

DETERMINATION REPORT

“TIMISOARA COMBINED HEAT AND POWER REHABILITATION FOR CET SUD LOCATION” PROJECT IN ROMANIA

REPORT No. 2006-0423

REVISION No. 03

DET NORSKE VERITAS



DETERMINATION REPORT

Date of first issue: 2006-03-13	Project No.: 45050002
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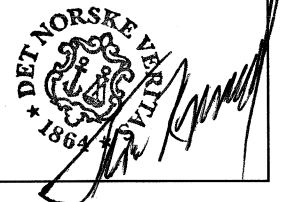
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Summary:

Det Norske Veritas Certification (DNV) has performed a determination of the "Timisoara Combined Heat and Power Rehabilitation for CET Sud Location" project in Romania on the basis of UNFCCC criteria for the JI, 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 modalities and procedures, and in particular the verification procedure under the JI supervisory committee.

The determination consisted of the following three phases: i) a desk review of the project design documents, ii) follow-up interviews with project stakeholders and iii) the resolution of outstanding issues and the issuance of the final determination report and opinion.

In summary, it is DNV's opinion that the "Timisoara Combined Heat and Power Rehabilitation for CET Sud Location" project meets all relevant UNFCCC requirements for the JI.



Report No.: 2006-0423	Subject Group: Environment	Indexing terms	
Report title: "Timisoara Combined Heat and Power Rehabilitation for CET Sud Location" Project in Romania		Key words Climate Change Kyoto Protocol Determination Joint Implementation	Service Area Verification
			Market Sector Process Industry
Work carried out by: Anu Chaudhary, Mario Voros		<input checked="" type="checkbox"/> No distribution without permission from the client or responsible organisational unit <input type="checkbox"/> free distribution within DNV after 3 years <input type="checkbox"/> Strictly confidential <input type="checkbox"/> Unrestricted distribution	
Work verified by: Michael Lehmann			
Date of this revision: 2007-01-15	Rev. No.: 03		
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***Abbreviations***

AAU	Assigned Amount Units
ANRE	National Electric and Heat Regulatory Authority
APER	Romanian Energy Policy Association
ARCE	Romanian Agency for Energy Conservation
CAR	Corrective Action Request
CEF	Carbon Emission Factor
CH ₄	Methane
CL	Clarification request
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
DNV	Det Norske Veritas
EIA	Environmental Impact Assessment
ERU(s)	Emission Reduction Unit(s)
GHG	Greenhouse gas(es)
GWP	Global Warming Potential
IPCC	Intergovernmental Panel on Climate Change
JI	Joint Implementation
MP	Monitoring Plan
MVP	Monitoring and Verification Plan
N ₂ O	Nitrous oxide
NGO	Non-governmental Organisation
PDD	Project Design Document
SB	Steam Boiler
UNFCCC	United Nations Framework Convention for Climate Change



1 INTRODUCTION

The Swedish Energy Agency (STEM) has commissioned Det Norske Veritas Certification (DNV) to perform a determination of the “Timisoara Combined Heat and Power Rehabilitation for CET Sud Location” in Romania (hereafter called “the project”). This report summarises the initial findings of the determination of the project, performed on the basis of UNFCCC criteria for Joint Implementation (JI) projects, as well as criteria given to provide for consistent project operations, monitoring and reporting.

The determination team consisted of the following personnel:

Ms Anu Chaudhary	DNV India	GHG Auditor
Mr Mario Voros	DNV Slovakia	GHG Auditor
Mr Michael Lehmann	DNV Norway	GHG Auditor, Technical reviewer

1.1 Objective

The purpose of the determination is to have an independent third party assessing the project design. In particular, the project’s baseline, the monitoring plan, and the project’s compliance with relevant UNFCCC and host Party criteria for Joint Implementation (JI) projects are validated in order to confirm that the project design as documented is sound and meets the identified criteria.

In the absence of specific verification procedures for JI projects hosted by Romania, the determination was carried out in accordance with the verification procedure under the Article 6 supervisory committee (JI track II) described in the JI modalities and procedures, i.e. the Guidelines for the implementation of Article 6 of the Kyoto Protocol (Decision 16/CP. 7).

Determination is a requirement for JI projects following the verification procedures under the Article 6 supervisory committee and it is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of the emission reduction units (ERUs).

1.2 Scope

The determination scope is defined as an independent and objective review of the Project Design Document (PDD). The information contained in this document is reviewed against the Kyoto Protocol requirements for JI projects, the guidelines for the implementation of Article 6 of the Kyoto Protocol (Decision 16/CP.7) as agreed in the Marrakech Accords, in particular the verification procedures under the Article 6 supervisory committee, and associated interpretations. DNV has, based on the recommendations in the Validation and Verification Manual /8/, employed a risk-based approach in the determination process, 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 STEM and other project participants. However, stated request for clarifications and/or corrective actions may have provided input for improvement of the project design.



1.3 GHG Project Description

The project aims at upgrading the existing heat production plant CET Timisoara Sud with cogeneration capabilities. Electricity consumed internally in the heat production plant and for distribution of district heating water is expected to be covered from the new cogeneration capacities. The project is thus displacing the electricity currently being bought from the national power grid (NPG). The project is expected to be commissioned by start of 2007.

The project involves the Romanian state as the host country and the Swedish state as the investor country in accordance with the bilateral agreement signed.

The geographical boundaries of the project are limited to the area which includes the Timisoara city in Timis County, Romania. The project's system boundaries include the boilers, back pressure steam turbines, pressure reduction stations, heat exchangers, hot water boilers and the heat and electricity generation and consumption component.

The project is expected to reduce 34 671 tCO₂ per year for the period from the end of 2007 until 2012.

2 METHODOLOGY

The determination of the project commenced in February 2006. The determination consisted of the following three phases:

- I a desk review of the project design, baseline and monitoring plan
- 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, a determination protocol was customised for the project, according to the Validation and Verification Manual /8/. 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 organises, details and clarifies the requirements a JI project is expected to meet;
- It ensures a transparent determination process where the validator 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 for the "Timisoara Combined Heat and Power Rehabilitation for CET Sud Location" project is included in Appendix A to this report.



