



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)

<i>Date of SSC WG meeting:</i>	01–03 September 2008, SSC WG 17
<i>Title/Subject (give a small title or specify the subject of your submission, maximum 200 characters):</i>	Clarification of program design requirements, application of the baseline penetration factor and consideration of cross effects in efficient lighting programme of activities
<i>Indicative methodology to which your submission relates (refer the items of Appendix B of the Simplified Modalities and Procedures), if applicable.</i>	AMS-II.J “Demand-side activities for efficient lighting technologies”
<i>Name of the authors of the query:</i>	Philip Cohn Institution: Cool nrg International Pty Ltd phil.cohn@coolnrg.com

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 Project Participant]

1. Program Design Issues

Para. 8 (ii) lists some good program design practices. Can the SSC WG confirm that these are meant to be examples of good program design practices – which are (i) not exhaustive and (ii) may not all be implemented under a given project activity?

For example, CFL give-aways can be effectively conducted to ensure accurate data collection, self-installation by consumers and robust post-program surveying to determine energy savings. Under our planned CFL programs, we will work with retail and media partners to educate consumers about energy efficiency, compact fluorescent lamps and how to properly dispose of mercury-containing CFLs. Effective program design allows us to achieve the following outcomes:

1. Identify the households participating in the project
2. Determine the number and rating of the incandescent bulbs (IBs) surrendered in exchange for a corresponding number of compact fluorescent lamps (CFLs).
3. Record the date of exchange of IBs for CFLs
4. This database would be made available to DOE for verification
5. A random sample of households is chosen from the database following statistical procedures for the post-installation and monitoring surveys.

In the event a poor program design does fail to deliver the desired results – the ex post surveys required by this methodology will in any case correct for any CFLs that are no longer in service in the households participating in the project. So there is no need to be so restrictive with respect to program design, which unnecessarily limits the applicability of AMS-II.J.

Of course, it is in the interest of both project proponents, often utilities (which can maximize demand reduction), and end-users (who can maximize savings in their energy bills) to install bulbs in higher use

areas. As mentioned above, one of the best ways to encourage end-users to install bulbs in high use areas is to educate them – and (with reference to Issue #2 above) this is not listed as an element of good design practice in para. 8 (ii).

Given the above, can the SSC WG confirm that the intention of para. 8 (iii) is to educate CFL recipients on the benefits of installing efficient lamp in spots where the (daily) utilization hours can be expected to be highest? We see no way to ensure that consumers do this – and whether or not they do, the calculated emission reductions will not change.

2. Baseline Penetration Factor

Equation 1 introduces the concept of the Baseline Penetration Factor (BP) to capture the penetration of the project technology in the baseline situation. It is only applied as a discount to emission reductions for project activities under a program of activities, ie. CPA of PoA. Clarification is sought as to the appropriateness of BP in CPAs undertaking retrofits or replacements of existing technologies as opposed to the installation of equipment at new facilities (Greenfield projects).

In the case of energy efficiency retrofits, the methodology requires that inefficient baseline technology be directly exchanged for efficient project technology, ie. CFLs are only exchanged for incandescent light bulbs. In such circumstances the installation of energy efficient technology always results in the removal of less efficient baseline devices regardless of the current market penetration rate of the project technology. Application of a discount based on current market penetration of project technology decreases the emission reductions claimed by the CPA below those actually generated due to the technology exchange.

We seek clarification that CPAs involving retrofits/replacements can apply the value of BP = 1. We have made a similar submission regarding this issue in AMS-II.C. where we advocate for the use of BP only in the case of Greenfield projects, as this allows identification of the baseline scenario in the absence of an equipment exchange.

3. Cross Effects

Para. 17c) requires project participants to account for leakage caused by cross effects, with particular reference made to the case of increased heating load due to the introduction of efficient lighting technologies. Cross-effects are very complex and their calculation in developing countries beyond the capabilities of most project developers. It is logistically and commercially impractical to meet this requirement and DOEs have no basis to validate CPAs against this criterion.

The nature and magnitude of heat dissipation from electric lighting on space conditioning demand can not be generalised as it depends on many interactive factors such as building design, heating systems and fuels used, building operations and prevailing climates. No guidance or standard methodology exists to measure heating load changes due to individual energy efficiency technologies in buildings.

We seek clarification as to how the SSC WG would propose calculation of increased heating load due to the introduction of energy efficient lighting.]

Recommendation by the SSC WG:

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

Please refer to paragraph 36 of the meeting report of the SSC WG 17
(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 (SSC WG) of the CDM Executive Board would like to thank the author for the submission.

With respect to the first request for clarification, the intent of para. 8 (ii) direct installation requirement

includes ensuring that the CFLs installed are tracked in a manner that allows for selection of a truly random and representative sample for ex-post monitoring requirements as indicated in para. 15. Thus, a verifiable tracking and database system of households and CFLs could meet the direct installation requirements of para. 8 (ii). However, please note that as currently written AMS-II.J, does require “charging at least a minimal price for efficient lighting equipment and restricting the number of lamps per household distributed through the project activity”.

In para. 8 (iii), the methodology encourages the project proponents to undertake appropriate activities for ensuring that the CFLs are used in high utilisation points. To answer the query author’s specific question, documented end user programs that educate CFL recipients on the benefits of installing efficient lamp in spots where the (daily) utilisation hours can be expected to be highest is an acceptable means of meeting the requirements of para. 8 (iii).

With respect to the second request for clarification, it is not appropriate for CPAs involving retrofits/replacements to apply the value of BP = 1. This is because the remaining useful lifetime of the replaced IBs cannot be reliably determined and the lifetime of the IBs are probably significantly less than the crediting period and lifetime of the new CFLs. Furthermore, the BP can also take into account baseline standard practice retrofits of the CFLs that occur without the benefit of the CPA of PoA.

With respect to the third request for clarification, the SSC WG agreed that the methodology in para. 17(c) provides several scenarios under which heating interactive effects do not need to be calculated. However, if heating interactive effects do need to be calculated there are several standard practice approaches available in the literature; for example those utilizing simple models that include consideration of the efficiency of the existing heating equipment and a factor for how much of the lighting heat generation displaces space heating requirements.



Signature of SSC WG Chair

(Ulrika Raab)

Date: 03/09/2008



Signature of SSC WG Vice-Chair

(Kamel Djemouai)

Date: 03/09/2008

Information to be completed by the secretariat

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