



VALIDATION REPORT

Title of CPA:

CPA 001 UNDER POA 'SOUTH AFRICAN GRID CONNECTED WIND FARM PROGRAMME'

Title of PoA to which CPA is to be included:

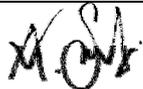
"SOUTH AFRICAN GRID CONNECTED WIND FARM PROGRAMME"

Report No.CCL0025/SAGCWF/15072011

Revision No. 00

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

CPA Title: CPA001 under PoA 'South African Grid Connected Wind Farm Programme'		Country: Republic of South Africa		Estimated CERs (tCO₂e): 57,847 annual average (CPA- 01)																																		
Managing Entity: Blue World Carbon Asset Management (Pty) Ltd		CPA Implementer: Windlab Developments South Africa (Pty) Ltd		GPS coordinates of the CPA: The verified range of geographic coordinates of locations under the first CPA is /09/: 26.0235 E to -32.7565 S																																		
				<table border="1"> <thead> <tr> <th>Turbine ID</th> <th>Longitude</th> <th>Latitude</th> </tr> </thead> <tbody> <tr><td>1</td><td>26.0243</td><td>-32.7608</td></tr> <tr><td>2</td><td>26.0301</td><td>-32.7595</td></tr> <tr><td>3</td><td>26.0248</td><td>-32.756</td></tr> <tr><td>4</td><td>26.0296</td><td>-32.7542</td></tr> <tr><td>5</td><td>26.0198</td><td>-32.7623</td></tr> <tr><td>6</td><td>26.0363</td><td>-32.7486</td></tr> <tr><td>7</td><td>26.0109</td><td>-32.7622</td></tr> <tr><td>8</td><td>26.0142</td><td>-32.7513</td></tr> <tr><td>9</td><td>26.0116</td><td>-32.7574</td></tr> <tr><td>10</td><td>26.0337</td><td>-32.7523</td></tr> </tbody> </table>		Turbine ID	Longitude	Latitude	1	26.0243	-32.7608	2	26.0301	-32.7595	3	26.0248	-32.756	4	26.0296	-32.7542	5	26.0198	-32.7623	6	26.0363	-32.7486	7	26.0109	-32.7622	8	26.0142	-32.7513	9	26.0116	-32.7574	10	26.0337	-32.7523
Turbine ID	Longitude	Latitude																																				
1	26.0243	-32.7608																																				
2	26.0301	-32.7595																																				
3	26.0248	-32.756																																				
4	26.0296	-32.7542																																				
5	26.0198	-32.7623																																				
6	26.0363	-32.7486																																				
7	26.0109	-32.7622																																				
8	26.0142	-32.7513																																				
9	26.0116	-32.7574																																				
10	26.0337	-32.7523																																				
Report No.: CL0025/SAGCWF/15072011		Revision: 00		Date of this report: 29/11/2012																																		
Technical Reviewer: Vikash Singh				Date of approval: 03/12/2012																																		
Approved by (Final Report): Adam Simcock 				Date of approval: 10/12/2012																																		
Organisational Unit: Carbon Check (Pty) Ltd																																						
Report Distribution: <input type="checkbox"/> Unrestricted Distribution <input type="checkbox"/> Limited Distribution <input checked="" type="checkbox"/> No Distribution (without permission from the Client or responsible organisational unit)																																						
Methodology																																						
Number: ACM0002		Title: Consolidated baseline methodology for grid –connected electricity generation from renewable sources.		Scale: Small <input type="checkbox"/> Large <input type="checkbox"/>																																		
Version: 12.3.0				SS(s): 1 TA (s): 1.2																																		
Summary of the CPA Validation and inclusion Opinion:																																						

Validation Team		Role				
Full Name	Appointed for Sectoral scopes (Technical Areas)	Team Leader	Trainee Auditor	Team Member (Auditor)	Technical Expert	Technical Reviewer
Prakash Kumar Mishra	1.2	x			x	
Arshi Vimal	1.2			x		
Gaurav Sharma	1.2		x	x		
Dhananjay Kumar			x	x		
Vikash Kumar Singh	1.2					x

Validation Phase	Validation Status
<input checked="" type="checkbox"/> Desk Review	<input type="checkbox"/> Corrective Actions / Clarifications requested
<input checked="" type="checkbox"/> Follow up interviews	<input checked="" type="checkbox"/> Full approval and submission for registration
<input checked="" type="checkbox"/> Resolution of outstanding issues	<input type="checkbox"/> Rejected

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Executive Summary - Validation Opinion

Under the validation (by means of document review and interviews with stakeholders), the validation team considers that the CPA description in CPA titled- "CPA 001 under PoA 'South African Grid Connected Wind Farm Programme' " as described in the CDM-CPA-DD of Date 20/11/2012, version 2.5 is accurate and complete; meets the requirements to be included in the PoA titled "South African Grid Connected Wind Farm Programme", version2.4 (date 21/11/2012) and correctly applies the baseline and monitoring methodologyACM0002. (version12.3.0).

Standard auditing techniques have been used for the validation of the project. An analysis, as provided by the applied methodology, demonstrates that the proposed CPA is not a likely baseline scenario. Emission reductions attributable to the CPA are additional to any that would occur in the absence of the project activity. Given that the CPA is implemented as designed, the project is likely to achieve the estimated amount of emission reductions as specified within the CPA-DD /02/.

The validation is based on the information made available to Carbon Check (Pty) Ltd, as well as the engagement conditions detailed in this report. The validation has been performed following the VVM requirements.

The validation was executed in the following steps so far:

- Receipt of PoA-DD (version 1.0, dated 13/09/2011) CPA DD (generic) and specific CPA-DD (version 1.0, dated 10/10/2011) for global stakeholder comments.
- Global stakeholder comment process (15 Oct 2011 - 13 Nov 2011)
- On-site visit with stakeholder interviews (19/01/2012)
- Issue of checklist with corrective action requests (CARs) and clarification requests (CLs) and the draft validation report and protocol
- Desk review of revised DDs applying ACM0002 (version 12.3.0).
- Review of responses for CARs/CLs
- Issue of the final validation report and protocol

During the course of validation a total of 26 Corrective Action Requests (CARs) and 10 Clarification Requests (CLs) were identified on webhosted PoA-DD /01/. Upon evaluation of responses provided by the Project Participant all the identified issues were closed successfully.

The single purpose of this report is its use during the inclusion process (of the real case CPA) at the time of requesting registration. The review of the CPA-DD /02/, subsequent follow-up interviews, and further verification of references have provided Carbon Check (Pty) Ltd, with sufficient evidence to determine the fulfilment of stated criteria in the PoA-DD /16/ and g-CPA-DD /17/. In the opinion of Carbon Check (Pty) Ltd, the CPA meets all relevant UNFCCC requirements for the CDM if the underlying assumptions do not change. Carbon Check (Pty) Limited recommends the real case CPA and the PoA for registration.

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Abbreviations

BE	Baseline Emissions
BM	Build Margin
BWC	Blue World Carbon Asset Management (Pty) Ltd
CAR	Corrective Action Request
CC	Cross Check
CCL	Carbon Check (Pty) Ltd
CDM	Clean Development Mechanism
CDM M&P	Modalities and Procedures CDM
CER(s)	Certified Emission Reduction(s)
CL	Clarification Request
CM	Combined Margin
CO ₂	Carbon dioxide
CO _{2e}	Carbon dioxide equivalent
CME	Coordinating/managing entity and participants of PoA
CPA	CDM Program Activity
CPA-DD	CDM Program Activity design document
DEA	Department of Environmental Affairs
DR	Document Review
DNA	Designated National Authority
DOE	Designated Operational Entity
EB	Executive Board
EIA	Environmental Impact assessment
ER	Emission Reductions
FAR	Forward Action Request
GHG(s)	Greenhouse gas(es)
GWP	Global Warming Potential
I	Interview or any follow up action
IPCC	Intergovernmental Panel on Climate Change
LA	Lead Assessor
LoA	Letter of Approval
MoV	Means of Validation/Verification
MP	Monitoring Plan
MR	Monitoring Report
NGO	Non-governmental Organization
ODA	Official Development Assistance
OM	Operating Margin
PE	Project Emission
PoA	Program of Activities
PoA-DD	Program of Activities design document
PP(s)	Project Participant(s)
Ref.	Document Reference
RSA	Republic of South Africa
SD	Sustainable Development
SS(s)	Sectoral Scope(s)
TA	Trainee Assessor
TL	Team Leader
TM	Team Member
TR	Technical Reviewer
UNFCCC	United Nations Framework Convention on Climate Change
VVM	Validation and Verification Manual
WDSA	Windlab Developments South Africa (Pty) Ltd

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Table of Contents	Page
1 INTRODUCTION	6
1.1 Objective	6
1.2 Scope	6
2 METHODOLOGY	6
2.1 Document Review	6
2.2 Follow-up actions	10
2.3 Resolution of outstanding issues	10
2.4 Internal quality control	12
2.5 Validation team and the technical reviewer(s)	12
3 VALIDATION SUMMARY	12
3.1 CPA Design Document	12
3.2 CPA Description	12
3.3 Eligibility Criteria for CPA Inclusion	15
3.4 Additionality	20
3.5 Emission Reduction	31
3.6 Monitoring Plan	32
3.7 Stakeholder Consultation	32
3.8 Environmental Analysis	33
Appendix A: Validation Protocol	
Appendix B: Certificate of Competence	

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

1 INTRODUCTION

Blue World Carbon Asset Management (Pty)Ltd (BWC) (hereafter referred as “CME”) has commissioned the DOE Carbon Check (Pty) Ltd, to assess the information in the CDM-CPA-DD for the CPA title “CPA 001 under PoA ‘South African Grid Connected Wind Farm Programme’” (hereafter called “the CPA”) against the requirements for including CPAs to the PoA “South African Grid Connected Wind Farm Programme” and further documentation requirements for including CPAs to a PoA.

This report summarizes the findings of the validation of the CDM Programme Activity Design Document(CPA-DD), performed on the basis of UNFCCC criteria for the PoAs under the CDM, as well as criteria given to provide for consistent programme operations, monitoring and reporting. The term “UNFCCC criteria” refers to Article 12 of the Kyoto Protocol, the CDM modalities and procedures, the modalities and procedures for CDM project activities, and the subsequent decisions by the COP/MOP and CDM Executive Board. In addition to these criteria, host country criteria are also taken into account.

1.1 Objective

The assessment of a CPA requesting to be included in a PoA shall ensure that all the requirements determined in the PoA are met. The assessment was performed on the basis of the eligibility and additionality criteria established in the PoA and the UNFCCC criteria for including CPAs to programme of activities under the Clean Development Mechanism (CDM), as well as criteria given to provide for consistent project operations, monitoring and reporting according to ACM0002 (version 12.3.0).

1.2 Scope

The scope of the validation is to have an independent and objective review on the CDM CPA design document (hereinafter referred to as ‘CPA-DD’) and other relevant documents. The DOE shall scrutinize the information in the CPA-DD to assess compliance with the eligibility criteria and criteria for demonstrating additionality established by the PoA, to check correct application of ACM0002. (version 12.3.0) and to check compliance with documentation requirements, decisions made by COP/MOP, CDM EB and relevant rules including the host country legislation and sustainability criteria for CPAs.

The validation is not meant to provide any consulting towards the programme participants. However, stated requests for clarifications and/or corrective actions may have provided input for improvement of the project design.

2 METHODOLOGY

The validation consists of the following three phases:

- I. A desk review of the specific CPA-DD with relevant information to be included in PoA.
- II. On-site visit and follow-up interviews with programme stakeholders; and
- III. The resolution of outstanding issues and the issuance of the final validation report and opinion.

The following sections outline each step in more detail.

2.1 Document Review

The following table lists the documentation that was reviewed during the validation.

