



**Validation report form for post-registration changes for CDM project activities**
**(Version 01.0)**

Complete this form in accordance with the "Attachment: Instructions for filling out the validation report form for post-registration changes for CDM project activities" at the end of this form.

**VALIDATION REPORT ON POST-REGISTRATION CHANGES (PRCs)**

<b>Title and reference number of the project activity</b>	Jirau Hydro Power Plant UNFCCC Ref.: 9226
<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>	Version 1.0
<b>Completion date of the validation report on PRCs</b>	25/05/2016
<b>Type(s) of PRCs</b>	<input type="checkbox"/> Temporary deviations from the registered monitoring plan, monitoring methodology or standardized baseline <input type="checkbox"/> Corrections <input type="checkbox"/> Changes to the start date of the crediting period <input type="checkbox"/> Inclusion of a monitoring plan to a registered project activity <input type="checkbox"/> Permanent changes from registered monitoring plan, monitoring methodology or standardized baseline <input checked="" type="checkbox"/> Changes to the project design of a registered project activity <input type="checkbox"/> Types of changes specific to afforestation and reforestation project activities
<b>Version number of PDD to which this report applies</b>	Version 3.1
<b>Project participant(s)</b>	Energia Sustentável do Brasil S.A GDF SUEZ Energy Latin America Participações Ltda
<b>Host Party</b>	Brazil
<b>Sectoral scope(s), selected methodology(ies), and where applicable, selected standardized baseline(s)</b>	Scope: 1 / Technical Area: 1.2 CDM Methodology: ACM0002 (version 13.0.0) – Consolidated baseline methodology for grid-connected electricity generation from renewable sources
<b>Name of DOE</b>	TÜV NORD CERT GmbH
<b>Name, position and signature of the approver of the validation report on PRCs</b>	 Rainer Winter Final Approver

**SECTION A. Executive summary**

As this assessment was carried out as part of the 1<sup>st</sup> verification of the project activity please refer to chapter 2 of the verification report.

**Table 1:** Project Characteristics

Item	Data	
Project title	Jirau Hydro Power Plant	
Project type	<input checked="" type="checkbox"/> Standard	<input type="checkbox"/> PoA
Project size	<input checked="" type="checkbox"/> Large Scale	<input type="checkbox"/> Small Scale
Technical Area(s)	1.2: Renewables	
Location	Brazil	
Crediting period	<input checked="" type="checkbox"/> Renewable Crediting Period (7 y) <input type="checkbox"/> Fixed Crediting Period (10 y)	

For a detailed project description please refer to the registered PDD and/or the latest verification report (to which this report is attached).

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

On the basis of a competence analysis and individual availabilities an assessment team, consisting of one team leader, was appointed. Furthermore, also the personnel for the technical review and the final approval were determined.

The list of involved personnel, the tasks assigned and the qualification status are summarized in the following table below.

**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 review	On-site inspection	Interview(s)	Validation findings
1.	Team Leader	EI	Cruz	Sergio	BRTUV – 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	EI	Lopes	Ricardo	BRTUV – Brazil
2.	Approver	IR	Winter	Rainer	TÜV NORD CERT

## SECTION C. Means of validation

### C.1. Desk review

The assessment of post registration changes consisted of the following steps:

- appointment of team members and technical reviewers;
- a desk review of the registered and revised PDD<sup>/PDD/</sup> submitted by the client and additional supporting documents;
- on-site assessment (if required);
- background investigation and follow-up interviews with personnel of the project developer and its contractors;
- resolution of corrective actions (CARs / CLs) (if any);
- final reporting;
- technical review;
- final approval.

In this case all activities were carried out as part of the 1<sup>st</sup> verification of this project activity.

The registered as well as the revised PDD and supporting background documents related to the project design and the post registration changes were reviewed.

As far as required the assessment team used additional documentation by third parties like host party legislation, technical reports referring to the project design or to the basic conditions and technical data.

A list of all documents reviewed or referenced during this validation is presented in Appendix 3 below.

