study on breeding birds and spring migration. This is inadequate as a basis for assessing impacts on birds, without long enough period to provide reliable results. The study was not completed prior to the EIA, and was not properly taken into account in the planning process.</p> <p>Also the EIA does not sufficiently consider the cumulative effects of this project in conjunction with the other wind farms proposed at Kaliakra (167 wind turbines allowed so far).</p> <p>Because of the lack of baseline data and relevant EIA team technical expertise, EIA does not provide an adequate assessment of the threat from collisions of migratory birds with the wind turbines.</p> <p>The EIA does not evaluate any alternative locations, although such consideration is obligatory under Bulgarian law which requires to assess at least two ones in a project.</p> <p>The licence was issued without strategic long term programme for developing wind power producing sector.</p> <p>Bern Convention case file</p> <p>In November 2006, the Standing Committee of the Bern Convention decided to open a new case file on the Kaliakra wind</p>	<p>The EIA was completed before 13 month site monitoring process was completely finished but it doesn't mean that the results from the monitoring have not been taken into account. All data from the monitoring was submitted to the competent authority as stipulated by the law. According to our knowledge all environmental data not only from the monitoring but from all other surveys, including the one submitted by the BSPB has been properly reviewed and taken into account by the Regional Inspectorate for Environment and Waters in Varna, which is the Bulgarian competent authority for taking a decision on the EIA of this project.</p> <p>The cumulative effect was not required by the authorities during the KWP's EIA process, because the KWP project was carried out first among other projects. On 02 March 2007, Council of Ministers decided to exclude the region of KWP area from NATURA 2000, based on the recommendation of National Council on biological diversity(national environmental expert council), considering all environmental aspects from national and international point of view.</p> <p>The study for alternative locations was not required by the authorities during EIA process of KWP projects, It is our understanding that the authorities will decide whether the study is needed or not by each project.</p> <p>Bern Convention case file</p> <p>It is a normal procedure for the Bern Convention to open a file in response to a request from a non-governmental organization. We</p>
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farms – the case file system is the mechanism for investigating infringements. The European Commission and Eurobats (Agreement on the Convention of Populations of European Bats), and CMS (Convention on Migratory Species) also have serious concerns about the case.

The Convention will visit Bulgaria in late June to see Kaliakra and discuss the situation.

European Commission concern

One of the requirements of the EU accession is to align national law with EU law, including identification, designation and protection of areas that qualify as Special Protection Areas (SPAs) for Birds under the EU Birds Directive.

The European Commission are concerned that the project could damage the site (Kaliakra IBA, potential SPA) in contravention with EU nature legislation.

At a European Parliament Environment Committee meeting on 14 September 2006, the Bulgarian Minister of Environment and Water stated that the government would reconsider the permits granted for wind farms at Kaliakra. However there are no evidences that this statement has been implemented to date. BSPB will make a complaint to the European Commission about the case.

The Government has decided to delay the designation of Kaliakra as a SPA and designation of Natura 2000 site in

are looking forward to receiving the results from the talks between the representatives of the Bern Convention and the Bulgarian authorities.

European Commission concern

The process of designating territories for the European network NATURA 2000 is very controversial in Bulgaria. The way in which the territories have been proposed by BSPB, etc. raised a lot of questions regarding the adequacy of the environmental information and caused many public protests in different parts of the country.

As these protests lasted for nearly two months the Bulgarian Government had no other choice but to postpone the approval of the proposal made by the NGOs.

We have no evidence for the time being that Bulgaria is in failure to implement the EU nature laws and that European Commission is going to take concrete actions against this country.

<p>Bulgaria is slow. So the European Commission will take action against Bulgaria for its failure to implement the EU nature laws.</p> <p>Ongoing Bulgarian court case</p> <p>On 16 March 2007, the Supreme Administrative Court of Bulgaria ruled that the Regional Court had incorrectly dismissed the NGO's court case against the MOEW's decision for the EIA of this project and that the Regional Court must reconsider the case. There is a very real risk that the Bulgarian courts will decide in favour of the NGOs.</p>	<p>Ongoing Bulgarian court case</p> <p>It is not appropriate for us to make any speculations and to comment on cases before the court has issued a decision.</p>
<p>Points of Comment from Association of Parks in Bulgaria dated 24 April 2007</p> <p>We consider that the implementation of this project will result in loss of valuable natural habitats being of high European and national conservation importance. The project site is located on the Via Pontica migratory route and will have considerable negative impact on a number of bird species, included in the EU Directive 79/409.</p>	<p>Response from the project participant dated 05 May 2007</p> <p>The comments equivalent to yours are received during the public discussion on 31 May 2005, and the project participants already gave a written response to these concerns.</p> <p>The approval of the EIA by the Bulgarian government is based on the results of the EIA report and the public discussion.</p> <p>And also the EIA was approved with the conditions to be taken, such as, (1) one year monitoring of the migrating birds upon commencement of the plant operation, (2) measures to assure continuous operation of the radar system and stopping of wind turbines when bird flocks are approaching to the site.</p>

2. How JACO CDM has considered the comments received in its determination

A. Comment from BirdLife International-European Division Office and BSPB/BirdLife Bulgaria dated 25 April 2007

(1) Regarding the point of “incomplete disclosure of project information”

JACO CDM does not consider that the paragraph of 33 and 40 of the JI Guidelines (Decision 9/CMP.1) requires the disclosure of the full text of the EIA report in the PDD. The EIA Report was made publicly available as requested by the Bulgarian Law of Environment by granting a 30-day access to several hard copies of the full text of the Report which was submitted to different institutions.