REFERENCE NO.	DOCUMENTS
/01/	CPA-DD specific (webhosted version), “CPA 001 under PoA ‘South African Grid Connected Wind Farm Programme’”, version 01.0, Date - 10/10/2011
/02/	CPA-DD specific (final version), “CPA 001 under PoA ‘South African Grid Connected Wind Farm Programme’”, Version 2.5, Date - 20/11/2012
/03/	Emission reduction spread sheet corresponding to /02/
/04/	Letter of Approval from the DNA of Republic of South Africa (dated 27/08/2012),

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

	authorizing Blue World Carbon Asset Management (Pty) Ltd, as the project proponent and the coordinating and managing entity (CME) to participate in the CDM project.
/05/	Technical specification brochure of WTGs of Goldwind for GW 90 of 2.5 MW capacity.
/06/	The Management System for the South African Grid Connected Wind Farm Programme, version 01 (November 2012).
/07/	Declarations from the CME and CPA Implementer: <ol style="list-style-type: none"> 1. PoA is a voluntary action by CME and is not mandated by any law or regulations of republic of South Africa (From CME), dated: 29/02/2012. 2. No double counting and no ODA involved/diverted as a result of the PoA (from Windlab), dated: 05/11/2012
/08/	Table 5, Activity Information Form, agreement between CPA implementer and CME regarding agreement on established management system by CME. Dated 19/11/2012.
/09/	Proof for GPS coordinates of the CPA site. Wind Energy Model Validation Report by Phomph Wind Farm Energy Services, dated: 21/09/2012
/10/	Certification of Incorporation of Windlab Development South Africa (Registration Number 2008/015881/07), dated: 22/08/2008
/11/	Certification of Incorporation of Blue World Carbon Asset Management (Pty) Ltd (Registration No.: 2009/002466/07, dated: 10/02/2009.
/12/	Grid Emission Factor (GEF) calculation Sheetdated; 21/11/2012
/13/	The Electricity Regulation Act, 2006 (Act No. 4 of 2006) (http://www.energy.gov.za/files/policies/NationalEnergyRegulatorAmendmentBill.pdf)
/14/	Integrated resource plan for electricity 2010-2030 (http://www.energy.gov.za/IRP/2010/IRP_2010.pdf)
/15/	PLF report; Wind Energy Model Validation Report by Phomph Wind Farm Energy Services, dated: 21/09/2012
/16/	"South African Grid Connected Wind Farm Programme", version 2.4 (date 21/11/2012) Final PoA-DD
/17/	Final CPA-DD template(generic)
/18/	Declaration from BWC on CPA 001 fulfilling the eligibility and applicability criteria for inclusion in PoA (dated 19/10/2012)
/19/	Wind Lab Declaration for technology used.
/20/	Declaration from CPA Implementer for Implementation schedule and government PPA.
/21/	Board Decisions: <ol style="list-style-type: none"> 1. Board Note of Windlab Developments South Africa (Pty) Ltd, dated : 24/10/2012 2. Board Resolution of Windlab Developments South Africa (Pty) Ltd, dated: 24/10/2012
/22/	Final EIA Report, dated November 2010
/23/	Technical Life of WTG "Statement of Compliance for the Design Assessment of the Wind turbine" prepared by China General Certification. Dated; 30/07/2012.
/24/	Declaration of change in credit period.
/25/	Environmental Authorization from the Department of Environmental Affairs, dated:
/26/	Draft Power Purchase Agreement
/27/	Documents related local stakeholder consultation:- <ol style="list-style-type: none"> 1. Stakeholder database 2. Public Notice and Newspaper advertisements 3. Stakeholder comments
/28/	Offer letter from Goldwind Africa (Pty) Ltd, dated: 05/09/2012
/29/	Estimates of BoP by Windlab Developments South Africa (Pty) Ltd, dated: 06/09/2012
/30/	NERSA review Eskom's tariffs for the period 01 April 2012 to 31 March 2013
/31/	Land lease agreement, dated: 12/10/2011
/32/	South Africa Renewable Energy Feed-In Tariff (REFIT) – Regulatory Guidelines, dated : 26/03/2009

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

/33/	Standard Bank, African Renewables: Investment and Financing, Section 6: Case Study: South African IPPPP.
/34/	PFI Renewables Report 2012
/35/	NERSA Consultation Paper – Review of Renewable Energy Feed-In Tariffs dated March 2011
/36/	Quarterly Bulletin, South African Reserve Bank, September 2012
/37/	African Renewables: Investment & Financing, Standard Bank, dated 08/02/2012.
/38/	Statistical Release – Consumer Price Index, October 2009
/39/	Statistical Release – Consumer Price Index September 2012
/40/	White Paper on Renewable Energy, Department of Minerals and Energy, Republic of South Africa, dated November 2003
/41/	Engineering News - “Strong support for SA’s renewables model as first deals are concluded”, dated 12/11/2012
/42/	public domain document - IDC, German Development Bank launch GEEF: http://idc.co.za/media-room/articles/127-gdc-launch-geef +E30
/43/	Standard Bank, South Africa has given a repayment period of 8 years: http://www.standardbank.co.za/portal/site/standardbank/menuitem.de435aa54d374eb6fcb695665c9006a0/?vgnextoid=c72f08f82045b210VgnVCM100000c509600aRCRD

Referred documents/websites:

/B01/	CDM validation and verification manual, version 01.2, EB 55 (Annex 1)
/B02/	ACM0002 Consolidated baseline methodology for grid –connected electricity generation from renewable sources (Version 12.3.0).
/B03/	Tool to calculate the emission factor for an electricity system, version 02.2.1, EB 63 (Annex 19)
/B04/	<p>PoA Specific guidelines / standards published by UNFCCC:</p> <ol style="list-style-type: none"> 1. Programme of activities design document form (CDM-PoA-DD) Version 01 2. CDM programme activity design document form (CDM-CPA-DD) Version 01 3. Procedures for registration of a programme of activities as a single CDM project activity and issuance of certified emission Reductions for a programme of activities, Version 04.1, EB 55 (Annex 38) 4. Procedures for review of erroneous inclusion of a CPA, version 03, EB 61 (Annex 22) 5. Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities, version 01, EB 65 (Annex 03) 6. Clarifications regarding the “Procedures for registration of a programme of activities as a single CDM project activity and issuance of certified emission reductions for a programme of activities”, version 01, EB 60 (Annex 26) 7. Tool for the demonstration and assessment of additionality, version 06.1.0, EB 69 (Annex 20) 8. Procedures for processing and reporting on validation of CDM project activities, version 03, EB 50 (Annex 48) 9. EB 47 report. 10. Guidelines on the assessment of investment analysis, Version 05, EB 52 (Annex 5) 11. Guidelines on the demonstration and assessment of prior consideration of the CDM, Version 04, EB 62 (Annex 13) 12. Guidelines on additionality of first-of-its-kind project activities, version 02.0, EB69 (Annex 7) 13. Guidelines on common practice, version 02.0, EB 69 (Annex 8) 14. Clarifications regarding the procedures for registration of a programme of activities as a single CDM project activity and issuance of certified emission reductions for a programme of activities. Version 01, EB 60, Annex 26. 15. Guidelines for the reporting and validation of plant load factors, Version 01, EB 48 (Annex 11)
/B05/	Glossary of CDM terms, version 06, EB 66 (Annex 6)
/B06/	<p>Websites:</p> <ol style="list-style-type: none"> 1. www.unfccc.int

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

	<ol style="list-style-type: none"> 2. http://www.blueworldcarbon.com/ 3. http://en.wikipedia.org/wiki/Geography_of_South_Africa
/B07/	<p>Website used for the validation of Grid Emission Factor:</p> <ol style="list-style-type: none"> 1. http://financialresults.co.za/2010/eskom_ar2010/downloads/eskom_ar2010.pdf 2. http://www.eskom.co.za/content/2008EskomPoster.jpg 3. http://www.eskom.co.za/content/calculationTable.htm 4. http://www.financialresults.co.za/eskom_ar2009/ar_2009/downloads.htm 5. http://financialresults.co.za/2010/eskom_ar2010/index.htm 6. http://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/2_Volume2/V2_1_Ch1_Introduction.pdf

The changes between the CPA-DD version1.0 (real case), published for the 30 days stakeholder commenting period /01/ and the final version submitted for registration /02/ are addressed in the table 2 of the validation protocol as a part of this report.

The main changes between the CPA-DD, version 1.0 /01/ published for the 30 days stakeholder commenting period and the final version /02/ submitted for registration are presented in the below table as follows:

TOPIC	CPA-DD - GSC/01/	FINAL CPA-DD/02/	ASSESSMENT
PoA title	South African Grid Connected Wind Farm Programme	South African Grid Connected Wind Farm Programme	No Change
CPA title	CPA 001 under PoA 'South African Grid Connected Wind Farm Programme'	CPA 001 under PoA 'South African Grid Connected Wind Farm Programme'	No Change
CPA Implementer	Windlab Developments South Africa (Pty) Ltd	Windlab Developments South Africa (Pty) Ltd	No Change
Scope	1: Energy Industries (renewable / non-renewable sources)	1: Energy Industries (renewable / non-renewable sources)	No change
Methodology / Activity	ACM0002	ACM0002. (version 12.3.0).	In the webhosted CPA-DD, version of the applied methodology was not written. Whereas webhosted PoA-DD mentioned version 12.1.0.
Amount of emission reductions (tCO ₂) PA	23,368	57,847	Emission reduction calculations were revised. As the project capacity changed from 10 MW to 25 MW, due board decision to upgrade the CPA.
Project Capacity	10 MW	25 MW	As the board decision prior to implementation left the scope of change in total actual capacity. Later on Board decided to upgrade the capacity to 25 MW.
Real case CPA starting Date	01/01/2013	01/01/2013	No Change
Choice of crediting	Fixed	Renewable	PP changed their option of fixed crediting

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Period			period to renewable. Please refer extra CL raised in table 2, 'Extra rCPA'.
CPA Location	Brakfontein' 141/3 which is approximately 10 km South-West of the town of Bedford in the Eastern Cape Province of the RSA.	Brakfontein' 141/3 which is approximately 10 km South-West of the town of Bedford in the Eastern Cape Province of the RSA	No Change

2.2 Follow-up actions

On 19/01/2012, Carbon Check visited the project participant, project implementation team and CDM Consultant of the Programme of Activities to resolve questions and issues identified during the document review and to perform interviews with relevant stakeholders in the Host Country. The key personnel interviewed and the main topics of the interviews are summarized in the table below.

SL No.	Date	Name and Role	Organization	Topic
a	19/01/2012	Katherine Degenar (Project Manager)	Windlab Development South Africa (Pty) Ltd	Project concept and Design and monitoring. CPA-DD Discussion, Baseline, additionality, monitoring and emission reduction calculation
b	19/01/2012	Samantha Bartle	BWC	Discussion on Financial of the PoA
c	19/01/2012	Thomas Hugo (Junior CDM specialist)	BWC	PoA DD development and CPA development
d	19/01/2012	Ilya Goryashin (Project Manager)	BWC	PoA DD and real case CPA discussion

Validation Team considered the views obtained in these interviews while arriving at Validation Opinion.

2.3 Resolution of outstanding issues

The objective of this phase of the validation is to resolve any outstanding issues, which need be clarified prior to Carbon Check's conclusion on the CPA design. In order to ensure transparency a validation protocol is customised for the programme. The protocol shows in transparent manner criteria (requirements), means of verification and the results from validating the identified criteria. The validation protocol serves the following purposes:

- It organises, details and clarifies the requirements a CPA is expected to meet;
- It ensures a transparent validation process where the validator will document how a particular requirement has been validated and the result of the validation.

The completed validation protocol for the CPA "CPA 001 under PoA 'South African Grid Connected Wind Farm Programme'" is enclosed in Appendix A to this report.

Findings established during the validation could either be seen as a non-fulfilment of CDM criteria or where a risk to the fulfilment of programme objectives is identified. Corrective action requests (CAR) are issued, where:

- (i) The project participants have made mistakes that will influence the ability of the project activity to achieve real, measurable additional emission reductions;
- (ii) The CDM requirements have not been met;

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

(iii) There is a risk that emission reductions cannot be monitored or calculated.

A request for clarification (CL) may be raised if information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met.

A forward action request (FAR) may be raised during validation to highlight issues related to project implementation that require review during the first verification of the project activity.

Validation Protocol

In order to ensure consideration of all relevant assessment criteria, a validation protocol is used. The protocol shows, in a transparent manner, criteria and requirements, means of validation and the results from pre-validating the identified criteria. The validation protocol reflects the generic CDM requirements as well as PoA and CPA specific issues which have to be met by the PoA and those to be included CPAs. The validation protocol serves the following purposes:

- It organises, details and clarifies the requirements that a PoA and those to be included CPAs are expected to meet;
- It ensures a transparent validation process where the validating entity will document how a particular requirement has been validated and the result of the determination.

The validation protocol as described in Figure 1.

Validation Protocol Table 1: Requirement checklist					
Checklist Item	Reference	MoV	Comments by Validation Team	Draft Conclusion	Final Conclusion
<i>The checklist items in Table 1 are linked to the various requirements of the PoA-DD which should meet, and Table 2 are linked to requirements the generic CPA-DD should meet. The checklists are organised in various sections. Each section is then further subdivided as per the requirements of the topic and the individual project activity.</i>	<i>Gives reference to the information source on which the assessment is based on</i>	<i>Means of verification (MoV) are document review (DR), interview (I) or any other follow-up actions (e.g., on site visit and telephone or email interviews) and cross-checking (CC) with available information relating to projects or technologies similar to the proposed CDM project activity under validation.</i>	<i>The section is used to elaborate and discuss the checklist item in detail. It includes the assessment of the validation team and how the assessment was carried out. The reporting requirements of the VVM shall be covered in this section.</i>	<i>Assessment based on evidence provided if the criterion is fulfilled (OK), or a CAR, CL or FAR (see below) is raised. The assessment refers to the draft validation stage.</i>	<i>In case a corrective action or a clarification the final assessment at the final validation stage is given.</i>

Validation Protocol, Table 3 - Forward Action Requests		
Forward action request	Reference to Table 2	Response by project participants Validation Conclusion
The FAR raised in table 2 is repeated here.	Reference to the checklist question number in Table 2 where the FAR is	Response by the project participants on how forward action request will be addressed prior to first verification.

