



CDM: Recommendation Form for Small Scale Methodologies (version 01)

*(To be used for presenting questions/proposals/amendments to the
simplified methodologies for small-scale CDM project activity categories)*

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| Date of SSC WG meeting: | 21–24 September 2009, SSC WG 22 |
| Title/Subject (give a small title or specify the subject of your submission, maximum 200 characters): | Revision of AMS-III.Q for project activities that utilize abandoned electricity |
| Indicative methodology to which your submission relates (refer the items of Appendix B of the Simplified Modalities and Procedures), if applicable. | AMS-III.Q, version 02 |
| Name of the authors of the query: | Kuniyuki Nishimura Institution: Mitsubishi Research Institute kuni@mri.co.jp |

Summary of the query:

Please use the space below to summarize the query related to SSC methodologies/categories SSC Modalities and Procedures provide recommendation/analysis of the SSC WG.

Original text from PP:

We request to revise the approved methodology AMS-III.Q. to expand its applicability to include project activities that utilize waste electricity for direct use as process electricity.

The project activity that we propose introduces an inverter to recover electricity which has been abandoned during performance tests of diesel engine generators at a railway locomotive manufacturing facility in China. All the recovered electricity is utilized within the plant and replaces electricity from the grid. In the absence of the project activity, the waste electricity would have been released into the water rheostat.

According to AMS-III.Q., “for the purpose of this category waste energy is defined as: a by-product gas/heat/pressure from machines and industrial processes having potential to provide usable energy, for which it can be demonstrated that it was wasted”. The applicability conditions of AMS-III.Q. specify gas/heat and pressure as the waste energy; however, recovering and utilizing waste electricity can be the same in concept.

While the approved methodology allows to utilize waste energy as an energy source for generation of electricity, utilizing waste electricity is more direct and efficient way to obtain utilizable electricity.

In addition, the waste electricity utilized in the project activity would have been released in the absence of the project activity.

Therefore, we think it is reasonable to expand its applicability to include waste electricity.

Additional Information provided by the PPs (also uploaded on the website):

As described in our PDD, Beijing Feb.7th Railway Transportation Equipment Co., Ltd has four sets of

test stands and introduces one set of inverter system. Therefore, when more than two diesel generators are simultaneously tested, waste electricity is recovered from only one diesel generator. The water rheostat system is not be used at Project Test Stand; however, it will not be taken out but just disconnected from the test stand in case the system is in need of repair.

The main reason why not 4 inverters are introduced at one time is the limitation on the budget at first phase. Another reason is utilization rate of each test stand is different, thus cost-efficiency of investment for each stand is different. So we decided to introduce the new systems in series; if utilization rate and cost-efficiency of another test stand is expected to be high enough, we will introduce the new inverter system to the stand. The factory is planning to start with one test stand and then expand to other stands. We intend to include four sets of independent test stands in the project boundary.

Need for conversion from AC to DC electricity:

A rectifier is needed to generate DC output because DC motor has been used in the diesel-electric locomotives as drive force. The factory must test diesel electric generation systems under as the same condition as actual way of usage. Therefore, the output of current diesel electric generation test system is DC to test the frequency and the voltage of DC output of diesel electric generation system. On the other hand, AC is used in on-site electricity network, so an inverter is necessary to convert DC to AC so as to utilize waste DC output from the diesel electric generation system.

Recommendation by the SSC WG:

Please use the space below to provide amendments/change (in your expert view, if necessary).

Please refer to paragraph 19 of the meeting report of the SSC WG 22
(http://cdm.unfccc.int/Panels/ssc_wg).

Answer to authors of query by the SSC WG:

Please use the space below to provide answer to the authors of the above query.

The small-scale working group of the CDM Executive Board would like to thank the author for the submission.

The SSC WG is of the opinion that a simplified small scale methodology cannot address the issues raised by a project that attempts to utilize abandoned electricity. Per paragraph 7 of AMS-III.Q, “Gases that have intrinsic value in a spot market as energy carrier or chemical (e.g., natural gas, hydrogen, liquefied petroleum gas, or their substitutes) are not eligible under this category.”

Electricity is certainly an energy carrier that has intrinsic value and thus establishing that in the baseline the electricity is truly wasted or abandoned would require significant documentation beyond the simplified approach defined in AMS-III.Q. In addition, requiring criteria for confirming a baseline scenario of wasted electricity would be to establish “caps” on the project case to ensure that additional electricity is not generated (with resulting emissions) in order to produce more “wasted electricity”.

Therefore, the SSC WG agreed not to recommend revising AMS-III.Q for the described proposal where a procedure to establish a credible baseline scenario for such a situation to show that it would have been truly wasted in the absence of the project activity would be difficult. Such a methodology would require a more rigorous methodological approach than a typical small-scale methodology



Signature of SSC WG Chair

(Hugh Sealy)

Date: 24/09/2009



Signature of SSC WG Vice-Chair

(Peer Stiansen)

Date: 24/09/2009

Information to be completed by the secretariat

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