Response to the request for review for the CDM project activity

"Jiangxi Pinggang Group 20MW Waste Gas and Surplus Steam based Captive Power Plant" (Ref. no. 2499)

Dear Sirs,

Please find below the response to request for review formulated for the CDM project with the registration number 2499.

Yours sincerely,

Project Participant:

Pingxiang Iron and Steel Group Co,.Ltd. P. R. China
(Project owner)

(Ms. Zhuxia) 朱霞

Issue 1:

The DOE shall further substantiate the existence of: (i) investment barrier, in particular, rejection of the loan application seems to be due to submission of incorrect economic analysis to the bank, and (ii) technological barriers, in accordance with the Sub-step 3a of Tool for the demonstration and assessment of additionality, v05.2.

Response by PP:

(i) The proof of Investment barriers in PDD is further clarified on two aspects:

1) Barriers of investment by equity.
2) Lack of loan from commercial bank.

For aspect 1):

According to an assessment report for the financial statement of PP in 2006 /**IL01**/, equity investment for the entire project is not wise or affordable. That was concluded based on analysis of net cash flow of PP and a safety consideration for asset constitution. To be more specific, the report shows that the net cash flow available was not sufficient to afford the entire investment of the project activity, which means the shortage led to the barrier to use PP's equity to build up the entire project. Meanwhile, as per the conclusion of the report, the working capital (i.e. current asset – current liability) was negative and the liquid ratio (i.e. current asset/current liability) came to 66%, which means that the short-term Liquidity has fallen below a critical level (normally range of 100% to 200% is considered as a rational value). In other words, an abundant working capital was required to enhance PP's repaying ability for short-term liability. Therefore, PP was unlikely to invest the project only by equity without any financing support. Finally, if considered the investment of the proposing expansion and acquisition plan would be implemented in coming years/**IL02**/, equity would be insufficient to support the entire project unless with enough financing support.

For aspect 2):

PP has provided the rejection letters from three banks during validation process (ICBC/**IL07**/, CCB/ **IL08**/ and ABC/ **IL09**/,). In addition, to justify the reason of the rejections, PP also provided the meeting minute with one of the banks (ICBC) in Jun 2006/**IL03**/, following up the rejection letter. The minute has presented the reason why bank's initial attitude was negative but changed significantly after informing of CER revenue, and how CDM was taken into account during this process. Based on the explanations, it is credible that the barriers to get loan can not be easily removed even with different economic analysis for the project, which means that the rejection was not only because of economic analysis, but a series of more crucial considerations.

In that meeting minute, the other main concerns of bank about the applied loan, beyond the "bad return" of the project, were explained, including:

i. high uncertainty on liability return due to lack of effective pledge;
ii. the restricting policy on loan for steel sector for commercial bank;
ii. the identity of non-public steel company for the project owner;

To further substantiate the creditability of above reasons and existence of the barrier for debt loan, corresponding justifications can be stated as below.

i. Since energy efficiency project can only bring an energy saving revenue within the plant, rather than a cash income, the risk of liability repayment is difficult to control by banks if without equivalent pledge. Worse, banks in China extensively lack awareness and experience on clean

energy project, and a cap on interest rates unintentionally discourages "risk-based" lending to industrial energy efficiency project. /**IL05** / Thus without CDM income, the project activity can not afford enough pledge or mortgage to convince bank the ability of repayment, then the bank would refuse lending considered that the uncertainty can not be overcome by the project itself. However when bank recognized that the CDM revenue can be taken as a pledge, they had changed their attitude. / **IL03**/ hence the barrier of loan can not be solved without CDM, no matter how the economic analysis was conducted.

ii. Loan access to steel sector has been extensively tightened since 2004 which remarkablely result in lower access to loan of PP. Since China's central government required restricting debt loan to high energy intensive sectors including steel industry/**IL04**/, moreover some inspection for suspicious loans had been done to ensure the implement of this policy/ **IL32**/. As a result, ICBC had restricted loan towards steel sector and even withdraw loans previously made/**IL33**/. As was reported by Carnegie Endowment. U.S*., the restriction on debt financing is one of the major barriers to clean energy finance in China/***IL05***/.* Therefore, to solve this barrier, a loan based on a CDM project can evidently alleviate the anxiety of bank for being on suspicion of lending toward high energy intensive project.