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Determination Protocol Table 1: Mandatory Requirements for Joint Implementation (JI) Project Activities			
Requirement	Reference	Conclusion	Cross reference
<i>The requirements the project must meet.</i>	<i>Gives reference to COP decision where the requirement is found.</i>	<i>This is either acceptable based on evidence provided (OK), a Corrective Action Request (CAR) of risk or non-compliance with stated requirements or a request for Clarification (CL) where further clarifications are needed.</i>	<i>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.</i>

Determination Protocol Table 2: Requirement Checklist				
Checklist Question	Reference	Means of verification (MoV)	Comment	Draft and/or Final Conclusion
<i>The various requirements in Table 1 are linked to checklist questions the project shall meet. The checklist is organised in six different sections. Each section is then further sub-divided. The lowest level constitutes a checklist question.</i>	<i>Gives reference to documents where the answer to the checklist question or item is found.</i>	<i>Explains how conformance with the checklist question is investigated. Examples of means of verification are document review (DR) or interview (I).</i>	<i>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.</i>	<i>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). A request for Clarification (CL) is used when the independent entity has identified a need for further clarification. N/A means not applicable.</i>

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

Figure 1 Determination protocol tables



2.1 Review of Documents

The Project Design Document /1/, Baseline Study /2/, Monitoring Plan /3/ and further Annexes to the PDD /4/-/7/ for the “Timisoara Combined Heat and Power Rehabilitation for CET Sud Location” submitted by STEM were assessed.

2.2 Follow-up Interviews

DNV performed interviews with project stakeholders on 20-22 March 2006 to confirm selected information and to resolve issues identified in the document review. Representatives of S.C.Colterm SA (Project developer), Eninvest SA (Project advisor) and the JI Focal Point of Romania (Ministry of Environment and Water Management (RMEWM)), were interviewed. The main topics of the interviews are summarised in Table 1.

Table 1 Interview topics

Interviewed organisation	Interview topics
S C Colterm S A	<ul style="list-style-type: none"> ➤ Technology overview ➤ Project additionality ➤ Monitoring and project management ➤ Legal requirements and environmental impact assessment ➤ Data sources ➤ Calculations of project and baseline emissions
Eninvest	<ul style="list-style-type: none"> ➤ Current scenario ➤ Data availability
RMEWM (JI Focal Point)	<ul style="list-style-type: none"> ➤ Requirements of the Romanian JI Focal Point ➤ Project's legal compliance ➤ Current cogeneration practices ➤ Environmental impacts

2.3 Resolution of Clarification and Corrective Action Requests

The objective of this phase of the determination is to resolve any outstanding issues which need to be clarified for DNV's positive conclusion on the project design.

The initial determination identified two *Corrective Action Request* and six requests for *Clarification*.

The project participants were invited to provide a response to these requests. The requests have been resolved through additional clarifications provided by the project participants in their response on 9 October 2006 and the submission of a revised PDD on 9 October 2006.

To guarantee the transparency of the determination process, the concerns raised by DNV and the response provided by the project participants are documented in Table 3 of the determination protocol in Appendix A to this report.



3 DETERMINATION FINDINGS

The findings of the determination are stated in the following sections. The determination criteria (requirements), the means of verification and the results from validating the identified criteria are documented in more detail in the determination protocol in Appendix A.

The final validation findings relate to the project design as described in the PDD of October 2006.

3.1 Participation Requirements

The project participants are SC Colterm SA of Romania and the Swedish Energy Agency (STEM) which participates on behalf of the government of Sweden. The Parties involved, Romania as host Party and Sweden, meet the requirements to participate in the JI.

Letters of Approval (LoA) from the Romanian and Swedish JI Focal Points including authorization of the project participants have been obtained.

3.2 Project Design

The project involves the upgrade of the existing heat production plant CET Timisoara Sud with cogeneration capabilities in order to improve system efficiency and displace the electricity currently being bought from the national power grid.

The project technology consists of installing a backpressure steam turbine in CET Timisoara Sud to process the steam produced in the steam boiler, increasing the energy efficiency. The project will have an installed power capacity of about 18 MW. Though the steam process electricity generation is a common practice in many countries, using a steam turbine to process the steam produced by low pressure steam boilers is not yet used in Romania. The project will be the first of its kind to be implemented in Romania.

The project proponent S.C. Colterm SA has previous experience of operating steam boilers and cogeneration cycles. Also it has been confirmed during site visit that training assistance will be received from the turbine manufacturer. However, training in the area of data management and monitoring needs to be in place before the project implementation.

The project is expected to get commissioned by start of 2007 for an operational lifetime of 20 years. The project's crediting period is the first JI commitment period from 2008 up to 2012.

3.3 Baseline Determination and Additionality

Currently the electricity needed for heat production and transport in CET Timisoara Sud is bought from the grid. The likely scenario in the absence of the project activity would be the continuation of the current practice.

Three possible options for the baseline scenario have been established out of which the most likely baseline scenario has been selected. The selected baseline scenario used is the business-as-usual scenario, which means that in the absence of the project, the plant would continue to import electricity and that the electricity produced by the project would be produced by existing power plants supplying electricity to the Romanian grid.



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For determining the emission factor of the Romanian electricity grid, only the operating margin is considered. CDM methodologies applicable to this project would require to consider both the operating and build margin (with equal weight), regardless of the size of the project. One of the arguments for this is that one project alone may not have any impact on future capacity additions, but several projects together may actually postpone the construction of a new power plant. On the other hand, DNV recognises that the electricity systems in JI countries, such as Romania, are different from the electricity systems in CDM countries (developing countries). While there is generally a lack of supply and new power plants have to be added in CDM countries, there is sufficient supply in Romania and hence there is not really a build margin. Hence, the exclusion of the build margin is deemed acceptable.

The estimated annual production of the project is approximately 0.12% of the NPG annual production.

