Genova, 14 March 2017

To: Members of Executive Board

Response to the Request for Review

Reference number of the proposed CDM project activity submitted for registration: # 10328

Title of the proposed CDM project activity submitted for registration: Small Hydroelectric Power Plants Projects: São Pedro, Carangola, Calheiros, São Simão, Funil, São Joaquim, Fumaça IV, Jataí, Irara, Bonfante, Monte Serrat, Santa Fé, hereafter referred to as group ("bundling").

1) *The CDM Glossary of terms define "Project Start Date" as the earliest date at which either the implementation or construction or real action of a CDM project activity begins. For the proposed project activity, the DOE has validated the project start date as 30/06/2004, date of signature of the PPAs with the power plants included in the project activity. The DOE is requested to further substantiate (a) how the defined project start date as 30/06/2004 i.e. date of signature of the PPAs with the power plants included in the project activity is in line with the definition of project start date as contained under "the CDM Glossary of terms", and (b) whether there were any real action towards the project implementation or construction before the defined start date as signature of the PPAs. Please refer to VVS version 9.0, paragraph 114.*

DOE response:

Further assessment on the project start date was added in the validation report (section D.8.6) version 1.6 of 14/03/2017.

Please refer attached:

- Revised validation report version 1.6 of 14/03/2017
- PDD version 4.5 of 23/02/2017
- PP's response.

2) *The validation report in section D.8.6 contains a table of milestones to demonstrate that continuous and real actions were taken to secure the CDM status for the project activity. However, it appears that the evidences supporting milestones 11 (01/06/2007) to 16 (26/05/2010) are internal communications and related documents from ELETROBRÁS related to PROINFA and not specific to the power plants included in the project activity. Even milestones 5 to 10 would not be suitable neither for the same reasons. The DOE is requested to substantiate how it has validated that these internal communication evidences meets the*

requirements as defined under para 29(b), footnote 7, of PS, version 9.0. In the event that these internal communications not being considered suitable to substantiate the continuous and real actions to secure CDM status for the project activity, there will be gap of more than 4 (four) years, between milestones 10 (17/01/2006) to 17 (31/08/2010).
Further, the DOE is also requested to substantiate how it has validated that milestones 11 to 16 are concrete evidences to support continuous and real actions undertaken to secure the CDM status for the project activity, determined for each power plant, and how the time gap between the milestones presented in table D.8.6 of the validation report comply with the requirements from paragraphs 117 to 119 of VVS - version 9.0. Please refer to VVS version 9.0 - paragraphs 117, 118 and 119 PS version 9.0 - paragraph 29(b).

DOE response:

Further assessment on continuous and real action to secure the CDM status for the project activity was added in the validation report (section D.8.6) version 1.6 of 14/03/2017.

Please refer attached:

- Revised validation report version 1.6 of 14/03/2017
- PDD version 4.5 of 23/02/2017
- PP's response.

3) The CDM arquitecture was not designed to deal with a Large Scale CDM project consisting on several independent hydropower plants combined together in one PDD. The CDM does explicitly consider only the possibility for binding SSC projects together in one PA, however still having to fulfil the rules for SSC projects. In contrast, there are no rules defined for bundles of projects to form a LSC CDM Project. Same applies to the additionality tool. The methodology ACM0002 in par. 3 stipulates that it is applicable to grid-connected renewable energy power generation project activities that (a) Install a Greenfield power plant. The DOE therefore is requested to further substantiate why the Project as a bundle of different hydropower plants meets the requirements of methodology ACM0002 and additionality tool that has been designed for single Projects only.

DOE response:

According to the FCCC/KP/CMP/2005/8/Add.1 - Page 97 dated 30 March 2006:

Para 21 (page 97). The Conference of Parties recognizes that large-scale project activities under the clean development mechanism can be bundled if they are validated and registered as one clean development mechanism project activity and invites the Executive Board to provide further clarification if needed;

The project activity consists of the implementation of 12 (twelve) small hydropower plants ("PCH", from the Portuguese "Pequena Central Hidrelétrica") located in the States of Espírito Santo, Minas Gerais, Rio de Janeiro and Goiás, totaling 275.6 MW installed capacity.

As per the glossary of terms: "CDM project activity: As the context requires: (a) A large-scale, non-A/R measure, operation or action that aims to reduce GHG emissions from sources, whether as a whole project or as a part of a project…", therefore, the proposed project activity is a large-scale measure, operation or action that reduces GHG emissions as a whole project.

In addition, RINA has verified the approved methodology ACM 0002, CDM Project Standard, Project Cycle Procedure and validation and verification standard and did not find any existing rules for the Large Scale bundle projects and any requirement that can prevent the inclusion of more than one (sub) projects in one single PDD.