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

	explained.	
--	------------	--

2.4 Internal quality control

Before the assessment begins, members of the team covering the technical area(s), sectoral scope(s) and relevant host country experience for evaluating the CDM PoA/CPA are appointed. The validation report including the validation findings underwent a technical review. A technical reviewer qualified in accordance with Carbon Check's qualification scheme for CDM validation and verification performed the technical review.

2.5 Validation team and the technical reviewer(s)

The validation team and the technical reviewers consist of the following personnel:

Validation Team		Type of Involvement						
Full Name	Role/Qualification	Supervision of work	Desk review	Site visit & Interview	Report & protocol writing	Technical Area	Reporting support	Technical Reviewer
Mr Prakash Mishra	TL / LA	X		X		1.2		
Ms Arshi Vimal	TM / LA				X	1.2	X	
Mr Gaurav Sharma	TM / TA		X		X	1.2	X	
Mr Dhananjay Kumar	TM / TA		X		X		X	
Mr Vikash Kumar Singh	TR / TR					1.2		X

3 VALIDATION SUMMARY

Under the validation by means of document review and interviews with stakeholders, the validation team considers that the CPA description in CPA titled "CPA 001 under PoA 'South African Grid Connected Wind Farm Programme'", as described in the CDM-CPA-DD of Date 20/11/2012, version 2.5 is accurate and complete; meets the requirements to be included in the PoA titled "South African Grid Connected Wind Farm Programme" and correctly applies the baseline and monitoring methodology ACM0002. (version 12.3.0). Several clarifications and corrective actions have been raised in during the course of validation and successfully closed (please refer to table-2 of appendix A for details of closure).

3.1 CPA Design Document

The CPA-DD is in compliance with relevant form and guidance as provided by the CPA-DD template /17/ for the POA and UNFCCC requirements under the PoA.

CCL considers that the guidelines for the completion of the CPA documents in their most recent version have been followed. The Managing Entity and the CPA Implementer/s provided relevant information in the applicable CPA-DD sections.

However, several CARs/CLs have been raised and closed successfully during the course of validation. Please refer Table 2 of this report below.

3.2 CPA Description

The following description of the proposed CDM programme activity as per CPA-DD /02/ was verified:

The proposed CPA is developed under the large-scale PoA, 'South African Grid Connected Wind Farm Programme' and introduce Wind Turbine generator system in Republic of South Africa. Windlab Development South Africa (Pty) Ltd is responsible for the implementation of the CPA and CME of the

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

PoA is Blue World Carbon Asset Management (Pty) Ltd The CPA will reduce GHG emission by replacing fossil fuel fired electricity generation in the national grid of RSA.

CPA001 envisages the installation of a new grid connected wind farm at a site where no wind farm was operated prior to the implementation of the activity.

The installed capacity of the wind farm is 25 MW. The wind farm will consist of wind turbines and the associated infrastructure. The produced electricity will be supplied to the national grid of the RSA and sold via Government PPA.

Webhosted CPA DD /01/ indicated the project capacity of 10 MW, however during the course of validation project proponent revised the project capacity to 25 MW, based on corrective action raised by validation team with regard to the fulfilment of compliance of paragraph 113 of VVM, as DOE observed that PP has used the information available in public domain for demonstration of additionality of the project activity. The same has been substantiated in the board notes and thereafter with board resolution /21/ dated 24-10-2012 of the CPA implementer which were assessed to be appropriate. Please refer table 2 of validation protocol section B.

Interview with the CME and CPA implementer and documents reveals that the EPC contract is expected to be signed on the 01/01/2013, and the commissioned plant is expected to be operational on the 01/04/2014. These dates have been verified from the declaration /20/ provided from the CPA implementer. This project forms part of a series of wind farms that are proposed to be constructed as part of the Amakhala Emoyeni Wind Energy Facility. This has been verified from the final EIA report /22/ page viii, Figure 1 as well as page 4.

Windlab Developments South Africa (Pty) Ltd (Private entity) is an entity responsible for CPA implementation and it is not a project participant for the proposed PoA.

However, CARs (rCPA-A3, rCPA-A5 and rCPA-A6) were raised and closed out successfully.

Technical description of the CPA:

The proposed CPA will be implemented in the town of Bedford in the Eastern Cape Province of the RSA and have the total installed capacity of 25 MW. The EPC contract is expected to be signed on 01/01/2013 /20/, and the commissioned plant is expected to be operational in 01/04/2014. However CPA implementer has provided the declaration/19/ stating that "Windlab Developments South Africa (Pty) Ltd hereby confirms that the wind turbine generators utilised for this project will be Goldwind GW109/2500". Ten wind turbine generators of GW109/2500 type will be employed by the present CPA.

The GW109/2500 specification is given in the following table:

Parameter		Unit	Value
Operational data	Rated power	MW	2.5
	Cut-in wind speed	m/s	Approx. 3
	Cut-out wind speed	m/s	22
	Survival wind speed	m/s	52.5
Rotor	The diameter	m	109
	Swept area	m ²	9.399
	Number of blades	-	3
	Type	-	LM 53.2 or similar
	Speed range	rpm	7-13.5
	Speed control	-	Pitch control
Tower	Hub height	m	100
	Material	-	Steel tube
	Design		Direct-drive (DD) multi-pole synchronous generator with permanent magnet excitation
Generator	Rated Voltage	-	Y 690 V
	Insulation class	-	F
Converter	Type	-	Frequency converter

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Electricity output	Voltage	-	Y 690 V
Yaw System	Design	-	4 Induction electric motors
Brake System	Primary brake system	-	Individual, redundant, blade pitch control system
	Holding brake	-	Hydraulic bolt lock
Control System	Operating mode		Micro-processor controlled with remote monitoring

The above specification mentioned has been supported by the brochure/05/ of technical specification for GW109/2500.

The proposed site of the CPA is:

CPA characteristic					Characteristic of each individual activity under the CPA					
No	Name	Type	Amount of activities	Total CPA capacity, MW	Number of activity	Type of wind turbines	Amount of turbines	Capacity, MW	GPS coordinates	Commercial Operation Date
1	001	1	1	25	1	GW109/2500	10	25	- 32.7565 S 26.0235 E	01/04/2014

The GPS coordinates of wind turbines are specified in the Table below:

Turbine ID	Longitude	Latitude
1	26.0243	-32.7608
2	26.0301	-32.7595
3	26.0248	-32.756
4	26.0296	-32.7542
5	26.0198	-32.7623
6	26.0363	-32.7486
7	26.0109	-32.7622
8	26.0142	-32.7513
9	26.0116	-32.7574
10	26.0337	-32.7523

All the above mentioned geo coordinates have been validated from the Phomph, Brakfontein Wind Farm, Wind and Energy Model Validation/15/.

The lifetime of the WTG GW109/2500 is 20years and the same has been verified from the technical literature titled "Statement of Compliance for the Design Assessment of the Wind turbine"/23/ prepared by China General Certification dated 27/07/2012.

The starting date of CPA is 01/01/2013, i.e. the expected date of signing the EPC contract. This has been verified from the declaration/20/ provided by the CPA implementer. Whereas the starting date of crediting period is mentioned to be 01/04/2014 or the date of inclusion of the CPA in the PoA; whichever is later. This is acceptable to the DOE. Moreover the PP has selected renewable crediting period for the proposed CPA, which is in compliance to the final CPA-DD template/17/which have the option to select either renewable or fixed crediting period. However in the webhosted CPA-DD/01/, PP selected the fixed crediting period and later on during the submission of final CPA-DD/02/, PP chose to the option of renewable crediting periods and length of the 1st crediting period as 7 years. This has been verified from the declaration/24/ provided by the CME stating that "Blue World Carbon Asset Management (Pty) Ltd has decided to change the crediting period of CPA-001 in the South African Grid Connected Wind Farm Programme from a 10 year fixed crediting period to a 7 year renewable crediting period since this will cover the lifetime of the equipment and suits the project better". This seems to be logical and acceptable.

The CPA is expected to result in an average annual emission reduction of 57,847 tCO₂e /02/, /03/ for renewable crediting period of 7 years.

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

The CPA receives no public funding and is not registered as an individual CDM project activity or as part of another registered PoA; this has been verified from an official declaration/8/ provided by the CPA implementer. The validation team has assessed from UNFCCC website /B06-1/ and interviews that there is no other similar PoA or CDM project occurring in the CPA area and the CPA is neither registered as an individual CDM project activity or is part of another Registered PoA.

The information presented in the CPA documents is consistent with the actual planning and implementation of the activity confirmed in the following ways:

- A review and cross check of data and information.
- During site visit, via interviews of relevant stakeholder and personnel with project specific knowledge. In case of doubt, further cross checks through additional interviews were conducted.
- A review of information related to similar projects or technologies, which have been used if available to validate the accuracy and completeness of the project description.

In conclusion, CCL confirms that the CPA project description is sufficiently accurate and complete in order to comply with the requirements of the PoA.

However, please refer CAR rCPA-A5 and rCPA-A6, which were raised during the validation in this regard and successfully closed.

3.2.1 CPA Boundary

The CPA boundary has assessed based on documented evidence, on site visit interviews. The validation team confirms that the identified boundary, the selected sources and gases as documented in the CPA-DD are justified and in the host country of RSA which is the programme boundary/16//04/; hence all sources and GHGs required by the applied methodology/B02/ have been included within the project boundary. Validation team confirms that the identified boundary, the selected gases and sources are documented in the CPA-DD /02/ and fully in line with the requirements set by the PoA-DD/16/.

However, please refer CAR rCPA-A5 which were raised during the validation in this regard and successfully closed

3.3 Eligibility Criteria for CPA Inclusion

Review of PoA-DD /16/, CPA-DD template /17/ and interviews and site visit with representatives of CME reveals that the CME of the PoA employs clear and unambiguous criteria for the inclusion of the CPAs. The eligibility criteria have been stated clearly and validation team confirms the eligibility criteria are in line with eligibility criteria set in the PoA-DD/17/ is found to be in accordance with the requirement of § 14, annex 3 of EB 65 /B04-5/. Additionality and applicability of the applied methodology are the eligibility criteria as per the PoA-DD/16/, which is deemed appropriate and acceptable to the validation team. The eligibility criteria can be checked at the CPA level by the CME and shall be confirmed by the DOE before inclusion of the CPAs in the PoA. The subject CPA meets all eligibility criteria of the PoA as assessed below:

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

SL. NO.	ELIGIBILITY CRITERIA AS STATED IN SECTION B.2 OF THE CPA-DD /02/ AND SECTION A.4.2.2 OF THE POA-DD /16/	STATUS MARKED IN CPA-DD /02/	ASSESSMENT BY THE VALIDATION TEAM
1	All activities under the CPA are in the geographical area of the Republic of South Africa (RSA).	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> NO	<p>This has been supported by providing the following document for validation:</p> <p>Environmental Authorization from the Department of Environmental Affairs/25/ LoA dated 27/08/2012/05/</p> <p>Conclusion: Based on the above assessment, validation team concludes that this eligibility criteria of the PoA is complied by the candidate CPA.</p>
2	The location of each activity under the CPA is uniquely identified by the GPS coordinates. The GPS coordinates has been crosschecked with previous records of GPS coordinates of activities under the existing CPAs under this PoA to ensure that no overlap between activities can occur.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> NO	<p>This has been supported by providing the following document for validation:</p> <p>Final EIA report, November 2010 Phomph, Brakfontein Wind Farm, Wind and Energy Model Validation (page 8)</p> <p>Conclusion: Based on the above assessment, validation team concludes that this eligibility criteria of the PoA is complied by the candidate CPA</p>
3	<p>The owner of each activity under the CPA has contractually agreed and signed the following:</p> <p>a) The activity has neither been and will not be registered as a CDM project activity nor as a CPA under another PoA; and</p> <p>b) The owner is aware that the activity will be subscribed to the present PoA.</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> NO	<p>This has been supported by providing Signed declaration of CPA developer /07/</p> <p>Conclusion: Based on the above assessment, validation team concludes that this eligibility criteria of the PoA is complied by the candidate CPA.</p>
4	The CME has checked the UNFCCC CDM project database to verify that none of the activities under the proposed CPA has been previously submitted to the UNFCCC. If an activity has been submitted to the UNFCCC for validation or registration, the activity developer has to prove that the process of validation or registration has been withdrawn.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> NO	<p>This has been supported by providing Signed declaration from CME /18/</p> <p>Conclusion: Based on the above assessment, validation team concludes that this eligibility criteria of the PoA is complied by the candidate CPA.</p>
5	The CPA is one of the following:	<input checked="" type="checkbox"/> Yes	The CPA is the installation of a new