iii. in addition to the restriction policy towards loan of steel sector, it can be justified that barrier to access debt loan for private companies exist and it can be broadly observed./**IL06**/ Based on statistic data, China's financial system provide only about one-quarter of new investment in to private companies, while over half of GDP is contributed by private firms, since private companies normally lack creditable mortgage or other guarantee of repayment in comparison with state-owned firms/**IL05**/. Obviously PP faced more barriers to get loan compared with state-owned steel companies, and this barrier is expected to be solved while CDM revenue being considered.

in addition, to further testify how CDM resolved the investment barrier, PP has provided the internal decision in Jul 2006 to carry out the project activity after awareness the promising loan based on CDM/**IL13**/. In that document, it can be found that PP then deicide to implement the project to maximize the CDM revenue during crediting period, with the consideration of promising loan from bank. Hence it can be confirmed that CDM can efficiently help PP to overcome the investment barrier.

Conclusively, the reasons of rejection have been explicitly presented in documents provided. Meanwhile the investment barrier will prevent the implement of project activity and finally can be alleviated by the promising debt loan when the project being registered as CDM project, whereas these barriers would not prevent the implement of other identified alternatives. Therefore the existence of investment barrier can be verified according to Validation and Verification Manual (VVM) and Tool for the demonstration and assessment of additionality, v05.2.

(ii) The proof of Technological barriers in PDD is further clarified on two aspects:

1) Difficulties for utilization result from the low quality of resources.
2) Lack of experience of operation and maintenance

Admittedly, compared with investment barriers, technological barrier is not the primary barrier to implement the project. However, these barriers dose exist and are explained in line with Tool V5.2.

For aspect 1)

Based on the official documents provided, the poor quality of waste gas and steam was a real challenge for the project activity. BFG is a kind of gas with characters of low caloric value, high toxicity and difficult to combust, thus it is difficult for energy use/ **IL31**/. The utilization of LDG and low-pressure steam was still challenging in engineering and there is rare operational case to demonstrate the commercial feasibility of the project activity. Since LDG is generated interruptedly and of high dust content and temperature, the ordinary way is flaring after simple use for process heating in steel plants/ **IL10**/. So the technology of using LDG for power generation is just in the demonstration state. Similarly, the low-pressure steam in the project activity can be justified with low enthalpy and difficult to power generation. According to the documents, except some simple use like on-site heating, this kind of steam is usually released directly so far in China, due to the discontinuity and low energy content/ **IL11, 12** /. In term of current situation, there exists rarely successful example of power generation by LDG or low-pressure steam in China, so it is reasonable that PP may likely encounter technological risks of failure, which can be identified as a technological barrier as per Tool v5.2

For aspect 2)

PP's main business is manufacturing of steel, and they do not have the qualified staffs with experience in power generation, even more so based on waste gas. Owing to the lack of experience in this field in addition to above stated perceived problems, the operation and maintenance of WHR power plant, may lead to equipment damage or malfunction. Based on the report of operation situation analysis, risk exists in the system and the main problem in current operation is lack of experience to correctly adjust or maintain the system during operation /**IL14**/. Hence the barrier result from lack of operational experience can be confirmed.

In addition, both the two technological barrier means possible financial loss, requirement of the additional cost of maintenance and a robust cash flow for risk adoption when implementing the project, thus these barriers will hinder the investment determination of the project at beginning. CDM revenue can just provide a promising financial source of potential needs of risk adoption and additional maintenance cost, which can efficiently help PP to overcome the anxiety of technological barrier.

Conclusively, the technological barrier, as a secondary barrier, will prevent the implement of project activity and finally can be alleviated by the CDM revenue. These barriers would not prevent the implement of other identified alternatives. Therefore the existence of technological barrier can be verified according to Validation and Verification Manual (VVM) and Tool for the demonstration and assessment of additionality, v05.2.

Issue 2:

The PP/DOE shall further clarify criteria of selecting similar projects and difference between the project activity and similar projects in line with the step 4 of Tool for the demonstration and assessment of additionality, v05.2.

