




**Validation report form for post-registration changes for  
CDM project activities  
(Version 02.0)**

*Complete this form in accordance with the instructions attached at the end of this form.*

**BASIC INFORMATION**

<b>Title and UNFCCC reference number of the project activity</b>	Teles Pires Hydropower Plant Project Activity 9301
<b>Process track</b>	<input type="checkbox"/> Prior approval <input checked="" type="checkbox"/> Issuance <input type="checkbox"/> Renewal of crediting period
<b>Version number of the validation report on PRCs</b>	1.0Aa
<b>Completion date of the validation report on PRCs</b>	29/03/2019
<b>Type(s) of PRCs</b>	<input type="checkbox"/> Temporary deviations from the registered monitoring plan, applied methodologies or applied standardized baselines <input type="checkbox"/> Corrections <input type="checkbox"/> Changes to the start date of the crediting period <input type="checkbox"/> Inclusion of a monitoring plan <input checked="" type="checkbox"/> Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines, or other applied standards or tools <input checked="" type="checkbox"/> Changes to the project design <input type="checkbox"/> Changes specific to afforestation and reforestation project activities
<b>Version number of PDD to which this report applies</b>	7.1
<b>Project participants</b>	Companhia Hidrelétrica Teles Pires Ecopart Assessoria em Negócios Empresariais Ltda.
<b>Host Party</b>	Brazil
<b>Applied methodologies and standardized baselines</b>	ACM0002, Consolidated baseline methodology for grid-connected electricity generation from renewable sources version 13 of 11/05/2012
<b>Mandatory sectoral scopes linked to the applied methodology</b>	Sectoral scope 1: Energy industries
<b>Conditional sectoral scopes linked to the applied methodologies</b>	N/A
<b>Name and UNFCCC reference number of the DOE</b>	RINA Services S.p.A. (RINA), E-0037
<b>Name, position and signature of the approver of the validation report on PRCs</b>	<b>Laura Severino</b> (Authorized officer signing for the DOE) Head of Sustainability & Food Certification Compliance Unit 

## SECTION A. Executive summary

>> RINA Services S.p.A. (RINA), commissioned by Companhia Hidrelétrica Teles Pires, is verifying the greenhouse gas emission reductions reported for the project activity “Teles Pires Hydropower Plant Project Activity” in Brazil, CDM Registration Reference N° 9301, for the period **Error! Reference source not found.**, with regard to the relevant requirements for CDM activities. The project was validated by PERRY JOHNSON REGISTRARS CARBON EMISSIONS SERVICES, INC (validation report C-1-B-01-L-0222-VA version 3.2 dated 24/12/2012) and it was registered on 28/12/2012 (Date of registration action 11/07/2013) under the CDM registration reference N° 9301.

The purpose of the project activity is to generate electricity through renewable energy generation (Greenfield hydropower plant) and it is connected to the national grid (SIN from the Portuguese Sistema Nacional Interligado). During the verification a PRC was identified. The PRC is based in the revised version of the PDD Version 7.1 of 15/03/2019 and is submitted with the current verification.

## Validation process

Validation was conducted using RINA procedures in line with the requirements specified in the CDM M&P, the latest version of the CDM Validation and Verification Standard, and relevant decisions of the COP/MOP and the CDM EB and applying standard auditing techniques.

The verification consisted of the following three phases:

- Desk review;
  - On-site assessment;
  - The resolution of outstanding issues and the issuance of the final validation report
- Validation is not meant to provide any consultancy towards the project participants. However, stated requests for clarifications and/or corrective actions may have provided input for improvement of the monitoring.

## Conclusion

It is RINA's opinion, the changes, as outlined in the revised PDD Version 7.1 of 15/03/2019, from the project activity as described in the registered PDD ensure that the level of accuracy and completeness in the monitoring and verification process is not reduced as a result of the revision; the revisions are in accordance with the applied monitoring methodology and the changes to the project activity comply with the requirements established in the CDM Project Standard.