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

	<p>a) The installation of a new wind farm at a site where no wind farm was operated prior to the implementation of the activity; or</p> <p>b) The installation of multiple wind farms at various sites where no wind farm has been operated prior to the implementation of the activities; or</p> <p>c) The capacity addition of an existing wind farm herewith the electricity generation at existing wind farm should not be affected by the CPA; or</p> <p>d) Multiple capacity additions of existing wind farms herewith the electricity generation at existing wind farm should not be affected by the CPA.</p>	<p><input type="checkbox"/> NO</p>	<p>wind farm at a site where no wind farm was operated prior to the implementation of the activity.</p> <p>This has been supported by providing Final EIA report /22/, dated: November 2010.</p> <p>Conclusion:</p> <p>Based on the above assessment, validation team concludes that this eligibility criteria of the PoA is complied by the candidate CPA.</p>
--	--	------------------------------------	---

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

6	<p>Each activity under the CPA is connected to the national grid of the RSA via either:</p> <p>a) The national transmission, distribution or reticulation lines; or</p> <p>A municipal electricity network that is connected to the national transmission, distribution or reticulation lines.</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> NO	<p>This has been supported by providing the following document for validation:</p> <p>Draft PPA/26/ declaration from the CPA developer/20/</p> <p>Conclusion: Based on the above assessment, validation team concludes that this eligibility criteria of the PoA is complied by the candidate CPA.</p>
7	<p>The start date of the CPA is clearly defined in the CPA-DD with supporting documentary evidence and is later than the date of start of global stakeholder process for the PoA (15/10/2011).</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> NO	<p>Since the date of EPC contract is taken as the estimated starting date of the proposed CPA as per CPA-DD/02/, which has not yet been signed. Moreover, a declaration for the same has been provided /20/.</p> <p>Conclusion: Based on the assessment of above mentioned document and interview with CME and CPA implementer, validation team concludes that this eligibility criteria of the PoA is deemed complied by the candidate CPA.</p>
8	<p>The CPA is in line with the applicability conditions of ACM0002 (version 12.3.0).</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> NO	<p>This has been supported by providing Signed declaration from CME /18/ that CPA meets the methodology applicability criteria.</p> <p>Conclusion: Based on the assessment of CPA-DD/02/ against ACM0002 /B02/ applicability criteria and declaration from CME /18/, validation team concludes that this eligibility criteria of the PoA is complied by the candidate CPA.</p>
9	<p>Additionality will be demonstrated individually by the CPA according to the procedures described in the Section E.5.1 of the CDM-CPA-DD.</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> NO	<p>This has been supported by providing IRR sheet /03/and description in section B.5.3. In the rCPA-DD, along with all evidence for input parameters of additionality demonstration, as mentioned under section 2.1 of this report above.</p> <p>Conclusion: Based on the above assessment, validation team concludes that this eligibility criteria of the PoA is complied by the candidate CPA.</p>
10	<p>The environmental impact</p>	<input checked="" type="checkbox"/> Yes	<p>This has been supported by providing</p>

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

	assessment required by NEMA ¹ regulation and local stakeholder consultations has been completed.	<input type="checkbox"/> NO	<p>the following document for validation:</p> <p>Environmental Authorization from the Department of Environmental Affairs/25/, 2 September 2011.</p> <p>Photo copy of newspaper where invitation was published, copies of invitation sent to local stakeholders, minutes of the meeting, list of attendance, list of comments received/22/, /27/</p> <p>Conclusion:</p> <p>Based on the above assessment, validation team concludes that this eligibility criteria of the PoA is complied by the candidate CPA.</p>
11	No official Development Aid will be involved or diverted as a result of activities under the CPA. The official declarations of 'no development aid' have been provided by the wind farm developers. If Annex 1 countries are involved, then a declaration from the concerned agency in Annex 1 country should also be submitted	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> NO	<p>This has been supported by providing the signed declaration/07/ of CPA developer</p> <p>Conclusion:</p> <p>Based on the above assessment, validation team concludes that this eligibility criteria of the PoA is complied by the candidate CPA.</p>
12	The owner of each activity under the CPA is duly registered/incorporated entity of the RSA.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> NO	<p>This has been supported by providing Company registration certificate/10/ of CPA implementer.</p> <p>Conclusion:</p> <p>Based on the above assessment, validation team concludes that this eligibility criteria of the PoA is complied by the candidate CPA.</p>
13	The owner of each activity under the CPA has chosen to sell power through either the private PPA or Government PPA. In case the owner of the activity has chosen to sell power through the private PPA, the CME should monitor the records for sold electricity in order to make sure that the owner has not switched to Government PPA after the CPA inclusion. In case such switch took place, the activity will not be eligible for this PoA.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> NO	<p>This has been supported by providing Signed declaration/20/ from the project developer.</p> <p>Conclusion:</p> <p>Based on the above assessment, validation team concludes that this eligibility criteria of the PoA is complied by the candidate CPA.</p>
14	A CME has checked that the CPA satisfies the eligibility	<input checked="" type="checkbox"/> Yes	<p>This has been supported by providing Signed declaration/18/ from the CME.</p>

¹ NEMA: National Environmental Management Act.

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

	criteria of the latest version of the PoA-DD.	<input type="checkbox"/> NO	Conclusion: Based on the above assessment, validation team concludes that this eligibility criteria of the PoA is complied by the candidate CPA.
--	---	-----------------------------	---

According to the requirements of § 17 and § 18 of annex 3 of EB 65 /B04-5/, the validation team by means of interview and through document review /06/ confirms that the CME is competent to check the features of the CPA. The CME system manual /06/ clearly mentions the roles, responsibilities and authorities within the managing entity. The validation team has also confirmed through document review and interviews the procedures to avoid double counting /06/, training and capacity development for personnel, records and documentation control process, Measures for continual improvements of the PoA management /06/.

In conclusion, CCL confirms that the CPA complies with the eligibility criteria requirements of the PoA. However, CAR rCPA-B1 and rCPA-B2 were raised and successfully closed.

3.4 Additionality

The project involves installation of 10 Wind Turbine Generators (WTGs) of 2.5 MW each at Brakfontein, Eastern Cape Province, Republic of South Africa by *Windlab Developments South Africa (Pty) Ltd*. The project is a large scale project and accordingly project developer has applied approved methodology ACM0002 /B02/ and demonstrated the additionality of the project activity in conformity with PoA, using Additionality Tool (version 06.1) /B04-7/ read with Guidelines on the Assessment of Investment Analysis (Version 05) /B04-10/.

3.4.1 Prior Consideration of CDM

The project implementation has not yet commenced and the expected start date of the project is 01/01/2013 which is signing of EPC contract /20/. Since the project developer had not undertaken any construction or any real action for the implementation of the project activity till date, as per Glossary of CDM Terms (version 6), the project activity has not yet 'started'

The real case CPA-DD was webhosted for Global Stakeholders' Comments (GSC) on 15/10/2011, which is prior to the start date of the project activity (the project activity has not yet started) and after 02/08/2008. Therefore, this is a *new project activity*. As per paragraph 2 of Annex 13, EB 62 /B04-11/, prior intimation to UNFCCC and DNA is not necessary in cases where the start date of the project activity is after the web-hosting for GSC. Validation team, therefore, concludes that the CPA confirms to Annex 13, EB 62 /B04-11/ and Annex 26, EB 60/B04-14/.

However CAR rCPA-B21 was raised and successfully closed.

Alternatives

The CPA identifies two alternatives, viz., the project activity being taken up without being registered as CDM activity and *status quo*. However, as the project activity is based on approved methodology ACM0002 /B2/ and the methodology has prescribed the baseline, as per paragraph 105 of VVM (01.2) /B01/, discussion on alternatives is not necessary.

Approach for demonstrating CPA additionality

The proposed project activity is a large scale project activity. Therefore, in accordance with ACM0002, the additionality of the project has been demonstrated based on the valid version of the "Tool for demonstration and assessment of additionality (Version 06.1)/B04-7/ and the Guidelines on the Assessment of Investment Analysis (Version 05) /B04-10/. For the above reasons, this approach has been assessed to be appropriate for the assessment of additionality for this project activity

Appropriateness of Investment Analysis

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

The project activity getting registered under the PoA is a new project. Since the project envisages generating electricity using wind energy, which will be sold to the grid, simple cost analysis is not appropriate for demonstration of additionality of this CPA. Therefore, in accordance with PoA, CPA envisages demonstrating investment barrier using benchmark analysis. Since the baseline does not require any investment and is outside the direct control of project developer, validation team confirms that the use of benchmark analysis is appropriate and conforms to paragraph 19 of Annex 5, EB 62 /B04-10/. Accordingly, the demonstration of additionality of CPA would involve demonstrating the project activity is not economically or financially feasible without the revenue from the sale of CERs. This is in conformity with Paragraph 108 of VVM (Ver. 01.2) /B01/ and PoA-DD /16/

Appropriateness of Financial Indicator

Since the project involves investment (cash outflow) and end product, electricity, is a saleable service having economic value (cash inflow), it is possible to use IRR as financial indicator. Accordingly, project developer has used IRR as financial indicator. As the project is funded by debt and equity mix, project IRR has been used as the financial indicator for additionality demonstration. Validation Team considers project IRR is the most suitable financial indicator for the project type and decision making context. Therefore, the selected financial indicator conforms to option II of sub-step 2b of Additionality Tool, Annex 5, EB 62/B04-10/ and PoA-DD/16/.

Bench Mark

Since project IRR has been used as the financial indicator, as stated in the PoA, commercial lending rate has been used as benchmark. The benchmark has been sourced from the term lending rate published in the latest Quarterly Bulletin of South Africa Reserve Bank²/36/ available at the time of decision making. As per the latest publication available at the time of decision making, term lending rate was 14.15%, which has been chosen as benchmark. The validation team checked the source and observed the rate to be correct. In this context, it may be stated that in the webhosted CPA, the benchmark was given as 12.5%. As this was incorrect, a CAR was raised, in response to which, the benchmark has been corrected in conformity with PoA-DD/16/ and guidance 12 of Annex 5, EB 62/B04-10/. CCL observed that the CPA remains additional even if the benchmark of 12.5% given in the webhosted CPA/01/ is reckoned as benchmark. As the benchmark conforms to PoA-DD/16/ and Guidance 12 and 13 of Annex 5, EB 62 /B04-10/, the validation team considers the selected benchmark is appropriate.

Validation of input parameters

The proposed project activity envisages generating electricity from wind energy. Accordingly, as envisaged in the PoA, the CPA has furnished all the input parameters used in the computation of the financial indicator. In this context, it may be stated that in the webhosted CPA-DD/01/, the installed capacity was considered at 10 MW and the input parameters available in the public domain were used to demonstrate additionality. Consequent upon a CAR raised by the DOE on the conformity of the project activity to PoA-DD, CPA operator submitted a revised project with an installed capacity of 43 MW once again based on input parameters available in the public domain. However, as the public domain information was not acceptable to DOE, a CAR was raised. Based on the CAR and keeping in view the shift in the approach of Department of Energy from Refit Mechanism to tender based mechanism, resulting in the uncertainty in tariff, the project developer decided to scale down the project to 25 MW and obtain quotations for the WTGs. The viability of the project was discussed in the meeting of the Board /21/ of Directors held on 24/10/2012 and the investment decision was taken by the Board based on the information contained in the quotation, information collected from public domain and unofficial information collected from other projects. All the basic assumptions supporting the financial indicator computation are given in the IRR template together with the sources. The input parameters used, which provides the details of each of the input parameters used, their source and the validation team's observation on the appropriateness of the same are given in the following table:

² Quarterly Bulletin, South African Reserve Bank, P. S-11, can be accessed at <http://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/5133/04Statistical%20tables%20-%20Money%20and%20banking.pdf>