The project's additionality has been demonstrated through a financial analysis and the assessment of investment barriers. The project's IRR without ERU revenues would be 12%, which is below an acceptable rate of return in Romania. Moreover, it is also argued that in absence of the JI, SC Colterm SA is not able to raise the necessary equity investment. The revenues from the sale of ERUs is expected to raise the IRR to about 13.4% will give access to further debt financing.

The project proponent takes into account the relevant national government policies that could have any direct or indirect effect on the project activity. There are no existing or expected future legal requirements for this kind of project activities.

3.4 Monitoring Plan

The monitoring methodology reflects good practice through a structured and complete monitoring plan taking into account all important factors and variables contributing to the baseline and the project emissions.

The project emissions are based on the monitoring of the volume of fuels (Coal and Natural Gas) used, amount of heat supplied and the amount of electricity consumed. It has been confirmed that the extra amount of fuel used in the project activity will be considered towards project emissions.

The baseline emissions calculations are based on the volume of fuels used, amount of heat supplied and amount of electricity consumed and the electricity supplied to the grid through the project activity.

The project is expected to be commissioned by starting of 2007, hence there are no previous records of monitored data available yet.

Detailed responsibilities and authorities for operation, monitoring and reporting have been described. However, procedures need to be developed for QA/QC of reported emission reductions, training of the personnel, calibration and maintenance of monitoring equipment. Considering the status of project implementation at present, it is suggested that these issues are resolved/verified once the project is in operation, and the implementation of the above is assessed during the first periodic verification.



3.5 Calculation of GHG Emissions

The baseline and project emission calculations are transparently described. It has also been confirmed that the extra amount of fuel used in the project activity is being considered towards project emissions.

The project is expected to reduce approximately 173 355 tCO₂ over the 5 year crediting period from 2008-2012 with an annual reduction of 34 671 tCO₂/yr.

3.6 Environmental Impacts

The project activity is not expected to result in any negative impacts to the environment. It has been confirmed with the Local Environment Protection Agency (LEPA) that an EIA is not required for the proposed project activity.



4 COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS

DNV published the PDD, baseline study and monitoring plan of January 2006 on its climate change website (<http://www.dnv.com/certification/ClimateChange>) and invited Parties, stakeholders and observers through the Climate-L mailing list to provide comments on the PDD during a period of 30 days from 1 February 2006 to 2 March 2006. No comments were received.



5 DETERMINATION OPINION

Det Norske Veritas Certification (DNV) has performed a determination of the "Timisoara Combined Heat and Power Rehabilitation for CET Sud Location" project in Romania. The determination was performed on the basis of UNFCCC criteria for Joint Implementation, as well as criteria given to provide for consistent project operations, monitoring and reporting. The determination was carried out in accordance with the verification procedure under the Article 6 supervisory committee (JI track II) described in the JI modalities and procedures, i.e. the guidelines for the implementation of Article 6 of the Kyoto Protocol (Decision 16/CP. 7).

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

The project participants are S.C. Colterm SA of Romania and the Swedish Energy Agency (STEM) which participates on behalf of the government of Sweden. The Parties involved, i.e. Romania as host Party and Sweden as the sponsor Party, meet the requirements to participate in the JI. Letters of Approval (LoA) from the Romanian and Swedish JI Focal Points including authorization of the project participants have been obtained.

The project developed by S.C. Colterm S.A. involves the upgrade of the existing heat production plant CET Timisoara Centru with cogeneration capabilities in order to improve system efficiency and displace the electricity currently being bought from the national power grid.

No approved CDM baseline and monitoring methodology is applied and instead a methodology is proposed for the project in accordance with the criteria set out in appendix B of the JI guidelines. The project baseline is the continuation of the current practice at the CET Timisoara SUD plant.

The project's additionality has been demonstrated through the tool for demonstration and assessment of additionality approved for CDM projects.

The monitoring methodology reflects good monitoring and reporting practices through a structured and complete monitoring plan taking into account all important factors and variables contributing to the baseline and the project emissions. The main project and baseline GHG indicators are being monitored such as volume of fuels (coal and natural gas) used, amount of heat supplied, amount of electricity produced, the amount of electricity consumed and the electricity supplied to the grid.

The project is expected to reduce approximately 173 355 tCO₂ over the 5 year crediting period from 2008-2012 with an annual reduction of 34 671 tCO₂/yr. The emission reduction forecast has been checked and it is deemed likely that the stated amount is achieved given that the underlying assumptions do not change.

In summary, it is DNV's opinion that the project, as described in the project design document version 02 dated October 2006, meets all relevant UNFCCC requirements for the JI. However, Letters of Approval (LoA) from the Romanian and Swedish JI Focal Points has not yet been obtained.



6 REFERENCES

Documents provided by the project proponent that relate directly to the project:

- /1/ SC Colterm SA and SC Eninvest SA: *Project Design Document - "Timisoara Combined Heat and Power Rehabilitation for CET Sud Location"*, October 2006.
- /2/ SC Colterm SA and SC Eninvest SA: *Baseline Study - "Timisoara Combined Heat and Power Rehabilitation for CET Sud Location" (Annex 2 to PDD)*, January 2006
- /3/ SC Colterm SA and SC Eninvest SA: *Monitoring Plan - "Timisoara Combined Heat and Power Rehabilitation for CET Sud Location" (Annex 3 to PDD)*, January 2006
- /4/ SC Colterm SA and SC Eninvest SA: *Heat Balance Calculation (Annex 4 to PDD)*, January 2006
- /5/ SC Colterm SA and SC Eninvest SA: *Plant Layout (Annex 5 to PDD)*, January 2006
- /6/ SC Colterm SA and SC Eninvest SA: *GHG Emission Reductions Calculation (Annex 6 to PDD)*, January 2006
- /7/ SC Colterm SA and SC Eninvest SA: *Investment Model (Annex 7 to PDD)*, January 2006

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

- /8/ International Emission Trading Association (IETA) & the World Bank's Prototype Carbon Fund (PCF): *Validation and Verification Manual*. <http://www.vvmanual.info>

Persons interviewed during the validation, or persons who contributed with other information that are not included in the documents listed above:

