Mr. Rajesh Kumar Sethi
Chair, CDM Executive Board
UNFCCC Secretariat
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8th December 2008

Dear Mr. Sethi,

Re: Request for review of the request for registration for the CDM project activity 'Guangdong Huizhou LNG Power Generation Project' (Ref. No. 1884)

SGS has been informed that the request for registration for the proposed CDM project activity 'Guangdong Huizhou LNG Power Generation Project' (Ref. No. 1884) is under consideration for review because three requests for review have been received from members of the Board.

The requests for review are based on the reasons as outlined below. Through this letter, we would like to provide responses to the issues raised in the requests for review and provide additional information.

Requests for Review 1-3, Issue 1:

The DOE should further clarify how it has validated that gas price and tariffs are unlikely to increase

SGS' Response to Issue 1:

1.1 About Gas Price

We would like to point out that in the validation report, SGS deemed the gas price unlikely to drop to a level where the IRR goes over the benchmark, when the gas price increases, the IRR would be even worse. As clarified in the response from the PP, the price of LNG used in the investment analysis of the Guangdong Huizhou power project in the PDD was estimated according to the pricing clause of the Liquefied Natural Gas(LNG) Sale and Purchase Contract signed between the project owner and the LNG supplier Guangdong Dapeng LNG Company Ltd. (Contract Number: DPLNG-CR-CT-HZ-001, Annex 1-1)

On page 29 of the contract, it is stated that The LNG price is determined in correlation with the spot crude oil price in the JCC international market and the upper limit of the Free-On-Board price of the JCC crude oil is defined at USD25/barrel. (Annex 1-1)

The price of crude oil has stayed higher than USD25/barrel ever since January 2004 (http://www.tnc.com.cn/news/detail/1/1/d115428.html and http://omrpublic.iea.org/omrarchive/10dec04pri.pdf). Besides, as per the document of provincial pricing bureau dated 03/09/2007 (Annex 1-2), the natural gas price for natural gas power plants has increased to 1.5961 RMB/ m3, higher than the value of gas price used in the IRR analysis of the PDD (1.55 RMB/ m3). This has been reported in the validation report dated 17/06/2008 revision 1.

It has been validated that the gas price used in the IRR calculation in the PDD is conservative.

1.2 About Tariffs

In accordance with section 4 of the Notification on Electric Power Tariff Reform by the Office of national council issued on 09/07/2003, newly-built power plants in the China are required to participate in on-grid tariff bidding. The purpose of on-grid tariff bidding is to introduce market competition into the tariff pricing. (Annex 1-3)

Result of pilot operation of on-grid bidding has showed that the tariffs for individual participating power plants could significantly decrease as a result of increased market competition. (http://www.chinapower.com.cn/article/1000/art1000256.asp)

The tariff used in the PDD is from the FSR of the project. In China, FSRs are prepared by accredited third parties. Assumptions and data sources for the economic evaluation of a project in the approved FSR are required to be based on relevant national standards and criteria. The FSR for the proposed CDM project was prepared by an independent third party entity accredited by the relevant national authority to carry out feasibility studies for new projects.

The NDRC approved the FSR for the project in July, 2004. In the approval for the FSR of the project, the NDRC requires the project to participate in the on-grid bidding after the power plant has been built. The approval for the FSR of the project has been provided to and validated by SGS.

Also, as clarified in PP's response, the bus-bar tariff used in the IRR analysis of the project (489 RMB/MWh (including VAT)) is higher than the 2004 reference tariff for coal-fired power plants (405 RMB/MWh (including VAT)). (Annex 1-4, Annex 1-5)

In China, relevant authority determines bus-bar tariff of projects. Considering the fact that the FSR has been approved by the NDRC and the bus-bar tariff used in the PDD (FSR) has been accepted by the NDRC, it is accepted that the bus-bar tariff is valid and applicable at the time of the investment decision.

It has been validated the tariff is unlikely to increase foreseen by the project owner at the time of investment decision making.