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Parameter	Value applied	Sources of Information and comments thereon
Project life (Years)	20	Project life is based on the information given by the machinery supplier on the technical life time of the WTGs/23/ vide letter dated 30/07/2012. Incidentally, this is also in conformity with the operating life considered by NERSA Consultation Paper – Review of Renewable Energy Feed-In Tariff /32/, March 2009 (paragraph 3.2). So far no wind power project from South Africa has been registered as CDM project. Hence, comparison with registered wind energy projects is not possible. However, of the projects under validation, it was observed that 16 out of 19 projects have considered the operational life at 20 years only. Hence, the value considered by the PP is in line with the operating life assumed by other projects and is therefore correct and appropriate.
Installed Capacity (MW)	25	The value is based on the Board Resolution/21/ dated 24/10/2012 and also the offer letter/28/ dated 05/09/2012 received from Goldwind Africa (Pty) Ltd. Since no real action has been taken for the implementation of the project, purchase order is not available. Therefore, based on the investment decision, the value is correct. The provided data source has been checked and the applied value is found to be correct.
Project cost (ZAR)	339,435,071	<p>The project cost includes equipment cost; civil works cost, net work and substation cost, engineering & project management cost, contingencies, pre-operative expenses and interest during construction. The costs considered in the financial indicator calculation represent the cost as per offer letters/28/ and estimates/29/ dated 05/09/2012 and 06/09/2012 respectively, copies of which have been submitted to validation team. Since these documents were available at the time of decision making, the value conforms to guidance 6 of Annex 5, EB 62 /B04-10/. The total cost of project works out to ZAR.339.435 mn. as per the offer letter and Board Note /21/ dated 22/11/2012</p> <p>The cost of the project works out to USD 1613/KW (at ZAR 8.414 = 1 USD). Validation team observed that NERSA in South Africa Renewable Energy Feed-In Tariff Regulatory Guidelines/32/ dated 26/03/2009 has considered the capital cost at USD 2250/KW. As compared to the cost recommended by NERSA, the cost reckoned by the CPA is much less. As stated above, no wind power project has been registered as CDM activity so far. All the projects are under validation/request for registration. Hence, it is not possible to compare the cost with registered projects. However, the validation team observed that the capital cost considered by the projects in CDM pipeline was ranging from USD 1415/KW³ (Cookhouse Wind Farm in South Africa) to USD 2642/KW (Grid Connected Wind Power Plant in Witberg). The cost of all other projects in pipeline fall in between this range. The cost considered by the candidate project is near the lower end of the range. The cost of candidate project is higher by 13% compared to the lower end of the range and the validation team observed that even if the project cost is subjected to 13% reduction, the project remains additional, in that the IRR goes up to 8.81% only as against the benchmark of</p>

³ The capital cost has been converted into USD considering the exchange rate of ZAR 8.414=1USD- same as the exchange rate considered for the candidate project (as given in the offer letter of Goldwind Africa (Pty) Ltd.)

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

		14.15%. In the above background, validation team considers the project cost as correct and appropriate for the project activity
Financing Pattern (percent) Debt Equity	70 30	Project is envisaged to be financed by a term loan of ZAR 237.6 mn. and equity capital of Rs.101.8 mn. The financing pattern yields a gearing of 70:30. This assumption is based on the public domain information - Standard Bank, African Renewables: Investment and Financing, Section 6: Case Study: South African IPPPP /33/ (p. 20) dated 08/02/2012, which was available at the time of decision making and hence conforms to guidance 6 of Annex 5, EB 62. Validation team observed that NERSA in the Consultation Paper on Review of Renewable Energy Feed-In Tariffs/32/ dated March 2011 has also proposed debt equity ratio of 70:30. It was also observed that the PFI Renewables Report 2012 ⁴ /34/ has also recommended debt equity ratio of 70:30 for renewable energy projects in South Africa. As stated earlier, no wind power project has been registered as CDM activity so far. All the projects are under validation/request for registration. Hence, it is not possible to compare the debt equity ratio with registered projects. Validation team also observed that none of the projects in the pipeline, barring one (TWE Golden Valley Wind Power Project) have disclosed the debt equity ratio in the webhosted PDD. TWE Golden Valley Wind Power Project has considered debt equity ratio at 70:30 only. In the above background, validation team considers the financing pattern is appropriate and acceptable.
Interest (percent)	14.15	Interest rate has been sourced from term lending rates published in the September 2012 issue of Quarterly Bulletin of South African Reserve Bank ⁵ /39/, which was the latest issue available at the time of decision making (conformity with guidance 6 of Annex 5, EB 62 /B04-10/). Validation team checked the publication and found the value to be correct. As stated earlier, no wind power project has been registered as CDM activity so far. All the projects are under validation/request for registration. Hence, it is not possible to compare the debt equity ratio with registered projects. Validation team also observed that none of the projects in the CDM pipeline, barring one (TWE Golden Valley Wind Power Project) have given the interest rate in the webhosted PDD. TWE Golden Valley Wind Power Project has reckoned the interest at 13%. Since the interest rate considered by the candidate project is based on central bank publication and is higher than the interest rate considered by only other project which has disclosed the interest rate (and hence conservative, as the interest rate and project IRR are positively correlated), the validation team considers the input value as correct, appropriate and conservative..
Repayment (years)	15	Repayment period has been sourced from a public domain document - IDC, German Development Bank launch GEEF ⁶ /42/. NERSA document does not contain repayment period and the project developer has not achieved financial closure so far. None of the webhosted projects have disclosed this information in the PDD. Validation team observed that Standard Bank, South Africa has given a repayment period of 8 years /43/ for

⁴ Please see <http://www.pfie.com/sa-renewables-funding-in-place/21014044.article>

⁵ Please see <http://www.resbank.co.za/Publications/QuarterlyBulletins/Pages/QuarterlyBulletins-Home.aspx>

⁶ Please see [http://idc.co.za/media-room/articles/127-gdc-launch-geef\)+E30](http://idc.co.za/media-room/articles/127-gdc-launch-geef)+E30)

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

		business term loans in its website. If the repayment period is reduced to 8 years ⁷ , the project IRR will drop down to 7.06% from 7.41% as given, making the project all the more additional. The repayment period considered by the candidate project is therefore, conservative and appropriate.
Moratorium (years)	Nil	Moratorium is considered for only implementation period, which is common for wind power projects as these projects generate cash right from the beginning. NERSA document does not contain moratorium period and the project developer has not achieved financial closure so far. None of the webhosted projects have disclosed this information in the PDD. Validation team observed that in case the moratorium period is assumed at 1 year after the COD with the door-to-door maturity kept constant, the project IRR will go to 7.45% as against 7.41% as presented and the project will continue to remain additional. The moratorium period considered by the candidate project is, therefore, correct and appropriate.
Generation (MWh)	58,550	<p>As per Annex 11, EB 48, the plant load factor (PLF)/B04-15/ should be defined <i>ex-ante</i> according to one of the following three options:</p> <p>(a) The plant load factor provided to banks and/or equity financiers while applying the project activity for project financing, or to the government while applying the project activity for implementation approval;</p> <p>(b) The plant load factor determined by a third party contracted by the project participants (e.g. an engineering company).</p> <p>Project developer has submitted a copy of the Wind and Energy Model Validation report prepared by Phomph Wind Farm Energy Services/15/ dated 21/09/2012. The third party engineering company contracted by the project developer – Phomph - has estimated the generation at 58,550 MWh which yields a PLF of 26.735%⁸ (p.6, 31 and 33) /15/. Validation team observed that NERSA in South Africa Renewable Energy Feed-In Tariff Regulatory Guidelines/32/ dated 26/03/2009 has considered the PLF at 27% (the PLF considered by the project developer in the webhosted CPA). The PLF considered is marginally lower (about 0.25%) than the NERSA recommended PLF. The project does not lose its additionality even if the PLF is subjected to an escalation of 10%. As stated earlier, no wind power project has been registered as CDM activity so far. All the projects are under validation/request for registration. Hence, it is not possible to compare the PLF with any registered projects. Validation team observed that 8 out of 19 projects in pipeline are located in Eastern Cape Province, where the candidate project is also located. These projects have considered PLF ranging from 21.81% to 39.39%. Only 2 projects have assumed PLF in excess of 31%. Since majority of the projects have considered PLF of less than 31%, validation team subjected the PLF to a</p>

⁷ Please see <http://www.standardbank.co.za/portal/site/standardbank/menuitem.de435aa54d374eb6fcb695665c9006a0/?vgnextoid=c72f08f82045b210VgnVCM100000c509600aRCRD>

⁸ It may be mentioned that in the webhosted CPA-DD, based on Suzlon Turbine, the project developer has estimated the PLF at 30.9%. However, as this does not conform to Annex 11, EB 48, a CAR was raised, whereupon, the PP commissioned Phomph to estimate the generation and has submitted a copy of the PLF assessment report together with the change in the installed capacity and the cost. This report estimates the PLF at 26.7%.

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

		<p>16% escalation and observed that though the financial indicator goes up to 9.62%, the project continues to remain additional. PLF depends on the installed capacity of windmill, mast height, location, wind velocity and density, among others. Therefore, it is not appropriate to compare the PLF with other projects. As the PLF is based on the third party engineering company's estimation (and hence conforms to Annex 11, EB 48 /B04-15/), is in conformity with the PLF recommended by NERSA and the fact that the project remains additional even if the PLF is reckoned at 31%, validation team considers the PLF is correct and appropriate for the project activity.</p>
Electricity tariff (ZAR/MWh)	606.6	<p>The tariff used in the financial indicator calculation represents Eskom's standard average electricity price and has been sourced from media statement "NERSA review Eskom tariffs /30/ for period 01/04/2012 -31/03/2013" 09/03/2012 (p. 1, Table 1)⁹ dated 2012/03/09, which was available at the time of decision making (conformity to guidance 6 of Annex 5, EB 62 /B04-10/). As stated earlier, no wind power project has been registered as CDM activity so far. All the projects are under validation/request for registration. Hence, it is not possible to compare the tariff with any registered projects. Validation team observed that 4 out of 8 projects¹⁰ located in Eastern Cape province has considered a tariff of ZAR 660/MWh; 1 project has assumed tariff of ZAR 1050/MWh, 2 projects have assumed tariff of ZAR 1150/MWh and 1 project has blacked out all input parameters in the webhosted CPA-DD/01/. Two projects, which have reckoned the tariff at ZAR 1150/MWh, have sourced the tariff from REFIT tariff, which is no more valid. In August 2011, the Department of Energy abandoned the Refit scheme in favour of a tender mechanism. REFIT scheme /32/ was introduced in March 2009 and guaranteed purchase prices (ZAR 1250/MWh) and long term contracts of 20 years. However, the tariff that had been established in 2009 was reduced to ZAR 938/MWh for 2011, ZAR 945/MWh for 2012 and ZAR 952/MWh for 2013 at a review on 26th May 2011, before the programme was dissolved completely. Under tender mechanism, which came into existence in August 2011¹¹, bidders will have to propose tariff which will fall under technology dependent cap (ZAR 1150/MWh has been fixed for onshore wind power projects under this cap). The proposed prices should make a single adjustment on April 1 each year in line with expected <i>decreasing</i> costs. In selecting the bidders 70% weight is given to financial aspects of the project and 30% to economic development which includes job creation, local content, ownership, management control, preferential procurement, enterprise development and socio economic development. CPA operator has not yet submitted the bid for the supply of electricity to the Government Bid and hence, the tariff the project likely to get is not known either at the time of decision making or</p>

⁹ <http://www.eskom.co.za/content/NERSAreviewEskomtariffs1Apr2012-31Mar2013.pdf>

¹⁰ Cookhouse Wind Farm in South Africa (<http://cdm.unfccc.int/Projects/Validation/DB/Z5QL0FUBSIIC7UQCXL6JKD5DTI8391/view.html>), Amakhala Emoyeni Grid Connected 750 MW Wind Farm (<http://cdm.unfccc.int/Projects/Validation/DB/M5VRTJLQJFJ8I61IJW9VAZ4PGPEGHX/view.html>), Dorper Wind Energy Facility, (<http://cdm.unfccc.int/Projects/Validation/DB/4R066T4GSWJMT16SNRY3S6VZOFTQ6J/view.html>) Indwe Wind Project, (<http://cdm.unfccc.int/Projects/Validation/DB/4E2Z1QDQ9NH9JA7LIFPXZR0FOYNBZF/view.html>)

¹¹ It may be stated that both REFIT tariff and the tariff discovered through tender mechanism fall under E- policy.