### C.2. On-site inspection

Duration of on-site inspection: 11/05/2016 to 12/05/2016				
No.	Activity performed on-site	Site location	Date	Team member <sup>1)</sup>
1.	Opening meeting	Plant office	11/05/2016	SC
2.	Project presentation	Plant office	11/05/2016	SC
3.	Post operation presentation	Plant office	11/05/2016	SC
4.	Hydrology presentation	Plant office	11/05/2016	SC
5.	Walk through plant installations, inspections of equipment and checking of control and operations	Plant	11/05/2016	SC
6.	Assessment of evidences	Plant office	12/05/2016	SC
7.	Visit at substation (meters)	Porto Velho collecting substation	12/05/2016	SC
8.	Closing meeting	PP's office at Porto Velho	12/05/2016	SC

<sup>1)</sup> Team Member:

- SC = Sergio Cruz

### C.3. Interviews

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Soares	Thais	ESBR	11/05/2016 12/05/2016	Presentation of the plant; Management	SC
2.	Costa	David	Engie	11/05/2016 12/05/2016	CDM aspects; Excel calculations	SC
3.	Cardoso	Carlos	ESBR	11/05/2016	Operation	SC

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
		Alberto			Management	
4.	A. S. Neto	Veríssimo	ESBR	11/05/2016	Environmental aspects	SC
5.	Fonseca	Marcelo	ESBR	11/05/2016 12/05/2016	Post operation of the plant; Calibrations	SC
6.	Moroso	Thayná	ESBR	11/05/2016 12/05/2016	Post operation of the plant; Calibrations	SC
7.	Ribeiro	Filipe	ESBR	11/05/2016	Real Time Operation	SC
8.	Trindade	Pedro	ESBR	11/05/2016	Hydrology	SC
9.	Lucena	Rogério	ESBR	11/05/2016	Maintenance	SC

<sup>1)</sup> *Team Member:*

- SC = Sergio Cruz

#### C.4. Clarification requests, corrective action requests and forward action requests raised

Areas of validation findings	No. of CL	No. of CAR	No. of FAR
Compliance with PDD form	-	-	-
Temporary deviations from the registered monitoring plan, monitoring methodology or standardized baseline	-	-	-
Corrections	-	-	-
Changes to the start date of the crediting period	-	-	-
Inclusion of a monitoring plan to a registered project activity	-	-	-
Permanent changes from registered monitoring plan, monitoring methodology or standardized baseline	-	-	-
Changes to the project design of a registered project activity	-	1	-
Types of changes specific to afforestation and reforestation project activities	-	-	-
Others (please specify)	-	-	-
<b>Total</b>	-	1	-

### SECTION D. Validation findings

#### D.1. Compliance with PDD form

<b>Means of validation</b>	The project participants used a later version of the PDD form for the revised PDD than the version of the PDD form of the registered PDD. By means of checking updated PDD with the latest applicable and available PDD template form the DOE can confirm that the information transferred to the later version of the PDD form is materially the same as that in the registered PDD besides those changes highlighted and assessed under this report.
<b>Findings</b>	-
<b>Conclusion</b>	The updated PDD is in line with the latest applicable PDD form.

#### D.2. Temporary deviations from the registered monitoring plan, monitoring methodology or standardized baseline

<b>Means of validation</b>	Not applicable as no changes to the registered PDD were necessary.
<b>Findings</b>	-
<b>Conclusion</b>	Not applicable

#### D.3. Corrections

<b>Means of validation</b>	Not applicable as no changes to the registered PDD were necessary.
<b>Findings</b>	-
<b>Conclusion</b>	Not applicable

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

Means of validation	Not applicable as no changes to the registered PDD were necessary.
Findings	-
Conclusion	Not applicable

**D.5. Inclusion of a monitoring plan to a registered project activity**

Means of validation	Not applicable as no changes to the registered PDD were necessary.
Findings	-
Conclusion	Not applicable

**D.6. Permanent changes from registered monitoring plan, monitoring methodology or standardized baseline**

Means of validation	Not applicable as no changes to the registered PDD were necessary.
Findings	-
Conclusion	Not applicable

