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|  <p align="center">CDM: Form for submission of queries from DOEs to the Methodologies Panel regarding the application of approved methodologies (version 01) <i>(To be used by DOEs for presenting questions / proposals / amendments related to the applicability of approved methodology)</i></p> | |
| Name of the entity (DOE) submitting this form | TUEV-SUED |
| Reference number and title of the approved methodologies | ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" Version 07 EB36 |
| Title/Subject (give a short title or specify the subject of your submission, maximum 200 characters): | Request for clarification on "Definition of grid" |
| Attach CDM-PDD example of project activity where applicability raises problem: | <input type="checkbox"/> Yes, is attached. |
| Date and signature for the DOE | <div style="text-align: right;">  2008-05-08 </div> |
| Submitted queries Please use the space below to substantiate the queries relating to the application of approved methodologies. If the questions are related to a project activity under development or implementation, please describe the context in which they arose. If you are proposing amendments to existing methodologies, please specify the text you want to change or introduce. If necessary, attach files or refer to sources of relevant information. | |
| If you have a question relating to the application of an approved methodology, please specify and provide reference to the exact project activity to which it applies. | |

Summary

The request for clarification is to facilitate a particular project activity in Indonesia and involves :

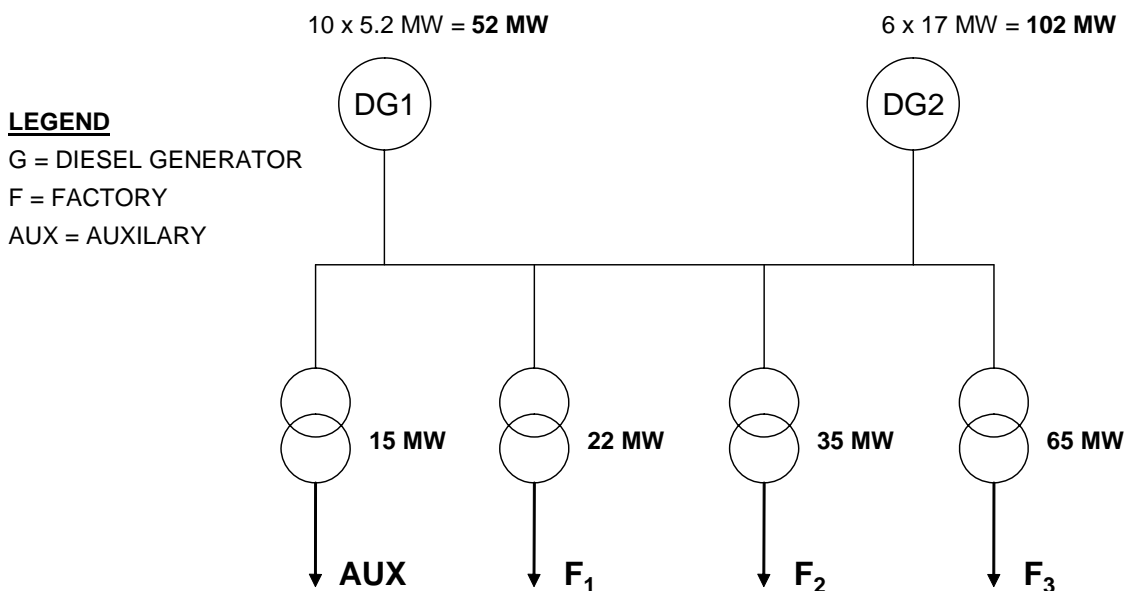
1. The “definition of grid” based on ACM0002v7
2. The calculation of the baseline emission factor when a renewable power generation (project activity) is connected to both the regional grid and the industrial “private” grid