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

		now; therefore, latest NERSA average tariff has been used in the financial indicator calculation as stated in PoA-DD. As per the unofficial information available from the second bids submitted, the tariff which the project is likely to get is estimated at ZAR 900/MWh, documentary evidence for which has been submitted by project developer. Validation team observed that the project will continue to remain additional even if the expected tariff is reckoned at ZAR 1150/MWh right through (without taking cognizance of a reduction in the tariff consequent upon decreasing cost), as the IRR works out to 12.73% ¹² as against the benchmark of 14.15%. Therefore, the validation team accepted the tariff.
Escalation in tariff (percent)	5.07	Tariff has been escalated at 5.07% per annum, which represents the Cumulative Annual Growth Rate of inflation (consumer price index) between Oct.2008 and Sept. 2012 and the data has been sourced from the Statistical Release – Consumer Price Index, October 2009 /38/ and September 2012 /39/ ¹³ . Validation team checked the document and found the input parameter to be correct. Since all other input parameters are also subjected to same inflation rate, consideration of inflation rate for escalating the power tariff is considered correct and appropriate for the project activity
O&M cost and Warranty fee (ZAR) - Year 1 to 5 - Year 6 onwards	3,600,000 3,290,000 4,200,000	O&M cost and warranty fee have been sourced from the offer letter /28/ of Goldwind Africa (Pty) Ltd. dated 05/09/2012 which was available at the time of decision making (conformity to guidance 6 of Annex 5, EB 62 /B04-10/). The offer letter gives the warranty fee estimates only up to 10 th year. Since the operating life of the project is 20 years and the project has to take the warranty even after 10 years, the cost is assumed at the same level as that of 6 th year after subjecting it to escalation based on CPI. Validation team checked the offer letter and found the value to be correct. Since the Offer letter was available at the time of decision making, the cost conforms to guidance 6 of Annex 5, EB 62 /B04-10/. The O&M cost (including warranty fee) of the candidate project works out to USD 32.75/KW (at ZAR 8.414 = 1 USD). Validation team observed that NERSA in South Africa Renewable Energy Feed-In Tariff Regulatory Guidelines dated 2009/03/26 has considered the O&M cost at USD 24/KW. The cost reckoned by the CPA, therefore, is more 36% more than the cost recommended by NERSA. However, validation team observed that the project continues to remain additional even if the O&M cost (and warranty fee) are subjected to a 37% decrease in that the financial indicator goes up to 8.46% as against the benchmark of 14.15%. As stated above, no wind power project has been registered as CDM activity so far. All the projects are under validation/request for registration. Hence, it is not possible

¹² To check the IRR with tariff of ZAR 1150/MWh, readers are advised to use the sensitivity analysis table given vide rows 101 to 107 of 'Cash Flow' worksheet. IRR with tariff of ZAR 1150/MWh can be obtained by inserting '1' in cell C106. Changing the tariff in cell D13 will yield incorrect result as the tariff is subjected to escalation, which is not correct for the bid based tariff. As explained in the text given above, the tariff is fixed and subject to only reduction consequent upon decreasing cost.

¹³ Consumer Price Index in October 2008 was 102.8 and in September 2012 was 125.3 resulting in a CAGR of 5.07%. Sourced from Statistical Release, Consumer Price Index October 2009 and September 2012, <http://www.statssa.gov.za/publications/P0141/P0141October2009.pdf> <http://www.statssa.gov.za/publications/P0141/P0141September2012.pdf>

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

		<p>to compare the O&M cost with registered projects. However, validation team observed that the O&M cost considered by the projects in pipeline was ranging from USD ~20/KW¹⁴ (De Aar Grid Connected 100.5 MW Wind Farm, Springbok Grid Connected 55.5 MW Wind Farm and Amakhala Emoyeni Grid Connected 750 MW Wind Farm) to USD 82/KW (Electricawinds 30 MW). An analysis of the O&M cost considered by 12 projects, which have disclosed this information in the web hosted PDD reveals that 5 out of 12 projects¹⁵ have reckoned the cost at less than USD 24/KW (the cost recommended by NERSA REFIT order); 2 projects have reckoned the cost between USD 24/KW to USD 33/KW and the balance 5 projects have reckoned the cost at more than USD 33/KW (the cost assumed by the candidate project). The validation team also observed that even if the O&M cost (including warranty fee) is subjected to 64% reduction (the difference between the O&M cost reckoned by the candidate project and the lowest O&M cost assumed by the project in the CDM pipeline), the project remains additional. In the above background, the O&M cost considered (which conforms to paragraph 6 of Annex 5, EB 62 /B04-10/) is accepted as correct and appropriate for the project activity.</p>								
<p>Escalation in O&M cost & Warranty fee (percent)</p>	<p>5.07</p>	<p>Offer letter /28/ of Goldwind Africa (Pty) Ltd. dated 05/09/2012 states that the O&M cost and warranty fee are subject to Consumer Price Index (CPI) escalation. Accordingly, O&M cost has been escalated at 5.07% per annum, which represents the Cumulative Annual Growth Rate of inflation (Consumer Price Index) between Oct.2008 and Sept. 2012 and the data has been sourced from the Statistical Release – Consumer Price Index, October 2009 /38/ and September 2012 /39/¹⁶. The validation team checked the document and found the input parameter to be correct. Since tariff and other input parameters are also subjected to same inflation rate, consideration of inflation rate for escalating the O&M cost and warranty fee is considered correct and appropriate for the project activity.</p>								
<p>Administrative expenses (ZAR)</p>	<p>4,500,000</p>	<p>This expenditure has been envisaged at the time of decision making as evidenced by the Board Note /21/ dated 22/11/2012 based on which the investment decision was taken. Therefore, the cost conforms to guidance 6 of Annex 5, EB 62 /B04-10/. This is a stand-alone project and no other activities are being carried out in the company. Administrative expenses reckoned in the financial indicator calculation include the following:</p> <table border="1" data-bbox="692 1559 1433 1682"> <thead> <tr> <th>Details</th> <th>ZAR</th> </tr> </thead> <tbody> <tr> <td>Salaries</td> <td></td> </tr> <tr> <td>– Director (1 X 100000 X 12)</td> <td>1,200,000</td> </tr> <tr> <td>– Project Manager (1 X 50000X12)</td> <td>600,000</td> </tr> </tbody> </table>	Details	ZAR	Salaries		– Director (1 X 100000 X 12)	1,200,000	– Project Manager (1 X 50000X12)	600,000
Details	ZAR									
Salaries										
– Director (1 X 100000 X 12)	1,200,000									
– Project Manager (1 X 50000X12)	600,000									

¹⁴ The capital cost has been converted into USD considering the exchange rate of ZAR 8.414= 1 USD- same as the exchange rate considered for the candidate project (as given in the offer letter of Goldwind Africa (Pty) Ltd.)

¹⁵ Cookhouse Wind Farm in South Africa, Grid Connected Wind Power Plant in Klawer, De Aar Grid Connected 100.5 MW Wind Farm, Springbok Grid Connected 55.5 MW Wind Farm, Amakhala Emoyeni Grid Connected 750 MW Wind Farm,

¹⁶ Consumer Price Index in October 2008 was 102.8 and in September 2012 was 125.3 resulting in a CAGR of 5.07%. Sourced from Statistical Release, Consumer Price Index October 2009 and September 2012, <http://www.statssa.gov.za/publications/P0141/P0141October2009.pdf><http://www.statssa.gov.za/publications/P0141/P0141September2012.pdf>

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

		<table border="1"> <tr> <td>– Engineers (2 X 30000 X12)</td> <td>720,000</td> </tr> <tr> <td>– Office Manager (1 X 15000 X 12)</td> <td>180,000</td> </tr> <tr> <td>Office rent (20000 X 12)</td> <td>240,000</td> </tr> <tr> <td>Travel (5000 X 12)</td> <td>60,000</td> </tr> <tr> <td>Misc. Expenses including insurance</td> <td>1,500,000</td> </tr> <tr> <td>Total</td> <td>4,500,000</td> </tr> </table> <p>As stated above, no wind power project has been registered as CDM activity so far. All the projects are under validation/request for registration. Since the webhosted PDD does not disclose all the costs considered in additionality demonstration, it is not possible to compare or draw any conclusion on the administrative expenses provided by the projects in CDM pipeline. However, validation team observed that one project, viz., TWE Golden Valley Wind Power Project, also located in Eastern Cape province has reckoned administrative expenses at ZAR 25 mn. over and above, O&M cost, insurance premium and retrofit and decommissioning reserve. As compared to this project, the administration expenses considered by candidate project are negligible. Moreover, validation team also observed that the total removal of this cost does not render the project non-additional, in that the project IRR goes up to 9.24% as against the benchmark of 14.15%. In the above background, the administration cost is accepted as reasonable and appropriate for the project activity.</p>	– Engineers (2 X 30000 X12)	720,000	– Office Manager (1 X 15000 X 12)	180,000	Office rent (20000 X 12)	240,000	Travel (5000 X 12)	60,000	Misc. Expenses including insurance	1,500,000	Total	4,500,000
– Engineers (2 X 30000 X12)	720,000													
– Office Manager (1 X 15000 X 12)	180,000													
Office rent (20000 X 12)	240,000													
Travel (5000 X 12)	60,000													
Misc. Expenses including insurance	1,500,000													
Total	4,500,000													
Escalation in admin. expenses (percent)	5.07	As the administrative expenses consists mainly of salaries, travel, office rent and other miscellaneous expense, which are all subject to inflation, the cost has been subjected to escalation as per Consumer Price Index. Accordingly, administrative expenses have been escalated at 5.07% per annum, which represents the Cumulative Annual Growth Rate of inflation (Consumer Price Index) between Oct.2008 and Sept. 2012 and the data has been sourced from the Statistical Release – Consumer Price Index, October 2009 /38/ and September 2012 /39/ ¹⁷ . Validation team checked the document and found the input parameter to be correct. Since tariff and other input parameters are also subjected to same inflation rate, consideration of inflation rate for escalating the O&M cost and warranty fee is considered correct and appropriate for the project activity												
Land lease rent (percent)	1.5	Land is leased. The lease rent is evidenced by the Deed of Lease /31/, a copy of which has been submitted by the project developer. As per the lease deed, the company has to be pay 1.5% of gross revenue. The Notarial Deed has been verified and the input parameter is found to be correct. Hence, validation team accepted this cost as correct and appropriate for the project activity.												
Social Development fee (percent)	2.0	This cost is based on the estimation by management as evidenced by the Board Note /21/ dated 24/10/2012. In August 2011, the Department of Energy abandoned the Refit scheme in												

¹⁷ Consumer Price Index in October 2008 was 102.8 and in September 2012 was 125.3 resulting in a CAGR of 5.07%. Sourced from Statistical Release, Consumer Price Index October 2009 and September 2012, <http://www.statssa.gov.za/publications/P0141/P0141October2009.pdf><http://www.statssa.gov.za/publications/P0141/P0141September2012.pdf>

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

		<p>favour of a tender mechanism. Under tender mechanism, which came into existence in August 2011¹⁸, bidders will have to propose tariff which will fall under technology dependent cap. In selecting the bidders 70% weight is given to financial aspects of the project and 30% to economic development which includes job creation, local content, ownership, management control, preferential procurement, enterprise development and <u>socio economic development</u>. CPA operator has not yet submitted the bid for the supply of electricity to the Government and hence, the social economic development cost likely to be incurred is not known either at the time of decision making or now. As stated above, no wind power project has been registered as CDM activity so far. Most of the projects under validation/request for registration were webhosted prior to the introduction of tender mechanism. Barring TWE Golden Valley Wind Power Project, none of the projects webhosted after the introduction of tender mechanism have disclosed this cost in the webhosted PDD. Therefore, it is not possible to compare or draw any conclusion on the social developer fee provided by the projects in CDM pipeline. TWE Golden Valley Wind Power Project, also located in Eastern Cape province, has reckoned this cost at 2.1% of revenue in contrast to 2% considered by the candidate project. Validation team also observed that the total removal of this cost does not render the project non-additional. Since the cost was considered at the time of decision making (conformity to guidance 6 of Annex 5, EB 62), the presently adopted tender mechanism requires the successful bidder to incur such expenditure and the cost assumed by the candidate project compares well with only other project which has disclosed this information, validation team accepted the cost as correct and appropriate.</p>
<p>Depreciation (percent)</p> <p>- I Year</p> <p>- II Year</p> <p>- III Year</p>	<p>50.00</p> <p>30.00</p> <p>20.00</p>	<p>Depreciation provided for computation of IT liability is based on the rates prescribed in the Income Tax Act, 1962 (Act 58 of 1962). The Act provides for depreciation on the assets at 50% of the cost in the first year, 30% of such cost in the second year and 20% of such cost in the third year. Validation team verified the Act and found the rates considered in financial indicator calculation to be correct.</p>
<p>Corporate Income Tax (percent)</p>	<p>28.00</p>	<p>The corporate income tax rate has been sourced from Guide for tax rates/duties/levies (12/2011 and prior years) (Issue 8), South African Revenue Service, 25/01/2012 (p.5 &6). There was no change in the corporate income tax rate for the financial year 2012-13¹⁹, i.e., the year in which investment decision was taken. Validation team verified the tax rate and found the rate to be correct.</p>

All the input parameters have been cross checked with available evidence (quotations, technical documentation), third-party or publicly available sources and with other projects (all of which are under validation or request for registration). Validation team verified the documents cited as basis and is convinced that the values are correct, appropriate and reliable. In the above background, validation team confirms that the guidance given vide paragraph 88 of VVM (Ver.01.2) /B01/ has been taken care of.