Response by PP:

First, to further clarify the compliance criteria of selecting similar projects in Tool for the demonstration and assessment of additionality (referred to as "Tool" afterward) v05.2, blow table shows the detailed information of similar projects identification in the project activity:

Table 1 Specification of criteria of selecting similar projects for 2499 project

criteria of selecting similar projects in Tool v5.2	Situation of project activity	Justification of the suitability
i. a broadly Similar technology	waste gas based power plant;	**The technology similar to project activity is correctly defined.**
ii. Similar scale	50%~150% of project activity,	**The range of scale of similar projects is correctly defined.**
iii. Comparable environment with respect to regulatory framework, investment climate, access to technology or financing:	Jiangxi Province	To justify the appropriateness of the region selected, following aspects were demonstrated: **- distinction of factors related to investment ability:** the relevant parameters impacts the business performance of steel firms, such as location, infrastructure, economical situation and development has been taken into account in order to define the region to be use for the common practice. Material factors e.g. power price, ironstone, are sensitive with provincial differences. /**IL15,16,17**/ **- distinction of regulatory framework:** the provincial policies shows difference in many factors e.g. sectoral volume control, development target set and standards for culling down backward production, etc. Supportively according to official documents provided, provinces have issued their own Sectoral Adjust Plan gradually to set provincial regulatory target in steel industry/ **IL18**/.

Second, as the result of the identification of similar projects, two projects are listed. To further clarify the difference between them and the project activity in line with Tool v05.2, PP has provided public documents that shows that these two similar projects are both implemented by listed state-owned enterprises/ **IL19**/. Being listed on the stock market can entitle them broader channels and lower cost to financing for the similar projects/ **IL20, 21**/, whereas PP who is a private non-listed company can not enjoy comparable access to financing in either debt loan or stock market, and the faced financing obstacle to perform the project activity. Therefore, the incomparable benefit engendered essential distinctions in financing ability of state-owned listed companies, and these two projects can be excluded in the common practice analysis according to Tool V5.2.

Issue 3:

The DOE shall further substantiate elimination of alternative; waste gas/heat is sold as an energy source as waste gas is sold in the pre-project scenario.

Response by PP:

Admittedly, there was part of BFG sold to other companies during past three years (form 2004 to 2006) / **IL22**/, however, the alternative that waste gas/heat is sold as an energy source is an option for the disposal of wasted gas in the pre-project scenario. Focused on the wasted gas, it has been demonstrated in PDD that the designed gas consumption was based on the waste amount of BFG and waste LDG in pre-project scenario. In other words, since sold BFG has been excluded from identification and calculation of waste gas in PDD, it is just needed to demonstrate that the "wasted part" of BFG would not be sold any more in the absence of project activity, to justify the credibility to exclude this alternative (W3).

First, the waste BFG can not be sold to any other on-site users any more.

BFG was only purchased by on-site quicklime producers within the plant, which just manufacture quicklime to PP for steel production. Since the demand of quicklime is fixed by the steel production, there is no anticipating expansion on the demand of BFG in the coming years. Supportively, according to gases balance in 2007 and 2008/**IL23**/, the amount supplied to the third party companies leveled up to historical high. Thus, it is not likely to sell "wasted BFG" to on-site users.

To further demonstrate that, a significant and noticeable fact is that there was still part of BFG left in surplus after operation of project activity. (For details, please refer to Figure 1 and Figure 2).

In Figure 1, it shows the varying percentages of each use of BFG and the waste part from 2004 to 2008. According to this chart, it can be found that amount of external supply has been kept in a stabilized level and was never impacted by the project activity. In addition, there was still considerable amount of waste BFG remained after operation of the project, as shown by the red block at the top row. Therefore, the availability of waste BFG in the pre-project scenario can be justified.

