Dear Sir,

This is with reference to the request for review raised by Executive Board members for the project "Waste Heat Recovery project" at Saraikela, Kharsavan, Jharkhand by M/s Kohinoor Steel Private Limited (Reference No 1296). We are obliged to submit our replies for the review request; we thank the opportunity provided by the CDM-EB to further explain on following issues:

Request for review: 2

Issue No: 1

The PDD states, that "the project will relieve the burden on the depleting resources of conventional fuel and hence increasing its availability to the other important processes". Further clarification is required in relation to the real contribution of the project to climate change mitigation as the aim seems to be saving fossil fuels for other alternative uses rather than real, long term and measurable emissions reductions.

The project undoubtedly helps in meeting the sustainability criteria as set by the host country and also helping in mitigating climate change as set by the protocol. The host country DNA has accorded the project activity as a CDM project activity based on its impact on the long-term sustainable contribution to the mitigation of the climate change. In India, a major share of the country's electricity is generated from fossil fuel sources such as coal, diesel, furnace oil etc. The proposed waste heat recovery CDM project will displace or replace the equivalent quantity of electricity generated in the grid.

The intent of wordings in the paragraph is no way to support or promote the use of coal/fossil fuel instead it wants to help the host country which is already depriving to meet its base and peak load power demands where in the grid is predominantly fossil intensive grid system (66%)[1]. The power that is generated by the project activity will reduce the equivalent amount of power that would have been generated else where using fossil fuel, since the project size constitute less than 8.04×10^{-5} % may be the impact be less but it at least made sure that this project activity tries to use a cleaner fuel and also it would holistically contribute in avoiding an equivalent amount of power generated elsewhere and also avoids upstream emissions related to extraction, processing and transportation of baseline fuel and also it promotes an overall environmental well- being in a broader spectrum.

Since the line has created an ambiguity we wish to remove that particular line from the PDD.

Issue No: 2

The PDD shows typographical errors in section A.4.4.

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[1] The All India aggregate installed capacity of electric power generating stations under various utilities as on 31.03.2006[1] was 124287.17 MW comprising 32325.77 MW of hydro, 82410.54 MW of thermal, 3360.00 MW of nuclear and 6190.86 MW Renewable Energy Sources (RES). The percentage share of hydro, **thermal**, nuclear and RES stood at 26.01%, **66.31%,** 2.70%, and 4.98% respectively of the total installed capacity. It is evident that the power generation is heavily dependent on the thermal generation. Since the project proponent from his end is able to avoid all such associated polluted emissions from 66.31% occurring from thermal generation, definitely it promotes an overall environmental security.

The error is now rectified in the revised PDD

The following is the requirement as per the guidelines of PDD completion.

A.4.4. Estimated amount of emission reductions over the chosen crediting period:

Please indicate the chosen crediting period and provide the total estimation of emission reductions as well as annual estimates for the chosen crediting period. Information on the emission reductions shall be indicated using the following tabular format.	
Years	**Annual estimation of emission reductions in tonnes of CO_2 e**
Year A (e.g. 2007)	
Year B	
Year C	
Year …	
Total estimated reductions (tonnes of CO_2 e)	
Total number of crediting years	
Annual average over the crediting period of estimated reductions (tonnes of CO_2 e)	

As per the submitted PDD for registration

A.4.4 Estimated amount of emission reductions over the chosen crediting period:

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The total emissions reductions throughout the first crediting period (7 years) from the project are expected to be as under:

Years	**Annual estimation of emission reductions in tonnes of CO2 e**
1st Oct 2007 – 31st Dec 2007	14,044
1st Jan 2008 – 31st Dec 2008	56,176
1st Jan 2009 – 31st Dec 2009	56,176
1st Jan 2010 – 31st Dec 2010	56,176
1st Jan 2011 – 31st Dec 2011	56,176
1st Jan 2012 – 31st Dec 2012	56,176
1st Jan 2013 – 31st Dec 2013	56,176
1st Jan 2014 – 30th Sep 2014	42,132
Total estimated reductions for the first crediting period	**3,93,235**
Total number of crediting years	**21y-0m (7 x3)**
Annual average over the first crediting period of estimated reductions (tones of CO2 e)	56,176

The highlighted issues would be the one with typographical errors.

