

UNFCCC Secretariat
Martin-Luther-King-Strasse 8
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Germany

Att: CDM Executive Board

Your ref.:
CDM Ref. 2930

Our ref.:
TANGZA/MLEH

Date:
23 April 2010

Response to request for review of the project activity 2930 “Huadian Beijing Natural Gas based Power Generation Project”

Dear Members of the CDM Executive Board

We refer to the requests for review raised by three Board members concerning DNV's request for registration of project activity 2930 “Huadian Beijing Natural Gas based Power Generation Project” and would like to provide the below initial response to the issues raised in the requests.

Comment 1: The DOE shall further substantiate the project start date in line with the “Glossary of CDM terms”, in particular it should confirm if other contracts such as the fuel supply contract were not signed earlier.

DNV Response:

The “Glossary of CDM terms” (version 5) states that

“Starting date of a CDM project activity is the earliest date at which either the implementation or construction or real action of a project activity begins.”...“In light of the above definition, the start date shall be considered to be the date on which the project participant has committed to expenditures related to the implementation or related to the construction of the project activity. This, for example, can be the date on which contracts have been signed for equipment or construction/operation services required for the project activity.”

“Minor pre-project expenses, e.g. the contracting of services/payment of fees for feasibility studies or preliminary surveys, should not be considered in the determination of the start date as they do not necessarily indicate the commencement of implementation of the project.”

As per the “Glossary of CDM terms”, the date on which the project participant has committed to expenditures related to the implementation or related to the construction of the project activity was verified by DNV as follows:

On 28 February 2006, Equipment Procurement Contract of Turbines and Generators was signed between Huadian Beijing Thermal Power Co., Ltd. and Shanghai Electric Group Co. Ltd.

On 3 April 2006, the Equipment Procurement Contract of Boilers was signed between Huadian Beijing Thermal Power Co., Ltd. and Wuhan Boiler Co. Ltd.

On 25 April 2006, the Civil Engineering Contract was signed between Huadian Beijing Thermal Power Co., Ltd. and Tianjin Power Construction Company.

On 8 June 2006, Construction Permit was issued by Hebei Power Supervision Co. Ltd.

On 13 March 2007, Loan Agreement for Huadian Beijing Natural Gas based Power Generation Project was signed between Huadian Beijing Thermal Power Co., Ltd. and Tianjin Power Construction Company and Bank Group.

On 11 July 2007, Guarantee Letter on natural gas supply was issued by Beijing Gas Group Co., Ltd.

On 6 March 2008, Natural Gas Purchase Agreement for Huadian Beijing Natural Gas based Power Generation Project was signed between Huadian Beijing Thermal Power Co., Ltd. and Beijing Gas Group Co., Ltd.

Therefore, DNV was able to verify and confirm that the signature of Equipment Procurement Contract of Turbines and Generators on 28 February 2006 /34/ was the earliest real action for the project, which is deemed as the starting date of the project activity. Relevant contracts and agreements were verified by DNV.

Comment 2: The DOE shall further explain how it has validated the financial calculations in line with the VVM (v1), para. 111, in particular, (a) the reason for updating the FSR with the FSR Supplementary and suitability of the input values taken from this document, including the annual heat generation, and (b) whether the interest rate was considered in the calculation of income tax.

DNV Response:

(a) The input parameters used in the financial analysis, except for the bus-bar tariff, are taken from the Feasibility Study Report (FSR) and Feasibility Study Report Supplementary (FSR Supplementary) developed by North China Power Engineering (Beijing) Co., Ltd. There are two parts for FSR: the main body and the FSR Supplementary. The main body and the investment and financial assessment were prepared in September 2005 and the FSR Supplementary was developed on 8 December 2005 by the same organisation, North China Power Engineering (Beijing) Co., Ltd. The FSR Supplementary includes more details on the information contained in the FSR. Hence, the FSR Supplementary is not be considered a updated FSR but a document providing further details on the information contained in the FSR.

The bus-bar tariff has been taken from Notice on the Bus-bar Tariff Adjustment for North China Power Grid issued by Beijing Development and Reform Commission on 28 April 2005 (Document No. JFG [2005]883). As the feasibility study reports have been prepared by independent agencies and approved by regulatory authorities, Beijing Development and Reform Commission, the input parameters used in the financial analysis can thus be considered information provided by an independent and recognized source. In the validation, DNV compared the input parameters used in the financial analyses with the data reported for other similar proposed CDM projects in China, the investment costs per MW, percentage of O&M costs relative to total investment costs, PLF and working capital relative to total investment cost in the validation report (Page 21), which shows the investment costs, working capital and O&M costs are in a reasonable range. Moreover, DNV also crosschecked total investment costs; heat and power generation and efficiency, residual value, electricity tariff and price of natural gas as described in the validation report, and DNV was able to confirm that the input parameters to the investment analysis are appropriate.

The FSR of the project activity was approved on 14 December 2005, thus 2 months prior to the decision to proceed with the project activity (the starting date of the project), which was on 28 February 2006/34/. Given this relative short period of time between approval of the FSR and the decision to proceed with the project activity it is unlikely in the context of the project that the input values would have materially changed. It is thus reasonable to assume that the FSR has been the basis of the decision to proceed with the investment in the project.

The “Guideline on the Assessment of Investment Analysis (Version 3) adopted at EB51 clarified that “in cases where a post-tax benchmark is applied the DOE shall ensure that actual interest payable is taken into account in the calculation of income tax”. Because the validation report and the final PDD were submitted for registration before the EB51 meeting, the actual interest payable was not taken into account in the calculation of income tax. To meeting the Guideline on the Assessment of Investment Analysis (Version 3), the project participants recalculate the IRR with the consideration of actual interest payable for the calculation of income tax. The result of IRR recalculation (without CER sales revenue) is 4.15%, which is slightly higher compared to the IRR value (3.69%) not considering interest payables in the calculation of the income tax. Nonetheless, the IRR remains clearly below the benchmark of 8%. The IRR recalculation spreadsheet is attached and verified by DNV.

Comment 3: The DOE shall further explain how it has validated the baseline identification, as the project activity supplies waste steam for heating while the baseline alternatives identified are purely power generation projects, in line with the requirements of AM0029, ver. 3 (p.2).

DNV Response:

The proposed project is a cogeneration project, which can provide electricity and district heating at the same time. In China, there are mainly two ways for the district heating, coal fired boilers and coal fired co-generation power plants (<http://www.chinaheatpipe.cn/Thermal/hr365.html>). For both ways coal will be used as fuel, so the proposed project will reduce the CO₂ emission in the district heating part.

It is our understanding that AM0029 does not prohibit the cogeneration of heat. However, AM0029 only provides for claiming the emission reduction related with power generation. Hence, as per AM0029 the project participants only claim emission reductions for the power generation part. No emission reductions are claimed for providing heat for district heating although the project is likely to reduce CO₂ emissions due to this as the heat for district heating would otherwise be provided by using coal as fuel. We would also like to note that another two registered natural gas fired cogeneration projects in China (Ref. 1320, registered in February 2008 and Ref. 1927, registered in June 2009) provide heat for district heating. As per described in the validation report, DNV can confirm that the construction of a 600 MW sub-critical coal-fired power plant is identified as the baseline scenario. We would also like to note that the revenue of the district heating is included in the IRR calculation spreadsheet as well.

We sincerely hope that the Board accepts our aforementioned explanations.

Yours faithfully
for DET NORSKE VERITAS CERTIFICATION AS



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