



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)

Date of SSC WG meeting:	12- 13 September 2005
Title/Subject (give a small title or specify the subject of your submission, maximum 200 characters):	“Projects that increase the generation of an existing hydroelectric facility by increasing the flow of water into the reservoir, and which supply electricity to a grid”
Indicative methodology to which your submission relates (refer the items of Appendix B of the Simplified Modalities and Procedures), if applicable.	AMS-I.D
Name of the authors of the query:	Tuev Sued - Econergy Brasil

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.

The new proposed category:

The submission proposes a new Type I category, for projects that increase the generation of an existing hydroelectric facility by increasing the flow of water into the reservoir, and which supply electricity to an electricity distribution system. The methodology is based on the methodology for the small-scale project category I.D, Renewable electricity generation for a grid.

- **Type I limits**

As the project activity is an increase of flow rate to an existing reservoir, and not an increase of installed power, the methodology includes a condition, in order to calculate the “equivalent power” added. The project’s equivalent capacity, based on its anticipated generation and the facility’s capacity factor, shall not exceed 15 MW, as shown in the following equation:

$$EG_y / (CF \times 8760) < 15 \text{ MW}$$

where:

EG_y = anticipated generation of the project, in MWh/yr

CF = hydro facility’s capacity factor

- **Boundary, baseline, and leakage**

The proposed methodology for Boundary, Baseline, and Leakage is identical to the methodology for category I.D.

- **Monitoring**

The characteristic of the project activity (added flow rate) requires the calculation of the portion of total flow rate that represents the added flow rate. This proportion is applied to the total production of electricity, in order to calculate the production attributable to the added flow rate (and then to the project activity).

$$EG_y = EG_{total,y} \times (Q_{project,y} / Q_{total,y})$$

where:

EG_y = electricity generation attributable to the project in year y

$EG_{total,y}$ = total electricity generation of the hydroelectric facility in year y

$Q_{project,y}$ = annual average flow into the reservoir in year y supplied by the project

$Q_{total,y}$ = total annual average flow into the reservoir in year y from all sources

Recommendation by the SSC WG :

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


The proposed simplified methodology requires further elaboration according to the following points.

- Type I limits:
The criteria proposed by the SSC WG for capacity additions must apply. The limit in the case of input increase is referred to the installed capacity of the plant. Then the limit should be 15 MW for the installed capacity of the plant.
- Spilled flow rate:
The case of spilled flow rate must be considered. The project flow rate (added) should be considered as “first” in the spill over. In the proposal, the spilled flow rate is a proportion of without project flow rate and project flow rate.
- Project emissions and leakage.
Two possible sources must be considered:
 - The addition of water could require the expenditure of some energy. The methodology must describe the way of capture and driving the new flow rate to the system, and must measure the energy (emissions) for that purpose.
 - The water driven to the reservoir may be felt in the waterbasin where it is taken from. That water subtracted to the adjacent basin will be therefore no longer available for electric generation in that basin (in existing or in future generation).
- Monitoring:
The added flow rate could lead to expand the installed generation capacity, which could be submitted as a new project activity under Type I. This circumstance (no expansion of installed capacity) should be monitored.

Answer to authors of query by the SSC WG :

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

Please refer to the recommendation above. You are welcome to provide the working group with further clarifications. Clarifications, if any, would need to be submitted by latest 28 November 2005.



Signature of SSC WG Chair

Date: 16 / 09 /2005 (Gertraud Wollansky)

Signature of SSC WG Vice-Chair

Date: / / (name)

Information to be completed by the secretariat

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