The Revised PDD has incorporated as below:

A.4.4 Estimated amount of emission reductions over the chosen crediting period:

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The total emission reductions throughout the first crediting period (7 years) from the project are expected to be as under:

Years	Annual estimation of emission reductions in tonnes of CO2 e
1st Oct 2007 – 31st Dec 2007	14,044
1st Jan 2008 – 31st Dec 2008	56,176
1st Jan 2009 – 31st Dec 2009	56,176
1st Jan 2010 – 31st Dec 2010	56,176
1st Jan 2011 – 31st Dec 2011	56,176
1st Jan 2012 – 31st Dec 2012	56,176
1st Jan 2013 – 31st Dec 2013	56,176
1st Jan 2014 – 30th Sep 2014	42,132
Total estimated reductions	**393,235**
Total number of crediting years	**21y-0m (7 x3)**
Annual average over the crediting period of estimated reductions (tonnes of CO2 e)	56,176

Issue No 3.

Further evidence is required to substantiate the investment barrier analysis, as the information provided does not suffice.

Initial Investment requirement for setting up of the project activity:

It is to be noted that the investment requirement for setting up of a waste heat recovery power plant is more than 40% in terms of a coal based power unit and more than 55% for a Waste heat recovery in comparison to that of the total sponge iron unit cost (which is the primary activity of the PP), and being a small player in the industry it is quiet difficult for KSPL to mobilize any funds in terms of equity and debt unless there are any additional advantages available for us to set up a power plant. Our initial board discussions and the board proceedings would very well reckon the fact that the most likely option of our management is to import from the grid not setting up any waste heat recovery captive power plant. The board resolutions and the communication with the CER buyer are submitted for your kind perusal as Annex- I the content of the same is provided in a nutshell in the succeeding paragraph:

The promoters have gone on record with their reluctance to set up the waste heat recovery based power unit, primarily on account of the high capital cost and the risks involved. In fact it was only when the CDM related revenue was highlighted to the investor group and concrete offers were produced to the investors that one of the investors Mr. Vijay Bothra agreed to invest the equity component required to fund the power plant. Otherwise, the investors were of the opinion that the project was very risky and preferred to set up the project by drawing the required power from the state electricity grid. It also to be pointed out that the project had received sanction for the

required power from the state electricity board and also the MoU signed with the local state government has provided support for all the necessary power.

It should also be highlighted that the investor (Mr. Bothra) had initially agreed to invest the additional amount required for the power project in the form of ***Cumulative Convertible Preference Shares and it was only much later when project was being developed under the CDM that he agreed to bring in his additional investments in the form of equity***. In view of the above, it may be concluded that the additional revenue from the sale of CERs played a very important role in facilitating the mobilization of the required equity and debt for the project.

Application to the bank for necessary financial resource:

1. ***DPR to the bank:*** The project has faced substantial barrier on account of attaining its financial closure. The financial institution was very keen on carbon credits, which will make viable in terms to cover their debt component. It may be mentioned that the detailed project report submitted to the banks specifically mentions that the project would be eligible to generate additional revenue from sale of CERs.
2. ***Credit committee appraisal note:*** The bank agreed to finance the project activity by analyzing the CDM possibility and the same has being quoted in their appraisal note. (Necessary documents are provided to the DOE at the time of validation). The credit committee report (highly confidential provided to the DOE – Annex - II) has noted that the project should be eligible for carbon credits and the necessary finance can be lend. This would clearly reckon the fact that how much CDM revenues are part and parsal of the projects investment requirement and we are of the opinion that if the CDM revenues are not there for the project activity this plant would not have setted up 10 MW WHR based power unit.
3. ***Communication from the bank on CDM revenues:*** The lender (bank) also asked the PP to provide update on the happenings on the carbon credits fund. The letter written by the Bank to the PP and the PP reply is recorded as Annex –III.

In addition, all (most) similar projects being set-up in the country (in the SME segment) are being developed under the CDM. In view of the above, it may be concluded that at the point in time when the decision to proceed with the project was taken, the related CDM linked revenue were seriously considered and was a key factor responsible for the favorable decision Thus the option to undertake this project without CDM revenue is highly impossible.

