




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)

Title and reference number of the project activity	Azito Energie, Phase 3 Expansion from Single Cycle to Combined Cycle, (Reference Number: 8456)
Process track	<input checked="" type="checkbox"/> Prior approval <input type="checkbox"/> Issuance <input type="checkbox"/> Renewal of crediting period
Version number of the validation report on PRCs	Version 2.0
Completion date of the validation report on PRCs	07/09/2015
Type(s) of PRCs	<input type="checkbox"/> Temporary deviations from the registered monitoring plan, monitoring methodology or standardized baseline <input type="checkbox"/> Corrections <input checked="" 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 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
Version number of PDD to which this report applies	Version 1.4
Project participant(s)	Azito Energie S.A. (private) The Ministry of Energy (public)
Host Party	Côte d'Ivoire
Sectoral scope(s), selected methodology(ies), and where applicable, selected standardized baseline(s)	01: ACM0007 - Conversion from single cycle to combined cycle power generation --- Version 06.1.0
Name of DOE	JQA (Japan Quality Assurance Organization)
Name, position and signature of the approver of the validation report on PRCs	 Tadayuki Yano, Senior Executive

SECTION A. Executive summary

The JQA is assigned by “Azito Energie S.A.” to perform the validation of post registration changes of the start date of the crediting period the CDM project activity, “Azito Energie, Phase 3 Expansion from Single Cycle to Combined Cycle” in Côte d'Ivoire.

The validation has been performed as per the VVS version 09.0 and constitutes the following steps:

- Desk review of the registered PDD, the relevant documents available on the UNFCCC website, and the documents listed in the Appendix 3;
- Interviews with the persons listed in the Section C.3.;
- Background investigation.

The PP proposes a new start date of the crediting period changed from 01/03/2014 to 01/06/2015, which is more than one year and within two year from the original crediting period. Through the validation process, JQA confirms that no changes have occurred to the project activity that would result in a less conservative baseline, and that substantive progress has been made by the project participants to start the project activity.

JQA concludes that the change meets all relevant requirements of the UNFCCC for CDM project activities including the Project Standard. JQA therefore requests the approval of post-registration changes of the project activity.

SECTION B. Validation team, technical reviewer and approver

JQA organized the validation team, technical reviewer and approver as below according to JQA's procedure

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	IR	Tanabe	Koichiro	Tokyo central office of JQA	X			X
2.	Validator	IR	Motokawa	Hiroshi	Tokyo central office of JQA	X		X	X
..	...								
..	Technical Expert		-	-					
..	...								
..	Financial/ Other Expert		-	-					
..	...								
..	Trainee		-	-					
..	...								

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	Yoshida	Tadashi	Japan
...				
...	Approver	IR	Tadayuki	Yano	Tokyo central office of JQA

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

The table in Appendix 3 shows the documentation reviewed and referred during the validation.

C.2. On-site inspection

Duration of on-site inspection: DD/MM/YYYY to DD/MM/YYYY				
No.	Activity performed on-site	Site location	Date	Team member
1.	None			
...				

C.3. Interviews

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Houshyani	Bamshad	Climate Focus			Hiroshi Motokawa
2.	Aye	Luc	Azito Energie			Hiroshi Motokawa

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	0	0	0
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			
Types of changes specific to afforestation and reforestation project activities			
Others (please specify)			
Total	0	0	0

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

Means of validation	-
Findings	-
Conclusion	-

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

Means of validation	-
Findings	-

Conclusion	-
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D.3. Corrections

Means of validation	-
Findings	-
Conclusion	-

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

The PP proposes a new start date of the crediting period changed from 01/03/2014 to 01/06/2015.