- /9/ Dorel Badescu – General Director, SC Eninvest SA
- /10/ Aurel Matei - General Director SC Colterm SA:
- /11/ Vlad Trusca – Senior Advisor, UNFCCC Focal Point, Ministry of Environment and Water Management

APPENDIX A

JI DETERMINATION PROTOCOL

Table 1 Mandatory Requirements for Joint Implementation (JI) Project Activities

Requirement	Reference	Conclusion	Cross Reference / Comment
1. The project shall have the approval of the Parties involved	Kyoto Protocol Article 6.1 (a)	OK GAR-4	An approval from the Swedish and the Romanian Focal points needs to be obtained.
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, i.e. the sponsor Party shall have in place a national system for estimating GHG emissions and a national registry and has submitted annually its most recent inventory	Kyoto Protocol Article 6.1 (c) Guidelines for the implementation of Art. 6 §21c,d,e,f	OK	The determination has not in detail assessed Sweden's compliance with article 5 and 7 of the Kyoto Protocol. However, Sweden has in place a national system for estimating GHG emissions and annually reports its national GHG inventory to the UNFCCC.
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 determination has not in detail assessed Sweden's domestic actions for meeting commitments under Article 3. However, Sweden is undertaking several measures to reduce domestic GHG emissions.
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	Guidelines for the implementation of Art. 6 §20	OK	The JI Focal Point for Romania is the Ministry of Environment and Water Management (RMEWM) and the JI Focal Point for Sweden is the Ministry of Environment.

Requirement	Reference	Conclusion	Cross Reference / Comment
6. Parties participating in JI shall be a Party to the Kyoto Protocol	Guidelines for the implementation of Art. 6 §21a/24	OK	Sweden ratified the Kyoto Protocol on 31 May 2002 and Romania ratified on 19 March 2001.
7. The participating Parties' assigned amount shall have been calculated and recorded	Guidelines for the implementation of Art. 6 §21b/24	OK	The assigned amounts for Romania and Sweden are 92% each relative to the 1990 levels.
8. The host Party shall have in place a national registry in accordance with Article 5 of the Kyoto Protocol	Guidelines for the implementation of Art. 6 §21d/24	OK	Romania has in place a national system for estimating GHG emissions and annually reports its national GHG inventory to the UNFCCC.
9. ERUs shall not be issued as a result of project activities undertaken within the European Community that also lead to a reduction in, or limitation of, emissions from installations covered by Directive 2003/87/EC, unless an equal number of allowances is cancelled from the registry of the Member State of the ERUs' origin.	Directive 2004/101/EC of the European Parliament and of the Council of 27 October 2004	OK	Romania may join the EU ETS in the future and the Romania will need to ensure that no double counting of emission reductions will occur.
10. Project participants shall submit to the independent entity a project design document that contains all information needed for the determination	Guidelines for the implementation of Art. 6 §31	OK	The Project Design Document submitted by SC Colterm SA has been reviewed.

Requirement	Reference	Conclusion	Cross Reference / Comment
11. 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	Guidelines for the implementation of Art. 6 §32	OK	DNV published the PDD, baseline study and monitoring plan of January 2006 on its climate change website at http://www.dnv.com/certification/ClimateChange and invited Parties, stakeholders and observers through the Climate-L mailing list to provide comments on the PDD during a period of 30 days from 1 February 2006 to 2 March 2006. No comments were received.
12. 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	Guidelines for the implementation of Art. 6 §33d	OK	Table 2, Section F
13. 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	Guidelines for the implementation of Art. 6, Appendix B	OK	Table 2, Section B.2
14. 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	Guidelines for the implementation of Art. 6, Appendix B	OK	Table 2, Section B.2
15. The baseline methodology shall exclude to earn EURs for decreases in activity levels outside the project activity or due to force majeure	Guidelines for the implementation of Art. 6, Appendix B	OK	Table 2, Section B.2

Requirement	Reference	Conclusion	Cross Reference / Comment
16. The project shall have an appropriate monitoring plan	Guidelines for the implementation of Art. 6 §33c	OK	Table 2, Section D

Table 2 Requirements Checklist

Checklist question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
A. General Description of Project Activity The project design is assessed.					
A.1. Project Boundaries Project boundaries are the limits and borders defining the GHG emission reduction project.					
A.1.1. Are the project's spatial (geographical) boundaries clearly defined?	/1/	DR	Yes, the project is located in Timisoara city in Timis County of Romania.		OK
A.1.2. Are the project's system (components and facilities used to mitigate GHGs) boundaries clearly defined?	/1/	DR	The project's system boundaries include the boilers, back pressure steam turbines, pressure reduction stations, heat exchangers, hot water boilers and the heat and electricity generation and consumption component.		OK
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.					
A.2.1. Does the project design engineering reflect current good practices?	/1/	DR	Yes		OK
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?	/1/	DR	Yes the project technology will result in significantly better performance than the baseline technology in Romania. It has been confirmed during the follow-up interviews that the proposed project technology is not a common practice in		OK

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

Checklist question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
A.2.3. Is the project technology likely to be substituted by other or more efficient technologies within the project period?	/1/	DR	Romania. No		OK
A.2.4. Does the project require extensive initial training and maintenance efforts in order to work as presumed during the project period?	/1/	DR I	The PDD does not provide any information on training and maintenance requirements. This needs to be in place before the start of the project activity.		OK
A.2.5. Does the project make provisions for meeting training and maintenance needs?	/1/	DR I	No the project design document does not address training and maintenance requirements.		OK
A.3. Compliance with host country requirements <i>The project's contribution to sustainable development is assessed.</i>					
A.3.1. Is the project in line with relevant legislation and plans in the host country?	/1/	DR I	This will be confirmed on receipt of the Approval letter from the Romanian Focal Point.	GAR-1	OK
A.3.2. Is the project in line with host-country specific JI requirements?	/1/	DR I	Yes		OK
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.					
B.1. Baseline Methodology It is assessed whether the project applies an appropriate baseline methodology.					
B.1.1. Is the discussion and selection of the baseline methodology transparent?	/1/ /2/	DR	The baseline methodology is transparent in nature and has been correctly applied.		OK

