

CTA-DGE- 0704/2017

Rio de Janeiro, 23 February 2017.

To: Members of Executive Board

Subject: **Response to the Request for Review**

Reference number of the proposed CDM project activity submitted for registration: # 0328

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")

During the request for review period of the above mentioned project, additional information was requested by three members of the CDM Executive Board.

Following the CDM Project Cycle Procedure, the Project Participants (PPs) provided responses and the necessary revisions of the Project Design Document (PDD) to the issues raised.

In the following the additional information requested in the review request is *italicized* and the comments of the PPs are in blue.

Before addressing the issues raised during the request for review, the PPs would like to recap general information about PROINFA, the Brazilian governmental program/project, which the above mentioned (sub-)projects are included.

PROINFA is a Brazilian renewable energy incentive program/project¹ created by Law nr. 10,438, dated 26/04/2002 and, regulated by Decree nr. 5,025 dated 30/03/2004. One of goals of the initiative since its genesis was to increase the renewable share of energy sources in the Brazilian electricity system, thus contributing to greater environmental sustainability. In order to achieve such goal, the Brazilian government has designated

¹ Brazilian Alternative Electric Energy Sources Incentive Program ("PROINFA" in a free translation from the Portuguese "Programa de Incentivo às Fontes Alternativas de Energia Elétrica").

the federal state-owned power utility, Centrais Elétricas Brasileiras S/A (Eletrobrás), also a Project Participant – to act as the primary off-taker of the electric energy generated by all sub-projects of the initiative, by entering into long-term Power Purchase Agreements (PPAs) at a guaranteed price of at least 80% of the average energy supply tariff charged to end consumers, significantly above market prices paid for business-as-usual projects.

The creation of PROINFA clearly indicated that, without the additional incentive, the implementation of similar plants using renewable sources to generate electricity would very unlikely be implemented otherwise in a normal market environment.

The Brazilian Decree nr. 5,025/2004 also establishes that PROINFA aims for the reduction of greenhouse gases in accordance with the United Nations Framework Convention on Climate Change (UNFCCC) under Kyoto Protocol, contributing to sustainable development. Therefore, the program is clearly a "Type E-" policy. Also, Article 16 of the Decree nr. 5,025/2004 determines the creation of a PROINFA account, to be managed by Eletrobrás, and composed by, but not limited to, revenues and costs related to the CDM project activities. Therefore, carbon credits are clearly mentioned in PROINFA regulations and the Brazilian government had indeed considered such revenues while awarding subsidized tariffs. It is also worth mentioning that the first list of selected sub-projects of the program/project was released on 10 May 2004.

Having said that, the PPs proceed in the next paragraphs to the responses to the requested additional information.

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.

According to the Glossary of the CDM Terms:

"Start Date: In the context of a CDM project activity or CPA, the earliest date at which either the implementation or construction or real action of a CDM project activity or CPA begins".

As described in the PDD (section C.1.1), the signature of PROINFA PPAs between ELETROBRÁS and the project sponsors (special purpose companies – SPCs) is considered as the project "start date", i.e. 30/06/2004.

Although this event neither can be considered as the financial closure nor represents a significant expenditure related to the implementation of the plant, the project developers are committed to the terms of the contract assuming that project is in fact going to be implemented. According to clause 16, §5, of the PROINFA PPA, in case of non-performance and lack of electricity supply, the project owners (SPCs) shall pay the amount of electricity agreed during the 20 years (clause 8) for the subsidized price established in the contract (clause 10) considering inflation adjustment (clause 12) for contractual penalties. Therefore, the PPs are confident to state that the signature of the PPA can be reasonably considered the earliest date which a real financial commitment is assumed.

Before the signature of PPAs, only the public call, habilitation and selection under PROINFA occurred as follows:

Date	Action
06/04/2004	Mines and Energy Ministry Ordinance nr. 45/04. Public call for alternative energy purchase from small hydro, wind and solar sources, totaling 3,300MW installed capacity
10/05/2004	Deadline for projects submission
23/06/2004	Publication of the results for habilitation and selection and call for contracts signature up to 30/06/2004
30/06/2004	Deadline for PPA signature for the selected projects

However, the above mentioned actions did not determine any penalties in cases of renouncement from the project sponsors' side nor indicate that the project would be implemented. Therefore, only with the signed PPA relevant penalties would incur in cases of non-performance of the PPA's subject matter.

