

Response to Request for Review: 0740 Zafarana Wind Power Project Plant

In reference to the request for review for the Zafarana Wind Power Plant Project in the Arab Republic of Egypt, the project proponents wish to express its appreciation of the work by the CDM-EB and RIT members.

The project proponents hereby summarize the response to the comments and relevant rectification work that has been carried out to the PDD.

Ref	Request for Review	Project Proponent Response
1.1	<p>The application of the methodology is not transparent: Data provided for the plants on the grid is not clear; it does not state which plants use oil and which use gas, it is not clear what SS stands for, and the operating margin is not calculated for each of the three years and then an average determined. Instead, an average over the 3 years is applied using a weighted average of the CEF for all fuels and a weighted average of the oxidation factor. These calculations should be done for each fuel used in each plant on the grid using the CEF, oxidation factors, and NCV's for each fuel, and not weighted averages of these values for all fuels – this is not transparent and it is not possible to tell if they are conservative. The fuels used for each plant should be provided, unless they is not available in which case it should be stated and validated that disaggregated fuel data is not available by plant.</p>	<p>Raw data for the plants on the grid is provided for in Annex 3 under Baseline Information, for the years 2001/2002, 2002/2003 and 2003/2004. The following clarification is provided in response to the request for review.</p> <p>In the tables, the following acronyms were used to describe the type of generation: ST = Steam Turbine CC = Combined Cycle GT = Gas Turbine The explanation of acronyms has been added to the revised PDD.</p> <p>In terms of the operating margin, we agree with the comments that the average for each of the 3 years shall be calculated. This has been rectified in the revised PDD. The change does not affect the calculation.</p> <p>With regards to the fuel use for each plant, this information was not publicly available. This fact will be added to the PDD. In addition, while the breakdown for fuel consumption in the individual plants, most of which are co-fired, was not available, the types of fuel used in the plants will be added to the tables of plant information in the PDD.</p> <p>The information publicly available and verifiable were:</p> <ul style="list-style-type: none"> • Individual fossil fuel consumption for each plant in the grid (tonnes of oil equivalent basis) • Aggregate percentage of natural gas and fuel oil use on a toe basis <p>The use of aggregate data is consistent with Footnote 4 of ACM0002, which states that emission factors can be “calculated, for the simple OM and the average OM, using aggregated generation and fuel consumption data, in cases where more disaggregated data is not available”. To provide further clarity in light of the request for review, the presentation of the calculations has been changed in the revised PDD.</p>
1.2	<p>Also, IPCC default values are used throughout but there is no explanation why local, or country specific values are not used. Also it is</p>	<p>This will be added to both the PDD and validation report With regard to the NCVs, it is noted that the PDD in effect uses the country-specific values, as all fuel consumption data reported</p>

	<p>not clear why the CEF for crude oil is used instead of for fuel oil.</p>	<p>by EEHC¹ is given on a energy content (tonnes of oil equivalent) basis. The reported NCV values are 1.111toe/t natural gas and 0.972toe/t fuel oil. These have been added to the revised PDD. The calculations are not affected.</p> <p>It has also been subsequently confirmed that the local CEF for natural gas and fuel oil are 15.3tC/TJ and 20.8tC/TJ, respectively. This has been reflected in the revised CER calculation.</p> <p>It was confirmed during validation that there is no local oxidation factor. This remains the case.</p> <p>We fully agree with the comments pointing to the use of the CEF for crude oil for fuel oil. This has been rectified in the revised PDD.</p>
2.1	<p>The Common Practice analysis is not convincing and there is no evidence that it was adequately validated. There are several other wind projects in the same region (Zafarana) that are not CDM projects. The PDD states that these were financed with "soft loans and other incentives" that are no longer available, hence it is not common practice. The validation report states that this argument is acceptable, but does not indicate that it was validated or confirmed.</p> <p>This project activity is also receiving a loan,</p>	<p>We appreciate the concern over the common practice analysis. We attempt to summarize the situation with more clarity below, which also includes information described in other sections of the PDD:</p> <p>As for the common practice of wind power projects in Egypt, we identified wind power projects which are implemented by grant assistance and/or combination of concessional loans and grant as common practice as follows:</p> <ul style="list-style-type: none"> • Several wind power projects have already been implemented in Egypt, all of them at sites adjacent to the Project's site. These power plants were constructed as a result of grants and concessional loans from Denmark and Germany. The Danish-sponsored plants have a total capacity of 60MW, the German-sponsored plants 80MW. • The grants had been an extremely important aspect of funding the previous wind power projects in Egypt, as wind power is more capital-intensive than fossil fuel power generation, as stipulated in Sub-step 2b. The capital requirement for an Egyptian wind farm, calculated as approximately US\$1.29/kWh is ten times the amount for conventional thermal generation, estimated at US\$0.12/kWh (refer to Annex 3). • Thus, these plants which have been carried out with grant assistance instead of the CDM can be considered as common practices in the wind power projects implemented by NREA in Egypt. <p>With regard to the difference between JBIC loan and other</p>

