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Att: CDM Executive Board

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Your ref.:	Our ref.:	Date:
CDM Ref 1218	MLEH/MAVI	31 October 2007

Response to request for review
Berlin Binary Cycle power plant in El Salvador (1218)

Dear Members of the CDM Executive Board,

We refer to the issues raised in the requests for review raised by three Board members concerning DNV's request for registration of project activity 1218 "Berlin Binary Cycle power plant in El Salvador" and would like to provide the following initial response to the issues raised.

Comment 1:
The additionality of the project should be demonstrated using version 3 if the additionality tool.

DNV Response:

DNV acknowledges that the project should have applied this version of the additionality tool and would like to thank the EB for pointing out this.

La Geo, S.A. de C.V has thus revised the PDD in line with version 3 of the additionality tool. Nonetheless, DNV would like to emphasise that the validation opinion with respect to the project additionality does not change as a result of the re-assessment. The necessary changes, as required by the latest version of the additionality tool, have been incorporated in the revised final validation report and are enclosed herewith (Appendix 1).

Comment 2:
The comments by the DOE in the validation report, "The development of the Emergency plan is the responsibility of the contractor. This will be handled over to LaGeo according to the contract. Remark: unintendend emissions N/A", require clarification.

DNV Response:

The project proponent has granted a contract to develop an elaborated emergency plan. However, the project equipment does not originate any greenhouse gas emissions at all, neither regular nor unintended. The Berlin Binary Cycle plant does not produce steam with non-condensables, in contrast to a "flash" geothermal plant like the Berlin Phase I plant that uses the steam extracted from the geothermal well, causing carbon dioxide and methane emissions. DNV can confirm that

there will not be intended emissions due to the non appropriate operation of the plant. Therefore, this has been marked as not applicable in the DNV validation report.

Comment 3:

In addition, the issue of safety and specific training of the staff on isopentane handling and on related emergency procedures requires further clarifications.

DNV Response:
The technology of the Berlin Binary Cycle plant, with a working cycle using isopentane, is implemented in El Salvador for the first time. LaGeo, the project proponent and operator of the plant, therefore has sought support for plant construction as well as operation from Islandic Enex hf. Islandic Enex hf. has provided engineering, equipment, construction management, assembly and personnel training. LaGeo personnel have visited Islandic Enex facilities in Iceland and three LaGeo technicians were trained for maintenance and operation of the plant. Special attention was paid to the isopentane handling, the principal hazard associated with this liquid being its high flammability.

LaGeo has gathered its isopentane information in the following document provided to DNV: "Isopentane hazards and procedures for isopentane handling. Binary Cycle Berlin Plant" (PP response, Appendix 2). This document includes a description of the isopentane characteristics, the hazards during handling, the safety systems and procedures, and the training in isopentane handling in Binary Cycle Berlin Plant. The procedures are the following:
- Lay-out of the fire protection system
- Isopentane loading procedures
- Procedure in case of fire
- Evacuation procedure
- Emergency response procedure during construction stage.

The document also includes an appendix (PP response, Appendix 4) with the list of the La Geo staff trained in isopentane handling, during workshops carried out March 6-8 and March 13-15, 2007.

The workshops' programme was based on the Islandic Enex hf document provided to DNV: “Binary Plant Berlin. Operation and Instruction Manual. Design, Procurement and Construction Management for LaGeo S.A. de C.V." (PP response, Appendix 3). This document includes the safety requirements for isopentane handling. Especially the topics 2 (Safety Precautions) and 4 (Installation) are focused on isopentane handling. DNV has assessed the training and documents and these are deemed sufficient for the proper handling of isopentane.

We sincerely hope that the Board accepts our aforementioned explanations and we look forward to the registration of the project activity.

Yours faithfully
for DET NORSKE VERITAS LTD

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