The price fixed for gas supply by GGCL is very costly and the management evaluated various options before going ahead with the project. The management had option of either installing coal based system that has lower efficiency as compared to gas engine.

Question
The project proponent has mentioned of using coal for power generation, but for Gujarat the coal is not a viable fuel option due to its availability issue. Gujarat has considerable quantum of lignite reserve but not coal, the major source of coal used is either imported or procured from the neighbouring state. So could the project proponent site relevant documentation to signify the availability of coal and it won’t face supply constraint.

Could the project proponent site the difference of efficiency of a FBC based coal based power plant and gas engine.

Is it technocommercially feasible option to incorporate such a small coal based unit of 5 MW, moreover per the setting up of coal based power plant is much more costly than the gas based unit.

Please compare the calorific value per kg of both the fuel and incorporate the fixed (excess) capital cost against per unit of power generated during the life time of 30 years for a power unit and then compare which is more costlier and it will reveal that the per unit cost of power from coal unit will be higher.

Statement 2
The project has opened up business opportunities for the material distributors, local industries and other ancillary businesses for local people.

How is it relevant to the project activity, the activity is only a part of business development to be very conservative can only be part of the corporate social responsibility

Statement 3
the project helps “Host Country” India to fulfil its goals of promoting sustainable development

Could the project proponent state the development goal of the host country and the how the project activity fulfilled the same

Statement 4
Examples include energy efficiency measures (such as efficient motors), fuel switching measures (such as switching from steam or compressed air to electricity) and efficiency measures for specific industrial or mining and mineral production processes (such as steel furnaces, paper drying, tobacco curing, etc.).

The methodology does not talks of power generation using
comparatively cleaner fuel anywhere so how does the project proponent choose the methodology

Statement 5
The project proponent proposes an efficiency of 28% for thermal power plant so are the project proponent planning to buy an old one as no new power plant has an efficiency so low. Moreover the project activity is not a combined cycle or include effective heat recovery unit so how can such high efficiency be claimed for a gas engine.

Question 6
Where is the capital cost gone in the financial analysis. There has been no such relevant documents provided by the project proponent that the return from the project activity is low or something that could be compared with the bench mark and having power under APM signifies that the project proponent is using gas for a long time so how do the question of technological barrier comes into frame.

Comment 2

Name: Amar
City: Kolkata
Organisation: Self
Country: India

II.D has been used on the grounds that NG fired Engines are more efficient than coal based ones. Although gas engines have a higher Electrical to Heat efficiency ratios compared to that of gas turbines of its class, the heat efficiency is always significant and the project activity does not tap that potential! Hence, there is certainly not much on energy ‘efficiency’ front to look at in this case. The case may have been different if Waste heat recovery was practiced (for thermic fluid heating or for process steam generation) and VAM machine would have been run entirely on jacket heat of the engines. Even if we surmise that industry does not have any thermal energy, the same should be tapped and diverted to surrounding industries (thereby bolstering the sustainability aspect) rather than being wasted as is unfortunately the case here.

Also, the argument that biomass was/is not available in the Surat-Ankleshwar region may be a bit of a stretch.

Gas @Rs.12.32 per SCM is expensive and it is always difficult for new entrants to fetch the contracts at the then market price. In my understanding if the contract was done at the end of 2004, the price offered was higher by Rs. 2.00 over the then existing supply rates. Hence, there is a barrier for new entrants in terms of sourcing resource supply at competitive price.

For levelized cost discussions, if waste heat recovery were practiced, this would amount to savings of anywhere between Rs. 0.80- Rs. 1 per unit of electricity generation. This would mean that the cost would come down from Rs. 3.75 to about Rs. 3, i.e., at par with that of the coal fired plant. Hence, there is a ready and existing potential to increase revenues and hence making this option really competitive with the baseline scenario. The fact that PP does not
Comment 3
25-03-08 8:43am

Name: ILANGO  City: Chennai
Organisation: CDM Watch  Country: India

Dear Validator,

First of all, the project activity has applied an entirely wrong methodology. The PP have chosen to apply small scale methodology AMS II.D which "primarily aims at energy efficiency". Measure I of AMS II.D very clearly states that, "this category covers the project activities aimed primarily at energy efficiency; a project activity that involves primarily fuel switching falls under III.B". This should have been pointed out in the primary check for correctness itself.

GGL already operates a Natural gas based electricity generation project using similar gas engines which clearly is the baseline scenario of the project activity. As GGL has expanded its production capacity, its electricity requirement has increased and as a result, PP has expanded the capacity of existing captive power plant with additional gas engines. It is purely an expansion of existing baseline scenario. AMS II. D can be applied for this project only if there is an energy efficiency due to any measure incorporated which is not a business as usual scenario.