**D.7. Changes to the project design of a registered project activity**

Means of validation	<p><b>Description</b></p> <p>Please refer to the description of CAR 1 in Appendix 4 below.</p> <p>The values of power capacity and nominal flow of the turbines and power capacity of generators were not correctly described at the registered PDD. The correct data are:</p> <table border="1"> <tr> <td colspan="2"><b>Alstom / Andritz / Voith – Quantity: 28</b></td></tr> <tr> <td colspan="2"><i>Turbines:</i></td></tr> <tr> <td>Nominal power:</td><td>76,550 kW</td></tr> <tr> <td>Nominal flow:</td><td>549.13 m<sup>3</sup>/s</td></tr> <tr> <td colspan="2"><i>Generators:</i></td></tr> <tr> <td>Nominal power:</td><td>83,334 kVA</td></tr> <tr> <td>Power factor:</td><td>0.9</td></tr> </table> <table border="1"> <tr> <td colspan="2"><b>Dongfang Electric Corporation – Quantity: 22</b></td></tr> <tr> <td colspan="2"><i>Turbines:</i></td></tr> <tr> <td>Nominal power:</td><td>76,500 kW</td></tr> <tr> <td>Nominal flow:</td><td>542.65 m<sup>3</sup>/s</td></tr> <tr> <td colspan="2"><i>Generators:</i></td></tr> <tr> <td>Nominal power:</td><td>83,334 kVA</td></tr> <tr> <td>Power factor:</td><td>0.9</td></tr> </table> <p>It is important to note that the main equipment has always been the same since the start of project implementation and no exchanges have taken place.</p> <p><b>Applicability and application of the approved baseline methodology</b></p> <p>The changes refer only to the correction of the nominal power of the turbines and generators and nominal flow of the turbines. The difference in the total installed capacity compared to registered PDD is negligible (0.00008%). Accordingly, the change has no impact to the application of methodology ACM0002.</p> <p><b>Additionality assessment</b></p> <p>The changes refer only to the correction of the nominal power of the turbines and generators and nominal flow of the turbines. The difference in the total installed capacity compared to registered PDD is negligible (0.00008%).</p> <p>In addition, the assessment of the additionality of the project has been performed during the validation considering the firm energy to be generated by the plant in accordance with the <i>Energy Assessment of the Equipment Options for the plants of the Madeira River</i><sup>TECH/</sup> of EPE<sup>/epe/</sup> (official agency for energy research) based on long term hydrology potential. So, as the firm energy remains unaltered, and hence the expected energy generation, which impact the revenues of the project, also</p>	<b>Alstom / Andritz / Voith – Quantity: 28</b>		<i>Turbines:</i>		Nominal power:	76,550 kW	Nominal flow:	549.13 m <sup>3</sup> /s	<i>Generators:</i>		Nominal power:	83,334 kVA	Power factor:	0.9	<b>Dongfang Electric Corporation – Quantity: 22</b>		<i>Turbines:</i>		Nominal power:	76,500 kW	Nominal flow:	542.65 m <sup>3</sup> /s	<i>Generators:</i>		Nominal power:	83,334 kVA	Power factor:	0.9
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Power factor:	0.9																												

	<p>remains the same.</p> <p>Thus, there is no impact to the additionality assessment carried out at validation.</p> <p><b>Scale of the project activity</b></p> <p>This project was registered as a large scale project activity, therefore the changes do not impact the scale of the PA, which continues to be large scale.</p> <p><b>Revised PDD</b></p> <p>The revised PDD has been forwarded in (i) track-changes and (ii) clean version. The post registration change has correctly been reflected in the revised PDD and the correct features are now described at section A.3 of the PDD. In addition, due to a more precise determination of the nominal power of the generation unit, parameter <math>Cap_{PJ}</math> was revised and reflects now in section B.7.2 of the PDD the exact sum of the nominal power of all generation units (3,750,030,000 W).</p>
<b>Findings</b>	<b>Refer to CAR 1 in Appendix 4 below.</b>
<b>Conclusion</b>	<p>As detailed above, the post registration changes do not adversely impact the relevant aspects outlined in the PS Appendix 1, paragraph 6:</p> <ul style="list-style-type: none"> <li>a. applicability and application of the approved baseline methodology under which the project activity has been registered (ACM0002);</li> <li>b. additionality of the project;</li> <li>c. scale of the CDM project activity.</li> </ul> <p>Therefore, according to PS Appendix 1, paragraph 6, the prior approval by the Board is not required for this PRC which is hence submitted in the issuance track.</p> <p>The PDD version 3.1 correctly describes the project design features as verified by TÜV NORD during the site visit carried out in the course of the first verification of the project activity.</p>