While analyzing the first action for projects implementation, almost all PROINFA projects delayed the initially planned construction start due to various issues. PROINFA sub-projects were expected to start electricity generation by 2006 at latest, but for the majority construction started only by mid-2006 and resumed by 2008-2009 only (**Table 1**). This information can be evidenced through publicly available official sources (Monthly "Fiscalização da Geração" reports) issued by the Brazilian Electricity Regulatory Agency (ANEEL², from the Portuguese "Agência Nacional de Energia Elétrica").

² <http://www.aneel.gov.br/acompanhamento-da-expansao-da-oferta-de-geracao-de-energia-eletrica> Status report from January 2006 submitted to the DOI.

**Table 1 – Status of PROINFA projects in Jan-2006 and actual operation start
(source: ANEEL)**

Plant	Status in Jan-2006		Signature of the financing contract (BNDES ³)	Operation startup
	Status	1st action from the schedule of events		
São Pedro	Construction not started	None. Work starting at the construction site was forecasted in Jul-2005, but it occurred in Jun-2007 only	Apr-2006, contract nr. 05.2.1175.1	Jun-2009
Carangola	Construction not started	None. Work starting at the construction site was forecasted in Jun-2005, but it occurred in Jul-2006 only	Apr-2006, contract nr. 05.2.1166.1	Jun-2008
Calheiros	Construction not started	None. Work starting at the construction site was forecasted in Jun-2005, but it occurred in Jul-2006 only	Apr-2006, contract nr. 05.2.1165.1	Sep-2008
São Simão	Construction not started	None. Work starting at the construction site was forecasted in Apr-2005, but it occurred in Jul-2006 only	Apr-2006, contract nr. 05.2.1176.1	Feb-2009
Funil	Construction not started	None. Work starting at the construction site was forecasted in Jun-2005, but it occurred in Jul-2006 only	Apr-2006, contract nr. 05.2.1168.1	Mar-2008
São Joaquim	Construction not started	None. Work starting at the construction site was forecasted in Jun-2005, but it occurred in Jul-2006 only	Apr-2006, contract nr. 05.2.1174.1	Apr-2008
Fumaça IV	Construction not started	None. Work starting at the construction site was forecasted in Jun-2005, but it occurred in Aug-2006 only	Apr-2006, contract nr. 05.2.1167.1	Dec-2008
Jataí	Construction not started	None. Work starting at the construction site was forecasted in Jun-2005, but it occurred in Jul-2006 only	Apr-2006, contract nr. 05.2.1170.1	Jul-2008
Irara	Construction not started	None. Work starting at the construction site was forecasted in Feb-2005, but it occurred in Jul-2006 only	Apr-2006, contract nr. 05.2.1169.1	Sep-2008
Bonfante	Construction not started	None. Work starting at the construction site was forecasted in Mar-2004, but it occurred in Jul-2006 only	Apr-2006, contract nr. 05.2.1164.1	Aug-2009
Monte Serrat	Construction not started	None. Work starting at the construction site was forecasted in Apr-2005, but it occurred in Jul-2006 only	Apr-2006, contract nr. 05.2.1171.1	Jun-2009
Santa Fé	Construction not started	None. Work starting at the construction site was forecasted in Feb-2005, but it occurred in Jun-2006 only	Apr-2006, contract nr. 05.2.1173.1	May-2008

Therefore, before the signature of the PPA, no real action towards projects implementation or construction occurred, since other actions – as financing agreement, start of construction, equipment purchase, etc. – were only carried out after the signature of the PPA. Only with the signed PPA and the assured financial flow, projects could start the necessary steps for securing financial contracts with the National

³ The Brazilian Development Bank ("BNDES" from the Portuguese Banco Nacional de Desenvolvimento Econômico e Social)

Development Bank (BNDES) and, ultimately, the project purchases, construction and implementation. The fact that not a single project started operation before March 2008 is another evidence to support the appropriateness of chosen start date.