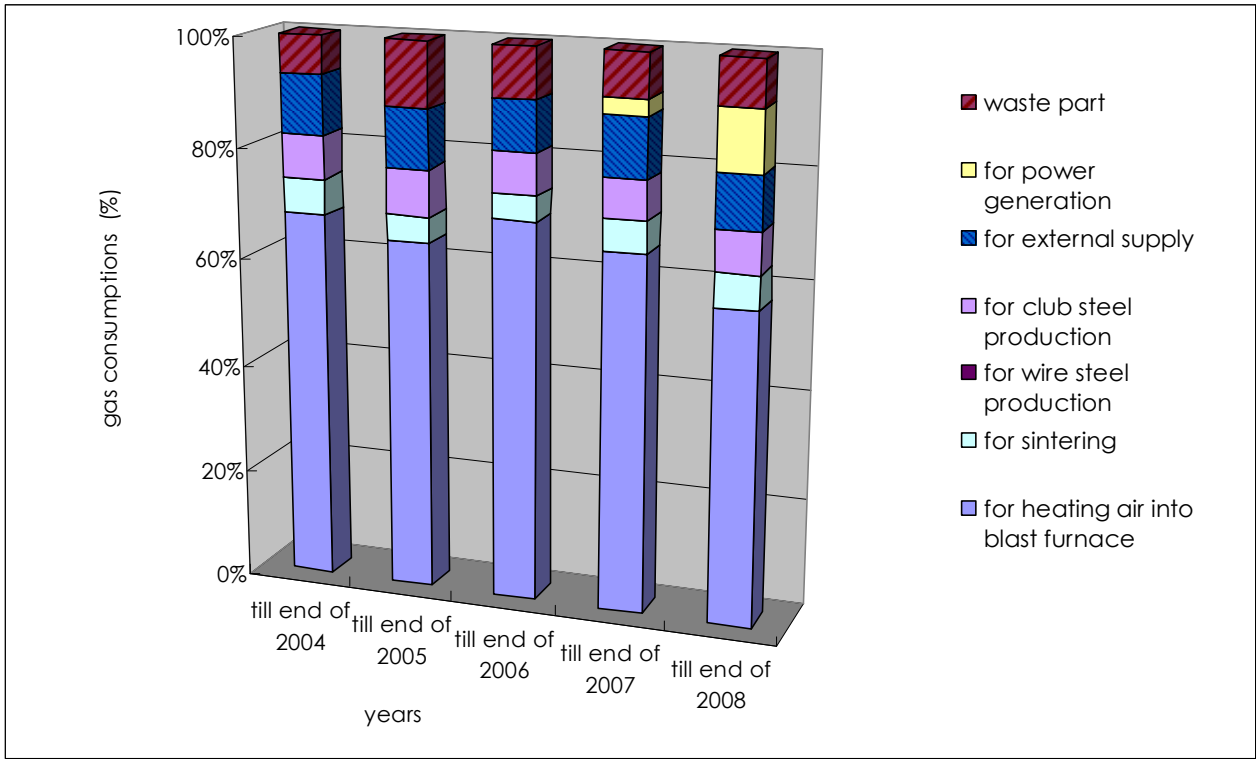

Figure 1 Historical percentages of waste BFG and other categories of BFG consumptions from 2004 to 2008 (project scenario).

As illustrated by Figure 2, the assumed situation in baseline scenario is illustrated and it can further justify that BFG is generally in surplus, thus the availability of waste BFG can ensure that the implement of project activity will not affect other users including the part sold.