However, JACO CDM admits that the descriptions of the EIA in the PDD are not sufficient for better understanding of the EIA. So JACO CDM requested the project participants to modify the PDD by Clarification 7.

Project participants responded to modify the description by making the additional brief explanations on (a) the EIA procedure of the host country including the public discussion, (b) the EIA approval based on the EIA report and the public discussion, (c) approval conditions such as one-year ornithological monitoring at the site, and continuous work of radar system for stopping the turbines while birds are flying through the site.

As for the description of the Environmental Review by JBIC, project participants simplified the overall expressions and also made it clear that the Review was based on the same EIA Report above, and the result of the review was made publicly available, and no additional requirements for monitoring was raised other than the conditions of EIA approval of the Bulgarian government (Refer to Table 3 of Appendix A). These responses are acceptable.

(2) Regarding the point of “Insufficient public consultation”

JACO CDM does not consider that there has been insufficient public consultation concerning the EIA, although we admit that there were partly insufficient descriptions of EIA in the PDD as described above.

The project participants conducted the environmental impact assessment (EIA) in accordance with the Bulgarian “Environmental Protection Act”. In the process of EIA, the public discussion on environmental impact of the project took place on 31 May 2005, and it was reported that the majority of the opinions were found favorable to the project, while some concerns were raised by certain NGOs with respect to the issues of noise, wild life and migrant birds. The project participants gave a written response to these concerns one by one /25/. Most of the concerns pointed out in this comment had been already raised and responded by the project participants during the public hearing of the EIA procedure. Particularly, BSPB, the Bulgarian counterpart of BirdLife International, had full access to all the materials concerned as it was invited to be a member of the Environmental Expert Council which reviewed the EIA. So this comment could be considered to be a representative one based on sufficient information. JACO CDM did not receive the other similar comment pointing out the insufficient public consultation during the comment period.

(3) Regarding the point of “Potential impacts on birds and their habitats”

Site of international biodiversity importance

JACO CDM believes that this issue was dealt with in the EIA and was concluded in the approval by RIEW in Varna and MOEW that the project would not lead to any significant and permanent negative impact on the environment if the countermeasures for the conditions required in the approval were strictly observed.

As for the migrating birds problem, several conditions were set to be observed by the Project Participants such as,

- (1) preparation of monitoring plan of the migrating birds,
- (2) one year monitoring of the migrating birds upon commencement of the plant operation, and
- (3) measures to assure continuous operation of the radar system and stopping of wind turbines when bird flocks are approaching to the site.

In order to comply with the 33 conditions and all Bulgarian environmental regulations, the project participant established “Preliminary Environmental Management Plan for Kaliakra Wind Power Project” and the detailed manual is scheduled to be made step by step depending on the nature of the condition under the direction of RIEW in Varna.

Inadequate EIA

In accordance with the paragraph 33 of the JI Guidelines (Decision 9/CMP.1), JACO CDM confirmed that the EIA of the project was conducted in accordance with the Bulgarian regulations and approved administratively by the Bulgarian authorities, based on the documentation submitted to JACO CDM and the interviews to the relevant persons.

JACO CDM is now waiting for the final judicial conclusion for the court case including the judgment of the adequacy of the EIA itself and the administrative approval of the project as mentioned below.

Bern Convention case file, European Commission concern

JACO CDM was informed recently that the Decree No.122 of the Council of Ministers /35/ was officially published on 02 March 2007. The Decree designates the Protected zones for wild birds as well as natural habitats and wild flora and fauna on the ground of Bulgarian Biodiversity Act, having regard to the compliance with the engagements under the accession agreement of the Republic of Bulgaria to the European Union related to the Bern Convention and the EU birds Directive. The item 3 of the Decree designates Protected zones for wild birds including Kaliakra, however, according to the item 4, the territories on which a Detailed Urbanization Plan has already entered into force, are explicitly excluded from the Protected zones.

Under the circumstances, JACO CDM considers that the project has now an international legal basis at this point of time, although the project is still in litigation internally as mentioned below.

Ongoing Bulgarian court case

JACO CDM considers that the project shall comply with the environmental legislations of the host country and JACO CDM has the responsibility of confirming and clarifying its compliance. In this sense, JACO CDM has to confirm the final judicial conclusion of this court case before the final determination.

B. Comment from Association of Parks in Bulgaria dated 24 April 2007

Please refer to ***Site of international biodiversity importance*** and ***Bern Convention case file, European Commission concern*** in A. above.