Hence RINA requests that the validation opinion on changes from the project activity as described in the revised PDD for the project activity “Teles Pires Hydropower Plant Project Activity” in Brazil may be considered by the Board

## SECTION B. Validation team, technical reviewer and approver

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### B.1. Validation team member

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)	Involvement in			
						Desk/document review	On-site inspection	Interviews	Validation findings
1.	Team Leader/ Validator/ verifier/ Technical Expert TA 1.2	IR	Carvalho	Thaís	RINA Brazil	x	x	x	x

**B.2. Technical reviewer and approver of the validation report on PRCs**

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)
1.	Technical reviewer	IR	Liu	Hui Feng	RINA China
2.	Approver	IR	Severino	Laura	RINA HQ

**SECTION C. Means of validation****C.1. Desk/document review**

>> The monitoring report, version 5.1 of 15/03/2019 and previous version /02/, the emission reduction calculations provided in the form of a spreadsheet, "CHTP\_CERs\_v.5\_2018.12.11.xlsx" version 5 of 11/12/2018 and previous versions /07/, were assessed as part of the verification. In addition the registered Project Design Document (PDD) /01/ in particular the baseline estimations and the monitoring plan and the validation report number C-1-B-01-L-0222-VA, version 3.2 dated 24/12/2012 /11/, revised version of the PDD /01/ for the project were reviewed.

The Appendix 3 lists the documentation that was reviewed during the verification and validation of PRC.

**C.2. On-site inspection**

Duration of on-site inspection:				
No.	Activity performed on-site	Site location	Date	Team member
1.	Implementation and operation of the proposed project activity. Checked the monitoring equipment, interviewed key personnel of the plant to confirm the operational and data collection procedures, cross-checked between information provided in the monitoring report and data plant	Teles Pires hydropower plant	30/10/2017	Thaís Carvalho
2.	Reviewed the information flows for generating, aggregating and reporting the monitoring parameters	Teles Pires hydropower plant	30/10/2017	Thaís Carvalho
3.	Checked calibration performance, reviewed calculations and assumptions made in determining the GHG data and emission reductions	Teles Pires hydropower plant	30/10/2017	Thaís Carvalho
4.	Checked the quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters	Teles Pires hydropower plant	30/10/2017	Thaís Carvalho
5.	Cross-checked between information provided in the monitoring report and data evidence	Teles Pires hydropower plant	30/10/2017	Thaís Carvalho

**C.3. Interviews**

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Loiola	Arthur	CHTP	30/10/2017	Environmental analyst: project implementation, project operation	Thaís Carvalho
2	Duarte	Marcos	CHTP	30/10/2017	DMA: project implementation, project operation	Thaís Carvalho
3	Gonçalves	Muller	CHTP	30/10/2017	O&M Manager: project implementation, project operation, energy measurements, calibration,	Thaís Carvalho
4	Giribola	Priscila	CHTP	30/10/2017	Analyst: project implementation, project operation, energy	Thaís Carvalho
5	Esparta	A. Ricardo	Eqao	30/10/2017	Technical analyst: MR, CERs calculation, emission factor data	Thaís Carvalho
6	Cunha	Gilson	CHTP	30/10/2017	Operational Technician: equipments	Thaís Carvalho

					installed, project operation, energy meters	
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**C.4. Sampling approach**

&gt;&gt;N/A

**C.5. Clarification requests (CLs), corrective action requests (CARs) and forward action requests (FARs) raised**

Areas of validation findings	No. of CL	No. of CAR	No. of FAR
Compliance with PDD form		1	
Temporary deviations from the registered monitoring plan, applied methodologies or applied standardized baselines			
Corrections			
Changes to the start date of the crediting period			
Inclusion of a monitoring plan			
Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines, or other applied standards or tools			
Changes to the project design		2	
Changes specific to afforestation and reforestation project activities			
Others (please specify)			
<b>Total</b>		3	

**SECTION D. Validation findings****D.1. Compliance with PDD form**

<b>Means of validation</b>	PDD applies the applicable CDM-PDD-FORM: Project design document form version 10.1. RINA confirms that the information transferred to the later version of the PDD form is materially the same as that in the registered PDD.
<b>Findings</b>	CAR 1: the version of the PDD was not updated. Appendix 7 of the revised PDD is not completed in accordance with the instructions: Provide a summary of the post-registration changes being proposed in this version of the PDD, and where applicable, the history of all post-registration changes to the project activity that have been approved by the Board after its registration. For all post-registration changes, include reasons for the changes and any additional information relating to the changes. Moreover, in accordance with project standard paragraph 230: The project participants shall determine whether the actual or proposed changes are temporary deviations referred to in section 8.2 below, or permanent changes referred to in section 8.3 below, and whether they require approval by the Board. Unless otherwise stated in the respective provisions in sections 8.2 and 8.3 below, post-registration changes require approval by the Board. To close CAR 1, PDD was revised in accordance with the instructions and project standard.
<b>Conclusion</b>	RINA verified that the PDD was completed in accordance with the CDM-PDD-FORM: Project design document form version 10.1, including its Attachment: Instructions for completing this form.

