

	CDM: FORM FOR SUBMISSION OF A “LETTER TO THE BOARD” (Version 01.2)
This form should be used only by project participants and other stakeholders for submitting a “Letter to the Board” in accordance with the latest version of the <i>Modalities and procedures for direct communication with stakeholders</i>	
<i>Name of the stakeholder¹ submitting this form (individual/organization):</i>	Global Environment Institute (GEI)
<i>Address and contact details of the individual submitting this form:</i>	Address: Suite 1-401, Building No.5, New World Villa, Dongcheng District, Beijing 100062, China Telephone number: 0086-10-6708 3192 E-mail address: gei@geichina.org
<i>Title/Subject (give a short title or specify the subject of your submission)</i>	Seeking Clarification from the Board in Treating Over-Production of hydropower CDM Projects in ex-post due to change of “Effective Factor” as per Procedures for notifying and requesting approval of changes from the project activity as described in the registered PDD.
<i>Please mention whether the submitter of the form is:</i>	<input type="checkbox"/> Project participant <input checked="" type="checkbox"/> Other stakeholder, please specify: NGO
<i>Specify whether you want the letter to be treated as confidential²:</i>	<input type="checkbox"/> To be treated as confidential <input checked="" type="checkbox"/> To be publicly available (UNFCCC CDM web site)
<i>Please choose any of the type(s) below³ to describe the purpose of this submission.</i>	
<p>■ Type I:</p> <p><input checked="" type="checkbox"/> Request for clarification <input type="checkbox"/> Revision of existing rules</p> <p><input type="checkbox"/> Standards. Please specify reference</p> <p><input checked="" type="checkbox"/> Procedures. Please specify reference EB48,ANNEX66</p> <p><input checked="" type="checkbox"/> Guidance. Please specify reference : EB48,ANNEX67</p> <p><input type="checkbox"/> Forms. Please specify reference</p> <p><input type="checkbox"/> Others. Please specify reference</p> <p><input type="checkbox"/> Type II: Request for Introduction of new rules</p> <p><input type="checkbox"/> Type III: Provision of information and suggestions on policy issues</p>	
<i>Please describe in detail the issue on which you request a response from the Board, including the exact reference source and version (if applicable).</i>	

¹ DNAs and DOEs shall use the respective DNA/DOE forms for communication with the Board.

² As per the applicable modalities and procedures, the Board may make its response publicly available.

³ Latest CDM regulatory documents and information are available at: <http://cdm.unfccc.int/Reference/index.html> .

Description of the Question

In many registered CDM hydropower projects, in particular the projects in P.R.China, an “effective factor” (normally within the range of 85%~100%) has been widely adopted in ex-ante estimation of electricity generation. By applying “effective factor”, the hydropower projects could underestimate electricity generation in PDDs during registration stage to assess the additionality of the proposed projects. The suitability of using such factor is usually explained that the power grid, in its off-peak time, could not accept full of the electricity generation from hydro projects during the wet season and let the water go unused.

On the other hand, we noted that a number of CDM hydropower projects continuously claiming to issue more CERs than the estimated volume in registered PDD due to heavy water resource¹, of which in a few cases these issuance requests were correctly challenged² by the EB

During requests for issuance, the over-producing projects rarely notified or obtained approval of such extra electricity generation, by arguing that the over-production is due to unforeseen changes in hydrologic condition e.g. heavy rain of the upstream area that leads to extra available water resources. However this argument is doubtful from the perspective of recipients of hydropower, in particular considering “effective factor” applied in registered CDM PDDs.

Since it is a “black-box” that how grid company (especially in non-Annex I countries) dispatches electricity supplied from grid-connected hydropower plants, we are concerned that the “effective factor” of the CDM hydropower projects is very likely to be increased due to efforts made by project participants in the actual operation of the projects, in order to achieve higher electricity generation than the registered PDD. Thus, we would like the EB to clarify whether DOE shall verify the change and suitability of “effective factor” in ex-post circumstances once over-production occurs, to justify whether the over-production belongs to situation described in item 4 of EB48, Annex 67:

(d) Different values of those actual operational parameters relevant to determination of emission reduction which are within the control of project participant and which result in the IRR passing the benchmark as described in the registered PDD

Case studies

A case study to highlight these concerns is *Sichuan Balangkou 96MW Hydropower Project* (Ref. No. 1996), which has been over-producing since year 2010 and obtained CER issuance twice. According to the monitoring reports of the project, we found the actual emission reductions in the all four monitoring periods exceeded the estimated emission reductions in the registered PDD. The four monitoring periods cover from 30/12/2009 to 25/07/2012, including around 2.5 years. The average rate of over-production by this project in the last three consecutive monitoring periods reaches 24.32% (higher than the critical value of 17.9% in the registered PDD).

