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Att: CDM Executive Board

Your ref.:
CDM Ref 0745

Our ref.:
KCHA/MLEH

Date:
20 October 2008

Response to request for review Demand side energy conservation and reduction measures at ITC Tribeni Unit (0745)

Dear Members of the CDM Executive Board,

We refer to the requests for review raised by three Board members concerning DNV's request for issuance of the CERs for project activity 0745 "Demand side energy conservation and reduction measures at ITC Tribeni Unit" and would like to provide the following initial response to the issues raised by the requests for review.

Comment 1:

The verification report (p.6) states that "For activities wherein energy meters were not in place, power consumption is measured by fluke meter once every month during the project period. Annual average power consumption during the project period has been computed from the instantaneous fluke meter reading and annual average run hours of the main equipment". Further information is required on how the DOE has verified the power consumption for activities where energy meters were not in place in accordance with the methodology which requires metering of the energy use.

DNV Response:

Fluke meters (energy meter) were only used for metering the energy consumption in the project phase for the following measures included in the project:

- TEM P5: (PM1 Edge Cutter Pump) and (PM3 Edge Cutter Pump)
- TEM P6: (PM3 VHP Pump)
- TEM P11: (PM3 Drum Thickener Water Pump)
- TEM UT4: (PM1 VHP Pump)
- TEM UT6: (PM4 VHP Pump)

The average of the measured values of the electricity consumption for each pump were then multiplied by the measured values of the operational hours of each pump to obtain the energy consumption.

The emission reductions of these measures in the reporting period in question are 687 tCO₂e and thus only 7 % of the emission reductions verified and certified for that period.

The pumps of these measures run synchronized to the machine operation having interlock facilities. These pumps run thus with constant loading and are integral to the respective paper machines. Although the monthly values reported for each of these pumps in the spreadsheet submitted with the request for issuance show that the variation of the measured electricity consumption is rather small, in particular during the monitoring period in question, we acknowledge that no statistical analysis was performed to confirm that the selected average value is representative for the average load of the pumps. However, given the small amount of emission reductions being reported from these measures, a statistical analysis excluding some outliers and/or applying a confidence interval of the average load is not expected to have a material impact on the reported emission reductions. Nonetheless, such an analysis may be carried out and emission reductions may be discounted, if necessary.

The fluke meter is an online portable energy measuring device (measuring kW, kWh, kVAh, kVARh) suitable for 3 phase 415 volt power systems both for star and delta connected loads. The Serial No. of the Device is DM8200046 with a valid calibration up to 7 May 2009 as per ERTL (Kolkata) calibration certificate number ERTL(E)/CAL/I101/0153/04-08. The fluke meter gives the average energy consumption of the drives pr. hour (kWh/h), this value will be very stable due to the constant load for the pumps. The average measured energy consumption value when multiplied by the operating hours, which is also a measured value, gives the annual energy consumption of the drives. Thus both the average energy consumption as well as the operating hours are measured values. Hence, the energy consumption of the activities is determined based on metered values only.

As a measure for cross-checking the energy consumption values, DNV also performed the measurement by the fluke meter during the verification visit. The measurement values were found to be consistent with the energy consumption values reported in the monitoring report.

DNV would also like to inform the Board that the project proponent will be installing continuous measurement energy meters for future verifications.

We sincerely hope that the Board accepts our aforementioned explanations.

Yours faithfully
for DET NORSKE VERITAS CERTIFICATION AS



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