**D.2. Temporary deviations from the registered monitoring plan, applied methodologies or applied standardized baselines**

<b>Means of validation</b>	N/A
<b>Findings</b>	
<b>Conclusion</b>	

**D.3. Corrections**

<b>Means of validation</b>	N/A
<b>Findings</b>	
<b>Conclusion</b>	

**D.4. Changes to the start date of the crediting period**

<b>Means of validation</b>	N/A
<b>Findings</b>	
<b>Conclusion</b>	

**D.5. Inclusion of a monitoring plan**

<b>Means of validation</b>	N/A
<b>Findings</b>	
<b>Conclusion</b>	

**D.6. Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines, or other applied standards or tools**

<b>Means of validation</b>	<p>PP is requesting a post registration change in the registered monitoring plan regarding the calibration periodicity. The registered PDD describes that ONS also governs the electricity meter calibration requirements which should be conducted every two years and performed by an entity accredited under the Brazilian Calibration Net (from the Portuguese Rede Brasileira de Calibração – RBC). PDD is revised due to an updated ONS procedure, valid from 01/01/2017 onwards, that describes that energy meter calibration shall be done in a 5-year period. Therefore, and, as stated in the originally registered PDD, “the Project owner will proceed with the necessary monitoring measures as established in the applicable official procedures from ONS, ANEEL and, CCEE”.</p> <p>RINA verified that the revised PDD describes the calibration frequency in accordance with updated national requirements, that is not under PP control. It is RINA’s opinion that the changes fall into the “Indicative list of post-registration changes that may be suitable for approval under the issuance track” item (c) Changes to the monitoring of a registered CDM project activity that have no material impact on the applicability of the applied methodologies or the other applied methodological regulatory documents, or the accuracy and completeness of the monitoring.</p>
<b>Findings</b>	N/A
<b>Conclusion</b>	<p>RINA verified that the change complies to “CDM project standard for project activities”, version 02.0, Appendix. Indicative list of post-registration changes that may be suitable for approval under the issuance track.</p> <p>c) Changes to the monitoring of a registered CDM project activity that have no material impact on the applicability of the applied methodologies or the other applied methodological regulatory documents, or the accuracy and completeness of the monitoring; RINA verified that the calibration of the energy meters followed the national requirements of ONS grid Procedures /30/.</p>

