



The CDM Executive Board
UNFCCC Secretariat
CDMinfo@unfccc.int

March 19, 2008

Re: Request for review of the request for issuance of certified emission reductions for the CDM project activity "Lawley Fuel Switch Project, South Africa" (0177) for the monitoring period 1 Jan 2005 – 31 December 2005

Dear CDM Executive Board Members,

SGS has been informed that the request for issuance of certified emission reductions for the CDM project "Lawley Fuel Switch Project, South Africa" (0177) for the monitoring period 2005 has received three requests for review from members of the Board.

The requests for review are based on the identical reasons as outlined below. We provide you here with a detailed answer in response to the concerns expressed within the Requests for Review. Based on the substantive arguments below, we see no ground for the allegation of incompetence.

Requests for Review:

Requests for Review dated 6 & 7 March 2008:

"The plant expanded the annual brick output from 73 million to 80 million in this monitoring period and the PP claimed the emission reductions only for the baseline output of 73 million bricks by using a production conversion factor. However, the methodology requires that the project activity does not increase the capacity of final outputs. CAR 7 was raised in this regard and it was closed because according to the DOE, the approach was conservative. However:

1. Further clarification is required on how the DOE verified that the monitoring report is in line with the methodology and how it verified the conservativeness of the project emissions associated with this approach.
2. Substantiated clarification of the PP and DOE is required on the impact of the higher production rate on the conclusions on the additionality of the project activity, if this higher production rate was assumed at the moment of registration of the project activity".

Response to 1

Please refer to the following information stated in the **PDD on p17** (highlighted):

"The maximum potential firing capacity of the Lawley 50 chamber Transverse arch (TVA) kiln, before and after the fuel switch was 98 million bricks/annum (Gross output).

The constraint to increasing the then production output of 72 million bricks/annum (Gross), before and after the fuel switch, was the then installed drying capacity of the plant comprising some 19 chamber dryers.

The construction sector in South Africa is currently in the midst of a boom period with demand for clay bricks escalating.

Therefore Corobrik decided to increase the output of the Lawley plant in order to meet this demand. This was achieved by increasing the drying capacity of the plant by 6 more dryers. The new dryers were commissioned 6 months after the fuel switch (June 2005). The overall capacity of the plant remained

unchanged since the TVA kiln remained unchanged. Due to the increase in drying capacity of the plant the annual brick output was increased from 73 million/annum to 80 million/annum for 2005 and 92 million/annum for 2006. The increased output was only related to increased demand in the market and not to the fuel source used and could have been met by Lawley still operating on coal.

It is important to note that the baseline used is static (73 million/annum) and does not increase over time. In the project case only the amount of fuel used and therefore the emissions relating to the production of 73 million/annum and not 92million/annum will be used. The static baseline is in line with the overall conservative approach followed in the application of the methodology.

Summary

The methodology '*AM008 Industrial fuel switching from coal and petroleum fuels to natural gas without extension of capacity and lifetime of the facility*' states as bullet #4 under the applicability criteria:

"The project activity does not increase the capacity of final outputs and lifetime of the existing facility during the crediting period (i.e. this methodology is applicable up to the end of the lifetime of existing facility if shorter than crediting period)".

Regarding capacity of the final output of the facility

- The capacity of the facility is ultimately linked to the kiln size, limiting output to 98 million bricks per annum (gross). This has remained constant before and after the fuel switch.
- The actual output fluctuates depending on market demand and is catered for through adjustments of the number of drying chambers, number of shifts and workflow optimization.
- Due to market demand the output of the brick factory did increase from 73 million bricks to 80 million bricks per annum for 2005 and 92 million bricks per annum for 2006. This increase is not related to the project activity as has been stated at the time of validation and as described in the PDD.
- The number of drying chambers increased, however it should be noted that the drying chambers utilize only waste heat from the kilns, no supplementary heating is used. The drying chambers do not have gas burners.
- There are similarities between the size of a boiler (nameplate capacity) and the actual output. The guidance is clear that the nameplate capacity is the deciding factor. It is unfortunate that from the PDD it could be interpreted that the dryers are part of the capacity. However as they are cubicles using waste heat from the kiln they can restrict the output, but do not change the kiln capacity of the Lawley factory.