Means of validation	<p>For the validation of this change, JQA has applied the following means:</p> <ol style="list-style-type: none"> 1) Reviewing the documents/ information listed in Appendix 3 and 2) Interviewing with the persons listed in Section C.3. <p>The PPs provided the documents and information relevant to the baseline and substantive progresses to reach the project implementation as their demonstration. Furthermore, JQA requested the PPs to provide several additional documents and information.</p> <p>Through the background investigations, JQA found the relevant information of other sources for cross-checking the evidences provided by the PP.</p>												
Findings	<p>As to whether no changes have occurred to the project activity that would result in a less conservative baseline, JQA obtains the following findings:</p> <ol style="list-style-type: none"> 1) The electricity supplied to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described by the "Tool to calculate the emission factor for an electricity system (version 02.2.1)"; 2) The CM of 0.625 tCO₂/MWh, is validated and fixed ex-ante as the grid emission factor during validation of the project; 3) The PPs had had no changes having the impact on the end-of-life of the existing equipment during the period from 01/03/2014 to 01/06/2015, especially the accidents or something to make the remaining lifetime of the existing equipment shorter than before. In fact, the PPs suffered a fire on Transformer of line GT12 (second Alstom GT13E2 single shaft gas turbine installed in 2000) on 12/06/2014. And a new transformer was purchased with Alstom and installed on 06/01/2015. As a result, this accident had no impact on the remaining lifetime of the existing equipment. <p>As to substantive progresses made by the PPs to start the project activity, JQA has the following findings:</p> <ol style="list-style-type: none"> 1) The financial closure was delayed due to the financial issue caused by the government payment arrears; 2) During the period between 01/03/2014 and 01/06/2015, substantive progress was made by the PPs as listed below: <table border="1"> <thead> <tr> <th>Date</th><th>Event and Action</th></tr> </thead> <tbody> <tr> <td>01 Oct 2012</td><td>The financial closure of the project was anticipated to occur in the registered PDD</td></tr> <tr> <td>21 Feb 2013</td><td>The actual financial closure of the project</td></tr> <tr> <td>01 March 2014</td><td>The start date of the crediting period in the registered PDD</td></tr> <tr> <td>April 2014 to Feb 2015</td><td>Construction and setup of main project equipment (e.g. HRSGs, STG and condenser)</td></tr> <tr> <td>12 June 2014</td><td>A fire on GT12 group's set up transformer</td></tr> </tbody> </table>	Date	Event and Action	01 Oct 2012	The financial closure of the project was anticipated to occur in the registered PDD	21 Feb 2013	The actual financial closure of the project	01 March 2014	The start date of the crediting period in the registered PDD	April 2014 to Feb 2015	Construction and setup of main project equipment (e.g. HRSGs, STG and condenser)	12 June 2014	A fire on GT12 group's set up transformer
Date	Event and Action												
01 Oct 2012	The financial closure of the project was anticipated to occur in the registered PDD												
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01 March 2014	The start date of the crediting period in the registered PDD												
April 2014 to Feb 2015	Construction and setup of main project equipment (e.g. HRSGs, STG and condenser)												
12 June 2014	A fire on GT12 group's set up transformer												

	Oct to Nov 2014	Pressure Test of HRSGs
	06 Jan 2015	New transformer was purchased with Alstom and installed
	31 March 2015	The steam quality was assessed
	2 April 2015	First steam was sent to turbine and pre synchronizing tests started
	30 April 2015 – 1 May 2015	Official performance test was done. And reliability test was started in continuation of the performance test.
	20 May 2015	Reliability Run Test Completion
	21 May 2015	PAC (Provisions Acceptance) and COD (Commercial Operation Date) are achieved The start date of Phase 3 commissioning
	01 June 2015	Phase 3 is operational and active The new start date of the crediting period
Conclusion	JQA confirms the following: 1) No changes have occurred to the project activity that would result in a less conservative baseline. The baseline of the project activity remains the same as the one included in the registered PDD; 2) The substantive progress has been made by the PPs to start the project activity.	

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

Means of validation	-
Findings	-
Conclusion	-

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

Means of validation	-
Findings	-
Conclusion	-

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

Means of validation	-
Findings	-
Conclusion	-

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

Means of validation	-
Findings	-
Conclusion	-

SECTION E. Internal quality control

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The following are implemented in line with the procedure for internal quality control prescribed by JQA CDM Quality Manual and relevant procedures.

First, the validation team establishes the draft validation report including draft conclusion and submits the draft validation report and other documents needed for the review to the technical reviewer. The reviewer verifies appropriateness of the draft conclusion on the validation of the project activity and its procedures. Then the reviewer reports the review results to the validation team. The validation team responds to the reviewer's comments and revises the documents, if

necessary. The team leader of the validation team reports the review result to the Senior Executive of JQA. Finally, the Senior Executive approves the validity of the project activity as DOE.

SECTION F. Validation opinion

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JQA performs the validation of post registration change of the CDM project activity, "Azito Energie, Phase 3 Expansion from Single Cycle to Combined Cycle", and confirms that the change meets all relevant requirements of the UNFCCC to the CDM project activities including the VVS and PS.

JQA confirms that the project activity baseline is conservatively estimated and request for change of the start date of the crediting period constitutes a difference between one and two years. JQA therefore requests the approval of post-registration changes of the project activity.