Request for Review 1-3, Issue 2:

The DOE should clarify how it has validated the prior consideration of the CDM in line with EB 41, Annex 46, paragraph 5

SGS' Response to Issue 2:

The timeline of the proposed project activity has been provided in the response made by the PP and the revised PDD. (Annex 1)

1. Meeting was held in Zhuhai City in August 2002, when the project investors was first aware of CDM potential in LNG power generation projects. (Evidence has been uploaded during registration request as Appendix 1-Carbon Credits Seminar August 2002).
2. *"Case Study of Clean Development Mechanism Project of Zhuhai Power Plant Project Phase II"* was initiated in February 2003 by the project investor and completed in November 2003 by an independent third party to evaluate the CDM potential on the natural gas-fired power plant projects in China (Annex 2-1).
3. Meeting on discussion of CDM implication in natural-gas-fired projects in the management team of project investor was held in February 2004, requiring the CDM consideration in the Huizhou LNG power generation project based on the outcomes of the "Case Study of Clean Development Mechanism Project of Zhuhai Power Plant Project Phase II" (Annex 2-2).
4. FSR with financial analysis considering the impacts of potential CDM revenue was carried out by Guangdong Electric Power Research Institute, an accredited third party institute, in February 2004 (Annex 2-3). The results of the analysis show that the financial internal return rate (FIRR) can increase from 6.12 percent to 8.18 percent after taking into account the CER revenue, higher than the investment benchmark of 8 percent, thus the CDM will dramatically increase the financial viability of the proposed project.
5. Shareholder investment decision meeting was held in May 2004. The project investors were aware of the financial non-viability of the project without CDM revenues and decided to proceed with the project taking into consideration the potential CDM contribution to the project's financial internal return rate (Evidence has been uploaded during registration request as Appendix 2 - Investor Meeting Minutes Reflecting Consideration of CDM).
6. Project construction started on September 23rd, 2004 (Available from

http://www.people.com.cn/BIG5/paper49/13041/1171618.html).

7. Notice was issued by the project entity in March 2005 to establish CDM working team so as to start the CDM project application (Annex 2-4).
8. Consulting contract of PDD was signed with Tsinghua University in July 2006 (Annex 2-5) .
9. Project Idea Note of the project was submitted to the World Bank in September 2006, after the methodology AM0029 was approved in May 2006 (Annex 2-6).
10. Version 01 PDD of the proposed project was published on UNFCCC website for public commenting from 15/09/2006 to 14/10/2006.
11. Letter of Intent was countersigned between the World Bank and the project proponent in October 2006 (Annex 2-7).
12. Emission Reductions Purchase Agreement was signed by the project entity and International Bank for Reconstruction and Development (IBRD) in December 2007 (Annex 2-8).

The project started construction on 23/09/2004, which is the start date of the project activity.

In accordance with *paragraph 5, EB 41, Annex 46, t*he PP has demonstrated that CDM was seriously considered in the decision to implement the project activity and continuing and real actions were taken to secure CDM status for the project in parallel with its implementation by providing relevant evidences. The evidences mentioned above have been provided and validated.

Request for Review 1-3, Issue 3:

The DOE should clarify how they have validated that the project activity will not constrain natural gas supply in the region in accordance with the methodology

SGS' Response to Issue 3:

The Meth Panel clarification AM _CLA_0091 states that "notwithstanding where the natural gas is imported from, this applicability condition is to be implemented by demonstrating, through monitoring, that the full demand of natural gas by the project activity is dedicatedly met with imported gas, and where dedicated imports is not the case, the monitoring should show that satisfying the project activity's demand for natural gas will not lead to a shortages in supplies of the gas to other projects within the country."

The LNG supply contract signed between the project entity and Dapeng LNG company shows that the full demand of liquefied natural gas by the proposed project is dedicatedly supplied by Dapeng LNG company (Annex 1-1) where the imported Australian LNG is being distributed to contracted users. As per requirement of the clarification, monitoring of sources of LNG supply has been included in the monitoring plan of revised PDD (Annex 1) to make sure this applicability is met.

Therefore, according to AM0029 version 1, it is of SGS opinion that the project activity will not constrain LNG supply in the region.

Request for Review 1-3, Issue 4:

The DOE should give a positive validation opinion on the elimination of baseline alternatives and levelized cost comparison of remaining alternatives

SGS' Response to Issue 4:

AM0029 requires that the baseline alternatives should include all possible realistic and credible alternatives that provide outputs or services comparable with the proposed project, these alternatives need not consist solely of power plants of the same capacity, load factor and operational characteristics (i.e. several smaller plant, or the share of a larger plant may be a reasonable alternative to the proposed project activity). Moreover, they should deliver similar services (e.g. peak vs. base load power).