Accounting principles and Arithmetical Accuracy

¹⁸ It may be stated that both REFIT tariff and the tariff discovered through tender mechanism fall under E- policy

¹⁹ Please see <http://www.mondaq.com/x/169372/Capital+Gains+Tax/Budget+Review+2012+Budget+Highlights>

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

The input parameters are consolidated in the IRR template. Since all the cells are interlinked, validation team is convinced that the input parameters as given in the assumptions form the basis of IRR calculations and ensures arithmetical accuracy. IRR calculations have been done for 20 years. Salvage value has been provided at 5% of the value of assets in the terminal year. Since the asset is fully depreciated and the tax shield afforded by the investment has been fully accounted for in the cash inflow, the salvage value represents only potential profit from the sale of assets in the terminal year. Therefore, the salvage value conforms to guidance 4 of Annex 5, EB 62/B04-10/. In the above background, Validation Team concludes that the accounting principles have been taken care of and the validation takes care of the requirements of paragraph 110 of VVM (Ver. 01.2) /B01/.

Based on the above, the IRR of the project activity works out to 7.41% in contrast to the benchmark of 14.15%. In the above background, validation team confirms that the project is additional and not a business-as-usual scenario.

Sensitivity analysis

The Guidance on Assessment of Investment Analysis requires the robustness of the conclusion arrived at to be proved through a sensitivity analysis by varying the critical assumptions to a reasonable variation ($\pm 10\%$). Accordingly, investment cost, generation, tariff, O&M cost and administrative expenses. Though O&M cost and administrative expenses do not account for 20% of project cost/revenue, still it was considered appropriate to subject these costs also to sensitivity analysis. All the parameters have been subjected to $\pm 10\%$ variation. The project cost is based on offer letter and purchase order is yet to be issued. Hence, the possibility of cost going up is more; tariff is not certain till the bid is submitted, accepted by Department of Energy and PPA is signed; generation is based on third party estimation and hence the probability of any consistent major variation is unlikely; O&M cost and administrative costs are all subject to only northward movement as the country is already experiences $\sim 5\%$ inflation per annum. Nevertheless, all the parameters have been subjected to 10% variation on either side. A further analysis has also been conducted by considering the maximum tariff applicable to the project Results of sensitivity analysis are given in the following table:

Parameters	-10%	Baseline	+10%
Investment cost	8.46%	7.41%	6.53%
Generation	5.94%	7.41%	8.81%
Tariff	5.94%	7.41%	8.81%
O&M cost	7.70%	7.41%	7.12%
Administration cost	7.60%	7.41%	7.22%
Maximum expected tariff	12.73%		
Benchmark	14.15%		

Results reveal that the financial indicator will not equal the benchmark even when the critical parameters are subjected to reasonable variation. Even if the maximum expected tariff is applied, the IRR goes up to 12.73% only, which is less than the benchmark of 14.15%. Therefore, it is concluded that the project is additional and would continue to remain additional even under the most optimistic condition. The project will lose its additionality only if

- Investment cost goes down by 44.0%
- Tariff or power generation go up by 52.5%

As mentioned earlier, since the project cost is based on the offer letter and the purchase order is yet to be issued, any reduction in the cost is hypothetical, what with the country experiencing inflation of about 5% p.a. As regards tariff, the project may get a higher tariff, provided its bid for a higher tariff is accepted by the Department of Energy. It has already been explained that the project would continue to remain additional even if the highest tariff, which the project can bid is assumed. As regards power generation, increase in generation by 52.5% is highly unlikely as it tantamount to achieving a PLF of more than 40% which none of the projects have assumed. Project will remain additional even if the O&M cost and administration cost is completely removed, which is unrealistic. Therefore, the validation team concludes that the project is additional and will continue to remain additional. The financial analysis conforms to paragraph 110 of VVM (01.2) /B01/ and Guidance 20 and 21 of Annex 5, EB 62 /B04-10/.

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

However, during the course of validation, CAR rCPA-(B3, B4, B5, B6, B7 B8, B9, B10, B11, B12, B16 and B18) and CL rCPA-(B13, B14, B15, B17, B19 and B23) were raised with regards to additionality demonstration, and closed successfully.

Common Practice Analysis

Step 4 of Additionality Tool /B04-7/ states that unless the proposed project type has demonstrated to be 'first-of-its kind', project developer has to complement additionality tests with an analysis of the extent to which the proposed project type has already diffused in the relevant sector and region as a credibility check. The project involves the generation of power (output), using wind energy (technology) in Republic of South Africa (geographical region). As of October 2011 (the date on which the PDD was webhosted for GSC)²⁰, there were only 3 wind energy based projects operational, viz., Klipheuwel (3.16MW)²¹, Darling (5.2 MW)²² and Coega (1.8 MW)²³ wind farms. Of the 3 wind farms in operation, Klipheuwel was commissioned in 2002 and 2003; Darling was commissioned in 2008 and Coega was commissioned in 2010. Thus, there were no wind farms with an installed capacity of range within 12.5 MW to 37.5 MW ($\pm 50\%$ of the installed capacity of the candidate project) operational in South Africa. Thus, none of the projects were of equivalent size; they were all small scale in size and hence the proposed CPA is not a common practice. Presentation of common practice analysis under rCPA-DD /02/ assessed to be transparently applied in accordance with the steps(1 to 4) paragraph 47 of the additionality tool /B04-07/ .

Based on the above validation team concludes that the project fulfils the criteria laid down for Common Practice Analysis and hence accepts that proposed CPA is not a common practice in the selected geographical area, thus additional.

However, CAR rCPA-B20 was raised on common practise analysis and closed successfully during the validation process.

Conclusion

In the above background, Validation Team is confirms that the project activity conforms to the PoA, is not a business-as-usual scenario and is additional. CDM benefits, therefore, would enable the project activity to alleviate the investment barrier.

3.5 Emission Reduction

3.5.1 Parameters determined ex-ante

As per the PoA DD and g-CPA DD template, the following parameters that are determined ex-ante are:

DATA/PARAMETER	UNIT	VALUE
$EF_{grid,CM}$	tCO ₂ /MWh	0.988
$P_{i,y}$	MW	25
LF_i	Ratio	0.267

In summary, the parameters determined ex-ante has been presented correctly according to PoA DD and g-CPA DD.

²⁰ As per Annex 7, EB 69, the cut-off date is the publication of the PDD (CPA) for global stakeholder consultation or the start date of the proposed project activity, whichever is earlier. Since the real action of the project has not yet commenced, webhosting of the CPA for GSC has become the project has not commenced

²¹ http://www.eskom.co.za/content/RW_0002KliphWindfRev5-2.pdf

²² <http://www.darlingwindfarm.co.za/aboutus.htm>

²³ <http://www.coega.co.za/NewsArticle.aspx?ID=16>

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

3.5.2 Emission reduction calculation

The CPA-DD confirms to meet the procedures provided in the methodology /B02/ and PoA-DD /16/. The formulae are correctly presented for the determination of baseline emission reductions.

Being a wind energy project consideration of project emission and leakage emission as zero, is found to be inline with the applied methodology ACM0002 version 12.3.0 /B02/.

Estimation of Emission Reduction presented in the real case CPA-DD and corresponding ER spread sheet /03/ is transparent and traceable to the validation team. Estimation of emission reduction is conducted using accurate formulae and equations as stipulated in the applied methodology ACM0002/B02/ and hence found appropriate.

However CAR rCPA-A7 was raised and closed successfully.

3.6 Monitoring Plan

The monitoring plan presented in the CPA-DD /02/ complies with the requirements of the PoA-DD /16/, the applied monitoring methodology /B02/. The assessment team has verified all parameters in the monitoring plan against the requirements of the methodology and no deviations have been found.

The assessment team through document review and on site interviews with the relevant personnel has reviewed the procedures. The information provided has allowed the assessment team to confirm that the proposed monitoring plan is feasible within the project design. The relevant points of monitoring plan have been discussed with the CME and the CPA implementer. Specifically, these points include the monitoring methodology, data management, quality assurance and quality control procedures to be implemented in the context of the activity.

The parameters that are to be monitored ex-post is:

- $EG_{CPA,y}$: Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CPA in year y .

In summary, the parameter determined ex-post has been presented correctly according to requirements related to monitoring procedure and is considered in accordance with the applied methodology /B02/.

The responsibilities and institutional arrangements for data collection, reporting and archiving have been clearly provided. The information provided in the CPA-DD /02/ could be confirmed based on the interviews and also through the submitted documentary evidence namely CME management system /06/ covering all requirements as stated in section E.7.2 of PoA DD/16/. Based on the same, it can be confirmed that the CME and the CPA implementer will be able to implement the monitoring plan and the achieved emission reductions can be reported ex-post and verified.

However, during the course of validation CAR rCPA-B24 was raised and closed successfully.

3.7 Stakeholder Consultation

The local stakeholder consultation has been done at the CPA level. This is deemed appropriate in the context of the CPA of the PoA. The project owner appointed Savannah Environmental (Pty) Ltd to undertake local stakeholder consultation. The public involvement process was undertaken by Sustainable Futures ZA in terms of the NEMA EIA Regulations and CDM requirements based on the Kyoto protocol. For the LSH consultation stakeholder were informed through newspaper advertisement and public notice /27/.

The comments raised by the local stakeholder were generic in nature. The same has been assessed by reviewing the comment sheet/27/ interview with the local stakeholder and PP. In addition to this final EIA report/22/ was also assessed which clearly indicates the LSC process and procedure, which is authorised by Department of Environmental Affairs/25/. Local stakeholder have been given ample time to comment on the proposed CPA, which can be traced from the invitation mode used/27/.

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Hence based on above it can be concluded that local stake holder consultation is conducted prior to the webhosting of CPA-DD/01/ and fulfils the requirement of paragraph number 128 and 129 of VVM/B01/.

However, CAR rCPA-D1 was raised during the validation process and successfully closed.

3.8 Environmental Analysis

The Environmental Impact Assessment (EIA)/22/ of the proposed wind farm is carried out in accordance with the South African legislation by Savannah Environmental (Pty) Ltd. The Final EIA Report was submitted to the Department of Environmental Affairs for a decision in November 2010. Environmental authorisation/25/ was obtained by means of a Record of Decision (ROD) that was issued by the department on 2 September 2011 and found to be appropriate in proposed CPA context.

In RSA there is EIA governing act NEMA (National Environmental Management Act) 107 of 1998, amended in June 2010, the same was verified by the validation team.

Based on above it can be concluded that environmental analysis done is in accordance with the requirement of paragraph 132 of VVM /B01/, hence appropriate.

However, CAR rCPA-C1 was raised during the validation process and successfully closed.

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

APPENDIX A

THE VALIDATION PROTOCOL FOR CDM PROGRAMME OF ACTIVITIES

Title of CPA:

CPA 001 UNDER POA 'SOUTH AFRICAN GRID CONNECTED WIND FARM PROGRAMME'

Title of PoA to which CPA is to be included:

"SOUTH AFRICAN GRID CONNECTED WIND FARM PROGRAMME"

Report No. CCL0025/SAGCWF/15072011

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Table 1: Conformity of CDM Programme of Activities

Checklist Item	Ref.	MoV*	Validation Team Comments	Draft Concl.	Final Concl.
A. General description of CPA					
A.1. Are title, unique identification of the CPA, current version no. and date of the document completion provided?	/02/ /04/ /B01/	DR, I, CC	<p>The title of the CPA (CDM-CPA-DD) is clearly enables to identify the unique CDM programme of activities (CDM-PoA-DD).</p> <p>rCPA-A1 However, LoA is required to be submitted by the PP to verify the same.</p> <p>rCPA-A2 gCPA should indicate the date format as DD/MM/YYYY. Although rCPA indicated the version of the document i.e. version number 01.0, and date of the document under section A.2. However, date is not in DD/MM/YYYY format.</p>	rCPA-A1 rCPA-A2	OK
A.2. Does the specific CPA-DD contain a clear and transparent description of CPA?	/02/ /B04-2/	DR	<p>Generic CPA DD (gCPA) section A.2 is not sufficiently provided with the requiremens of this section inline with PoA-DD as it lacks in the information regarding sectoral scopes, type and technology or measures employed, view of PP on sustainable development by each CPA.</p> <p>Description of rCPA under section A.2 of the CPA-DD is incomplete and not transparent, as this section does not contains the following:</p> <ol style="list-style-type: none"> 1. Purpose of the CPA 2. Scenario prior to the project activity 3. how the proposed project activity reduces greenhouse gas emissions 	rCPA-A3	OK
A.3. Intity/Individual responsible for CPA					
A.3.1. Does it become evident which entity/individual is responsible for the CPA (the CPA implementer)?	/02/ /B04-2/	DR, I	It is evident from the rCPA that Windlab Developments South Africa (Pty) Ltd is the entity responsible for implementing the CPA.	OK	OK
A.3.2. Is there any document substantiating that the stated entity/individual is responsible for the implementation of the	/02/ /B04-2/	DR, I	As informed by the CME that, the Host Country approval (LoA) is yet to received, neither any other documents to substantiate the same are submitted by the PP.	rCPA-A1	OK