Conclusion:

The signature of the PPA is the project "start date," since it is the first real action (actually financial commitment) that indicates the proposed project activity would be implemented. While having signed PPAs, the project sponsors committed to comply with the electricity supply contract, otherwise would incur in relevant penalties. Before this date, no expenditure nor commitment were made towards the project construction or implementation. In reality, PROINFA projects in the present PDD started construction only by 2006 and operation only by 2008.

Action:

Detailed additional information regarding the determination of the project starting date is included in the revised PDD version. Related evidences are provided to DOE.

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).

According to the CDM Project Standard:

"For a proposed CDM project activity with a start date before 2 August 2008 and prior to the date of publication of the PDD for global stakeholder consultation, project participants shall demonstrate that the CDM was

seriously considered in the decision to implement the proposed project activity. Such demonstration requires the following elements to be satisfied:

- (a) Project participants shall provide evidence of their awareness of the CDM prior to the start date of the proposed project activity, and that the benefits of the CDM were a decisive factor in the decision to proceed with the project;*
- (b) Project participants shall provide evidence that continuing and real actions were taken to secure CDM status for the proposed project activity in parallel with its implementation;*
- (c) Project participants shall provide an implementation timeline of the proposed CDM project activity. The timeline should include, where applicable, the date when the investment decision was made, the date when construction works started, the date when commissioning started and the date of start-up (e.g. the date when commercial production started). Project participants shall provide a timeline of events and actions, which have been taken to achieve CDM registration, with description of the evidence used to support these actions."*

Regarding the documented evidence to support items a) and b), the CDM Project Standard states:

"(for a) Evidence to support this could include, inter alia, minutes and/or notes related to the consideration of the decision by the board of directors, or equivalent, of the project participants, to undertake the project as a CDM project activity...

(for b) Evidence to support this should include one or more of the following: contracts with consultants for CDM/PDD/methodology/standardized baseline services; draft versions of PDDs and underlying documents such as letters of authorization, and, if available, letters of intent; emission reduction purchase agreement (ERPA) term sheets, ERPAs, or other documentation related to the sale of the potential CERs (including correspondence with multilateral financial institutions or carbon funds); evidence of agreements or negotiations with a DOE for validation services; submission of a new methodology or standardized baseline, or requests to the Board for clarification or revision of existing methodologies or standardized baselines; publication in a newspaper; interviews with DNA; earlier correspondence on the project with the DNA or the secretariat. Letters, e-mail exchanges and other documented communications may help to substantiate the evidence".

The CDM consideration is clearly mentioned in Brazilian Federal Government Decree nr. 5,025/2004, released before the project start date, which states that PROINFA aims for the reduction of greenhouse gases as established by the United Nations Framework Convention on Climate Change (UNFCCC) under Kyoto Protocol, contributing to sustainable development. Article 16 of the Decree determines the creation of PROINFA

account to be managed by ELETROBRÁS, composed by, but not limited to, revenues and costs related to the CDM project activities. Therefore, carbon credits are clearly mentioned in PROINFA regulations and the Brazilian government had indeed considered such revenues in the subsidized contracting energy price.

Projects under PROINFA were always treated as a group of projects (sub-projects) by the Brazilian government and not individually. All regulations related to PROINFA are determined for all selected projects participating in the program. Furthermore, signed PPAs are ruled by PROINFA regulations and, therefore, project sponsors knew and were aware about the conditionings and requirements established under their participation in PROINFA, which includes the centralization of CDM development by ELETROBRÁS. Then, in the beginning of 2010 year, ELETROBRÁS requested detailed information for project sponsors individually in order to start the preparation of the PDD, after CDM costs were included and approved in the 2010 provisions costs by ANEEL.

Brazilian government, represented by ELETROBRÁS, has continually demonstrated real actions in order to secure the CDM status as presented in the timeline of events presented in the PDD (section B.5). In spite of the events from June 2007 to May 2010 being ELETROBRÁS' internal documents, both can be reasonably considered official hard evidences, due to the participation of various directors and managers as well as members from other institutions (Ministry of Science and Technology, Ministry of Mines and Energy, private initiative), in the case of reference 12a, and researchers from the Federal University of Rio de Janeiro, in the case of reference 23. In spite of that, the list of evidences of continuous and real action in order to secure the CDM status is revised to include various additional publicly available evidences (see below, for every single reference a corresponding evidence was supplied to the DOE).

