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Att: CDM Executive Board

Your ref.:	Our ref.:	Date:
CDM Ref 1728	VRI/PETMO	31 July 2008

Response to request for review "Jingdezhen Kaimenzi Ceramics Chemical Industry Group Limited Company CDQ Technology - Reform Project" (1728)

Dear Members of the CDM Executive Board,

We refer to the requests for review by three Board members concerning DNV's request for registration of the project activity **"Jingdezhen Kaimenzi Ceramics Chemical Industry Group Limited Company CDQ Technology-Reform Project"** (1728) and would like to provide the following initial response to the issues raised by the requests for review.

Comment 1: *Further clarification is requested on how the DOE has validated the additionality of the project activity in particular what data and evidences has been validated to support the investment and technical barriers.*

DNV Response:
<u>Investment barriers.</u>
Coke Dry Quenching (CDQ) is a new and advanced technology, which at present is not adopted in the Chinese Coke Industry. As per the letter issued by the Coke Industry Association of 12 August 2007[1], more than 90% of Chinese coke plants use traditional Coke Wet Quenching (CWQ) technology, primitive coke or small coke oven. China is also carrying out the task of energy saving and emission reduction, and in order to achieve this it promotes the introduction of the advanced CDQ technology. However, there is no regulative enforcement to adopt the CDQ process up to this date. The proposed project will be the first of the five large plants (the other four large plants are steel companies) in the Jiangxi Province as stated in the Notice for Speeding Up the Installation of the CDQ Technology in KMZ issued by the Jingdezhen Economic and Trading Committee on 15 August 2007[2]. Installing CDQ, facilities needs a larger upfront investment than installing CWQ technology; for the proposed project, the total investment for CDQ facilities accounts to 117 762 200 RMB while that for CWQ facilities accounts to 7 500 000 RMB. This was validated by checking Notice on record for reference regarding the CDQ construction of the proposed project[3] and the meeting minutes of the year end meeting in KMZ from 2004[4]. The

[1] Letter to recommend the CDQ technology development issued by China Coke Industry Association on 12 August 2007.

[2] Notice for speeding up the installation process of the CDQ technology in KMZ issued by Jingdezehen Economic & Trading Committee on 15 August 2007.

[3] Notice on Record for reference regarding the CDQ construction project by Jiangxi Jingdezhen Kaimenzi Ceramics Chemical Industry Group Ltd. Co. issued by the Jingdezhen City Development and Reform Committee on 1st March 2007.

project participant approached two banks seeking loan to the proposed project activity. A letter from the ICBC Jingdezhen Branch confirming the receipt of the loan application for the proposed project, stating as a pre-conditions for the loan the achievement of the CDM approval from the National Development and Reform Commission, was verified by DNV [5]. The bank also noted that the capability of repayment of the loan and the profit level are mainly dependant on the income from the CDM project. DNV also verified a letter form the China Construction Bank Jingdezhen Branch[6], stating that the project owner would be granted a loan to develop the proposed project activity from 2008 given that the project will be registered as a CDM project.

DNV has checked the Statistic of Annual Productivity of KMZ for the years 2005 - 2007[7] which shows that the profit of the project owner mainly comes from the sales of its products (coke, carbon black and gas). If we compare the revenue from the sales of electricity supplied to the grid with the proposed project activity without CDM benefits, with the revenue from the coke products, it accounts to 1.39%, given an annual electricity production of 136.79 GWh, and referring to the year 2007. The electricity price has been verified from the Feasibility Study Report (FSR)[8]. Due to the high investment cost for CDQ, the fact that the existing CWQ process complies with the local regulations and the relatively small profit of the proposed project activity without CDM benefits, it is likely that the project owner would chose to invest in the expansion of the coke production lines rather than the energy efficiency project.

Technical barriers

As per the approved FSR, the proposed project activity will adopt the most advanced CDQ technology in China. From the FSR it was verified that in order to assure the project carries on smoothly with reliable production, the key equipment (electric cylinder, coke ejector, vibration feeder and circulatory fan) need to be imported from abroad. The other components (such as arrester, testing components and frequency control in electric vehicle, the hoist rope, bearings, upgrade motor, low voltage electrical components, speed control, PLC, detection systems) can according to the FSR, be made locally at present but still require imported know-how for their manufacturing processes from abroad. Furthermore, according to the FSR, CDQ facilities being a new process equipped with advanced technology and complicated systems, higher level operators in terms of education and technical knowledge are required, and all staff operating in the CDQ power process must achieve a competence level regulated by the Ministry of Power. It is also recommended they received a pre-on-the-job training in the Japanese plants where the CDQ technology is operating. Consequently the personnel used in the existing CWQ process will need advanced training and knowledge. The FSR states the need for 28 persons operating the CDQ process and 16 persons for the power generation process.

Lack of locally made key equipment and know-how and qualified personnel for CDQ operation and maintenance are the major areas of technical barriers for the project. It is stated that CDM

[4] Meeting minutes of the 2004 year end meeting of KMZ of 22 December 2004.

[5] Response to the loan application regarding Jingdezhen Kaimenzi Ceramics Chemical Industry Group CDQ Technology Reform Project issued by ICBC Jingdezhen Branch on 25 October 2007.

[6] Response to the loan application regarding Jingdezhen Kaimenzi Ceramics Chemical Industry Group CDQ Technology Reform Project issued by China Construction Bank Jingdezhen Branch on 23 September 2007.