In Sub-step 1a under Section B.4 of the PDD version 3 that was submitted for registration request, fourteen alternatives were included, which are Natural Gas power generation using combined cycle gas turbine (CCGT) without CDM, Natural Gas power generation using single Gas Turbine technology, Light Oil based

power plants using CCGT, Coal based power plant with Sub-critical boilers, Coal based power plant with Supercritical boilers, Wind, Nuclear, Hydro Run-of-river, Hydro Daily regulating, Hydro Monthly regulating, Hydro Seasonal regulating, Hydro Yearly regulating, Hydro Multi year regulating and import from Three Gorgers.

All the alternatives mentioned above are in compliance with all applicable legal and regulatory requirements.

Natural Gas power generation using single Gas Turbine technology is not plausible because it is not widely used in SCPG due to the lower thermal efficiency of it than that of the CCGT.

Wind and nuclear are not plausible because they do not deliver outputs and services for peak load.

Hydro Run-of-river, Hydro Daily regulating, Hydro Monthly regulating and Hydro Seasonal regulating are not plausible because they do not deliver outputs and services comparable to the project activity.

Hydro Yearly regulating and Hydro Multi year regulating are not plausible due to their long construction period.

Import from Three Gorgers is not plausible because it does not deliver outputs and services comparable to the project activity with full-year peak regulation capacity.

We deemed the elimination of alternatives mentioned above had been well justified in the PDD, in response to this request for review, the validation opinion on this point has been added into revised validation report (Annex 2).

Five scenarios (the Proposed Project without CDM, 300 MW Coal-fired Sub-Critical, 600MW Coal-fired supercritical, 600MW Coal-fired sub-critical and 180MW Oil fired CCGT) were identified to conduct further investment analysis in the PDD.

The levelised cost comparison of the five scenarios has been done in the PDD to show that the proposed project without CDM is not the baseline alternative with the best financial indicator, ie, levelised cost. The alternative with the lowest levelised cost, which is 600MW Coal-fired sub-critical, is selected as the baseline scenario.

The sensitive analysis of the alternatives has been carried out taking into consideration of the factors including the load factor and fuel cost to demonstrate that the conclusion regarding the financial attractiveness is robust to reasonable variations in the critical assumptions.

It has been validated that the main parameters used to calculate the levelised cost are mainly from *Design reference cost index for thermal power transmit electricity and transformer electricity projects (2004)* issued by China Electrical Power Press, which is a reliable source and has been applied widely for the design of power plants, as has been verified by SGS. SGS assessor verified the data input used in the levelised cost analysis against this index, and compared the results with other LNG power generation projects and Natural Gas power generation projects which had already been registered as CDM project. It was found that the calculation results are reasonable and reliable, in response to this request for review, this has been elaborated in revised validation report.

Request for Review 1-3, Issue 5:

The DOE should explain how it has validated that the monitoring plan complies with the methodology

SGS' Response to Issue 5:

In compliance with AM0029 version 1, the following parameters are included in the monitoring plan of the project:

For Baseline Emission:

Build Margin emission factor for the grid.($EF_{BL,CO2,y}$). This parameter will be from NDRC, or if not available in a timely manner, shall be calculated based on the procedures described in section B.6.1 and the relevant parameters should be monitored ex-post;

Relevant parameters used for calculation of Build Margin emission factor for the grid include:

The amount of fuel i consumed by relevant power sources ($F_{i,j,y}$) from China Energy Statistical Yearbook;

The net calorific value (energy content) per mass or volume unit of a fuel i ($NCV_{i,}$) from China Energy Statistical Yearbook;

The oxidation factor of the fuel i ($OXID_i$) from 2006 IPCC Guidelines for National Greenhouse Gas Inventories;

CO2 emission factor per unit of energy of the fuel I ($EF_{CO2,i}$) from 2006 IPCC Guidelines for National Greenhouse Gas Inventories;

The amount of electricity generation by source j in year y ($G_{j\ ,\ y}$) from China Electric Power Yearbook;

Station service power consumption rate of source j in year y ($e_{j,y}$) from China Energy Statistical Yearbook;

Efficiency of most advanced coal-fired power technology that is commercially available ($EE_{coal,adv}$) from Notice on the determination of emission factors of regional power grids by Chinese CDM DNA or other official statistics data;