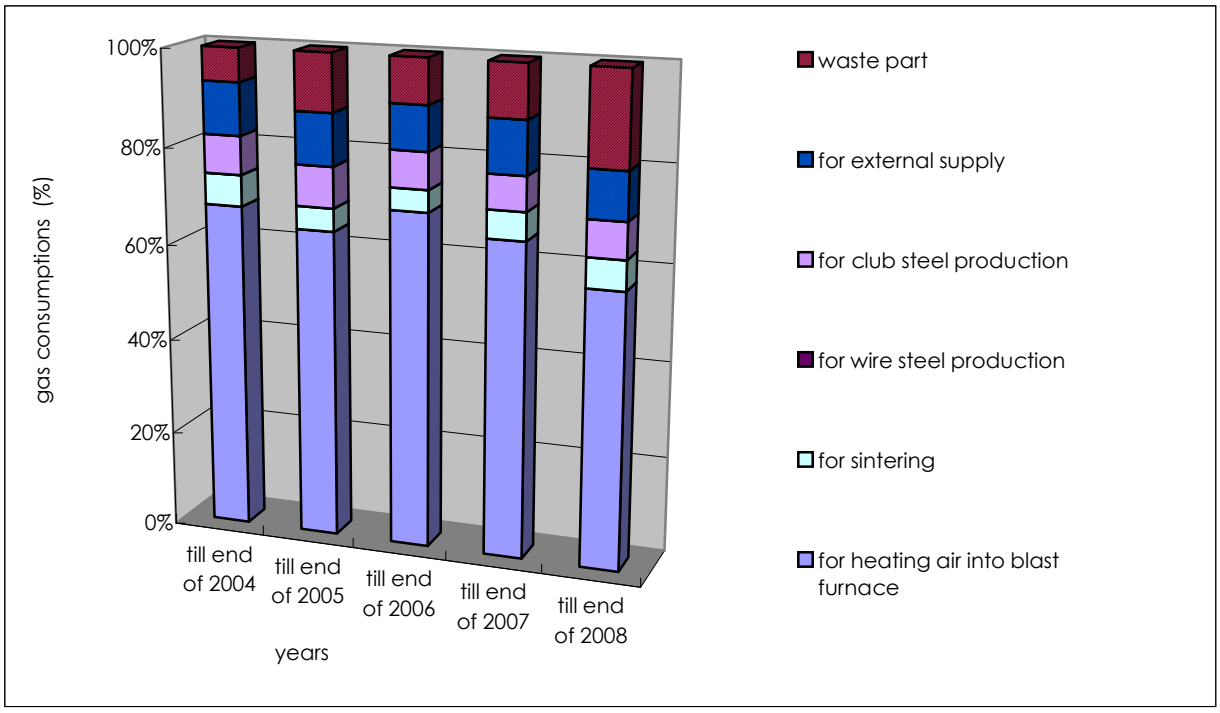

Figure 2 Assumed percentages of waste BFG and other categories of BFG consumptions from 2004 to 2008 in the absence of the project activity. (Baseline scenario)

In addition, although the BFG for heating air into blast furnace seems decreased in 2008, the ratio falls in a reasonable range according to the FSR of blast furnace, and the reason of this decline is due to the operation optimization of blast furnace.

To be more specific, further clarification is made as below:

i. In year 2005 the waste BFG was 319,381,853 Nm^3, whereas the BFG consumed in project activity in 2008 is 317,188,349 Nm^3. therefore the quantity of BFG used in project activity did not exceed the maximum value in the past three years. In that case, the fcap value is more than 1, which means all the BFG used in project activity was form the waste part in pre-project scenario. Furthermore, the decrease of BFG used for air heating is not resulted by the project activity clearly.

ii. In year 2005 the ratio of BFG for air heating was about 65%, but this value drop to 55% in year 2008. The reduction of BFG for air heating is caused by operation optimization to reach the designed working condition of blast furnace. According to FSR of the blast furnace, the designed BFG consumption of air heating furnace is 52260 Nm^3/h, while the total BFG amount ranges form 97000 Nm^3/h to 130000 Nm^3/h. therefore, the current ratio 55% has fallen in a reasonable range according the designed value, after a gradual optimizations.

iii. The incentive of optimization can be clarified. Due to higher cost of use overfull BFG in heating air, PP has suffered the loss of maintenance of heating furnace. So it is reasonable of PP to reduce BFG consumption in 2007 and 2008. In that case, the waste part of BFG obviously will increase in the absence of project activity. (As shown in the Figure 2)

Based on above analysis, wasted BFG was in surplus before and after the implement of project activity, and the demand of all other users, both external and internal, can be met all the time. Therefore, in the absence of the project activity, the waste gas was unlikely sold to any on-site users any more.

Second, the waste BFG can not be sold to any other off-site users anymore.

There exist obvious barriers to sell waste gas/heat off-site as commercial energy source. Owing to low ignitability, low caloric value and high toxicity, BFG or LDG is not suitable as fuel for household or other commercial use/**IL31**/. Moreover, the location of the project activity is distant from residential area (5km at least) or other industry companies (2km at least), so it is not economically feasible to sell waste gas/steam as energy source for off-site use, which requires a huge investment to install the infrastructures like pipes for such a waste gas with poor quality. The only possible way to transmit energy to off-site users is by power generation.

Finally, the waste BFG for the project can not be sold to other users for on-site use so far, furthermore due to the poor quality of the waste gas/heat as well as lack of plausible demand nearby, the waste gas/heat is highly unlikely sold as an energy source for off-site use in the absence of project activity, hence the exclusion of this alternative can be regarded credible.

Issue 4：

The PP/DOE shall further substantiate:

(i) that the waste gas/steam utilized in the project activity was released into the atmosphere in the absence of the project activity at existing facility with detailed information in line with the applicability criteria of the ACM0012 v2.;

(ii) validation of the BFG supplied to the other companies with credible evidence;

(iii) how the consumption of BFG and LDG for club production and steel rolling respectively have decreased in 2006 compared to 2005 when steel production was increased in 2006 compared to 2005; and

(iv) amount of electricity imported from the Central China Power Grid in the pre-project scenario.

Response by PP:

As for sub-issue (i):

To further substantiate the compliance of related applicability criteria of the project, following table shows the detailed information.