Project activity

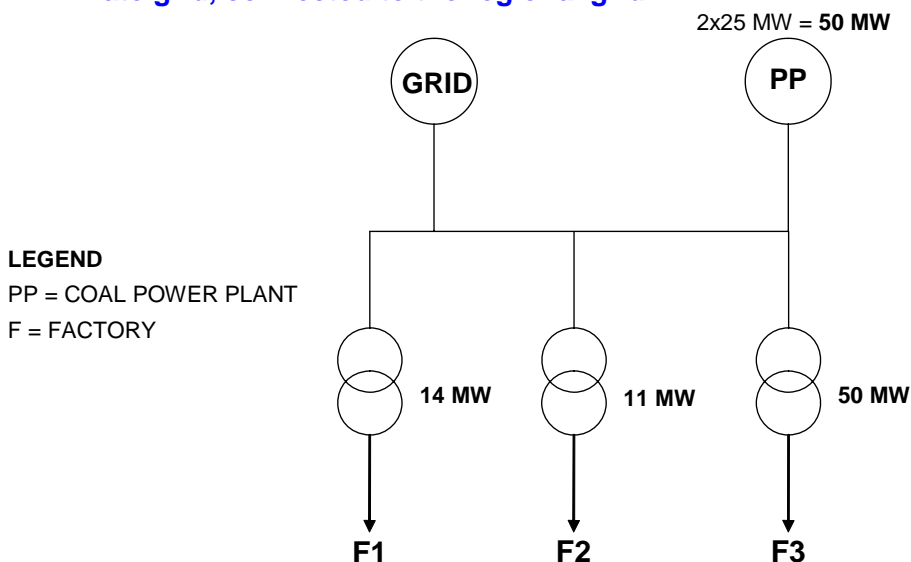
In Indonesia, chronic shortages of electricity and relatively sparse transmission network has resulted in many large industrial facilities (often in remote areas) to install their own power generation capacity. Many, particularly large industrial facilities (eg. mines, cement plants, etc...) are characterised by a number of discrete electricity consumers (“off-takers”) spread across a wide geographic area supplied by one or more discrete power plants. In effect, such facilities have developed their own “private” grids, which may or may not be connected to the wider regional or national transmission network.

Below are 2 typical examples found in Indonesia:

1. Private grid, not connected to the regional grid



2. Private grid, connected to the regional grid



1. “Definition of grid”

The definition of the grid as provided in ACM0002v7 is the *“Grid/project electricity system is defined by the spatial extent of the power plants that are physically connected through transmission and distribution lines to the project activity (e.g. the renewable power plant location or the consumers where electricity is being saved) and that can be dispatched without significant transmission constraints.”* (p.2).

The ACM0002v7 applicability criteria states that:

- *“the methodology is applicable to grid-connected renewable power generation project activities that involve electricity capacity additions”* (p3);
- *“the geographic and system boundaries for the relevant electricity grid can be clearly identified and information on the characteristics of the grid is available”* (p3);

The industries in Indonesia that were mentioned above have instead developed their own private grid with sufficient complexity to service several off-takers by means of their own power plants (which sometimes are connected to the regional grid). In effect, those industries have created and managed their own private generation and transmission grid, whose boundaries *can be clearly identified and information on the characteristics of the grid is available.* (ACM0002v7, p3 as above).

As a result the request for clarification is on whether the industrial private grid meets the definition of the “Grid / project electricity system” given in ACM0002v7.

2. Calculation of the baseline emission factor when the renewable power generation (the project activity) is connected to both the regional grid and the industrial private grid

Due to the growing electricity demand and the complexity of the transmission network in Indonesia, there is no certainty that the proportion of the electricity generated by the renewable power generation (the project activity) distributed to the regional grid and the industrial private grid will stay constant throughout the project lifetime. We would also, therefore request clarification on whether the baseline emission factor for the project can be calculated based on the weighted average of the two baseline emission factors, i.e. the emission factor of the regional grid (which will be calculated using ACM0002,v7); and the emission factor of the industrial private grid (which will be calculated using ACM0002,v7 after the clarification in the previous section). The weighting of the two baseline emission factors will be determined ex-post based on the actual dispatch data / the amount of electricity (MWh) distributed to the regional grid and the industrial private grid and will be updated annually during monitoring.

$$EF_{\text{baseline},y} = EF_{\text{regional grid},z} * w_{\text{grid},y} + EF_{\text{private grid},z} * w_{\text{private grid},y}$$

Where:

$EF_{\text{baseline},y}$ = Emission Factor for the baseline emission at year y (tCO₂/MWh)

$EF_{\text{regional grid},z}$ = Emission Factor of the regional grid during the crediting period z (tCO₂/MWh)

$w_{\text{grid},y}$ = Weighting of the the regional grid emission factor at year y (%) which is determined by the amount of electricity in MWh distributed to regional grid relative to the total amount of electricity in MWh distributed to the industrial private grid and the regional grid.

$EF_{\text{private grid},z}$ = Emission Factor of the industrial private grid at crediting period z (tCO₂/MWh)

$w_{\text{private grid},y}$ = Weighting of the industrial private grid emission factor at year y (%) which is determined by the amount of electricity in MWh distributed to the industrial private grid relative to the total amount of electricity in MWh distributed to the regional and the private grid.

Please clarify whether this is an acceptable approach in the use of ACM0002v7 and the “Tool to calculate the emissions factor for an electricity system” v1.

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| If you propose an amendment to an approved methodology, please provide reasons. | |
| Not applicable. | |
| In case you propose the amendment to the approved methodologies, please provide your draft below, if not included in an annex: | |
| Not applicable. | |
| <i>Date of submission of contribution:</i> | |
| Information to be completed by the secretariat | |
| Date when the form was received at UNFCCC secretariat | |
| Date of transmission to the Meth Panel and Executive Board | |