Issue No 4 & 5.

Issue no: 4 Further information is required to show how the investment barriers have been validated.
Issue no: 5 The DOE shall further clarify how they have assessed and validated the sensitivity analysis.

The issues will primarily be addressed by the DOE

We have not opted to prove the additionality of the project through the investment barrier, since the other barriers are very much prohibitive for the implementation of the said project and more over as per our understanding we are of the opinion by substantiating one barrier, which is prohibitive for implementation of the project activity it is considered be as additional.

The barriers for implementation of this project activity identified are as below:

1. Initial investment requirement for the project
2. Technological and Operational barrier
3. Managerial resource barrier
4. Common Practice barriers.

Issue No: 6.

The technological barriers as per the PDD are related to the risks associated with power supply in steel manufacturing. If such is the case, the project would not be technically feasible and CDM revenues would not ameliorate the risks described. Further clarification is required.

We hereby apologize with the EB that if the language written is misleading but actually the technological barrier are not only with the down stream processes. We have identified many technological barriers, which are prohibitive for the implementation of our project activity.

The following are the technological barriers identified by us

- ***Heat content of the waste gas:*** If the heat content of the waste gas is not sufficient, the project activity will be directly affected and as a result, unable to generate power;

- ***Flow rate of the waste gas:*** Cumulative effect of sustained variable frequency operation due to fluctuations in waste gas supply (flow rate & temp) may have substantial bearing on safe and sustained operation of assets like the power plant equipments.

- ***Quality of products in downstream processes***: Quality of products of a number of process industries like steel manufacturing is heavily dependent on the quality of power supply. Poor quality of power supply not only results in reduced life of equipment but also in poor quality of products.

- ***Non-availability of waste gas*** at the required temperature can also result in a complete closure of the project activity. It has been further stated that resumption of production process takes a long time. Hence the power interruption even for a short spell destabilizes the manufacturing process, besides causing production loss and damage to the sophisticated equipments due to thermal shock.

- ***Waste gas temperature issues:*** Moreover if the waste gas temperatures are greater than 1000^{o}C, the corrosive nature of the waste gases increase manifolds and it would have a detrimental effect on the boiler tubes designed for waste gases between 950-1000^{o}C. The project activity thus required the installation of expensive controls to ensure the waste gas temperatures does not exceed 1000^{o}C, however in case of any failure of such controls the DRI kilns will have to be shut down immediately; else the boiler would be damaged.

- ***Operational problem of the Kiln***: For successful waste heat power generation activity steady operation of the kiln is a pre-requisite. Improper operation of kiln results in inconsistent generation of hot gases generated both in terms of quantity as well as heat content. Therefore, successful implementation of any waste heat recovery based power generation project depends solely on steady operation of kiln, failing which the power generation capability from the waste heat of the gases becomes uncertain. The operational problems in the kiln directly affect the power generation from the project activity and hence presents significant barrier to the project activity.

- ***Forward integration***: The other major technical barrier is in the form of forward integration in the steel manufacturing process. Any fluctuations in the power output from the WHR will affect the production of steel to a larger extent as almost the entire production is based on power drawn from the WHR system with a contract maximum demand from the Jharkhand State Electricity Board limited to 1.5 MW (Annex – IV). ***As we slated here that the plant has CMD of only 1.5 MW so any such problem with the power plant (CDM project activity) would obviously make our project technically not feasible as expressed correctly by the EB members but we are taking this risk because we are confident that the CDM revenues can ameliorate the financial losses that may incur to us in the operation of the downstream plant and more so with the environmental responsibility our management trying to implement.***

Thus it has been conceived by us that the CDM benefits would help in covering the financial risks associated with the project activity due to the uncertainty of power generation, which is related to the proper operation of the kilns/forward integration problems in particular the technological barrier. Consistent and better operation of sponge iron kiln will in-turn enhance the viability of project which otherwise is affected by low PLF, unavailability of DRI gas due to shut-down or break-down and other factors related to low capacity utilization of kiln and subsequent lower availability of waste gases at high temperature.