#### D.8. Types of changes specific to afforestation and reforestation project activities

<b>Means of validation</b>	Not applicable as the project is not an afforestation and reforestation project activity.
<b>Findings</b>	-
<b>Conclusion</b>	Not applicable

#### SECTION E. Internal quality control

Before submission of the final assessment report a technical review is carried out. The technical reviewer is a competent GHG auditor being appointed for the scope this project falls under. The technical reviewer is not considered to be part of the verification team and thus not involved in the decision making process up to the technical review.

As a result of the technical review process the assessment opinion as prepared by the validation team leader may be confirmed or revised. Furthermore reporting improvements might be achieved.

**SECTION F. Validation opinion**

The below listed changes have occurred after the registration of the project activity.

<i>Type of Change occurred</i>	<i>Total No. of changes</i>	<i>No. of changes which require prior approval</i>
<input type="checkbox"/> Temporary deviations from the MP	-	-
<input type="checkbox"/> Temporary deviations from the MM	-	-
<input type="checkbox"/> Corrections that do not affect the project	-	-
<input type="checkbox"/> Change to the start date of the crediting period	-	-
<input type="checkbox"/> Permanent changes from the MP	-	-
<input type="checkbox"/> Permanent changes from the MM	-	-
<input checked="" type="checkbox"/> Design changes to the project activity / PoA	1	-
<input type="checkbox"/> Changes specific to AR projects	-	-

The changes refer only to the correction of the nominal power of the turbines and generators and nominal flow of the turbines. The difference in the total installed capacity compared to registered PDD is negligible (0.00008%), i.e. 3,750,030,000 W instead of 3,750,000,000W.

None of the changes requires prior approval of the Board. The actual changes comply with relevant requirements of the PS related to changes to the project design.

The proposed changes provide the exact description and accurately reflect the implementation of the project activity.

The proposed changes do not adversely impact:

- the additionality of the registered project activity;
- the scale of the registered project activity;
- the applicability and application of the approved baseline methodology (ACM0002);
- the compliance of the monitoring plan and applied monitoring methodology (ACM0002).

Refer to the assessment of the changes at Section D.7.

The new PDD version (version 3.1) accurately reflects the proposed changes.

São Paulo, 25/05/2016


Sergio Cruz  
BRTUV – Brazil  
Assessment Team Leader

## Appendix 1. Abbreviations

Abbreviations	Full texts
ANA	National Water Agency
ANEEL	Brazilian Electricity Regulatory Agency
CA	Corrective Action / Clarification Action
CAR	Corrective Action Request
CCEE	Chamber of Commerce of Electric Energy
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CO <sub>2</sub>	Carbon dioxide
CO <sub>2</sub> e	Carbon dioxide equivalent
CL	Clarification Request
DVerR	Draft Verification Report
EPE	Energy Research Agency
ER	Emission Reduction
ESBR	Energia Sustentável do Brasil S.A
FAR	Forward Action Request
GHG	Greenhouse gas(es)
IM	Interview Memo
GSELA	GDF SUEZ Energy Latin America Participações Ltda
JHPP	Jirau Hydro Power Plant
MME	Ministry of Mines and Energy
MP	Monitoring Plan
MR	Monitoring Report
ONS	National Operator of the Electric System
PA	Project Activity
PBA	Basic Environmental Plan
PDD	Project Design Document
PP	Project Participant
PRC	Post Registration Changes
QA/QC	Quality Assurance / Quality Control
SIN	Interconnected Grid System
UG	Generation Unit
UHE	Hydroelectric Plant
UNFCCC	United Nations Framework Convention on Climate Change
VVS	Validation and Verification Standard
XLS	Emission Reduction Calculation Spread Sheet