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

Checklist question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
B.1.2. Does the baseline methodology specify data sources and assumptions?	/1/ /2/	DR	Yes, except for the coal carbon content and natural gas carbon content. Since these values vary region-wise, local values need to be used and an authentic source of data identified.	GL-4	OK
B.1.3. Does the baseline methodology sufficiently describe the underlying rationale for the algorithm/formulae used to determine baseline emissions (e.g. marginal vs. average, etc.)	/1/ /2/	DR	The assumptions made in the baseline study for e.g., those regarding the operating margin and the calculation of grid emission factor need to be supported with sufficient evidence/data. The basis behind the ratio calculated between installed power of new equipment and that of current electricity production facilities in the Romanian NPG is not clear. Similarly the other assumptions made need to be clearly shown in the form of calculations and verifiable source of data. It is also not clear how the t_{cc} values have been converted to t/yr. Excel worksheets are needed to verify the calculations done to estimate the baseline emissions. It is also not clear whether the exclusion of the BM emission factor while calculating the grid emission factor can be considered conservative. More justification needs to be provided in this regard. In the absence of any guidance on baseline and monitoring methodologies for JI projects, reference can only be made to CDM methodologies, which require to consider both the operating and build margin (with	GL-2 GL-3	OK

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

Checklist question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
B.1.4. Does the baseline methodology specify types of variables used (e.g. fuels used, fuel consumption rates, etc)?	/1/ /2/	DR	equal weight), regardless of the size of the project. One of the arguments for this is that one project alone may not have any impact on future capacity additions, but several projects together may actually postpone the construction of a new power plant. On the other hand, DNV recognises that the electricity systems in typical JI countries are different from the electricity systems in CDM countries (developing countries). While there is generally a lack of supply and new power plants have to be added in CDM countries, there is generally sufficient supply in JI countries and hence there is not really a build margin.		OK
B.1.5. Does the baseline methodology specify the spatial level of data (local, regional, national)?	/1/ /2/	DR	The variable data would be local or that directly monitored at the plant. The source of other data used like the coal carbon content and natural gas carbon content has not been specified.	CL-1	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	/1/	DR	Yes the application of the baseline study		OK

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Checklist question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
discussion and determination of the chosen baseline transparent?	/2/		chosen is clear and transparent.		
B.2.2. Has the baseline been determined using conservative assumptions where possible?	/1/ /2/	DR	It is not clear whether the exclusion of the BM emission factor while calculating the grid emission factor can be considered conservative. More justification and background verifiable calculations need to be provided in this regard.	GL-3	OK
B.2.3. Has the baseline been established on a project-specific basis?	/1/ /2/	DR	Yes the baseline has been established on a project specific basis.		OK
B.2.4. Does the baseline scenario sufficiently take into account relevant national and/or sectoral policies, macro-economic trends and political aspirations?	/1/ /2/	DR I	The project proponent takes into account the relevant national government policies that could have any direct or indirect effect on the project activity. There are no existing or expected future legal requirements for this kind of project activities.		OK
B.2.5. Is the baseline determination compatible with the available data?	/1/ /2/	DR	Yes		OK
B.2.6. Does the selected baseline represent a likely scenario in the absence of the project?	/1/ /2/	DR	The likely scenario in the absence of the project activity would be the continuation of current practice.		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	/1/ /2/ /7/	DR I	The project's additionality has been demonstrated through investment barrier. The project's IRR without ERU revenues is 12% and with ERU revenues is 13.4% which is claimed to be the minimum acceptable for the municipality owned project. However, there are other similar JI projects in Romania (by the same project proponent) where it is argued that	GL-4 GL-6	OK

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

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Checklist question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
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)?			<p>an IRR of 11-12% is sufficient to overcome the financial barrier. This needs to be explained.</p> <ul style="list-style-type: none"> ▪ It has been confirmed during the follow-up interviews that 12% IRR is not deemed sufficient for the project to be implemented in the absence of JI ▪ It needs to be demonstrated that the baseline itself does not face this barrier. The project's additionality is also in jeopardy because of the claims made in the PDD that a "continued operation of the existing system (Baseline) would endanger the existence of SC Colterm SA in the long run." It remains to be clarified whether this fact then make the implementation of the project activity a must/ necessity for the project proponent. ▪ Excel worksheets have been provided to demonstrate the investment barrier. 		
B.2.8. Have the major risks to the baseline been identified?	/1/ /2/	DR	No risks to the baseline have been identified. However, the issue raised in B.2.7 above could be one of the threats to the baseline and needs further clarification.	CL4	OK
B.2.9. Is all literature and sources clearly referenced?	/1/ /2/	DR	Yes		OK

Checklist question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
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?	/1/	DR	The project will be commissioned by 2007 and is expected to have an operational lifetime of 20 years.		OK
C.1.2. Is the project's crediting time clearly defined?	/1/	DR	The crediting period is the first Kyoto Protocol commitment period 2008-2012.		OK
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.					
D.1. Monitoring Methodology It is assessed whether the project applies an appropriate baseline methodology.					
D.1.1. Does the monitoring methodology reflect good monitoring and reporting practices?	/1/ /3/	DR	Yes, the monitoring methodology reflects good practices through a structured and complete monitoring plan taking into account all important factors and variables contributing to the baseline and the project emissions. The monitoring plan also gives project specific information such as the responsibilities for project monitoring and management.		OK
D.1.2. Is the selected monitoring methodology supported by the monitored and recorded data?	/1/ /3/	DR	Since the project is expected to get commissioned only by 2007, no recorded data is available currently.		OK
D.1.3. Are the monitoring provisions in the monitoring	/1/	DR	Yes		OK