The CDM benefits will increase the viability of the project by enabling us to acquire higher quality and costlier raw materials for its sponge iron production operation and even to take risk of stopping/idling the downstream activities for the sake of power generation with waste heat resources coupled with the CDM revenues.

The CDM benefits will also cover some of the risks and additional investments associated.

Issue No: 7.

The argument in page 17 of the PDD leads to the conclusion that emission reductions in this project activity might not be long term emission reductions, as the market conditions are volatile, the project activity is totally dependent on the upstream sponge iron plant and also to a large extent on the prices of scrap, and there is a risk that the plant might be shut down. Further clarification is required.

We once again apologize if the statements are misleading, as stated in the PDD the market scenario of the sponge iron in the country is volatile; the prices for the final product too have been fluctuating[2] as shown in the graph in the PDD. The fluctuation in the price of the final product is significant as the project was conceptualized at a point in time when the steel prices had peaked and were showing a downward trend. We are being aware of this, were very keen to limit the total project exposure.

The proposed project activity (waste heat based power plant) is totally dependent on the upstream sponge iron plant and also to a large extent on the prices of scrap (as below a level, it would make economic sense to shift partially / completely from sponge iron to scrap). Furthermore, the market conditions being volatile, there is the possibility of the project promoters having to discontinue the project activity and shift to alternative power sources. This may lead to either downscaling or

[2] http://www.indiainfoline.com/sect/stee/db71.html

shutting down the upstream sponge iron plant altogether and thus terminating the project activity (the project activity will cease to generate power at below ~ 35% PLF). Therefore there is a significant capital risk associated with the project

As we earlier stated that the investment on the WHR is more than 55% of the total sponge iron cost, even in that case we have taken this risk by keeping in view that the CDM revenues can ameliorate the financial losses that may incur to us in this volatile market, more over the study report presented by the Joint Plant committee report (JPC) constituted by Government of India has clearly depicted the fact that the Captive power plants in eastern region (regional grid opted) less than 5% plants are having captive power plant and of which most of all are developed under CDM.

So it is very well understood that no sponge iron manufacturers has taken the risk of setting up a captive power plant unless there is any additional incentive available as CDM.

Issue No: 8.

The common practice analysis should be conducted in accordance with step 4 of the additionality tool by detailing similar projects in the region and explaining the differences between this activity and those similar projects. In this context, further substantiation of the barriers should also be provided.

Sl no	Text of the additionality tool	Explanation
	Sub-step 4a. Analyze other activities similar to the proposed project activity:	
1	Provide an analysis of any other activities implemented previously or currently underway that are similar to the proposed project activity. Projects are considered similar if they are in the same country/region and/or rely on a broadly similar technology, are of a similar scale, and take place in a comparable environment with respect to regulatory framework, investment climate, access to technology, access to financing, etc. Other CDM project activities are not to be included in this analysis. Provide documented evidence and, where relevant, quantitative information. On the basis of that analysis, describe whether and to which extent similar activities have already diffused in the relevant region.	The time in which we decided to set up this waste heat based sponge iron unit, there were only 22 sponge iron manufacturers in the state and among those units only one unit[3] has waste heat recovery systems other than us. As required by the additionality tool it is proved by official documentation, which is not better than the status report/letter provided by the ***Deputy Director of Directorate of Industries, Govt of Jharkand (State government) and it is annexed as Annex - V*** Even now the situation prevails the same in the region, there could not be a better report/study that can advocate our stand the latest study report published by the ***Joint plant Committee[4] report a Govt. of India Institution (Refer Annex VI) titled Survey on sponge iron industries reveals that the entire region (not only the state of the project activity but the entire regional grid opted)*** there are only 5%

[3] http://cdm.unfccc.int/Projects/DB/SGS-UKL1160483764.02/view

[4] This particular committee is formed to find out the bottleneck in the sponge iron industry and to provide services to the sponge iron sector.

