



Response to request for review 1218 Berlin Binary Cycle Power Plant

Dear Member of the CDM Executive Board,

We refer to the issues raised in the requests for review raised by the three Board members concerning DNV's request for registration of the "Berlin Binary Cycle Power Plant" (Ref. 1218) and would like to provide the following clarifications for your perusal and review.

The points raised and our response to the same are indicated below.

Request 1

1. Version 3 of the Tool for the demonstration and assessment of additionality should be applied.

Answer:

Section B.5 of the PDD was modified according to the Tool for the demonstration and assessment of additionality. Please see the version 4 of the PDD, which is in the file called "CDM_PDD Cycle Binary Berlin 4".

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: unintended emissions N/A", require clarification.

Answer:

There will not be intended emissions due to the non appropriate operation of the plant. The plant will have the procedures and manuals to operate it safely and continuously, according to the engineering practices required for binary cycle technologies. Furthermore, the plant will have the procedures and manuals to respond to emergencies and contingencies. Additionally, the staff has been trained in all the aspects of plant operation.

The manuals and procedures will be developed by LaGeo under the requirements and guidelines of ENEX (the contractor), which will be given in during the commissioning period. The emergency manual will be developed until ENEX gives in the draft manual according the contract between LaGeo and ENEX.

The proposal for the commissioning schedule is described in the file named "Commissioning-draft".

Request 2

1. Version 3 of the Tool for the demonstration and assessment of additionality should be applied.



Please see answer to request 1.

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: unintended emissions N/A”, require clarification.

Please see answer to request 1.

Request 3

1. Version 3 of the Tool for the demonstration and assessment of additionality should be applied.

Please see answer to request 1.

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: unintended emissions N/A”, require clarification.

Please see answer to request 1.

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

Answer:

LaGeo, S.A. de C.V has a strong training program through local workshops and courses in Iceland about cycle binary systems because this technology is implemented by first time in El Salvador. The training program has several modules, which has been carried out since the first stage of the project and will be extended until the operation of the plant.

Due isopentane is a highly flammable fluid, it requires special measures for storage and handling, by this reason the staff has been attending several workshops about isopentane handling. The contents of the workshops includes: Hazards identification and binary cycle plants operation. The workshop concerning binary cycle plants operation was based in the “*Binary Plant Berlin Operation and Instruction Manual*” realized by ENEX. See the Operation and Instruction Manual for Berlin Binary Cycle Power Plant by ENEX in the file named “Binary Plant Berlin Manual (eng)”

Enex designed and installed a fire protection system in the plant, in order to minimize the risks and to protect the personnel and the equipments of the plant under fire conditions. The layout of this system could be appreciated in the annex A of the document “Hazards of isopentane and procedures for isopentane handling”.



LaGeo has developed a draft version of procedures for isopentane handling, which could be found in the document named “Hazards of isopentane and procedures for isopentane handling”, which contains a description of isopentane characteristics, main risks, hazards identification in each component of the plant, layout of the fire protection system, loading procedures, procedure in case of fire, evacuation procedure and emergency response procedure during construction stage. This document will be improved during commissioning period.

It is pending to develop the Emergency Plan and the Contingency Manual specifically to the characteristics of Binary Cycle Berlin Plant. This manual will be developed according to the instructions and manuals that Enx will give to LaGeo.