Appendix 1. Abbreviations

Abbreviations	Full texts
BM	Build Margin
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CDM EB	CDM Executive Board
CER	Certified Emission Reduction(s)
CL	Clarification request
CM	Combined Margin
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
DNA	Designated National Authority
DOE	Designated Operational Entity
EI	External Individuals
FAR	Forward Action Request
GHG	Greenhouse Gas(es)
GWP	Global Warming Potential
HRSG	Heat Recovery Steam Generator
IPCC	Intergovernmental Panel on Climate Change
IR	Internal Resource
JQA	Japan Quality Assurance Organization
MoC	Modalities of Communication
MP	Monitoring Plan
MR	Monitoring Report
OM	Operating Margin
PCP	CDM Project Cycle Procedure
PDD	Project Design Document
PLF	Plant Load Factor
PP	Project Participant
PRC	Post Registration Change
PS	CDM Project Standard
STG	Steam Turbine Generator
UNFCCC	United Nations Framework Convention on Climate Change
VVS	CDM Validation and Verification Standard

Appendix 2. Competence of team members and technical reviewers

The statements of competence are given as below.

Validation team members:

Statement of competence



Name: Mr. Koichiro Tanabe

Qualified and authorized by Japan Quality Assurance Organization.

Function	Date of qualification
Validator	-
Verifier	2014/12/22
Team leader	2015/3/24

Technical area within sectoral scopes

	Date of qualification
TA 1.1. Thermal energy generation	2014/12/22
TA 1.2. Renewables	2014/12/22
TA 3.1. Energy demand	2014/12/22
TA 4.6. Other manufacturing industries	2014/12/22
TA 5.1. Chemical industry	2014/12/22
TA 10.1. Fugitive emissions from oil and gas	2014/12/22
TA 13.1. Solid waste and wastewater	2014/12/22

E-01-30

Statement of competence



Name: Mr. Hiroshi Motokawa

Qualified and authorized by Japan Quality Assurance Organization.

Function	Date of qualification
Validator	2014/12/22
Verifier	2014/12/22
Team leader	2014/12/22

Technical area within sectoral scopes

	Date of qualification
TA 1.1. Thermal energy generation	2014/12/22
TA 1.2. Renewables	2014/12/22
TA 3.1. Energy demand	2014/12/22
TA 4.1. Cement and lime production	2014/12/22
TA 4.6. Other manufacturing industries	2014/12/22
TA 13.1. Solid waste and wastewater	2014/12/22

E-01-30

Technical reviewer

Statement of competence



Name: Dr. Tadashi Yoshida

Qualified and authorized by Japan Quality Assurance Organization.

Function	Date of qualification
Validator	2014/12/22
Verifier	2014/12/22
Team leader	2014/12/22

Technical area within sectoral scopes

	Date of qualification
TA 1.1. Thermal energy generation	2014/12/22
TA 1.2. Renewables	2014/12/22
TA 3.1. Energy demand	2014/12/22
TA 4.6. Other manufacturing industries	2014/12/22
TA 5.1. Chemical industry	2014/12/22
TA 10.1. Fugitive emissions from oil and gas	2014/12/22
TA 13.1. Solid waste and wastewater	2014/12/22

E-01-30

Appendix 3. Documents reviewed or referenced

No.	Author	Title	References to the document	Provider
1	Climate Focus	Project Design Document "Azito Energie, Phase 3 Expansion from Single Cycle to Combined Cycle",	Version 01.4, 15/10/2012	Others
2	TÜV Rheinland	Validation Report	Version 02, 14/11/2012	Others
3	UNFCCC	ACM0007 - Conversion from single cycle to combined cycle power generation	Version 06.1.0	Others
4	UNFCCC	Combined tool to identify the baseline scenario and demonstrate additionality	Version 04.0.0	Others
5	UNFCCC	CDM Validation and Verification Standard (VVS)	Version 09.0	Others
6	UNFCCC	CDM Project Standard (PS)	Version 09.0	Others
7	UNFCCC	CDM Project Cycle Procedure (PCP)	Version 09.0	Others
8	Azito Energie	Monthly Construction Reports	March 2015 April 2015	PP
9	ALSTOM	GT Rotor Lifetime Monitoring Reports	29/10/2010 24/11/2011	PP
10	The Energy Consulting Group	Phase 3 Sustainability of the Azito Power Plant	18/01/2012	PP
11	CI Energies	Compte Rendu Technique Annuel	13/02/2015	PP
12	AZITO Energie CI Energies	Official minutes of Phase 3 commissioning signed by Azito Energie	15/06/2015	PP
13	International Finance Corporation	Confirmation notice of financial close and first repayment date	21/02/2013	PP
14	Allianz (Insurance Company)	Incident report of the fire on Transformer of line GT12	14/07/2014	PP
15	The World Bank	World Development Report 2014	2014	Others

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

No CAR/CL/FAR was raised.

Table 1. CL from this validation

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

Table 2. CAR from this validation

CAR ID	--	Section no.		Date: DD/MM/YYYY
Description of CAR				
Project participant response				Date: DD/MM/YYYY
Documentation provided by project participant				
DOE assessment				Date: DD/MM/YYYY

Table 3. FAR from this validation

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