Ref.	Date	Action
1	26/04/2002	Enactment of Law # 10,438, creating the Alternative Electricity Sources Incentive Program (PROINFA).
2	30/03/2004	Publication of Decree # 5,025 which regulates Law # 10,438 confirming that PROINFA aims for the reduction of greenhouse gases as established by the United Nations Framework Convention on Climate Change (UNFCCC) under Kyoto Protocol, contributing to sustainable development. It also creates PROINFA account to be administrated by ELETROBRÁS, which includes, but is not limited to, financial benefits from CDM.
3	30/06/2004	Signature of PROINFA Power Purchase Agreements (PPAs) between ELETROBRÁS and project sponsors (<u>project start date</u>).
4	30/08/2004	ELETROBRÁS Technical Note # 006/2004 from the Environment Department. It presents discussion regarding CDM and carbon credit markets and ELETROBRÁS insertion under CDM. The document has 82 pages and presents climate change framework, characteristics, eligibility criteria, stages and costs related. It also presents legal approach for PROINFA projects participation in the CDM and determines that carbon certification should be managed by the Energy and Mines Ministry and ELETROBRÁS.

5	13-17/06/2005	Participation of ELETROBRÁS team on CDM training course promoted by the Center of Wind and Solar Energy ("CRESESB" from the Portuguese "Centro de Referência para Energia Solar e Eólica Sérgio de Salvo Brito").
6	02/08/2005	ELETROBRÁS Technical Note nr. 007/2005 issued by the Environmental Department. It presents discussion regarding carbon credits ownership and detailed analysis regarding PROINFA projects registration under CDM.
7	09-11/11/2005	VIII ENGEMA ("ENGEMA" from the Portuguese Encontro Nacional sobre Gestão Empresarial e Meio Ambiente). National Meeting conducted by ELETROBRÁS and Fundação Getúlio Vargas (FGV) regarding advantages of CDM projects in Brazil. It presented the benefits from CDM and risks associated with uncertainties after 2012.
8	11/11/2005	ELETROBRÁS internal meeting in order to create a Working Group to conduct CDM process for PROINFA projects, with ten participants from five different areas from ELETROBRÁS. The WG was composed by all people participating in this meeting. All actions suggested in the meeting report were forwarded to the ELETROBRÁS Executive Board Meeting for assessment and approval.
9	17/01/2006	Brazilian DNA Official Letter, ref. MDL/02/2006/CIMGC, clarifying points related to starting date and retroactive carbon credits to Ms. Laura Porto from the Mines and Energy Ministry. The Brazilian DNA informed that PROINFA projects were not allowed to receive retroactive credits, since projects eligible for retroactive credits should start operation from 01/01/2000 to 18/11/2004, which was not case of PROINFA projects.
10	31/08/2006	Publication of Decree nr. 5,882/2006 which determines that only ELETROBRÁS is responsible for preparing the PDD and all required process for validation, registration, monitoring, certification and commercialization of carbon credits from PROINFA projects.
11	02/03/2007	Meeting with RWE Power AG and CARBON Projektentwicklung GmbH from Germany and Austria, respectively, which are potential CDM advisory companies experienced with large scale projects. Meeting call and presentation from companies are available.
12a	01/06/2007	Report for ELETROBRÁS Executive Board. The objective of the report was to propose the creation of a Coordinating Group of PROINFA Carbon Credits (composed by 4 people), a Group of PROINFA Project Design Document (composed by 10 people) and a Group Carbon Credits Commercialization (composed by 9 people). The PROINFA PDD Group would present discussion about best alternative to prepare the PDDs: one PDD for each power plant, bundling or PoA, as well as presenting estimated schedule and costs. The Commercialization Group would be responsible for indicating the best alternative for CERs commercialization: immediately sell, future sell after CDM validation, future sell after CERs issuance or any other alternative.
12b	12/06/2007	ELETROBRÁS Executive Board approves all suggestions from the Report dated 01/06/2007 through Resolution nr. 2183, process 1781/63, RES-435/2007. Three groups were created to manage, develop and commercialize carbon credits from PROINFA projects.