**D.7. Changes to the project design**

<b>Means of validation</b>	<p>The following Changes to project design are applicable to the project activity and are being submitted with the monitoring report as part of the request for issuance (post-registration changes - issuance track) as applicable from this monitoring period.</p> <p>1. Reservoir water level: it changed from 220m to 220.40 m, affecting reservoir area, which increased from 134.7km<sup>2</sup> to 146.50km<sup>2</sup>. To confirm the revised data, PP has provided the water level measurements /15/ and the ANEEL technical sheet /21/ and executive project report /22/. The Area of the reservoir measured on the surface of the water, after the implementation of the project activity is listed as a monitored parameter A<sub>PJ</sub>. The PPs clarify that at the time of the PDD preparation, the reservoir area considered was 134.7 km<sup>2</sup> based on 220 m water level as checked during validation on ANEEL Technical Summary - Feasibility studies and</p>
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	<p>Project Design (April 2008). However, the reservoir area was changed to 146.50 km<sup>2</sup> based on 221.59 m water level as can be seen in ANEEL Technical Record signed by the constructing companies Voith, CNO and Alstom. Changes were needed due to topographical differences, necessary for adjustments in water levels upstream and downstream. Considering the revised installed capacity and reservoir area, the power density of the project is updated to 12.42 MW/km<sup>2</sup> (1,820.025 MW ÷ 146.50 km<sup>2</sup> = 12.42 MW/km<sup>2</sup>) and project emissions still not applicable to the project activity.</p> <p>2. Installed capacity: While considering generators tag, the resulted installed capacity is 1,820.025 MW: 404,450 kVA x 0.9 = 364,005 kW x 5 generating units = 1,820.025 MW (instead of 1820 MW). RINA has confirmed the installed capacity of the project activity in the generator's name plate. Installed capacity of the hydropower plant after the implementation of the project activity is also a monitored parameter <math>Cap_{PJ}</math> and was updated in the revised PDD.</p> <p>All official documentation of the project refers to the rounded installed capacity, as can be seen in ANEEL Ordinances of operation startup /12/, Operation License and other public and official information available, which has been considered in the registered PDD. Although installed capacity presented in the registered PDD does not consider decimal places, the minor 0.025 MW difference (less than 0.01%) cannot be considered relevant as has an immaterial impact on generation of emission reductions, additionality (no additional investment was made and the impact in the investment analysis is negligible) and applicability of the methodology (no small scale criteria was impacted).</p> <p>3. Turbine capacity: it changed from 369.7 MW to 370.10MW each. RINA has confirmed the installed capacity turbines of the project activity in the equipment's name plate. In spite of the difference, there are no changes in effective output capacity and, therefore, has an immaterial impact on generation of emission reductions, additionality (no additional investment was made) and applicability of the methodology (no small scale criteria was impacted).</p>
<b>Findings</b>	<p>CAR 2: In accordance with paragraph 242. The project participants shall report in the revised PDD the impacts of the proposed or actual changes to the registered CDM project activity on the following:</p> <ul style="list-style-type: none"> <li>(a) The applicability and application of the applied methodologies, the applied standardized baselines and the other applied methodological regulatory documents with which the project activity has been registered;</li> <li>(b) The compliance of the monitoring plan with the applied methodologies, the applied standardized baselines and the other applied methodological regulatory documents;</li> <li>(c) The level of accuracy and completeness in the monitoring of the project activity compared with the requirements contained in the registered monitoring plan;</li> <li>(d) The additionality of the project activity;</li> <li>(e) The scale of the project activity.</li> </ul> <p>To close CAR 2 PDD was revised in accordance with the requirements of the project standard.</p> <p>CAR 3: the tables of the parameters <math>Cap_{PJ}</math> and <math>A_{PJ}</math> are not corrected filled (values) in the revised PDD</p> <p>To close CAR 3, PDD was revised to correctly present the values of the parameters <math>Cap_{PJ}</math> and <math>A_{PJ}</math></p>
<b>Conclusion</b>	<p>RINA verified that the changes are according to "CDM project standard for project activities", version 02.0, Appendix. Indicative list of post-registration changes that may be suitable for approval under the issuance track.</p> <p>(d) Changes to the project design of a registered CDM project activity that do not adversely impact any of the following:</p> <ul style="list-style-type: none"> <li>(i) The applicability and application of the applied methodologies, the applied standardized baselines and the other applied methodological regulatory documents with which the project activity has been registered; RINA verified changes do not impact the applicability and application of the applied methodology ACM0002 v 13.0.0 and its applicable tools, nor the applied standardized baseline with which the project activity has been registered</li> </ul>

	(ii) The additionality of the project activity; RINA verified that changes do not impact the additionality of the project activity (iii) The scale of the project activity. RINA verified that the project remains large scale
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#### D.8. Changes specific to afforestation and reforestation project activities

Means of validation	N/A
Findings	
Conclusion	

#### SECTION E. Internal quality control

>> The draft final validation opinion before being submitted to the client were subjected to an independent internal technical review to confirm that all validation activities had been completed according to the pertinent RINA instructions.

The technical review was performed by a technical reviewer(s) qualified in accordance with RINA's qualification scheme for CDM validation and verification

#### SECTION F. Validation opinion

>> RINA Services Spa (RINA) has performed a validation of post registration changes for the project activity "Teles Pires Hydropower Plant Project Activity" in Brazil, CDM Registration Reference N° 9301. The validation has s based on the information made available to us.

RINA has performed this validation on the basis of the following documents:

- CDM project cycle procedure for project activities; version 2.0 of 29/11/2018
- CDM project standard for project activities; version 2.0 of 29/11/2018
- CDM validation and verification standard for project activities; version 2.0 of 29/11/2018
- Approved baseline and monitoring methodology ACM0002, Consolidated baseline methodology for grid-connected electricity generation from renewable sources version 13 of 11/05/2012

It is RINA's opinion that the permanent changes from the registered monitoring plan and the applied methodology and changes in the project design are in line with the Project standard as all the requirements in the methodology version 13 of 11/05/2012 have been met and that the application of the updated version of the applied methodology does not impact the conservativeness of the monitoring and verification process, including the related emission reduction or removal calculations.

It is RINA's opinion, the changes in the project design, as outlined in the revised PDD Version 7.1 of 15/03/2019, ensure that the level of accuracy and completeness in the monitoring and verification process is not reduces as a result of the revision; the revisions are in accordance with the applied monitoring methodology and the changes to the project activity comply with the requirements established in the CDM Project Standard. There was no impact in the additionality nor in the scale of the project activity nor applicability of the methodology and tools. Therefore it is RINA's opinion that the post registration change would not adversely affect the conclusions of the validation report of the registered PDD.