Efficiency of most advanced oil-fired power technology that is commercially available ($EE_{oil,adv}$) from Notice on the determination of emission factors of regional power grids by Chinese CDM DNA or other official statistics data;

Efficiency of most advanced gas-fired power technology that is commercially available ($EE_{gas,adv}$); from Notice on the determination of emission factors of regional power grids by Chinese CDM DNA or other official statistics data;

Installed capacity of source j in year y in SCPG ($CAP_{j,y}$) from China Energy Statistical Yearbook or other official statistical data;

Electricity supplied to the grid by the project (EGy). This parameter will be monitored by Electricity meter at project boundary with accuracy level of 0.2S. The meters shall be calibrated half a year. Sales receipts will be used for double check.

For Project Emission:

Annual fuel(s) consumption in project activity ($FC_{LNG,y}$). This parameter will be monitored through flow meters with accuracy of 0.5% continuously both by supplier and project owner for cross-verification. The LNG consumption will be aggregated automatically and recorded daily. Calibration will be carried out every month.

Net Calorific Value(s) of the fuel used in the project activity ($NCV_{f,y}$). The supplier-provided data will be used instead of country specific value once the project is put into operation.

Fuel emission factors for fuel used in the project activity ($EF_{CO2,LNG,y}$). IPCC default value will be used.

Oxidation factor of LNG($OXID_{gas}$). IPCC default value will be used.

Annual quantity of Diesel as startup fuel consumed in project activity($FC_{diesel,y}$). This parameter will be monitored through Diesel flow meter and recorded daily.

Net Calorific Value(s) of the diesel used in the project activity ($NCV_{diesel,y}$). This parameter will be from Chinese Energy Statistical Yearbook or Supplier-provided data if available.

Emission factor for diesel consumed as startup fuel in the project activity ($EF_{CO2,diesel,y}$). IPCC default value will be used.

Oxidation factor of diesel($OXID_{diesel}$). IPCC default value will be used.

For Leakage

As shown in the ex-ante determination of emission reductions in Section B.6.3 of the PDD, LEy is zero. As per the Approved Monitoring Methodology AM0029 version 1, parameters for leakages are not required to be monitored thus are not included in the monitoring plan of the project.

For monitoring of liquefied natural gas source

Liquefied natural gas source will be from relevant documents and data provided by the gas supplier.

The above mentioned information has been added in the revised validation report (Annex 2).

We apologize if the initial validation report was unclear and hope that this letter and the attached documents address the concerns of the Board. If further information is required, Joe Sun (mailto:Joe.Sun@sgs.com +86 13817041095) will be the contact person for the review process and is available to address questions from the Board during the consideration of the review in case the Executive Board wishes.

Yours sincerely,

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Enclosures:

Annex 1: Revised PDD

Annex 2: Revised validation report

Annex 1-1: Liquefied Natural Gas(LNG) Sale and Purchase Contract signed between the project owner and the LNG supplier Guangdong Dapeng LNG Company Ltd. (Contract Number: DPLNG-CR-CT-HZ-001)

Annex 1-2: Notification of the sale price of LNG from Guangdong Dapeng Terminal issued by Guangdong Provincial pricing bureau dated 03/09/2007

Annex 1-3: Notification on Electric Power Tariff Reform by the Office of national council issued on 09/07/2003

Annex 1-4 Notification of easing the tariff conflicts in China Southern Power Grid issued by Guangdong Pricing Bureau on 08/06/2004

Annex 1-5 Notification of easing conflicts in tariff pricing and standardization guidance issued by Guangdong Pricing Bureau on 16/04/2004

Annex 2-1: Minute of Invest and Zhuhai Electric Power Company held in February 2003

Annex 2-2: Minute of meeting on discussion of CDM dated 13/02/2004

Annex 2-3: Agreement on Financial Assessment of FSR dated February, 2004

Annex 2-4: Notice of establishing CDM working team dated 09/03/2005

Annex 2-5: Consulting contract of PDD dated 19/07/2006

Annex 2-6: PIN of the project dated 13/09/2006

Annex 2-7: LOI between world bank and the project owner dated 27/10/2006

Annex 2-8 : ERPA signed between the project entity and International Bank for Reconstruction and Development (IBRD) dated 19/12/2007