13	06/07/2007	Minutes of Meeting between ELETROBRÁS, the Mines and Energy Ministry, the Science and Technology Ministry, the World Bank and RWE Power AG. The main objective of the meeting was to discuss opportunities and risks of the PROINFA carbon credits. It was also discussed about the alternatives for PDD implementation. The development of a PoA was discarded since, to the understanding of the ELETROBRÁS WG, PoA was conceiving for open programs involving transport and energy efficiency, which it is necessary to include projects continually. Also, there were important uncertainties regarding the initial stage of PoA procedures. The alternative for individually develop the PDD is due to interdependence of projects under the program. For this reason, it was understood that the best option for PROINFA projects was to prepare a bundle of projects in the same PDD, following the example of registered CDM projects.
14a	06/07/2007	ELETROBRÁS letter to the Executive Secretary of the Brazilian DNA requesting clarifications regarding procedures for CDM registration of PROINFA projects under Decree nr. 5,882 dated 31/08/2006.
14b	24/08/2007	Brazilian DNA Official Letter nr. 062/2007-CIMGC/MCT confirming receipt of ELETROBRÁS letter dated 06/07/2007 and confirms legitimacy of ELETROBRÁS as the only entity authorized to develop, direct or indirectly, the preparation of the PDD, as well as the validation, registration, monitoring and commercialization of carbon credits from PROINFA projects. The Brazilian DNA also requests information on measures taken by ELETROBRÁS in order to regularize the PDD registry process.
14c	07/11/2007	ELETROBRÁS letter to the Brazilian DNA clarifying issues related to PROINFA projects process under CDM.
15	22/11/2007	2008 Annual PROINFA Plan ("PAP 2008"). Brazilian Federal Government Decree nr. 5,025/2004 determines the preparation of Annual PROINFA Plan by ELETROBRÁS, which shall present provisions, resources allocation, results and expenditures related to PROINFA development. According the decree the document shall be submitted to regulatory agency ANEEL. In PAP 2008 (section 2.8) it is stated that the CDM process for carbon credits commercialization is under initial stage. Ratio of energy and costs from PROINFA projects presented in the Annual PROINFA Reports shall be annually calculated and approved by ANEEL (the Brazilian Power Regulatory Agency) and be public available.
16	30/10/2008	ELETROBRÁS internal approval on provision of CDM costs (personnel training, validation, registration fee, verification and advisory company contracting) for publication in PAP 2009.
17	11/2008	ELETROBRÁS Coordinating WG Report. It presents a complete analysis for CDM registration of PROINFA projects and the results achieved by the WGs created under ELETROBRÁS Resolution 2183 dated 12/06/2007.
18	24/11/2008	2009 Annual PROINFA Plan ("PAP 2009") presents provisions of costs for PDD preparation (R\$1MM), validation (R\$ 6,360MM), registration fee (R\$ 6,360MM), verification (R\$ 5,940MM) and advisory firm for CDM consultancy (R\$1MM), totaling (R\$ 20,660MM). PROINFA reports are publicly available.

19a	27/01/2009	ANEEL Resolution nr. 772 and related Technical Note nr. 29/2009-SRE/ANEEL (§ 13 and 14), approved 2009 Annual PROINFA Plan and calculated the ratio of energy and costs from PROINFA projects. However, as presented in the Resolution addendum ("voto", §5 to §7), ANEEL did not include and approve provisions of costs related to CDM development presented in PAP 2009, claiming lack of detailed information on costs and revenues on this matter.
20a	25/03/2009	ELETROBRÁS Technical Note DE/UEP # 108/2009 presents detailed provision of costs and expenses related to the CDM development for PROINFA projects for PAP 2010 publication and approval from ANEEL.
20b	19/10/2009	2010 Annual PROINFA Plan ("PAP 2010") presenting costs and expenses related to CDM development for PROINFA projects.
21	26/01/2010	ANEEL Resolution nr. 930 approving ratio of energy and costs from PROINFA projects, including costs and revenues from CDM development, as informed in PAP 2010. See addendum reports ("voto", §2).
22	11/02/2010	ELETROBRÁS requested detailed information for project sponsors individually in order to start the preparation of the PDD.
23	01/02- 18/02/2010	E-mails exchange regarding the possibility of signature of a cooperation agreement with Rio de Janeiro University (COPPE/UFRJ) and fulfillment of legal/normative requirements associated.
24	26/05/2010	Report prepared for presentation to the ELETROBRÁS Executive Board regarding the signature of a Cooperation Agreement between ELETROBRÁS and Rio de Janeiro University (UFRJ), scope, modules and provision of costs.
25	31/08/2010	Draft of Cooperation Agreement between ELETROBRÁS and Rio de Janeiro University (COPPE/UFRJ) for technical training of ELETROBRÁS and COPPE/UFRJ teams regarding CDM methodologies and procedures to be used in PROINFA projects.
26	07-11/2011	Publication of PDDs in Portuguese for public consultation.
27	05/10/2012	CDM validation starting with the PDD publication for Global Stakeholder Consultation at the UNFCCC's website.