		of plants have undertaken WHR systems and mostly all of them are developed under CDM. Hence being a small player in the industry this is the second reason, which made us to be skeptical on deciding up on setting a captive power unit, however as stated earlier we are confident that the CDM revenue can ameliorate the risks involved in putting down the fingers where there are no precedents available.
	Sub-step 4b. Discuss any similar options that are occurring:	
2	If similar activities are widely observed and commonly carried out, it calls into question the claim that the proposed project activity is financially unattractive (as contended in Step 2) or faces barriers (as contended in Step 3)..	***No. From the above it is clear that there no such precedents to compare though the number of industry (22) are comparable is same and the quantity are measurable and alike to that of the project activity***
	Therefore, if similar activities are identified above, then it is necessary to demonstrate why the existence of these activities does not contradict the claim that the proposed project activity is financially unattractive or subject to barriers This can be done by comparing the proposed project activity to the other similar activities, and pointing out and explaining essential distinctions between them that explain why the similar activities enjoyed certain benefits that rendered it financially attractive (e.g., subsidies or other financial flows) and which the proposed project activity cannot use or did not face the barriers to which the proposed project activity is subject.	***Only one project identified and that too is developed under CDM.***
	Essential distinctions may include a serious change in circumstances under which the proposed CDM project activity will be implemented when compared to circumstances under which similar projects were carried out. For example, new barriers may have arisen, or promotional policies may have ended, leading to a situation in which the proposed CDM project activity would not be implemented without the incentive provided by the CDM. The change must be fundamental and verifiable	***There are no similar projects because without CDM there are no sponge iron WHR plants.***
	Conclusion	
	"If Sub-steps 4a and 4b are satisfied, i.e.(i) similar activities cannot be observed or (ii) similar activities are observed, but essential distinctions between the project activity and similar activities can reasonably be explained, then the proposed project activity is additional)".	***Similar activities cannot be observed, hence deemed to be additional.***

Issue No: 9 in RfR 2 and Issue no: 1 in Rfr 1,3,4

Further information is required to confirm whether or not the AFBC boiler, which is supplying steam to the same turbine as the project activity, would have been installed in the absence of this

CDM project activity, and in addition why this AFBC boiler has not been included in the project boundary.

As noted by the requests for review, the steam from the WHRB is fed to a common steam header that is also fed by the atmospheric fluidized bed combustion (AFBC) and the steam from the common header is fed to the turbine. However, the power generation from the turbine depends on the steam fed to the turbine only and steam generation from the waste heat recovery boiler (WHRB) and the AFBC is independent of each other. There is no dependency of the steam generation of the WHRB with the steam generation from the AFBC. The turbine is designed to operate up to 35% of the rated capacity of 17 MW. Thus the steam from the AFBC is not required for up to 60 % of the rated capacity of the turbine or 10 MW of the power generation. Hence the emissions from the coal fired AFBC is not considered as project emissions. The project activity is however, confined to the utilization of the waste heat which in the absence of the project would have been vented to the atmosphere. The emissions reduction estimates for the project are likewise restricted to only that amount of electricity generation, which is attributable to the steam generated from the waste heat recovery boilers.

In section B.4 of the PDD, PP has clearly identified various available options for meeting the power demand of the plant in the absence of project activity. It also included possibility of generation of power in a coal based thermal power plant. It has been stated in the PDD that a coal based power generation would have been the most plausible options (the expert from the PDD submitted for registration is quoted[5]). It has also been stated that it could have been the choice of power generation considering the fact that char (residue from DRI kilns) would also be available that would make the power generation even more economical. But, as the emission factor for power generation in a coal based thermal power plant is more than grid emission factor, grid emission factor has been used for calculation of ER estimation in the project activity for conservative estimation of emission reductions. It may also be noted that PP had approached state electricity for drawing the power from the grid prior to implementation of project activity. As for estimation of emission reductions, steam energy from WHRBs only has been considered (steam from AFBC is not being considered for this estimation). Hence we have considered project emissions on account of steam generation from coal-fired boiler.

Keeping in view of logic while two credible baselines (coal and grid import) exists the lowest emission factor among them needs to be considered but we also calculated the mix of both grid and captive power plant but we have chosen grid import since emission factor is conservative. From the below stated figures the import of power from the grid is the conservative option for the CPP. Hence in absence of this project activity the equivalent power would have been imported from the grid.

