3. The PP and DOE are requested to explain how a very generic uncertainty of implementing wind power would be interpreted as a project specific barrier.

The present project activity is a small scale CDM wind power project. Therefore, the additionality of the project has been proven as per the options provided under *Attachment A* to Appendix B of the simplified modalities and procedures for small-scale CDM project activities. As per the same, at least one of all the given barriers has to be proven for the project to be additional. In the CDM PDD, two options have been chosen to prove additionality i.e. the Investment barrier and the Prevailing practice barrier. While the Investment barrier tries to prove financial unviability of the project without CDM benefits, the Prevailing Practice barrier tries to show the factors that influence the investment scenario of the project type.

As per the Appendix B of the simplified modalities and procedures for small-scale CDM project activities, the prevailing practice barrier should reflect the following "Prevailing practice or existing regulatory or policy requirements would have led to implementation of a technology with higher emissions".

Accordingly, two barriers faced by the PP were pointed out in the CDM- PDD:

• The dominance of investment into thermal power plants in the Indian Power Sector

As pointed in the PDD, in 2005-06, thermal and hydro power constituted 64% and 26% of the total installed capacity in India respectively, while wind constituted only  $5\%^1$ . These data reflect the market scenario in the Indian power sector and the dominance of thermal power in it. For deciding on an investment, the PP is likely to do a due diligence of these current trends. The fact that huge investments are taking place in the thermal power projects shows the profitability and stability in the sector. On the contrary, the wind power sector is a newly established sector in India and is expected to be accompanied by fair amount of uncertainty and instability.

MMTC, a Government of India enterprise, plans to diversify in various sectors. The 15 MW wind power project is also part of their diversification strategy. Looking at the sectoral trends, as pointed out above, it was difficult for MMTC to take a decision to invest into wind power projects. A major barrier that faced them was that if an equivalent amount of money was invested into some other sector, it might have yielded better returns. However, it was solely on the basis of CDM revenues and the intention of investing into green power that MMTC decided to invest into this project. Thus, although this barrier is not a decisive barrier, it can influence the decision making context of the PP greatly.

• <u>Uncertainty with respect to revenue accrual of wind power projects in Karnataka after the tenth year of operation.</u>

The regulatory environment is another factor which is likely to influence the investment decision of the PP. Since wind power projects are already faced with various barriers like erratic supply of wind, huge upfront costs, etc., the regulatory scenario for the sector needs to be very strong and stable to attract investments in the sector. However, such is not the case with wind power projects in Karnataka.

<sup>&</sup>lt;sup>1</sup>Annual Report 2005-06, page 170 <u>http://powermin.nic.in/reports/pdf/ar05\_06.pdf</u>

The present wind power project in Karnataka has signed a Power Purchase Agreement with HESCOM for a period of twenty years. The PPA in its clause  $5.1 \text{ and } 5.2^2$  states that tariff rate for the project has been determined only upto the first ten year of operations at a fixed rate of Rs.3.40/unit. From the  $11^{\text{th}}$  year onwards, the tariff rates for the project would be decided by the commission. The HESCOM may or may not purchase the power at the rates determined by the commission as it is free to do so as per the clause 5.2 of the PPA. In case the HESCOM is unwilling to purchase, MMTC may have to compulsorily sell the power to a third party even at a lower tariff rate (in addition to the wheeling and banking charges).

Further, according to the above mentioned tariff order, KERC (Para 8 vii) opines that differential tariff rate should apply to projects that have completed their first ten years of operation, as major liabilities in the project (mainly debt repayment) is expected to be over by this time. Hence, for projects beyond 10 years, PP may not get the same rate of tariff or even get lower tariff rates. Hence, there is a lot of uncertainty in the quantum of revenue which is expected to accrue to the PP after the tenth year.

Both the above factors are likely affect the tariff rate applicable to the project after the tenth year and thus can be considered as a project specific barrier. The present wind power project is an unviable project by itself. Although uncertainty related to tariff is applicable to all projects in Karnataka the impact would be worse in this case. CDM revenues are the only cushion to the available to the PP and the project against the impact of these uncertainties.

In the absence of CDM revenues, the PP would not have invested into this wind power project and instead would have opted for sector with higher returns and stability. Thus, the above mentioned factors are capable of indirectly influencing the investment decisions, as in this case and therefore they are project specific barriers.

<sup>&</sup>lt;sup>2</sup> Annex 3-1 relevant extracts of the PPA