Hence RINA requests that the post registration changes from the project activity as described in the registered PDD for the project activity "Teles Pires Hydropower Plant Project Activity" in Brazil may be considered by the Board



## Appendix 1. Abbreviations

Abbreviations	Full texts
BE	Baseline Emissions
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CDM M&P	Modalities and Procedures CDM
CER(s)	Certified Emission Reduction(s)
CH <sub>4</sub>	Methane
CL	Clarification Request
CHTP	Central Hidrelétrica Teles Pires
CO <sub>2</sub>	Carbon dioxide
CO <sub>2</sub> e	Carbon dioxide equivalent
CRT	Coordination and Technical Control Staff
DCI	Certification Division of RINA Services Spa
DNA	Designated National Authority
DOE	Designated Operational Entity
EB	Executive Board
ER	Emission Reductions
FAR	Forward Action Request
GHG(s)	Greenhouse gas(es)
GWP	Global Warming Potential
IPCC	Intergovernmental Panel on Climate Change
LoA	Letter of Approval
MoV	Means of Verification
MR	Monitoring Report
NGO	Non-governmental Organization
ODA	Official Development Assistance
PDD	Project Design Document
PE	Project Emission
PP(s)	Project Participant(s)
Ref.	Document Reference
RINA	RINA Services Spa
SS(s)	Sectoral Scope(s)
TA(s)	Technical Area(s)
UNFCCC	United Nations Framework Convention on Climate Change
VVS	Validation and Verification Standard

## Appendix 2. Competence of team members and technical reviewers



### CERTIFICATO DI QUALIFICA QUALIFICATION CERTIFICATE

Si attesta che il sig./sig.ra:  
We declare that Mr/Mrs/Ms:

Thais DE LIMA CARVALHO

è qualificato come<sup>1</sup>:  
is qualified as:

CDM -TEC, -VAL, -VER, -TL  
ITRP, REG-EXP<sup>2</sup>

per le seguenti aree tecniche:  
for the following technical areas:

1.1, 1.2, 2.1, 13.1

AREE TECNICHE TECHNICAL AREAS	DESCRIZIONE DELL'AREA TECNICA TECHNICAL AREA DESCRIPTION	SCOPO SETTORIALE SECTORAL SCOPE
1.1	Thermal energy generation	1
1.2	Renewables	1
2.1	Electricity distribution	2
13.1	Solid waste and wastewater	13

in accordo alle istruzioni della Divisione Certificazione.  
in accordance with the instructions of the Certification Division.

REVISIONE REVISION	DATA DATE	MOTIVAZIONI PER LA REVISIONE REASON FOR THE REVISION
0	19-08-2009	-
13	31-03-2017	Added qualification as ITRP
14	20-07-2018	Added qualification as REG-EXP

Il Resp. CCPLS  
Head of CCPLS

<sup>1</sup> Legend:

VAL: Validator  
VER: Verifier  
TEC: Technical Expert  
TL: Team Leader  
FIN-EXP: Financial Expert  
DET: Determiner

CDM: Clean Development Mechanism  
VCS: Verified Carbon Standard  
GS: Gold Standard  
SCS: SocialCarbon Standard  
JI: Joint Implementation

<sup>2</sup> South America (all countries); Central America (all countries), Cape Verde

RINA Services S.p.A. è accreditato da UNFCCC, quale Entità Operativa Designata (DOE), per condurre la Validazione e la Verifica di Progetti CDM, da VCSA per condurre la Validazione e la Verifica di Progetti VCS, da GS Foundation, per condurre la Validazione e la Verifica di Progetti GS, da Ecologica Institute per condurre la Validazione e la Verifica di rapporti SCS

RINA Services S.p.A. is accredited by the UNFCCC, as Designated Operational Entity (DOE), to carry out Validation and Verification of CDM Projects, by the VCSA, to carry out Validation and Verification of VCS Projects, by the GS Foundation, to carry out Validation and Verification of GS Projects and by the Ecologica Institute, to carry out Validation and Verification of SCS Reports

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**CERTIFICATO DI QUALIFICA**  
**QUALIFICATION CERTIFICATE**

Si attesta che il sig./sig.ra:

Hui Feng LIU

We declare that Mr/Mrs/Ms:

è qualificato come<sup>1</sup>:  
is qualified as:

CDM -TEC, -VAL, -VER, -TL  
ITRP, REG-EXP<sup>2</sup>

per le seguenti aree tecniche:  
for the following technical areas:

1.1, 1.2, 8.1, 9.2, 13.1

AREE TECNICHE TECHNICAL AREAS	DESCRIZIONE DELL'AREA TECNICA TECHNICAL AREA DESCRIPTION	SCOPO SETTORIALE SECTORAL SCOPE
1.1	Thermal energy generation	1
1.2	Renewables	1
8.1	Mining and mineral processes	8
9.2	Iron, steel and ferro-alloy production	9
13.1	Solid waste and wastewater	13

in accordo alle istruzioni dell'unità Sostenibilità & Cambiamenti Climatici.  
in accordance with the instructions of the Sustainability & Climate Change Unit.