Table 2 Specification of adoption of criterion of applicability related to waste gas in existing facility for 2499 project

applicability criteria of the ACM0012 v2	Situation of project activity	Justification for the suitability
Criterion 9: *The waste gas/pressure utilized in the project activity was flared or released into the atmosphere in the absence of the project activity at existing facility. This shall be proven by either one of*	Two designated methods, Energy balance and On site checks, have been used to check this criterion of ACM0012. To demonstrate the applicability, initially PP has provided the historical Energy Balance in 2004, 2005 and 2006.	-The historical balance of gases shows that waste gas was flared before the implement of project activity. In particular, the amount of waste gas in historical level can cover

the following: ● ***By direct measurements*** ● ***Energy balance*** ● ***Energy bills*** ● ***Process plant manufacturer's original specification/information*** ● ***On site checks***	According to that, there are still wasted BFG and LDG for flaring after an internal balance in the three years. The three years maximum value of waste BFG and LDG are respectively 319,381,853 Nm^3/a and 48,626,687 Nm^3/a /**IL22**/, while the estimated need of BFG is 264,000,000 Nm^3/a and that of LDG is 36,000,000 Nm^3/a/**IL24**/. It means that the waste gas is around 1.2 times more than demand of the project, so it is in abundance to cover all the need of gases for power generation. In addition, DOE had checked the on-site situation in 20 June 2007, before the project activity start operation. During the on-site check, waste BFG and LDG was found kept flaring and surplus steam was released directly.	the need in project. -On site checked by DOE prior to project implementation confirm that no equipment for waste gas recovery and use has been installed, and the waste gases is flared and surplus steam is released directly without use.

As for sub-issue (ii):

To justify the BFG supply relationship of other company with PP, the BFG purchase agreements with two clients were provided (Xiangshi Co, and Hongyuansheng Co,) / **IL25**/, which could prove that part of BFG was supplied to other companies. Meanwhile, the amount of BFG supplied to other companies is recorded in BFG annual balance sheet by PP, the historical quantity is respectively 129,378,716 Nm^3, 287,867,668 Nm^3, and 265,203,870 Nm^3 in 2004, 2005 and 2006/**IL24**/. However, this fact dose not conflict with the conclusion that the waste gas used by project would not be sold in the absence of project activity, since the BFG used in project is totally beyond the part was used or sold.

As for sub-issue (iii):

To explain the decline of gases consumption for steel product, the reason is due to two main improvements in management and operation of steel rolling. One of them was aiming to optimize the operation of heating steel billet. The new method start in early 2006 emphasized uniform temperature condition during heating process, instead of traditional way being high-temperature-oriented/**IL29**/. By this promotion, the gas consumption of unit steel product could be reduced about 5%. The other improvement is in order to increase united yield ratio, which can enable them use less raw material to product the same amount of qualified steel product. As presented in the documents, the yield ratio should boost from 93% to 97% (wire steel) and 98% (club steel) / **IL30**/. This method can result in gas saving up to around 4%. So to combine the impacts of two promotions, the unit gas consumption will be downsized by 9%. Hence the decrease of BFG and LDG consumption in 2006 is result from management promotion and process optimization by PP.

As for sub-issue (iv):

According to the FSR of the project, the amount of power from grid (CCPG) is the pre-project scenario. As a clarification, FSR states that three sets of 50 MVA transmission units are installed. It means that Grid can afford capacity up to 150 MW to satisfy the peak load of PP (the peak load is 93.4MW

according to FSR)/**IL24**/, so grid power is a reasonable source in the pre-project scenario. Moreover the Power Purchase Agreement signed with Grid Company and the invoice has been provided/**IL26, 27**/, therefore this issue can be accurately confirmed.

Issue 5：

The DOE shall further substantiate the suitability of quantity of waste BFG assumed in calculating the emission reduction in compliance with paragraph 90 of VVM as it appears only 84% of the waste BFG assumed is available when the steel plant is running close to full capacity.

Response by PP:

In PDD the two parameters, quantity of waste BFG in pre-project scenario ($Q_{WG,BL}$) and BFG used for power generation during year y($Q_{WG,y}$), were used to calculate capping value (f_{cap}) for emission reduction.