Checklist question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
methodology consistent with the project boundaries in the baseline study?	/3/				
D.1.4. Have any needs for monitoring outside the project boundaries been evaluated and if so, included as applicable?	/1/ /3/	DR	No		OK
D.1.5. Does the monitoring methodology allow for conservative, transparent, accurate and complete calculation of the ex post GHG emissions?	/1/ /3/	DR	Yes the data variables being monitored after project implementation along with the data from the baseline scenario (i.e., previous years data) should lead to conservative and complete calculations.		OK
D.1.6. Is the monitoring methodology clear and user friendly?	/1/ /3/	DR	The last 3 columns of Table 2 of the monitoring plan need to be filled in correctly.	GAR-2	OK
D.1.7. Does the methodology mitigate possible monitoring errors or uncertainties addressed?	/1/ /3/	DR	There are no monitoring errors/uncertainties identified.		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?	/1/ /3/	DR	It is not clear whether the extra amount of fuel being used in the project activity (i.e. as shown in Annex 6), is being considered while calculating the emission reductions due to the project activity.	GL-5	OK
D.2.2. Are the choices of project GHG indicators reasonable?	/1/ /3/	DR	Yes, the main project GHG indicators are volume of fuels used (Coal and Natural Gas), amount of heat supplied and amount of electricity consumed.		OK
D.2.3. Will it be possible to monitor / measure the	/1/ /3/	DR	Yes		OK

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Checklist question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
specified project GHG indicators?					
D.2.4. Will the indicators enable comparison of project data and performance over time?	/1/ /3/	DR	Yes		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?	/1/ /3/	DR I	The project is not expected to cause any significant leakage effects.		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?	/1/ /3/	DR	Yes		OK
D.4.2. Is the choice of baseline indicators, in particular for baseline emissions, reasonable?	/1/ /3/	DR	Yes, the main baseline GHG indicators are volume of fuels used (Coal and Natural Gas), amount of heat supplied, amount of electricity consumed and electricity supplied to the grid by the project activity.		OK
D.4.3. Will it be possible to monitor the specified baseline indicators?	/1/ /3/	DR	Yes		OK

Checklist question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
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/ /3/	DR I	No negative environmental impacts are foreseen due to the proposed project activity. Hence no monitoring pertaining to this would be required. This has also been confirmed during site visit.		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/ /3/	DR I	Yes the responsibilities for project monitoring, management and reporting are clearly described in the monitoring plan.		OK
D.6.2. Is the authority and responsibility for registration, monitoring, measurement and reporting clearly described?	/1/ /3/	DR I	Yes		OK
D.6.3. Are procedures identified for training of monitoring personnel?	/1/ /3/	DR I	No, procedures for training of the monitoring personnel have been identified, though the monitoring plan indicated that the controlling department would be responsible for training. The procedures need to be in place before the site verification/project implementation.		(OK)
D.6.4. Are procedures identified for emergency	/1/	DR	No emergencies that can result in		OK

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Checklist question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
preparedness where emergencies can result in unintended emissions?	/3/	I	unintended emissions are likely to occur.		
D.6.5. Are procedures identified for calibration of monitoring equipment?	/1/ /3/	DR I	No procedures have been identified for calibration of monitoring equipment. The procedures need to be in place before project implementation.		(OK)
D.6.6. Are procedures identified for maintenance of monitoring equipment and installations?	/1/ /3/	DR I	No procedures have been identified for maintenance. The procedures need to be in place before project implementation.		(OK)
D.6.7. Are procedures identified for monitoring, measurements and reporting?	/1/ /3/	DR I	The responsibilities for monitoring, measurement and reporting have been delegated.		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)?	/1/ /3/	DR I	Yes		OK
D.6.9. Are procedures identified for dealing with possible monitoring data adjustments and uncertainties?	/1/ /3/	DR I	Not Applicable		OK
D.6.10. Are procedures identified for internal audits of GHG project compliance with operational requirements where applicable?	/1/ /3/	DR I	No procedures have been identified for internal audits, project performance reviews and corrective actions. The procedures need to be in place project implementation.		(OK)
D.6.11. Are procedures identified for project performance reviews?	/1/ /3/	DR I	See D.6.10		(OK)
D.6.12. Are procedures identified for corrective actions?	/1/ /3/	DR I	See D.6.1		(OK)

Checklist question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
<p>E. Calculation of GHG Emissions by Source</p> <p>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.</p>					
<p>E.1.Predicted Project GHG Emissions</p> <p>The validation of predicted project GHG emissions focuses on transparency and completeness of calculations.</p>					
E.1.1. Are all aspects related to direct and indirect GHG emissions captured in the project design?	/1/ /4/ /6/	DR	Yes, the main project GHG indicators are volume of fuels used (Coal and Natural Gas), amount of heat supplied and amount of electricity consumed.		OK
E.1.2. Are the GHG calculations documented in a complete and transparent manner?	/1/ /4/ /6/	DR	Excel worksheets showing the detailed GHG emissions calculations need to be provided to DNV.	CL-2	OK
E.1.3. Have conservative assumptions been used to calculate project GHG emissions?	/1/ /4/ /6/	DR	It is not clear how the extra amount of fuel being used in the project scenario will be accounted for. Also the assumptions leading to the estimation of fuel that would be required for the project activity need to be made clear.	CL-5	OK
E.1.4. Are uncertainties in the GHG emissions estimates properly addressed in the documentation?	/1/ /4/ /6/	DR	No uncertainties related to the GHG emission estimates have been identified.		OK
E.1.5. Have all relevant greenhouse gases and source categories listed in Kyoto Protocol Annex A been evaluated?	/1/ /4/ /6/	DR	Yes		OK

Checklist question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
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.					
E.2.1. Are potential leakage effects beyond the chosen project boundaries properly identified?	/1/ /4/ /6/	DR	The project is not expected to cause any significant leakage effects.		OK
E.3. Baseline Emissions The validation of predicted baseline GHG emissions focuses on transparency and completeness of calculations.					
E.3.1. Have the most relevant and likely operational characteristics and baseline indicators been chosen as reference for baseline emissions?	/1/ /4/ /6/	DR	Yes, the main baseline GHG indicators are volume of fuels used (Coal and Natural Gas), amount of heat supplied, amount of electricity consumed and electricity supplied to the grid by the project activity.		OK
E.3.2. Are the baseline boundaries clearly defined and do they sufficiently cover sources and sinks for baseline emissions?	/1/ /4/ /6/	DR	Yes		OK
E.3.3. Are the GHG calculations documented in a complete and transparent manner?	/1/ /4/ /6/	DR	The assumptions made in the baseline study for eg., those regarding the operating margin and the calculation of grid emission factor need to be supported with sufficient evidence/data. The basis behind the ratio calculated between installed power of new equipment and that of current electricity production facilities in the Romanian	GL-2	OK