While analyzing the table above, it can be demonstrated that documented evidence is not limited to the information provided by the PPs, but most of it is based on information exchange between third parties (frequently federal government institutions), official sources and public available data, fully in accordance with the validation approach established in the CDM Validation and Verification Standard.

Therefore it is demonstrated that continuing efforts were taken in order to secure the CDM status of the proposed project activity since the project starting date. The long time needed to start the CDM validation process for the proposed project activity was due to regular governmental processing of information and approval of expenses required while dealing with several entities (private and public), prolonged governmental process – especially when approvals are required. Besides, delays in the CDM process start can be also attributed to difficulties faced in the program/project

implementation itself, resulting in the later than expected operation startup of most sub-projects by 2008/2009 (initially planned by 2006).

Conclusion:

CDM was seriously considered in the decision to implement the proposed project activity. There is abundant and official evidences of the awareness of the CDM prior to the start date of the proposed project activity through Brazilian regulation and plentiful and reliable evidence from official and external sources that continuing and real actions were taken to secure CDM status in parallel with its implementation.

Action:

Additional information with respect to the CDM prior consideration and awareness, as well as regarding continuing real actions taken to secure the CDM status, were included in the revised PDD. Related evidences were submitted to DOE.

3) The CDM architecture 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.

According to the Glossary of CDM 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.."

To the best of the PPs understanding, the proposed project activity is a large-scale measure, operation or action that reduces GHG emissions as a whole project. As mentioned in the PPs response to issue 2, projects under PROINFA were always treated as a group of project by the Brazilian government and by ELETROBRAS, never individually. All Brazilian regulation related to PROINFA is applicable to all selected projects in the program as a whole, not individually. For this reason, the proposed project activity can be reasonably treated as (macro) project with several sub-projects. Actually this is stressed as the understanding of the Brazilian government with the publication of Federal Government Decree number 5,882/2006, determining that ELETROBRÁS is centrally responsible for preparing the PDD and all required process for validation, registration, monitoring, certification and commercialization of CERs from PROINFA projects.

As explicitly mentioned in the request for review, there are no rules for a LSC bundle projects; however the CDM Project Standard and the Project Cycle Procedure, as well as ACM0002 and the additionality tool, do not limit the inclusion of more than one (sub-)projects in one single PDD. Indeed, there are several registered CDM LSC projects with millions of issued CERs considering more than one project in the same PDD. Even after the introduction of PoAs. In a quick (far from exhaustive) search in the CDM project database, only for registered projects in Brazil, the PPs understanding is confirmed, as it was possible to find a few projects using ACM0002 and containing several sub-projects combined together in one PDD, for example:

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

As reminded in the request, the only existing explicit rule for a project bundle in the same PDD is related to SSC projects. To the best of the PPs understanding, SSC bundling rules were introduced in order to avoid LSC projects using SSC simplified M&P inappropriately. The ultimate goal of the Simplified Modalities and Procedures for SSC is to incentive small projects while reducing transaction costs, as presented in the Report of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol on its first session, held at Montreal from 28 November to 10 December 2005⁴:

"In order to reduce transaction costs modalities and procedures are simplified for small-scale CDM project activities, as follows:

- (a) Project activities may be bundled or portfolio bundled at the following stages in the project cycle: the project design document, validation, registration, monitoring, verification and certification. The size of the total bundle should not exceed the limits stipulated in paragraph 6 (c) of decision 17/CP.7;*
- (b) The requirements for the project design document are reduced;*
- (c) Baseline methodologies by project category are simplified to reduce the cost of developing a project baseline;*
- (d) Monitoring plans are simplified, including simplified monitoring requirements, to reduce monitoring costs;*
- (e) The same operational entity may undertake validation, and verification and certification".*