REVISIONE REVISION	DATA DATE	MOTIVAZIONI PER LA REVISIONE REASON FOR THE REVISION
0	10/09/2010	-
11	31/03/2017	Updating qualification as ITRP
12	30/07/2018	Updating qualification as REG-EXP

Il Resp. CCPLS  
Head of CCPLS

<sup>1</sup> Legend:

VAL: Validator  
VER: Verifier  
TEC: Technical Expert  
TL: Team Leader  
FIN-EXP: Financial Expert  
DET: Determiner

CDM: Clean Development Mechanism  
VCS: Verified Carbon Standard  
GS: Gold Standard  
SCS: Social Carbon Standard  
JI: Joint Implementation

<sup>2</sup> Asia / Central Asia and Pacific region

RINA Services S.p.A. è accreditato da UNFCCC, quale Entità Operativa Designata (DOE), per condurre la Validazione e la Verifica di Progetti CDM, da VCSA per condurre la Validazione e la Verifica di Progetti VCS, da GS Foundation, per condurre la Validazione e la Verifica di Progetti GS, da Ecologica Institute per condurre la Validazione e la Verifica di rapporti SCS

RINA Services S.p.A. is accredited by the UNFCCC, as Designated Operational Entity (DOE), to carry out Validation and Verification of CDM Projects, by the VCSA, to carry out Validation and Verification of VCS Projects, by the GS Foundation, to carry out Validation and Verification of GS Projects and by the Ecologica Institute, to carry out Validation and Verification of SCS Reports

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### Appendix 3. Documents reviewed or referenced

No.	Author	Title	References to the document	Provider
1	Companhia Hidrelétrica Teles Pires and Ecopart Assessoria em Negócios Empresariais Ltda.	* Registered CDM-PDD for project activity “Teles Pires Hydropower Plant Project Activity” in Brazil	Version 7 of 04/10/2012  Version 7 of 05/03/2019  Version 7.1 of 15/03/2019	Project participant
2	Companhia Hidrelétrica Teles Pires and Ecopart Assessoria em Negócios Empresariais Ltda.	Monitoring report for project activity “Teles Pires Hydropower Plant Project Activity” in Brazil related to the monitoring period <b>Error! Reference source not found..</b>	version 01 of 29/08/2017 of version 2 of 04/07/2018 version 3 of 12/09/2018 version 4 of 27/09/2018 version 5 of 11/12/2018 version 5.1 of 15/03/2019	Project participant
3	CDM Executive Board	CDM project cycle procedure for project activities	version 2.0 of 29/11/2018	Others
4	CDM Executive Board	CDM project standard for project activities	version 2.0 of 29/11/2018	Others
5	CDM Executive Board	CDM validation and verification standard for project activities	version 2.0 of 29/11/2018	Others
6	CDM Executive Board	CDM Executive Board: Baseline and monitoring methodology ACM0002, Consolidated baseline methodology for grid-connected electricity generation from renewable sources	version 13 of 11/05/2012	Others
7	Companhia Hidrelétrica Teles Pires and Ecopart Assessoria em Negócios Empresariais Ltda.	CERs spreadsheet “CHTP_CERs_v.1_2017.08.18.xlsx” “CHTP_CERs_v.2_2018.06.19.xlsx” “CHTP_CERs_v.3_2018.08.20.xlsx” “CHTP_CERs_v.4_2018.09.27.xlsx” “CHTP_CERs_v.5_2018.12.11.xlsx”	version 1 of 18/08/2017 version 2 of 19/06/2018 version 3 of 20/08/2018 version 4 of 27/09/2018 version 5 of 11/12/2018	Project participant
8	CDM Executive Board	CDM-MR-FORM - Monitoring report form, including Attachment. Instructions for completing this form	version 6.0	Other
9	CDM Executive Board	Guideline: Application of materiality in verifications	Version 2 of 20/02/2015	Other
10	CDM Executive Board	Tool to calculate the emission factor for an electricity system	02.2.1 of 29/09/2011	Other
11	PERRY JOHNSON REGISTRARS CARBON EMISSIONS SERVICES, INC	Validation report number C-1-B-01-L-0222-VA for the project Teles Pires Hydropower Plant Project Activity	version 3.2 dated 24/12/2012	Other
12	ANEEL	Ordinance nº 3646 from 06/11/2015, authorizing the startup of generation unit 1 on 07/11/2015	06/11/2015	Other