Checklist question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
E.3.4. Have conservative assumptions been used when calculating baseline emissions?	/1/ /4/ /6/	DR	NPG is not clear. Similarly the other assumptions made need to be clearly shown in the form of calculations and verifiable source of data. It is also not clear how the t _{cc} values have been converted to t/yr. Excel worksheets are needed to verify the calculations done to estimate the baseline emissions. It is not clear whether the exclusion of BM emission factor while calculating the grid emission factor can be considered conservative. More justification and background verifiable calculations need to be provided in this regard.	GL-3	OK
E.3.5. Are uncertainties in the GHG emission estimates properly addressed in the documentation?	/1/ /4/ /6/	DR	No uncertainties in the GHG emission estimates have been identified.		
E.3.6. Have the project baseline(s) and the project emissions been determined using the same appropriate methodology and conservative assumptions?	/1/ /4/ /6/	DR	Yes		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/ /4/ /6/	DR	Yes, the project is expected to reduce 34 671 tCO ₂ /yr.		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/	DR 	No, the project is not expected to have any negative environmental impacts.		OK
F.1.2. Are there any Host Party requirements for an Environmental Impact Assessment (EIA), and if yes, is an EIA approved?	/1/	DR 	No an EIA is not required for this kind of project activity.		OK
F.1.3. Will the project create any adverse environmental effects?	/1/	DR 	No		OK
F.1.4. Are transboundary environmental impacts considered in the analysis?	/1/	DR 	No		OK
F.1.5. Have identified environmental impacts been addressed in the project design?	/1/	DR 	NA		
F.1.6. Does the project comply with environmental legislation in the host country?	/1/	DR 	This will be confirmed on receipt of the Approval letter from the Romanian Focal Point.	OK CAR 4	

Table 3 Resolution of Corrective Action and Clarification Requests

Draft report clarifications and corrective action requests	Ref. to Table 2	Summary of project participants' response	Final determination conclusion
OK CAR 4 Approval from the Host and the Annex 1 country needs to be obtained.	Table 1 A.3.1	Obtained. Annex 1 country – Letter from 23.09.2005 Host Country – Letter nr.10152 from 29.08.2005	A copy of the LoAs has been provided to DNV. The corrective action request has now been closed. OK
CAR 2 The last 3 columns of Table 2 of the monitoring plan need to be filled in correctly.	D.1.6	Done	OK The Corrective Action Request has now been closed.
CL 1 Source of data for the selected Coal and Natural Gas carbon content need to be identified.	B.1.2 B.1.5	No certified laboratory to make the fuel analysis has been identified in the Timisoara area; therefore, in accordance with the Decisions 2/CP3 and 13/CMP1, the "Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories " carbon content has been used for the calculation	OK The clarification request has now been closed.
CL 2 The assumptions made in the baseline study for e.g., those regarding the operating margin and the calculation of grid emission factor need to be supported with sufficient evidence/data. The basis behind the ratio calculated between installed power of new equipment and that of current electricity production facilities in the Romanian NPG is not clear. Similarly the other assumptions made need to be clearly shown in the form of calculations and verifiable source of data.	B.1.3 E.1.2 E.3.3	<i>Baseline for electricity production:</i> According to the JI Supervisory Committee Guidance on criteria for baseline setting and monitoring, a baseline may be established that is in accordance with appendix B to decision 9/CMP.1. In doing so selected elements of baseline and monitoring methodologies approved by the CDM Executive Board may be used, as appropriate. According to the ACM0002 methodology, the baseline shall be calculated on the basis of a combined margin. Except for solar PV and wind power, the recommendation regarding the weights for the build margin and for the operating margin is 50%:50%. The context of CDM projects is however	OK The justification provided is deemed sufficient and the clarification request has now been closed.

Draft report clarifications and corrective action requests	Ref. to Table 2	Summary of project participants' response	Final determination conclusion
<p>It is also not clear how the t_{cc} values have been converted to t/yr. Excel worksheets are needed to verify the calculations done to estimate the baseline emissions</p>		<p>quite different from the JI context. CDM projects are implemented in countries in development where a deficit in electricity production capacity is commonplace. In Romania, in contrast, according to the last report (2004) of the National Regulation Authority for the Electricity and Heat Sectors, the installed power of the national power grid (NPG) is about 17200 MW, while the peak load in 2004 was about 8000 MW. Moreover, there has been no addition and no major rehabilitation in the System for a very long time (10-15 years). Still, in the third quarter of 2006, no major capacity addition has been announced for the Romanian NPG, except for that of a nuclear unit that has been planned since a long time back.</p> <p>Consequently, the principle used within the CDM for determination of the build margin, i.e. on the basis of historical data concerning new power plant capacity added to the grid, would be quite difficult and inappropriate in the context of this project.</p> <p>Furthermore, the ACM0002 provides guidance on selecting alternative weights. According to ACM0002, project size ALONE cannot be used as an argument for alternative weights (with respect to the build and operating margins). However, we do note that the Project in Timisoara Sud is very small (18 MW), compared to the installed capacity of the NPG. We argue that the small relative size of the project COMBINED with the fact that a significant surplus of installed production capacity exists, and a nuclear power plant is to be added, implies that</p>	