The project activity cannot even be covered under III B because, III B is for "switching of fossil fuels" i.e switching from a higher GHG intensive fossil fuel to lesser GHG intensive fuel. Since there is no switching of fossil fuel, III. B cannot be applied. The project activity assumes that it would have opted for a coal or lignite for electricity generation. This is very clearly "an unrealistic alternative as coal /lignite based generation are opted generally for capacities above 100 MW. A credible, realistic and conservative baseline would be the grid electricity if the industry has a grid connection. Whether the industry has grid connection is not at all clear from the PDD. If there is no grid connection for any of the electricity requirements of the industry, then, only Natural gas based generation is the baseline. Giving a argument of "peak demand", which is definitely not valid, grid electricity is not considered by the PP as an alternative. If peak demand is considered, all industries in India can claim coal or lignite or any other hypothetical more GHG intensive fuel as the baseline. The installed capacity of the grid and demand is the actual indicator of electricity scenario of the grid and not peak demand. Peak demand can be for 3-4 hours of the day or even shorter. If the industry has no grid connection, than the baseline is natural gas based generation and in that case the project is not "additional" at all as the new project is only expansion of existing baseline.

Moreover, considering coal or lignite based generation for a 6 MW plant is something which is unheard of. The alternative of biomass /renewable based generation is not considered. In fact, for a plant of this magnitude, renewable energy based generation is definitely a very very realistic, credible alternative. In fact, more than 90 % of the
renewable energy plants are lesser than 25 MW. Without any explanation, this realistic alternative has not been considered. There are other large scale methodologies that could be applied for this project, if all applicability criteria of those methodologies are met.

It is quite clear from the PDD that the Public consultation process has not been done in proper manner. Section E.2 says that the comments were received from companies supplying equipments (its suppliers!) and local Nagar Palika regarding "the fuel shift from more carbon intensive fuel to lesser carbon intensive fuel"! which is not the project and "all stakeholders have lauded the efforts of GGL in saving fossil fuels". Where is the saving of fossil fuel here?

Natural gas is also a fossil fuel which GGL has been using for its existing power plant and project power plant. If GGL has adopted for renewable energy based generation reducing the use of fossil fuel, the appreciation makes sense! Instead GGL has not considered renewable energy as an alternative at all and has only expanded its existing NG based generation with no improvement in efficiency or any other innovative. Request you to consider these comments in your validation process.

Comment 4  
25-03-08 10:26pm
Name: Raghu  
City: Aurangabad  
Organisation: CDM Future  
Country: India
1. This project is not applicable under AMS II.D methodology. This is a new project activity involving installation of new gas based power plant hence AM0049 or other appropriate methodology should be used or should propose new method. This indicates the consultant capability in understanding the CDM and project requirements.
2. When GGL has already operating gas based power plant, there is no question of considering coal/lignite based power generation.
3. If gas supply is not abundant, how the PP establishes the sustainability of the plant operation. Total baseline arrival arguments are baseless and unrealistic.
4. Additionality argument is unconvincing and it is better not to mention technological and other barriers. When the baseline selection itself is wrong then there is no point in doing financial analysis comparing coal as baseline fuel.
5. Why there is a delay in applying for the CDM when the project started in 2005. Please check the review comments of EB for such projects and substantiate the delay in the project application. This indicates indirectly no-cdm fund requirement for the project. PP should also do the investment analysis for the project and prove the poor economic returns of the project instead of comparison analysis.
6. Evidence for stakeholder meeting should be included in the PDD and DOE should check the appropriateness of list of stakeholders for the project.

Comment 5  
13-04-08 8:03pm
Name: paryavaran mitra  
City: ahmedabad  
Organisation: paryavaran mitra  
Country: India
Comments regarding natural gas based power plant project at Gujarat Glass Ltd.
1. How many skilled/unskilled people from surrounding area were employed at this project during commissioning and operation as mentioned in social well being section?
2. Whether uninterrupted supply of Natural Gas has been ensured
from suppliers for continuous operation? Whether gas will be provided from existing network of pipeline or modification is needed?

3. How many Natural Gas based power plant are in existence in surrounding area? How additionality criteria meet in this case?

4. What is total pollution load generated during manufacturing in terms of water, solid waste, scrap etc. from factory premises and its impact on global warming?

5. Stake holder consultation did not include local villagers, district or state government authority from environment department/pollution control board. Whether NOC from state departments has been issued to this project?

6. Whether local villagers would be beneficiary of CDM revenue earned by company? Any plan has been develop to earmark certain fund from CDM revenue for community welfare to improve social well being of local people?

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