Baseline emission factor per GWh (Grid as baseline)	927.19	tCO2e/GWh
Baseline emission factor per GWh (Coal based CPP as baseline)	1091.87	tCO2e/GWh
Weighted average emission factor of baseline as both power from grid and fossil fuel based power plant	994.70	tCO2e/GWh

[5] Page No 12,13 option 3 of the submitted PDD

Further, as established in the PDD the coal fired AFBC along was considered as a best baseline alternative and had been established as the baseline scenario since the cost of power per kWh is lowest for a coal-based CPP. Thus any emissions from the coal fired AFBC is part of the baseline scenario and not the project activity. The viable baseline scenario for the project is import of power from the regional grid as it does not require any upfront investment but is costlier as compared to self-generated power in terms of the operation cost, since as a small player the initial investment of mobilizing more than 55% on the total cost of the sponge iron plant and about 50% costlier that the coal based boilers was a daunting task.

However, as noted by the requests for review, electricity from the grid has been considered for calculating baseline emissions. This has been done to ensure conservativeness of the emission reduction figures. The grid emission factor of the grid to which the project is connected is 0.927 t CO2/MWh as compared to an emission factor of coal-fired power plant of 1.091 t CO2/MWh. The calculation of the coal-based emission factor has been provided in **Annex-VII**.

Thus the installation of an AFBC is not related to the CDM project activity and it is business as usual scenario, CO2 emissions associated with the AFBC is therefore not accounted for in the project plants emission reductions estimates and as a sake of conservativeness for estimation of baseline emissions, import of power from the regional grid has been selected as the baseline for the project.

Issue No: 10 in RfR 2 and Issue no: 2 in Rfr 1,3,4

Further explanation is required regarding how the method for calculating EGy described in section B.6.3 of the PDD is consistent with the requirements of the approved methodology and the monitoring plan proposed for this project activity.

Since from the beginning we are advocating that the CDM revenues is the valiant requirement of us for the success of the project activity, this might very well be supplemented based on the adoption of two pronged monitoring system considered by the us to calculate the net quantity of electricity generated by the project activity. It is also to be noted that under such a corrosive, dirty and high temperature environment the readings measured cannot be perfect/apt, however based on the requirement of the methodology we have ensured that all the equipments to measure the waste gas flow rate, CV of fuel is provided, hence we are of the opinion that the monitoring plan adopted in the PDD is in line with the methodology.

As stated in the review earlier based on the conservativeness though the baseline selected is grid based electricity emission factor, the turbo generator affected by the project activity is supplied by two steam sources and the methodology has provided steps to calculate the electricity generated in units which are supplied by both the waste gas and other fuels. The procedure specified in the methodology is that the relative share of the total generation from waste gas is calculated by considering the total electricity produced, the amount and caloric values of the other fuels and of the waste gas used, and the average efficiency of the plants where the electricity is produced. The electricity produced by the project activity is calculated as follows:

Notation	Description	Monitoring plan adopted by KSPL
Electricity produced by the project activity	$EG_{year} = \frac{\sum_{h=1}^{8760} Q_{WG,h} * NCV_{WG}}{H_r}$	
Q_{WG}	Amount of WG recovered (Nm^3/h)	We have provided with sensors which will be hourly logging the required data, however this measurement has high risk since the gas is of high impurity, high temperature and corrosive in nature the reliability of the measurement quiet dicey.
NCV_{WG}	Net Calorific Value of Waste Gas (TJ/Nm^3)	Continuously measured
Hr	Average Power Plants Efficiency (TJ/MW)	Calculated on yearly basis
The average power plant efficiency Hr	$H_r = \frac{\sum_{h=1}^{8760} \sum_{i=1}^{I} Q_{i,h} * NCV_i}{EG_{total,year}}$	
$Q_{i,h}$	Amount of individual fuel (waste gas and other fuel(s)) I consumed at the power plants during hour h (Nm^3/h)	On a hourly basis the fuel consumption is measured
NCV_i	Net Calorific Value annual average for each individual consumed fuel and the waste gas (TJ/Nm^3	Continuously measured
$EG_{total,year}$	Total annual energy produced at the power plants. (MWh/year)	Measured continuously

As stated above the plant has also provided provision to measure the net quantity of the electricity generated by the project using steam-apportioning approach.