Draft report clarifications and corrective action requests	Ref. to Table 2	Summary of project participants' response	Final determination conclusion
CL 3 It is not clear whether the exclusion of	B.1.3 B.2.2	<p>the Project will not have an impact on electricity production capacity being added to the grid. In other words, the implementation of the Project will influence the operation of the existing NPG installed equipment used to cover the electricity load curve and especially the equipment operating on the margin. Coal-fired power plants). Therefore we argue that using an operating margin on a 100% basis is an adequate way to estimate the Project's emission reduction.</p> <p><i>The calculation of Project's size relative to the NPG installed capacity:</i> The ratio between the installed power of the project in Timisoara and the installed power of the NPG is: $18/17163 = 0.1\%$. (see attached document, Annual Report 2004, page 18 or http://www.anre.ro/engleza/default_e.htm). According to the same source, the electricity production in year 2004 was 55817 GWh while the project in Timisoara is estimated to produce about 66862 MWh/yr. We get that the estimated annual production of the Project is approximately 0.12% of the NPG annual production. In order to verify the data mentioned in the PDD, we attach Chapter 6 of the National Yearly Book 2004, "Industry".</p> <p><i>The transformation of t_{co}/yr to t/yr:</i> For the transformation of t_{co}/yr into t/yr we have used a lower heating value of 1600 kcal/kg (the LHV of project for CET Timisoara Sud).</p> <p>Strong arguments concerning why a build margin would not give an adequate representation of the</p>	OK The justification provided is

Draft report clarifications and corrective action requests	Ref. to Table 2	Summary of project participants' response	Final determination conclusion
<p>the BM emission factor while calculating the grid emission factor can be considered conservative. More justification needs to be provided in this regard.</p>	E.3.4	<p>project baseline are presented under CL 2. Therefore, no further justification in relation to CL 3 should be necessary. Furthermore, the emission reductions due to displacement of electricity production in the national power grid are estimated conservatively through:</p> <ul style="list-style-type: none"> (i) Applying the minimum specific fuel consumption, 346 gcc/kWh for coal-based power production. (ii) Not including the CO₂ equivalent of CH₄ and N₂O emissions of the baseline. 	deemed sufficient and the clarification request has now been closed.
<p>CL 4 Additionality: Investment barriers have been presented to demonstrate the project additionality. It needs to be demonstrated that the baseline itself does not face this barrier. The project's additionality is also in jeopardy because of the claims made in the PDD that a "continued operation of the existing system (Baseline) would endanger the existence of SC Colterm SA in the long run." Does this fact then make the implementation of the project activity a must/ necessity for the project proponent?</p>	B.2.7 B.2.8	<p><i>Baseline facing investment barrier:</i> The baseline was determined under a business-as-usual scenario – i.e., assuming the absence of any interventions that would change the company activity trend. It is clearly stated in the PDD that "...for the crediting period (2008 – 2012) there was no plan for major retrofits or rehabilitations for the existing equipment in CET Timisoara Sud. In the absence of the JI project it is therefore justified to assume that the facility would have continued to operate in the same way as historically." Thus, it would not be relevant analyse this scenario in relation to investment barriers. From our point of view the barriers (legal, social, investment, financial, etc...) are related to the investment itself and represent factors that can limit the investment implementation.</p>	OK The explanation provided is deemed sufficient and the clarification request has now been closed.

Draft report clarifications and corrective action requests	Ref. to Table 2	Summary of project participants' response	Final determination conclusion
		<p><i>Danger of continued operation of the existing system:</i></p> <p>Regarding the claims made in the PDD we refer to the fact that without the Project, COLTERM will continue to operate under poor energetic, environmental and economic performance, generating high costs, that would burden the final consumers, and cause high environmental impact. This is elaborated upon in the last paragraph of the investment analysis (B.4, Step 2). The term "endanger" was misused on page 7; the absence of the Project would not threaten the existence of COLTERM. For this reason the sentence claiming that the existence of COLTERM would be endangered has been removed. We would like to add, however, that the capital saved by COLTERM (see investment analysis, B.4, Step 2) would be endangered.</p>	
<p>CL 5</p> <p>It is not clear whether the extra amount of fuel being used in the project activity (i.e. as shown in Annex 6), is being considered while calculating the emission reductions due to the project activity.</p>	<p>D.2.1 E.1.3</p>	<p>The extra amount of fuel being used in the project activity is considered in the calculation of the emissions reductions. This is clear from items 5, 8 and 13 of section E1. Some clarifying changes have been made to the items 5, 8 and 13 in order to demonstrate this more clearly. Further evidence is provided in the accompanying Excel worksheets.</p>	<p>OK</p> <p>The clarification request has now been closed.</p>
<p>CL 6</p> <p>The project's additionality has been demonstrated through a financial analysis and the assessment of investment barriers. The project's IRR without ERU revenues would be 12%, which is claimed to be below an</p>	<p>B.2.7 B.2.8</p>	<p>The IRR generally depends on several factors. Among the most prominent ones one finds</p> <ul style="list-style-type: none"> - the economic sector where the project is implemented - the project type, and - the financing conditions. <p>Generally speaking, for projects in the energy sector, characterized by bid investment values,</p>	<p>The explanation provided is deemed acceptable and the clarification request has now been closed.</p> <p>OK</p>

Draft report clarifications and corrective action requests	Ref. to Table 2	Summary of project participants' response	Final determination conclusion
<p>acceptable rate of return in Romania. However, there are other similar JI projects in Romania (by the same project proponent) where it is argued that an IRR of 11-12% is sufficient to overcome the financial barrier. This needs to be explained.</p>		<p>long payback periods and high risks, an acceptable IRR is around 15% for a usual discount rate of 10%. This level provides assurance to the investor that the project is economically and financially safe. In case of municipality-owned projects (public utilities) the success of the project depends on the population's affordability and capability of supporting the resulting final prices that cover the investment cost, financial cost and a reasonable level of profit.</p> <p>In relation to CL6, which concerns conditions of "similar" projects, it is important to point out that differences with respect to required IRRs may be explained by different financing conditions. In case of the Project (CET Sud), the source of financing is a commercial bank. In an otherwise similar project of particular relevance to CL6 (New 20 MW Cogeneration equipment in CET Timisoara Centru) the financier is the EBRD, a financial institution that can generally accept a lower IRR compared to commercial banks.</p>	

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