In order to cross-check this information, RINA verified similar projects in Brazil at UNFCCC database, in which one PDD has included several sub-projects combined together:

Project ref.	Registration date	ACM0002, version	Type and number of sub-projects
0519	02/10/2006	5	6 Small hydropower plants
3897	16/01/2013	13	6 Small hydropower plants
9923	11/04/2014	13	5 wind farms

RINA has confirmed that the CDM arquitecture is designed for large scale CDM project and is in line with requirements for CDM large scale project activity and applicable methodology.

Please refer attached:

- PP's response.

4) The tariff used as input parameter for the investment decision as 76.92 R$/MWh is based on an Energy Auction conducted by the Brazilian Government in 2003 and validated by the DOE. However, there is a floor price defined as 117.02 R$/MWh in the Rule MME 45/04 of 2004 applicable to all hydroprojects applying PROINFA. Therefore, the DOE has to further substantiate how it has validated the tariff used for the investment analysis to comply with Para 11 of the investment analysis tool, Version 7, i.e., was a valid input parameter applicable at the time of the investment decision.

DOE response:

According to the Project Standard para 44:

44. As a general principle, national and/or sectoral policies and circumstances shall be taken into account in the establishment of a baseline scenario, without creating perverse incentives that may impact host Parties' contributions to the ultimate objective of the Convention.

45. When establishing a baseline scenario, project participants or the coordinating/managing entity shall take into account the following two types of national and/or sectoral policies:

(a) National and/or sectoral policies or regulations that give comparative advantages to more emissions-intensive technologies or fuels over less emissions-intensive technologies or fuels (E+ policies);

(b) National and/or sectoral policies or regulations that give comparative advantages to less emissions-intensive technologies over more emissions-intensive technologies (e.g. public subsidies to promote the diffusion of renewable energy or to finance energy efficiency programmes) (E- policies).

46. Project participants or the coordinating/managing entity shall address the two types of policies described in paragraph 45 above as follows:

(a) Only national and/or sectoral policies or regulations described in paragraph 45(a) above that have been implemented before the adoption of the Kyoto Protocol by the Conference of the Parties (hereinafter referred to as the COP) (decision 1/CP.3, 11 December 1997) shall be taken into account when establishing a baseline scenario. If such national and/or sectoral policies were implemented since the adoption of the Kyoto Protocol, the baseline scenario should refer to a hypothetical situation without the national and/or sectoral policies or regulations being in place;

(b) National and/or sectoral policies or regulations described in paragraph 45(b) above that have been implemented since the adoption by the COP of the CDM M&P (decision 17/CP.7, 11 November 2001) need not be taken into account in establishing a baseline scenario (i.e. the baseline scenario could refer to a hypothetical situation without the national and/or sectoral policies or regulations being in place).

RINA clarify that PROINFA (Law n# 10.438 of 26/04/2002 and regulated by Decree n# 5.025 of 30/03/2004) is a **TYPE E-policy** and it provides comparative advantages to less emissions-intensive technologies and the PPAs under this programs have a higher electricity tariff when compared to the baseline scenario in order to incentive renewable electrical energy projects. The initiative for PROINFA creation demonstrate that without a long term PPA with subsidized prices by the Brazilian government, the project activity would very unlikely be implemented.

PROINFA was implemented after the COP of the CDM M&P (decision 17/CP.7, 11 November 2001); therefore it does not need be taken into account in establishing a baseline scenario.

Based on this information, the floor price defined as 117.02 R$/MWh in the Rule MME 45/04 of 2004 applicable to all hydro projects applying PROINFA need not be taken into account in establishing a baseline scenario as per PS para 46 (a) and explanation above.

Furthermore, as per Investment analysis para 11 –

" Input values used in all investment analysis shall be valid and applicable at the time of the investment decision taken by the project participant. The DOE is therefore expected to validate the timing of the investment decision and the consistency and appropriateness of the input values with this timing. The DOE should also validate that the listed input values have been consistently applied in all calculations".

The investment decision for the project activity is 30/06/2004, when PROINFA PPAs were signed. The tariff value of R$ 66.77MWh was based on the average of the results of the 1st Energy Auction conducted by the Brazilian government in 2003 and it was adjusted to the expected operation startup of PRONFA projects based on Brazilian inflation targeting (R$76.92MWh).

Hence, the electricity tariff value used in the proposed project activity is in accordance with Methodological tool - Investment analysis para 11.

Further assessment on *tariff used as input parameter for the investment decision* for the project activity was added in the validation report (section D.8.6) version 1.6 of 14/03/2017.

Please refer attached:

- Revised validation report version 1.6 of 14/03/2017
- PDD version 4.5 of 23/02/2017
- PP's response.

Authorized officer signing for the DOE

Laura Severino - Unit Manager

Sustainability & Climate Change