¹ Egyptian Electricity Holding Company

	<p>from the Japan Bank for International Cooperation – but no information has been provided regarding how this loan is different from those provided to the other projects by Denmark, Germany and Spain.</p>	<p>finance provided to the other projects, there is an important distinction that makes it different to the existing wind farms as follows:</p> <ul style="list-style-type: none"> • The previous wind projects, as common practices, were financed through a grant and/or combination of concessional loans and substantial grants by Demark and Germany. For instance, the assistance for the second phase of the Danish-funded wind power plant included DKK 30 million as a grant. The approximately USD 4.7 million grant for the 30MW plant translates to USD 18.8 million for the Project. • While the Project will also be financed through concessional loans, it will not receive any grants, reflecting OECD’s upgrading of Egypt to a middle income country in recent years. The Project was the first to be affected by this change of financial condition to Egypt. • As explained in Sub-Step 4a, the grants had been an extremely important aspect of funding the previous wind power projects in Egypt to fill in the gap between the cost for wind power plants and those for conventional thermal power plants, as wind power is more capital-intensive than fossil fuel power generation, as stipulated in Sub-step 2b. However, the Project is the first without grant assistance. • As stated previously, NREA and JBIC agreed to implement the Project under the CDM. For NREA, it was important that the income from the CDM fill in the gap for the grant. • Thus, the Project is not the common practice and there is a substantial difference between previous projects as common practice and the Project. • NREA also plans to implement other new wind power projects financed by Denmark, Germany and Spain, which will receive no grant assistance (same as JBIC finance), under the CDM. <p>While these are already included in various sections of the original PDD, the above will be reflected in the common practice analysis (Sub Step 4a and 4b) of the revised PDD.</p>
2.2	<p>The application of the methodology is not transparent: Data provided for the plants on the grid is not clear; it does not state which plants use oil and which use gas, it is not clear what SS stands for, and the operating margin is not</p>	<p>Please see response to 1.1.</p>

	<p>calculated for each of the three years and then an average determined. Instead, an average over the 3 years is applied using a weighted average of the CEF for all fuels and a weighted average of the oxidation factor. These calculations should be done for each fuel used in each plant on the grid using the CEF, oxidation factors, and NCV's for each fuel, and not weighted averages of these values for all fuels – this is not transparent and it is not possible to tell if they are conservative. The fuels used for each plant should be provided, unless they is not available in which case it should be stated and validated that disaggregated fuel data is not available by plant.</p>	
2.3	<p>In addition, IPCC default values are used throughout, but there is no explanation why local, or country specific values are not used. It is also not clear why the CEF for crude oil is used instead of for fuel oil.</p>	<p>Please see response to 1.2</p>
3.1	<p>The application of the methodology is not transparent: Data provided for the plants on the grid is not clear; it does not state which plants use oil and which use gas, it is not clear what SS stands for, and the operating margin is not calculated for each of the three years and then an average determined. Instead, an average over the 3 years is applied using a weighted average of the CEF for all fuels and a weighted average of the oxidation factor. These calculations should be done for each fuel used in each plant on the grid using the CEF, oxidation factors, and NCV's for each fuel, and not weighted averages of these values for all fuels – this is not transparent and it is not possible to tell if they are conservative. The fuels used for each plant should be provided, unless they is not available in which case it should be stated and validated that disaggregated fuel data is not available by plant.</p>	<p>Please see response to 1.1.</p>
3.2	<p>Also, IPCC default values are used throughout but there is no explanation why local, or country specific values are not used. Also it is not clear why the CEF for crude oil is used instead of for fuel oil.</p>	<p>Please see response to 1.2</p>