According to FSR, the estimated consumption of BFG is 264,000,000 Nm^3/a / **IL24**/. Meanwhile the corresponding maximum amount of waste BFG is 319,381,853 Nm^3. Hence the amount of waste gases can satisfy the estimated load of project and even 17% of the total would be left surplus when the steel plant is running in full capacity. Therefore the assuming ratio of waste BFG availability is 117% according to values in PDD.

In addition, according to energy balance sheet in 2007 and 2008/**IL23**/, the waste BFG used by project activity in these two years were 83,475,847 Nm^3 and 317,188,349 Nm^3. Beside the BFG used by project activity, there were still 220,933,113 Nm^3 and 243,209,760 Nm^3 left surplus. Thus the actual ratio of waste BFG availability is testified as 177% in 2008.

As a conclusion, the waste BFG is abundant and the availability ratio is more than 100%, thus the issue of only 84% available BFG does not exist in the project activity.

Table 3 BFG balance sheet of PP in year 2007 and 2008

	No.	Dept	Gas generator/users	Gas volume (unit m^3/y)	
				Year 2007	Year 2008
gas generation	1	iron factory	3 sets of Blast Furnace	2,989,827,508	3,066,765,681
	Sum of generation			2,989,827,508	3,066,765,681
gas consumption	1	iron factory	3 sets of hot air stove	1,826,803,332	1,652,087,930
	2	sintering	sintering	161,784,827	177,638,311
	3	Steel rolling	Wire production	196,022,571	178,459,214
			Club production	197,568,242	215,326,152
	4	output	other company in the factory boundary	303,239,576	282,855,965
	5	power	Power generation	83,475,847	317,188,349
	Sum of consumption			2,768,894,395	2,823,555,921
Waste amount (m^3/y) = Sum of generation - Sum of				220,933,113	243,209,760

consumption		

Issue 6：

The means of calculation of fcap for waste steam is not in accordance with ACM0012 version 2. The DOE shall clarify why it suggested that the PP can use the ACM0012 v3 to calculate the fcap for waste steam, while the applied methodology for the project activity is ACM0012 v2.

Response by PP:

The ACM0012 version-2 methodology requires the capping of emission reductions through the parameter fcap for which two methods are described.

Method (1) is applicable to projects utilizing waste gas/heat at facilities for which data is available while Method (2) applies to projects at new facilities or projects that utilize waste pressure.

Initially Method (1) is adopted in PDD, however in the description of the parameters only reference is made to waste gas and a unit is provided (Nm^3) that is relevant to waste gas.

Seeking for solution for these difficulties, PP was required to follow relevant clarification approved by Meth Panel and then refer to the revised version (version 3.0) of the methodology, approved by EB41. According to ACM0012 version 3, the Method-2 was adopted to calculate the capping value for waste steam power generation in PDD.

Issue 7：

The PP/DOE should provide the spreadsheet of the emission reduction calculation.

Response by PP:

PP has supplemented spreadsheet of emission reduction calculation and all the equitation and parameters are used according to ACM0012 v02./**IL28/**

Issue 8：

The monitoring plan shall include monitoring of: (i) quantity of waste gases used for energy generation per hour (QBFG,h, QLDG,h), (ii) amount of individual fuel consumed at the energy generation per hour (Qi,h) , and (iii) net calorific values of the waste gases (NCVBFG, NCVLDG) and fossil fuel (NCVi) in line with the methodology.

Response by PP:

First, to clarify the appropriateness of current monitoring plan, equations and parameters of f_{wg} has been checked. It can be justified that no fossil fuel used in the project can generate energy, although some LPG is used to ignite. Second, it can be clarified that electricity generation is purely from the use of waste gas, the waste BFG and LDG. A few of bottled LPG will be used to ignite the waste gas during the start-up of boiler, and it will be removed quickly from system as soon as the waste gas ignited. Thus the use of LPG will not result in any measurable electricity generation in practice. Finally according to ACM0012 V02, in case the electricity is generated purely from waste gas and f_{WG} can be identified as 1. Moreover the potential emission to use LPG is about 2 tCO_2 and far less than 1% of average annual emission reduction, thus it can be neglected according to Para 76 of VVM.

Based on the above consideration, the four parameters ($Q_{WG,h}$, $Q_{i,h}$, NCV_{WG} and NCV_i) involving the calculation of f_{WG} is not necessary to monitor.

Issue 9：

The PP/DOE shall clarify how the PP makes sure there is no reduction of BFG supplied to the existing two thirdparty companies with the implementation of the project activity.