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



**Statement of Competence**  
Appointment and authorization according to the procedures  
of the TÜV NORD J/CDM Certification Program

**Mr. Sergio Cruz**


SCHEME	STATUS	VALID UNTIL
CDM	Senior Assessor (Validation, Verification) Technical Reviewer	2017-12-16
VCS / ISO 14064-2	Senior Assessor	2017-12-16

Authorization status for technical areas within sectoral scopes:

CODE	TECHNICAL AREA
1.2	Renewables
13.1	Solid waste and wastewater

185 - Rev.6, Date: 2015-01-07

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**Statement of Competence**  
Appointment and authorization according to the procedures  
of the TÜV NORD J/CDM Certification Program

**Mr. Ricardo Lopes**

SCHEME	STATUS	VALID UNTIL
CDM	Senior Assessor (Validation, Verification)	2018-03-03
VCS / ISO 14064-2	Senior Assessor	2018-03-03

Authorization status for technical areas within sectoral scopes:

CODE	TECHNICAL AREA
1.2	Renewables
13.1	Solid waste and wastewater

77 - Rev. 6, Date: 2015-03-04

201-UN095-F20.doc

## Appendix 3. Documents reviewed or referenced

No.	Reference	Author	Title	References to the document	Provider
1.	/CPM/	DOE	TÜV NORD JI / CDM CP Manual (incl. CP procedures and forms)	-	Other
2.	/GOT/	UNFCCC	Glossary "CDM terms" – version 08.0	<a href="https://cdm.unfccc.int/filestorage/e/x/t/extfile-20150226124447549-glos_CDM.pdf/glos_CDM.pdf?t=U mZ8bnFjODI3fD CW9A3vJwR03k QQh4sbLiYu">https://cdm.unfccc.int/filestorage/e/x/t/extfile-20150226124447549-glos_CDM.pdf/glos_CDM.pdf?t=U mZ8bnFjODI3fD CW9A3vJwR03k QQh4sbLiYu</a>	Other
3.	/IPCC/	IPCC	<ul style="list-style-type: none"> <li>1996 IPCC Guidelines for National Greenhouse Gas Inventories: work book</li> <li>2006 IPCC Guidelines for National Greenhouse Gas Inventories: work book</li> </ul>	<a href="http://www.ipcc-nggip.iges.or.jp">www.ipcc-nggip.iges.or.jp</a>	Other