From the above and the explicit definition regarding bundle for SSC projects, it is the PPs' understanding that SSC limitation bundling rules exist to avoid the application of the Simplified Modalities and Procedures by LSC projects and, thus, to reduce requirements and costs by benefiting LSC with SSC advantages. Furthermore, it is our

⁴ https://cdm.unfccc.int/Reference/COPMOP/08a01_abbr.pdf

understanding that the proposed project activity can be reasonably considered a project consisting of several sub-projects and, therefore, does not infringe any CDM regulatory requirement. On the contrary, it fulfills all the requirements for LSC projects, from the assessment of additionality, calculation of emission reductions, and eligibility of methodology (monitoring of parameters for each power plant individually, project boundary, calculation of power density, establishment of the baseline scenario, etc).

Conclusion:

The submitted project activity can be reasonably considered a single project consisting of several subprojects. The Brazilian government shares the same view, as demonstrated by Decree 5,882 from 2006. The PPs were not able to find any objection to the inclusion of more than one power plant in the same PDD for LSC. Actually there are many registered large-scale CDM projects having several sub-projects in a single project activity/PDD. The only existing limitation is applicable for SSC projects only, based on debundling definition. The proposed project activity does not take any advantage from SSC projects and fulfills all CDM regulatory requirements. Therefore, the present project activity clearly does not infringe any principles and objectives of the UN Climate Change Convention.

Action:

Not applicable. The PPs understand that the clarifications provided in the present response address the raised issue and no PDD revision is necessary.

- 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.*

According to Guidance 6 of the "Guidelines on the assessment of investment analysis":

"Input values used in all investment analysis should be valid and applicable at the time of the investment decision taken by the project participant".

The value of R\$ 66.77/MWh is based on the electrical energy auction for all energy sources carried out by the Brazilian Government in 2003 and reflects the energy price paid for hydropower projects in the market at that time (before the investment decision). This energy auction price was adjusted to the expected operation startup of PROINFA projects based on Brazilian inflation at the time of the investment decision, resulting in R\$ 76.92/MWh. Therefore, this energy price reasonably reflects the investment decision context following the guidance from the "Guidelines on the Assessment of Investment Analysis".

Furthermore, according to the "CDM Project Standard":

"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.

§50 When establishing the baseline scenario, project participants 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 (type E+);*
- (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 (type E-))."*

Additionally:

"Project participants shall address the two types of policies described in paragraph 50 above as follows:

- (a) Only national and/or sectoral policies or regulations described in paragraph 50(a) above that have been implemented before 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 50(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)".*

Considering the above, PROINFA program is classified as a Type E- policy, since it gives comparative advantages to less emissions-intensive technologies. PPAs under PROINFA presented a higher energy price when compared to the baseline scenario in order to incentive renewable electrical energy projects. The initiative for PROINFA creation demonstrates that without a long term PPA with subsidized prices by the Brazilian government, the project activity would very unlikely be implemented.

Since PROINFA was implemented after the adoption of the Kyoto Protocol (11 December 1997) and the adoption of the M&P by the CoP (11 November 2001), it does not need to be taken into account in the baseline scenario. Therefore, the mentioned floor price of "117.02 R\$/MWh in the Rule MME 45/04 of 2004 applicable to all hydro

projects applying PROINFA,” need not to be taken into account in establishing a baseline scenario and is not valid input parameter applicable at the time of the investment decision.

Conclusion:

The consideration in the submitted PDD of the energy price available to power producers at the time of the investment decision (76.92 R\$/MWh) reflects the investment climate of the project activity and is fully in accordance with the “Guidelines on the investment analysis”. Additionally the subsidized energy price (117.02 R\$/MWh) under PROINFA (a type E- national policy), need not to be taken into account in establishing a baseline scenario and is not valid input parameter applicable at the time of the investment decision.

Action:

Not applicable. The PPs understand that the clarifications provided in the present response address the raised issue and no PDD revision is necessary.

Best regards,



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