Response by PP:

Firstly, the third-party companies are situated in the plant site of PP and their main business is to product quicklime used for blast furnace operation. The design of project activity is based on the waste part of BFG which has excluded the amount supplied to two third-party companies from calculation, so PP will not cut down the supply to them when project operated.

Secondly, based on the updated energy balance in 2007 and 2008, particularly the historical data after implement of project activity, BFG consumption by the other users of BFG leveled up at the record high in 2007 and 2008. It can be check from Table 4 below.

Table 4 historical data of amount of external BFG supply from 2004 and 2008

Years	2004	2005	2006	2007	2008
BFG External supply (Nm3/y)	129,378,716	287,867,668	265,203,870	303,239,576	282,855,965

Finally, according to Figure 1, unless the power generation came to 180% of current value, the waste gas will not be run up at all. In that case, the operation hours will come to 10,620 h which is impossible. Thus this situation can not occur in the project activity and the use of BFG by the third-party will not affected by the implement of project activity in the future.

Based on above analysis, no unreasonable reduction of gas supply to those companies will occur.

Index of literature

IL No.	IRL No. in PDD/VR	Title of references
IL01	n/a	Assessment report for financial statement in 2006
IL02	PDD F8	News about the proposing acquisition of PP *(http://business.sohu.com/20060929/n245604233.shtml)*
IL03	n/a	A meeting minute by PP and bank (ICBC) in Jun 2006
IL04	PDD F11	*Report: central government and the No.47standing conference of State Council (www.hnii.gov.cn/itlt1.asp?theid=2641.)*
IL05	IRL 46	Report: Financing Energy Efficiency in China
IL06	IRL 47	Report on the Actual Situation of Non-Public Iron and Steel Enterprises in China, 2004
IL07	IRL 35	rejection letter from bank (ICBC)
IL08	n/a	rejection letter from bank (CCB)
IL09	n/a	rejection letter from bank (ABC)
IL10	n/a	The current state and development of recovery and utilization technology of domestic LDG.
IL11	IRL 45	Discussion on Utilization of Low- pressure After heat Steam[J]
IL12	IRL 44	Discussion on plan of waste heat steam utilization in steelmaking process[J]
IL13	n/a	Internal decision to implement the project in 2006
IL14	n/a	Report of operation situation analysis
IL15	PDD F21	Statistic data of grid power price in provinces of CCPG, 2006.
IL16	PDD F22	Structural adjustment and development planning in Jiangxi steel industry "11th Five-Year Plan" structural adjustment and development planning
IL17	PDD F23	Comparison of Steel profit between the corporation in Jiangxi and other province （*http://www.jxjmw.com/user/jxgjl/index.php?langtype=cn&pageid=cn_13&add=view&id=225*）
IL18	n/a	Adjust plan for Revitalization of the Iron and Steel industry in provinces （http://www.jxstj.gov.cn/News.shtml?p5=9058）
IL19	PDD F24	Stock information for project named in PDD.
IL20	n/a	Shareholders meeting report of Xinyu Steel.
IL21	n/a	Shareholders meeting report of Nanchang Steel. （http://finance.sina.com.cn/stock/t/20080310/08002056561.shtml）
IL22	IRL 28	Pingxiang Iron and Steel Co. Ltd. Table of balance for blast and low gas furnace, low pressure steam (2004-2006)
IL23	n/a	Pingxiang Iron and Steel Co. Ltd. Table of balance for blast and low gas furnace (2007-2008)
IL24	IRL 11	Feasibility Study Report of the project.
IL25	n/a	BFG purchase agreements signed by PP with two clients
IL26	n/a	Power Purchase Agreement of PP.
IL27	IRL 34	Invoice of power purchase from grid.
IL28	n/a	spreadsheet of the emission reduction calculation
IL29	n/a	Plan to optimize steel billet heating in early 2006
IL30	n/a	Plan to boost steel yield ratio in early 2006
IL31	n/a	Research Progress of Technology for High Temperature Air Combustion[J]
IL32	PDD F12	News about loan inspection for high energy-intensive sector. *(Http://www.mysteel.com/servlet/News.Detail?id=531227 and http://news.yonghua.net.cn/htmldata/2005_03/2/11/ article_126308_1.html.)*
IL33	PDD F13	News of ICBC withdrawing issued loan. *(Http://finance.sina.com.cn/money/bank/bank_hydt/20060404/20372473902.shtml.)*