No.	Reference	Author	Title	References to the document	Provider
4.	<b>/KP/</b>	UNFCCC	Kyoto Protocol (1997)	<a href="http://unfccc.int/kyoto_protocol/items/2830.php">http://unfccc.int/kyoto_protocol/items/2830.php</a>	Other
5.	<b>/MA/</b>	UNFCCC	Decision 3/CMP. 1 (Marrakesh – Accords)	<a href="http://cdm.unfccc.int/Reference/CO/PMOP/index.html">http://cdm.unfccc.int/Reference/CO/PMOP/index.html</a>	Other
6.	<b>/METH/</b>	UNFCCC	ACM0002 – Consolidated baseline methodology for grid-connected electricity generation from renewable sources – version 13.0.0	<a href="http://cdm.unfccc.int/methodologies/DB/EY2CL7RTEHRC9V6YQHRLA6MJ6VEU83">http://cdm.unfccc.int/methodologies/DB/EY2CL7RTEHRC9V6YQHRLA6MJ6VEU83</a>	Other
7.	<b>/MR/</b>	PP	Monitoring Report for CDM project “Jirau Hydro Power Plant” - version 1.0 - version 2.0	2016-04-08 2016-05-12	PP
8.	<b>/MT/</b>	UNFCCC	<u>Methodological Tools:</u> - Tool to calculate the emission factor for an electricity system – version 02.2.1 - Tool for the demonstration and assessment of additionality – version 06.0.0	<a href="http://cdm.unfccc.int/Reference/tools/index.html">http://cdm.unfccc.int/Reference/tools/index.html</a>	Other
9.	<b>/PDD/</b>	PP	Project Design Document for CDM project “Jirau Hydro Power Plant” – version 3 – 2012-09-05  Revised Project Design Document for CDM project “Jirau Hydro Power Plant” – version 3.1 – 2016-05-12	<a href="http://cdm.unfccc.int/Projects/DB/LRQA%20Ltd1356533361.56/view">http://cdm.unfccc.int/Projects/DB/LRQA%20Ltd1356533361.56/view</a> -	Other
10.	<b>/PS/</b>	UNFCCC	CDM Project Standard – version 9.0	<a href="http://cdm.unfccc.int/Reference/Standards/index.html">http://cdm.unfccc.int/Reference/Standards/index.html</a>	Other
11.	<b>/VAL/</b>	LRQA	Validation Report for CDM project “Jirau Hydro Power Plant” – version 03.1 – 2012-09-18	<a href="http://cdm.unfccc.int/Projects/DB/LRQA%20Ltd1356533361.56/view">http://cdm.unfccc.int/Projects/DB/LRQA%20Ltd1356533361.56/view</a>	Other
12.	<b>/VVS/</b>	UNFCCC	CDM Validation and Verification Standard – version 09.0	<a href="http://cdm.unfccc.int/Reference/Standards/index.html">http://cdm.unfccc.int/Reference/Standards/index.html</a>	Other
13.	<b>/LIC/</b>	IBAMA IBAMA IBAMA IBAMA IBAMA  IBAMA  ANEEL ANEEL ANEEL ANEEL	<u>Environmental Licenses:</u> - Preliminary license # 251/2007 - Installation license # 563/2008 - Installation license # 621/2009 - Operation license # 1097/2012 - 1st Rectification of the Operation license # 1097/2012 - 2nd Rectification of the Operation license # 1097/2012  <u>Authorizations:</u> - Dispatch # 909 – Approval of the feasibility study of UHE Jirau - Dispatch # 3104 – Approval of the basic technical project of UHE Jirau - Dispatches of the authorization of operation test per generation unit - Dispatches of the authorization of start of commercial operation per generation unit	2007-07-09 2008-11-14 2009-06-03 2012-10-19 2012-11-29  2013-07-19  2007-03-30 2011-07-29  from the start of operation from the start of operation	PP

No.	Reference	Author	Title	References to the document	Provider
14.	<b>/TECH/</b>	Themag Eletrosul Themag  EPE  ESBR  ESBR  ESBR  ESBR  ESBR	<ul style="list-style-type: none"> <li>- Project layout drawing</li> <li>- Operational Diagram</li> <li>- List of auxiliary equipment used in the project activity</li> <li>- Energy Assessment of the Equipment Options for the plants of the Madeira River (Santo Antônio and Jirau) – EPE-DEE-RE-100/2011</li> <li>- Electricity connection diagram to the grid with metering location</li> <li>- Operational Diagram</li> </ul> <p><u>Presentations:</u> General status of JHPP</p> <p><u>Pictures:</u>  <ul style="list-style-type: none"> <li>- UGs – operational for the first monitoring period</li> <li>- Electricity Meters – operational for the first monitoring period</li> </ul> </p>	2009-06-17 2010-04-07 2010-05-21  2011-11-07  Dec/2012  Mar/2013  May/2016  May/2016  May/2016	PP
15.	<b>/ccee/</b>	-	Chamber of Commerce of Electric Energy	<a href="http://www.ccee.org.br/">http://www.ccee.org.br/</a>	Other
16.	<b>/dna/</b>	-	DNA of Brazil	<a href="http://www.mct.gov.br">http://www.mct.gov.br</a>	Other
17.	<b>/epe/</b>	-	Energy Research Agency	<a href="http://www.epe.gov.br">http://www.epe.gov.br</a>	Other
18.	<b>/ipcc/</b>	-	IPCC publications	<a href="http://www.ipcc-nggip.iges.or.jp">www.ipcc-nggip.iges.or.jp</a>	Other
19.	<b>/unfccc/</b>	-	UNFCCC	<a href="http://cdm.unfccc.int">http://cdm.unfccc.int</a>	Other