[7] Jingdezhen Kaimenzi Ceramics Chemical Industry Group Ltd. Co. – Statistics of Annual Productivity & Incomes of KMZ related to the year 2005 (dated January 2006), year 2006 (dated January 2007) and year 2007 (dated January 2008).

[8] Beijing Shougang Design Institute Beijing China & Japan Energy Saving & Environmental Protection Engineering Ltd. Co. - Feasibility Study Report of the Jingdezhen Kaimenzi Ceramics Chemical Industry Group Ltd. Co. CDQ Technology Reform Project, dated December, 2005 and approved by the Jingdezhen City Development and Reform Committee on 1st March 2007.

benefits will support hiring highly qualified personnel and to increase the know-how in operation and maintenance of this type of equipment and that the CDM thus alleviates this barrier.

In conclusion, it is DNV's opinion that it has been demonstrated that the project faces investment barrier and technical barriers which will be alleviated through CDM benefits. It has also been demonstrated that the investment and technical barriers would not affect the baseline scenario selected, as the current practice is the import of electricity from the Central China Power Grid.

Comment 2: *Further clarification is requires on why only the investment costs of a CDQ compared to wet quenching in the baseline are considered while ignoring the cost savings of power production.*

DNV Response:
The cost savings of power production has been calculated in the FSR in the chapter Technical Economy Target/Calculation of product sales revenue. The proposed project activity is expected to generate 136.79 GWh electricity annually, resulting in an annual revenue of 38.3 million RMB, considering the electricity tariff of 0.28 RMB/kWh as confirmed from the FSR. DNV verified the numbers above during the validation process, although it was not clearly stated in the PDD or the validation report. DNV refers to the PP's response for more details on this question.

Comment 3: *Further clarification is required how the DOE has validated the start date of the project activity.*

DNV Response:
The following chronological events demonstrate how the CDM revenues were considered for the project activity prior to starting date of the project:

- The Feasibility Study Report (FSR) dated December 2005, was approved by the Jingdezhen City Development and Reform Commission on 1 March 2007. In the approval of the FSR it is stated the project is noticed in association with high financial investment and lower economic returns, having the financial support from foreign countries will be the key to ensure the successful implementation of the proposed project activity.

- During a Board of Directors Meeting of 27 May 2007[9], the General Manager, considering the uncertainties and complexities of the project installation, suggested adopting the CDM application for the project development, and the board decided that the President is in charge of seeking CDM support and the General Manager is responsible for the CDQ technology introduction.

- On 12 August 2007 the project proponent received a letter from the China Coke Industry Association[10] in which it is recommended to apply for, and develop CDM projects to proactively support the new CDQ technology into the coking industry in China.

- The project owner, Jiangxi Jingdezhen Kaimenzi Ceramics Chemical Industry Group Limited Company (KMZ), asked two banks for loan for the proposed project activity. On 25 October 2007 the ICBC Jingdezhen Branch issued a letter confirming the receipt of a

[9] Jingdezhen Kaimenzi Ceramics Chemical Industry Group – Board of Directors Meeting of 27 May 2007.
[10] Letter to recommend the CDQ technology development issued by China Coke Industry Association on 12 August 2007.

loan application from KMZ for the Coke Dry Quenching Technology Reform Project[11]. A precondition of the loan requirements was to obtain the CDM approval from the National Development and Reform Commission. The China Construction Bank Jingdezhen Branch replied on 23 September 2007 that a loan would be granted for the proposed project activity from 2008 given that the project will be registered as a CDM project[12].

At the time of the submission of the proposed project for registration, neither the bank loan agreement nor the purchase order was in place. At the time of the publishing of the PDD, the expected starting date of the construction of the project was 1 October 2007, and this was decided to be the project starting date. As neither a bank loan was signed, any equipment ordered nor any construction had started at the time of the submission of the project, this date was kept. It should be mentioned that a bank loan was approved on 25 July 2008, five months after the submission of the proposed project.

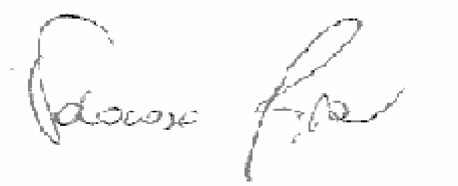
Comment 4: *Further clarification is required on how the DOE has validated the baseline determination, in particular that the continuation of grid electricity imports is more economically attractive than the project activity undertaken without CDM.*

DNV Response:
As described in DNV response of Comment 1 it has been demonstrated that the project faces investment barrier and technical barriers which will be alleviated through CDM benefits. DNV compared the investments costs per MW and the electricity tariff of the proposed project activity with data reported for other similar proposed CDM projects located in the Jiangxi Province, and it was able to confirm that the this parameters are reasonable and adequately represent the economic situation of the project.
Thus it is DNV’s opinion that the continuation of grid electricity imports is more economically attractive than the project activity undertaken without CDM.

We sincerely hope that the Board accepts our aforementioned explanations.

Yours faithfully
for DET NORSKE VERITAS CERTIFICATION AS

Peter Molin
Project Manager
DNV Int. Climate Change Services



Rita Valoroso
Project Manager
DNV Int. Climate Change Services

[11] Response to the loan application regarding Jingdezhen Kaimenzi Ceramics Chemical Industry Group CDQ Technology Reform Project issued by ICBC Jingdezhen Branch on 25 October 2007.
[12] Response to the loan application regarding Jingdezhen Kaimenzi Ceramics Chemical Industry Group CDQ Technology Reform Project issued by China Construction Bank Jingdezhen Branch on 23 September 2007.