Conservativeness of the emission reduction

- The PPs have chosen to limit the claim for emission reductions to 73 million brick per annum cap. This limitation expressed the voluntarily conservative approach chosen by the PPs. It is not required by AM0008 version 1.
- Theoretically, if the methodology (AM0008 version 1) was still available, the actual firing capacity of the facility could be taken as the cap and the emission reduction calculated accordingly. This would allow the emission reduction associated with the fuel switch for the current volume of 80 [92] million bricks to be claimed by the project participant. The emission reduction e.g. associated with the output of 92 million bricks would be 23 900 ton CO2 equivalent, therefore higher than under the 73 million brick cap; also, the use of a monthly (instead of yearly) production conversion factor is a further conservative approach.



- The approach taken is providing a conservative volume of real (conversion has been done), measurable (gas flow rates and coal consumption based on actual values) and long term emission reduction (no potential for reversal of emission reductions).
- At the time of writing the PDD, conservativeness of the CDM projects were seen as a crucial element is maintaining the credibility and integrity of the entire Kyoto protocol. Over time this sentiment has changed and currently additionality has received specific focus and attention, over and above what a methodology would require. This project with an extra layer of conservativeness built in to the PDD, over and above what is required by the methodology reflects the thinking of CDM project developers and DOE approaches in 2005. Although unnecessary, the project should not be penalized for taking this overly precautionous approach at the time of validation.

Response to 2

Additionality of the Lawley fuel switch project

The additionality as required per AM0008 is calculated and summarized in the table below, for the following 3 scenarios

- As per the registered project capped on 73 million bricks;
- A hypothetical scenario based on all the actual brick production for the year (92 million bricks);
- A hypothetical scenario based on the maximum capacity of the facility corresponding to 98 million bricks produced.

Table 1: NPV calculations

Brick production per annum	73 million	92 million	98 million (maximum capacity)
NPV without CER income	-17.7 million ZAR	-25.7 million ZAR	-28.2million ZAR
Estimate CER volumes (rounded values)	19 000	23 900	25 500
NPV with CER income	-15.2 million ZAR*	-20.4 million ZAR	-22.6 million ZAR

* The PDD states a NPV with the income from CERs of -2.3 million ZAR, this was however updated to actual CER as per the monitoring report and current exchange rates

The impact of the production rate does not change the conclusion of the additionality, as required by AM0008, as shown in the table above. The NPV remains negative as natural gas costs was ZAR 21.5 /GJ and coal cost ZAR 3.74/GJ as stated in the PDD. Using the current costs of natural gas ZAR 33.4 /GJ and coal cost ZAR 6.21/GJ the NPV remain negative.

In terms of common practice, South Africa has large reserves of coal, and coal has been, and is, the cheapest energy source for industrial facilities. There is no legislation or policies restricting the use of coal in South Africa, and, in addition, there are no incentives to promote the use of natural gas in any sector. Especially in the brick industry coal is the dominant energy sources.



Conclusion

The project met at the time of validation all the conditions set forth in the approved monitoring methodology AM0008 and is still continuing to meet them.

It is acknowledged that it is current common practice to give preference to compliance with the methodology instead of compliance with the PDD. Especially in this case where the PDD was developed without the benefit of all the other registered PDD's and revised templates or guidance currently available, the Project should be measured against the criteria set in the AM0008. The Project activity did not increase the capacity of final outputs. Lawley factory capacity is the 50 chamber Transverse arch (TVA) kiln producing 98 million bricks/annum (Gross output). This capacity has remained constant during the fuel switch and is still the same in 2008.

Based on the above substantive arguments, we look forward to the issuance of CERs for the fuel switch project activity.

We hope that the above clarifications and information addresses the concerns of the Board. We however apologise if it was not sufficiently clear from our verification and certification report.

Siddharth Yadav (Tel. 0044 7712785772, 01276 697837) is the SGS contact person during the review process and is available to answer questions, if needed by the Board.

Yours sincerely,

Siddharth Yadav
Technical Reviewer
Siddharth.Yadav@sgs.com
Tel : 0044 1276 697837
M: 0044 7712785772

Irma Lubrecht
Technical Reviewer
Irma.Lubrecht@sgs.com
T: +31 181 693287
M: +31651851777