13	ANEEL	Ordinance nº 4151 from 29/12/2015, authorizing the startup of generation unit 2 on 30/12/2015	29/12/2015	Project participant
14	ANEEL	Ordinance nº 2103 from 03/08/2016, authorizing the startup of generation unit 3, 4 and 5 on 04/08/2016	03/08/2016	Project participant
15	UHTP	Spreadsheet with data from the water level (reservoir area): Dados_operacionais_CHTP_2015.xlsx Dados_operacionais_CHTP_2016.xlsx Dados_operacionais_CHTP_2017.xlsx	2015 2016 2017	Project participant
16	UHTP	Official Email informing the meters' change on 19/10/2017 (RES Extrato de Coleta dos Dados de Medição no SCDE - (TELES PIRES) - Outubro 2017.msg)	25/10/2017	Project participant
17	Prolux Engenharia de Sistemas	Calibration certificate number 2015-466, for the energy meter PT-121A044-01, calibration performed on 30/09/2015 (CC_2015_464_TELES PIRES C1 500 KV – SE - PRINC.pdf)	Certificate dated 02/10/2015	Project participant
18	Prolux Engenharia de Sistemas	Calibration certificate number 2015-464, for the energy meter MT-1306A028-01, calibration performed on 30/09/2015 (CC_2015_464_TELES PIRES C1 500 KV – SE - RETAG.pdf)	Certificate dated 02/10/2015	Project participant
19	Prolux Engenharia de Sistemas	Calibration certificate number 2015-463, for the energy meter PT-1212A173-01, calibration performed on 30/09/2015 (CC_2015-463_TELES PIRES C2 500 KV – SE - RETAG.pdf)	Certificate dated 02/10/2015	Project participant
20	Prolux Engenharia de Sistemas	Calibration certificate number 2015-465, for the energy meter PT-1212A059-01, calibration performed on 30/09/2015 (CC_2015-465_TELES PIRES C2 500 KV – SE - PRINC.pdf)	Certificate dated 02/10/2015	Project participant
21	ANEEL	Companhia Hidrelétrica Teles Pires, technical sheet signed (Ficha Técnica Alstom - Assinada.pdf; Ficha Técnica CNO - Assinada.pdf; Ficha Técnica Voith - Assinada.pdf)	-	Project participant
22	COMPANHIA HIDRELÉTRICA TELES PIRES	Executive project, for the changes in the quota of the project activity, due to IBGE change in orthometric altitude. (TX-RT-EC-LA-C20-00001.pdf)	Jun/2014	Project participant
23	UHTP	Work license LT0443/2016, for meter replacement (LT_0443_2016.pdf) _ RES_ Ajuste da rede do IBGE.pdf,	12/07/2016	Project participant
24	Schneider Eletric	Factory calibration certificate for the energy meter serial number MW-1602A158-02 (Certificado de calibração medidor faturamento sobressalente 2.pdf)	09/02/2016	
25	CAM GyM	calibration certificate for the energy meter serial number MW-1602A158-02 (Certificado de calibração medidor faturamento sobressalente.pdf)	20/03/2016	PP
26	MCTI (Brazilian DNA)	Brazilian Resolution # 8 of 28/05/2008 defines the Brazilian Interconnected grid for CDM project, available at <a href="http://www.mctic.gov.br/mctic/opencms/ciencia/SEPED/clima/cimgc/Comissao_Interministerial_de_Mudanca_Global_do_Clima_CIMGC.html">http://www.mctic.gov.br/mctic/opencms/ciencia/SEPED/clima/cimgc/Comissao_Interministerial_de_Mudanca_Global_do_Clima_CIMGC.html</a>	Accessed on 09/11/2017	Other
27	CCEE	CCEE report "MED003 - Medição da Geração e Consumo" (Consumption and Generation Measurements) for the UHE Teles Pires	2015-2017	PP

28	Companhia Hidrelétrica Teles Pires	Comparison between energy measurements and CCEE reports (gross enervgy) "Geração 2015.xlsx"; "Geração 2016.xlsx"; "Geração 2017.xlsx"	2015-2017	PP
29	Energisa	Invoices for the energy consumed from the grid (faturas ENERGISA.RAR; 11-2015.pdf; 12-2015.pdf; 01-2016.pdf)	2015-2017	PP
30	ONS	National Electric System Operator. Grid Procedures – Module 12: measurement for billing/Submodule 12.3 Maintenance of the system of measurement for billing.		