Monitoring Period	Estimated Electricity Supply	Monitored Electricity Supply	Rate of extra electricity or CER generated
30/12/2009~25/06/2010	175,604 MWh	176,237MWh	0.36%
26/06/2010~25/04/2011	299,910 MWh	385,044MWh	28.38%
26/04/2011~25/02/2012	301,883 MWh	368,710MWh	22.13%
26/02/2012~25/07/2012	148,967MWh	182,015MWh	22.18%

According to the registered PDD, the project IRR would reach the benchmark of 8% if the supplied electricity increases by 17.9%. Therefore, the actual IRR in the last three consecutive monitoring periods without CER revenues is higher than the benchmark of 8%, considering the average increase rate of 24.23% in the electricity supplied to the grid.

In the registered PDD of the proposed project, the Annual Electricity Output of 360,090MWh is applied to the Sensitivity Analysis of the project. However, according to the public available information³, the project is expected to generate an Annual Electricity Output of 414,800MWh. In such case, we'd like to raise the Board's attention to the suitability of the input values to the investment analysis as per the requirement of the EB and if an 'effective factor' or similar factor(s) was applied in the sensitivity analysis.

A second example to clarify our concern that we noted was the continuous over-production in *Sichuan Baishuijiang Shuanghe Hydro Power Project* (Ref. No. 2155). This project has been over-producing for eight continuous monitoring periods by claiming heavy rainfall in the region, and successfully obtained CER issuance for first five monitoring periods.

According to the monitoring reports of the project, we found that the actual emission reductions in all the eight monitoring periods exceeded the estimated emission reductions in the registered PDD. The eight monitoring periods cover from 27/07/2009 to 31/12/2012, including around 3.5 years. The overall rate of over-production by this project from year 2010 to 2012 reaches 17.23% (higher than the critical value of 11.8% in the registered PDD).

Period	Estimated Electricity Supply	Monitored Electricity Supply	Rate of extra electricity or CER generated
Calendar year 2010	314,800 MWh	366,635MWh	16.47%
Calendar year 2011	314,800 MWh	354,549MWh	12.63%
Calendar year 2012	314,800 MWh	385,978MWh	22.61%

According to the registered PDD, the project IRR would reach the benchmark of 8% if the supplied electricity increases by 11.8%. Therefore, the actual IRR without CER revenues is higher than the benchmark 8%, considering the average increase rate of 17.23% in the electricity supplied to the grid.

In the response to explain the projects effective factor submitted to EB by the PP during the Request for Review period during the project's registration process, the Project Participant (Jiuzhaigou Electric Power Development Limited Corporation) argued that *"The 10.5% is the difference between the maximum electricity (351,540 MWh/y) that can be generated by the Project at its full load, and the actual electricity (314,800 MWh/y) that will be supplied to and accepted by the Grid. During high-water seasons, the electricity that can be generated by the hydropower stations running at full load exceeds what is actually needed by the Grid; however, this excess of electricity cannot be accepted by the Grid. Due to lack of economic benefit of operating at full load, the hydropower stations normally release some 'surplus' water through spillway."* However, according to the public available information⁴, the electricity demand from the regional grid decreased due to the poor economic atmosphere in 2012, while the PP was ahead of its yearly profit schedule by avoiding the releasing of 'surplus' water.

1. Please refer to projects with Ref. No. 0378, 0574, 1943, 1996, 2155, 3039.

2. Please refer to projects with Ref. No. 0378, 4555, 0574.

3. <http://www.docin.com/p-217379541.html>

4. http://www.boraid.com/company_news/news_read.asp?id=119117

Please provide any specific suggestions or further information which would address the issue raised in the previous section, including the exact reference source and version (if applicable).

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Thus, we believe it's reasonable and suggest the Board to re-examine the change and suitability of the input values in ex-post hydro power projects particularly to those that over-produce heavily, and challenge the involved DOE's on their work and responsibilities and take appropriate action in the necessary cases.

If necessary, list attached files containing relevant information (if any)

- [replace this bracket with text, the field will expand automatically with size of text]

Section below to be filled in by UNFCCC secretariat

Date when the form was received at UNFCCC secretariat	30 January 2013
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History of document

Version	Date	Nature of revision
01.2	08 February 2012	Editorial revision.
01.1	09 August 2011	Editorial revision.
01	04 August 2011	Initial publication date.
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