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

Table 1. CL from this validation

CL ID	-	Section no.	-	Date:	-
Description of CL					
-					
Project participant response				Date:	-
-					
Documentation provided by project participant					
-					
DOE assessment				Date:	-
-					

Table 2. CAR from this validation

CAR ID	1	Section no.	B.2.6	Date:	12/05/2016
Description of CAR					
<p><i>It was verified that the values of nominal power and nominal flow of the turbines and nominal power of generators checked at the plates of the main equipment are not correctly described at the registered PDD, although the total installed capacity of the plant is correct.</i></p> <p><i>In addition, the value of "Cap<sub>PJ</sub>" is not correct at Section B.7.1 of registered PDD.</i></p>					
Project participant response (1 <sup>st</sup> round)				Date:	12/05/2016
<p><i>Section B.1 (Table 7) of the Monitoring Report and Section A.3 (Table 4) of the PDD have been revised in order to reflect the main information provided in the nameplates of the power units.</i></p> <p><i>The value of Cap<sub>PJ</sub> was revised in Section B.7.1 of the PDD, as well as in section D.2 of the monitoring report.</i></p> <p><i>These changes are also indicated in section B.2.6 of the monitoring report.</i></p>					
Documentation provided by project participant (1 <sup>st</sup> round)					
<input checked="" type="checkbox"/>	Changes in the PDD	Section(s):	A.3; B.7.1	New version No.:	3.1
<input checked="" type="checkbox"/>	Changes in MR	Section(s):	D.2, B.2.6	New version No.:	2.0
<input type="checkbox"/>	Changes in XLS	Worksheet(s):		New version No.:	
DOE assessment (1 <sup>st</sup> round)				Date:	13/05/2016
<p>Section A.3 of the PDD has been revised in order to reflect the actual nominal power of the generators and nominal power and nominal flow of the turbines implemented at the plant. In addition, as 28 generation units are from one supplier and the other 22 from another, the table describes this difference and reflects the information of the suppliers evidenced by nameplate of each unit.</p> <p>Moreover, due to a more precise determination of the nominal power of the generation unit, parameter Cap<sub>PJ</sub> was also revised and reflects now the exact sum of the nominal power of all generation units. This correction does not result in any change in the calculated power density.</p> <p>It is important to note that the total installed capacity of the plant remains virtually the same as presented in PDD, i.e. 3,750MW, as the difference in the installed capacity is negligible (0.00008%). Thus, there is no impact for the application of the methodology and no impact for the additionality and scale of the project activity.</p>					
<b>CAR is closed</b>					
Conclusion		<input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed			
Tick the appropriate checkbox					

Table 3. FAR from this validation

FAR ID	-	Section no.	-	Date:	-
Description of FAR					
-					
Project participant response				Date:	-
-					
Documentation provided by project participant					
-					
DOE assessment				Date:	-
-					

## Appendix 5. Assessment of Financial Parameters

Assessment of Financial Parameters (VVS, §§ 120, 121 / in case financial parameters from FSR §122)

<input checked="" type="checkbox"/>	Not applicable as the changes do not impact the additionality assessment of the validation					
<input type="checkbox"/>	Assessment of all financial parameters see below					
Parameter	Value applied	Unit	Source of Information (please indicate document and page)	Reference	DOE ASSESSMENT	
					Correctness of value applied	Comment
-	-	-	-	-	<input type="checkbox"/>	-

## Appendix 6. Assessment of Barrier Analysis

### Assessment of Barrier Analysis (VVS, §§ 124-127)

<input checked="" type="checkbox"/>	No barrier parameters are used for additionality justification			
<input type="checkbox"/>	Assessment of barriers see below			
Kind of Barrier (invest, tech, other)	Description of Barrier	Evidence used	Assessment of validation team	
			Appropriateness of information source	Explanation of final result
-	-	-	<input type="checkbox"/>	-