## Appendix 4. Clarification requests, corrective action requests and forward action requests

Table 1. CLs from this validation

CL ID	xx	Section no.	Date: DD/MM/YYYY
Description of CL			
N/A			
Project participant response			Date: DD/MM/YYYY
Documentation provided by project participant			
DOE assessment			Date: DD/MM/YYYY

Table 2. CARs from this validation

CAR ID	1	Section no.	D.1	Date: 07/03/2019
Description of CAR				
the version of the PDD was not updated. Appendix 7 of the revised PDD is not completed in accordance with the instructions: Provide a summary of the post-registration changes being proposed in this version of the PDD, and where applicable, the history of all post-registration changes to the project activity that have been approved by the Board after its registration. For all post-registration changes, include reasons for the changes and any additional information relating to the changes. Moreover, in accordance with project standard paragraph 230: The project participants shall determine whether the actual or proposed changes are temporary deviations referred to in section 8.2 below, or permanent changes referred to in section 8.3 below, and whether they require approval by the Board. Unless otherwise stated in the respective provisions in sections 8.2 and 8.3 below, post-registration changes require approval by the Board.				
Project participant response				Date: 15/03/2019
PDD is revised to include summary of post registration changes (see appendix 7 of the revised PDD).				
Documentation provided by project participant				
<ul style="list-style-type: none"> <li>Revised PDD, version 7.1, (clean and tracked-changes versions)</li> </ul>				
DOE assessment				Date: 26/03/2019
PDD was revised and complies with the instructions. The changes in the project design are correctly described in the version 7.1 of the PDD.				
This CAR is closed				

CAR ID	2	Section no.	D.7	Date: 07/03/2019
Description of CAR				

In accordance with paragraph 242. The project participants shall report in the revised PDD the impacts of the proposed or actual changes to the registered CDM project activity on the following:	
(a) The applicability and application of the applied methodologies, the applied standardized baselines and the other applied methodological regulatory documents with which the project activity has been registered;	
(b) The compliance of the monitoring plan with the applied methodologies, the applied standardized baselines and the other applied methodological regulatory documents;	
(c) The level of accuracy and completeness in the monitoring of the project activity compared with the requirements contained in the registered monitoring plan;	
(d) The additionality of the project activity;	
(e) The scale of the project activity.	
<b>Project participant response</b>	<b>Date:</b> 15/03/2019
<i>PDD is revised to report the impacts of the proposed changes on the items indicated in paragraph 242 of the CDM Project Standard (see appendix 7 of the revised PDD).</i>	
<b>Documentation provided by project participant</b>	
<ul style="list-style-type: none"> <li>Revised PDD, version 7.1, (clean and tracked-changes versions)</li> </ul>	
<b>DOE assessment</b>	<b>Date:</b> 26/03/2019
Revised PDD is completed in accordance with the requirements of the Project Standard.	
This CAR is closed	

<b>CAR ID</b>	3	<b>Section no.</b>	D.7	<b>Date:</b> 07/03/2019
<b>Description of CAR</b>				
the tables of the parameters $Cap_{PJ}$ and $A_{PJ}$ are not corrected filled (values) in the revised PDD				
<b>Project participant response</b>				<b>Date:</b> 15/03/2019
<i>The values of <math>Cap_{PJ}</math> and <math>A_{PJ}</math> are corrected in the parameter table.</i>				
<b>Documentation provided by project participant</b>				
<ul style="list-style-type: none"> <li>Revised PDD, version 7.1, (clean and tracked-changes versions)</li> </ul>				
<b>DOE assessment</b>				<b>Date:</b> 26/03/2019
Revised PDD presents correctly the values of the parameters $Cap_{PJ}$ and $A_{PJ}$				
This CAR is closed				

Table 3. FARs from this validation

<b>FAR ID</b>	xx	<b>Section no.</b>		<b>Date:</b> DD/MM/YYYY
<b>Description of FAR</b>				
<b>Project participant response</b>				<b>Date:</b> DD/MM/YYYY
<b>Documentation provided by project participant</b>				
<b>DOE assessment</b>				<b>Date:</b> DD/MM/YYYY

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Document information

Version	Date	Description
02.0	31 October 2017	Revision to align with the requirements in the “CDM validation and verification standard for project activities” (version 01.0).
01.0	23 March 2015	Initial publication.
Decision Class: Regulatory		
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Business Function: Registration		
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