In the PDD, we have also provided provision to estimate the power generation from the project activity (WHRB) calculated based on the steam fraction supplied to the turbine from the WHRB. This is done as the steam from WHRB and AFBC have same properties (pressure and temperature). However, to consider any difference in properties of these steam sources (WHRB & AFBC), PP has included monitoring of steam properties (pressure and temperature), which would be the basis of steam energy calculation. Steam energy used as the basis for pro-rata power generation from the turbine attributable to steam from WHRB in the project activity. The estimations in the PDD are ex-ante based on prorated steam generated from WHRB and for estimation of actual emission reductions in the project activity, the electricity generated and auxiliary consumption will be monitored directly and the net electricity will be proportioned on the basis of the steam energy. ***It should also be noted here that any loss of steam between individual boilers (WHRB & AFBC) outlet and common steam header and from common steam header to the turbine inlet would be deducted from WHRB steam. This is most***

conservative and transparent. Thus both the electricity generated by the CPP and the auxiliary electricity consumed by the CPP is monitored and the net electricity is calculated by subtracting the auxiliary electricity from the total generation. Since utilizing steam from both the WHRB and the AFBC generates power, the potential amount of electricity to be displaced by the WHRBs in the project scenario has been estimated by proportionate of the total steam available from the WHRB and the AFBC boiler respectively. This is in our opinion carried out in line with the clarification provided by the methodology panel in its 26th meeting in response to the request for revision AM_REV_0033 (EB 31) whereby the methodology panel approved the method used by the project proponent. The calculations procedures are annexed as Annex- VIII

We have also noticed that the following registered project activities have adopted the same procedure and the methodology panel/CDM - EB has acknowledged the same.

Date of registration	***Title of the project activity***	***Reference number***
4/16/206	Waste heat based 7 MW Captive Power Project Godawari Power and Ispat Ltd (GPIL)	264
7/3/2006	8MW Waste Heat Recovery based Captive Power Project at OCL	367
7/10/2006	Waste heat recovery based captive power project at Monnet	394
7/17/2006	JBSL–Waste Heat Recovery Based Captive Power Project	433
12/17/2006	"Waste Heat Recovery based captive power generation by SKS Ispat Ltd"	674
12/23/2006	Usha Martin Limited - Waste Heat Recovery Based Captive Power Project activity	696
2/12/2007	Waste Heat based 4.75 MW captive power project "RSIPL-WHRB(1&2)" CDM PROJECT ACTIVITY	783
2/18/2007	Waste Heat based 10 MW captive power project "GPIL- WHRB 2" CDM PROJECT ACTIVITY	772
3/24/2007	MSPSPL Waste Heat Recovery Based Captive Power Project	818
9/14/2007	10MW Waste Heat Recovery based Captive Power Project at Vikash Metal and Power Limited	1149
10/19/2007	"4MW Waste Heat Recovery based power project by GRSPL, India"	1114
10/19/2007	MSPPL WHR based power project at Chattisgarh, India	1140

We have provided the statistics not to make any precedence but tried to convey the approach selected is most conservative, technically sound and that is the reason the highly respected CDM – EB has accepted this approach for more than twelve projects and registered under the CDM.

However on a very meticulous way we have provided both the monitoring options (the one that is mentioned in the methodology and other based on the clarification/precedence/new approved consolidated methodology) not restricting to just one like other projects and moreover as the first option has it's associated unreliability on data's accumulation and perfect ness due to the operation/technical reasons as stated earlier we request the CDM EB to consider our case and accept for registration.

We sincerely hope that the Board accepts our aforementioned explanations and we look forward to the registration of the project activity.

LIST OF ANNEX:

Annex: 1 Board resolution papers
Annex: 2 Bank Credit committee appraisal note
Annex: 3 communications between the bank and us
Annex: 4 Power supply contract with the Jharkand Electricity Board
Annex: 5 Letter from the Directorate of Industries, Jharkand
Annex: 6 Study report published by JPC, Govt of India
Annex: 7 Coal-based emission factor calculations
Annex: 8 Monitoring procedure based on the steam apportion