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

CPA?			Please refer section A.1.1 above.		
A.3.3. Is all information on the CPA implementer provided in consistency with details provided by further chapters of the CPA-DD (in particular annex 1)?	/02/ /B04-2/	DR	Under section A.3 of the rCPA-DD, the name of the entity responsible for this particular CPA (CPA 001) implementation is not consistent with Annex 1 of this rCPA; it is also not clear whether the PP is private or public entity.	rCPA-A4	OK
A.4. Technical description and project boundary of CPA					
A.4.1. Are the CPA's spatial boundaries (geographical) clearly defined, allowing the unique identification of the CPA?	/02/ /16/ /B04-2/	DR	rCPA under section A.4.1.2 provided with the information on the location of the programme (CPA) with unique identification in terms of geographical area. Which was checked and found to be correct. However, gCPA under section A.4.1.2 does not provide the provision to include the region/province and geo-coordinates (unique identification) of the CPA to be included.	rCPA-A5	OK
A.4.2. Has it been demonstrated that the CPA is within the PoA?	/02/ /04/ /B04-2/	DR	Yes, Republic Of South Africa (RSA) is indicated as the host country and inline with the CDM-PoA-DD.	OK	OK
A.4.3. Are the CPA's starting date and operational lifetime clearly defined and evidenced? Does CPA-DD provide a confirmation that the start date of the CPA is not prior to the first publication of PoA-DD for GSC?	/02/ /B04-2/ /B04-3/ /B04-9/	DR	As the PoA validation has started on 15/10/2011 and the indicated starting date of CPA is on 01/01/2013, hence, it is considered to be consistent with the PoA timeline and the requirements of the PoA procedures. During the interviews it has been observed that the project implementation has not yet 'started' , hence the project has seriously considered CDM benefits. Moreover, gCPA is not provided the requirements for the information regarding operational life time for the rCPAs to be provided e.g. lifetime of the equipments as 0 Years, 0 Months etc. Whereas, the rCPA under section A.4.2.2 provides the expected lifetime of the "wind farm" and not the technical equipments i.e. WTGs. Moreover, evidence to support the technical lifetime is to be submitted to the DOE.	rCPA-A6	OK
A.4.4. Has the crediting period been clearly defined and is the start of the crediting period deemed to be reasonable?	/02/ /B04-2/	DR	gCPA and rCPA are checked and a fixed crediting period of 10 years have been taken and found to be taken. However, please refer CL rCPA-A10 under table 2 of this report for the change in choice of type of crediting period.	rCPA-A10	OK

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

A.4.5.	Does CPA-DD provide a clear and correct estimation of emission reductions over the chosen crediting period?	/02/ /B04-2/	DR	The estimated amount of emission reduction stated in the CPA-DD is: <ul style="list-style-type: none"> Total: 233680 tCO₂e Annual Average: 233,68 tCO₂e/yr However, estimated amount of CERs under section A.4.4 is consistent with section B.5, however the emission factor applied to calculate the emission reduction under section B.5 is not consistent with combined margin emission factor as calculated in CDM-PoA-DD.	rCPA-A7	OK
A.4.6.	Is the conformation about public funding provided in the CPA?	/02/ /B04-2/	DR	Information provided on public funding at gCPA level is not sufficient. Also PP needs to submit the evidence (declaration) for Non-ODA.	rCPA-A8	OK
A.4.7.	Has the CPA-DD confirm that the proposed CPA is not a debundled component?	/02/		The proposed PoA is a large scale, hence this checklist question is not applicable.	NA	OK
A.4.8.	Does the CPA-DD provide the confirmation that the proposed CPA is neither registered as a CDM project activity nor is a part of any registered PoA?	/02/ /B04-2/ /B04-3/		rCPA states under section A.4.6 that CP001 is not registered as an individual CDM project activity or as a part of another PoA. However the same is required to be appropriately substantiated by the CME and CPA implementer.	rCPA-A9	OK
B. Eligibility of CPA and estimation of emission reductions						
B.1. Eligibility criteria for CDM Programme Activities						
<i>It is assessed whether the CPA complies with the criteria for inclusion in the registered programme of activities.</i>						
B.1.1.	Are title and reference of the PoA to which the CPA is intended to be included provided correctly?	/02/ /B04-2/	DR	Title of the CPA is provided in consistency with the CDM-PoA-DD. However, section B.1 of the gCPA is not complete with regards to the reference of the registered PoA, which will be followed by subsequent CPA at the time of its inclusion to the PoA.	rCPA-B1	OK
B.1.2.	Has it been sufficiently justified that the CPA complies with the PoA eligibility criteria?	/02/ /B04-2/ /B04-5/	DR	Since the PoA-DD itself does not provide eligibility criteria for the inclusion for CPA inclusion into the PoA in accordance with the latest requirements stipulated as per §14 Annex 3 of EB 65 and also the gCPA and rCPA followed the same, Hence PoA-A9 in is raised in table 2 of PoA-DD.	rCPA-B2	OK

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

			Please also refer section A.4.2.10 of CDM-PoA-DD of this report above.		
B.1.3. Does the CPA-DD includes justification on the applicability of the applied methodology as described in the PoA-DD level?	/02/ /B04-2/ /B04-5/	DR	Please refer rCPA-B2 in section B.1.2. above.	rCPA-B2	OK
B.2. Additionality <i>It is assessed whether the CPA complies with the eligibility criteria for demonstrating additionality of a CPA under the registered programme of activities.</i>					
B.2.1. Identification of alternatives Step 1					
B.2.1.1. Does the list of alternatives contain the status-quo situation, the project not undertaken as a CDM project as well as all other viable means of supplying the outputs or services that are to be supplied by the proposed CDM project activity?	/02/ /B02/ /B04-2/ /B04-7/	DR	Under section B.3 of the webhosted rCPA-DD, PP has demonstrated 2 alternatives:- 1. The proposed CPA is undertaken without CDM revenue ; 2. The proposed CPA is not undertaken Both the alternatives selected were found appropriate and in accordance to the applied methodology ACM0002.	OK	OK
B.2.1.2. Have all realistic alternatives been identified to the project?	/02/ /B02/ /B04-2/ /B04-7/	DR	Yes, all the realistic alternatives have been identified by the PP.	OK	OK
B.2.1.3. Do all identified alternatives comply with enforced legislations?	/02/ /B02/ /B04-2/ /B04-7/	DR	Yes, identified alternatives comply with the applicable mandatory legal and regulatory requirements as the implementation of project activity is a voluntary initiative, is not mandated by any legal requirement and there is no legal requirement on the choice of a particular technology or restriction on the use of wind energy. Moreover, the approved methodology ACM0002 also prescribes the baseline. Where the approved methodology prescribes baseline, discussion on alternatives is not necessary.	OK	OK
B.2.2. Investment analysis Step 2					
B.2.2.1. Is an appropriate analysis method chosen for the project (simple cost analysis, investment comparison analysis or benchmark analysis)?	/02/ /B01/ /B02/ /B04-2/ /B04-7/ B04-10/	DR	rCPA-B3 The CPA does not explain the appropriateness of the financial indicator selected to the project type and decision making context	rCPA-B3	OK
B.2.2.2. Is a clear, viewable and unprotected	/02/	DR	rCPA-B4	rCPA-B4	OK

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

<p>Excel spreadsheet available for the investment calculation?</p>	<p>/B02/ /B04-2/ /B04-7/ B04-10/</p>		<p>The values given in the table (p.10) differ from the worksheet.</p> <p>rCPA-B5 The IRR given in the rCPA is at variance with the figures given in worksheet.</p> <p>rCPA-B6 Worksheet gives the additionality demonstration for a project of 10 MW installed capacity, which cannot fall under this PoA-DD.</p> <p>rCPA-B7 Though sensitivity analysis forms part of the worksheet, it does not have any provision to check the correctness of the results.</p> <p>rCPA-B8 Worksheets contain so many redundant sheets like Spreadsheet info, exchange rate and MWh and CER (which is given separately as ER worksheet).</p>	<p>†CPA-B5 †CPA-B6 †CPA-B7 †CPA-B8</p>	
<p>B.2.2.3. Does the period chosen for the investment analysis reflect the technical lifetime of the project activity or in case a shorter period is chosen, is the fair value of the project activity's assets at the end of the investment analysis period (as a cash inflow) included?</p>	<p>/02/ /B02/ /B04-2/ /B04-7/ B04-10/</p>	<p>DR</p>	<p>rCPA-B9 The technical life time of the project considered does not conform to Annex 15, EB 50.</p>	<p>†CPA-B9</p>	<p>OK</p>
<p>B.2.2.4. Is the fair value calculated in accordance with local accounting regulations (where available) or international best practice?</p>	<p>/02/ /B02/ /B04-2/ /B04-7/ B04-10/</p>	<p>DR</p>	<p>rCPA-B10 The tariff and the argument relating to tariff is not acceptable.</p> <p>rCPA-B11 PLF given does not conform to Annex 11, EB 48.</p> <p>rCPA-B12 Additionality has been demonstrated using REFIT recommended input values. Validation is not meant to ascertain the additionality of a hypothetical project, but a real project. The input parameters should be sourced either</p>	<p>†CPA-B10 †CPA-B11 †CPA-B12</p>	<p>OK</p>

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

			from offer letters or FSR conforming to paragraph 113 of VVM. At the maximum REFIT values can serve as L2 or L3 information.		
B.2.2.5. Were the input values used in the investment analysis valid and applicable at the time of the investment decision?	/02/ /B02/ /B04-2/ /B04-7/ B04-10/	DR	All input parameters are required to be substantiated by appropriate documentary evidences and appropriate references to the DOE for the assessment. The plant load factor taken, as 27% is not in accordance with the EB 48 Annex 11 and also latest version of tool for the demonstration and assessment of additionality has not been applied. Moreover, Complete assessment of additionality is subject to acceptance on closure of CARs/CLs PoA-E1 and PoA-E2, raised on CDM-POA-DD.	rCPA-B13	OK
B.2.2.6. In case of project IRR: Are the costs of financing expenditures (loan repayments and interests) excluded from the calculation of project IRR?	/02/ /B02/ /B04-2/ /B04-7/ B04-10/	DR	rCPA-B14 Please clarify the reasons for giving the IRR calculation with ZAR and USD when both of them give the same results. rCPA-B15 IRR has been computed for only 'value added'. Clarify how this is considered appropriate for the project type and decision making context.	rCPA-B14 rCPA-B15	OK
B.2.2.7. In case of equity IRR: Is the part of the investment costs, which is financed by equity considered as net cash outflow and is the part financed by debt excluded in net cash outflow?	/02/	DR	Not Applicable	NA	OK
B.2.2.8. Is the type of benchmark chosen appropriate for the type of IRR calculated (e.g. local commercial lending rates or weighted average costs of capital for project IRR; required/expected returns on equity for equity IRR)?	/02/ /B02/ /B04-2/ /B04-7/ B04-10/	DR	rCPA-B16 In the CPA, the explanation given for the benchmark and the calculations used to convert the commercial lending rate are neither correct nor acceptable. rCPA-B17 Clarify whether the methodology adopted for determining the benchmark has been recommended by the methodology guidance or any standard text book recommends such approach.	rCPA-B16 rCPA-B17	OK
B.2.2.9. Is the benchmark value suitable for the project activity and is it reasonable to assume that no investment would be made at a rate of a lower return than	/02/ /B02/ /B04-2/ /B04-7/	DR	Please refer rCPA-B16 and rCPA-B17 in section B.2.2.12 above	rCPA-B16 & rCPA-B17	OK

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

the benchmark?	B04-10/				
B.2.2.10. Does the PDD and related spreadsheets contain a sensitivity analysis and does the same contain variation of parameters which may vary throughout the project lifetime	/02/ /B02/ /B04-2/ /B04-7/ B04-10/	DR	Findings related to spread-sheet has been accumulated against one query of this checklist table. Refer rCPA-B4 to rCPA-B8 in section B.2.2.3 above	rCPA-B4 to rCPA-B8	OK
B.2.2.11. Were only variables that constitute more than 20% of either total project costs or total project revenues subjected to reasonable variation?	/02/ /B02/ /B04-2/ /B04-7/ B04-10/	DR	Sensitivity analysis section does not explain the conformity of the parameters selected or the variations to which they have been subjected to guidance 20 and 21 of Annex 5, EB 62.	rCPA-B18	OK
B.2.2.12. Is the range of variation reasonable in the specific context of the project activity, taking into consideration historic trends in the business sector?	/02/ /B02/ /B04-2/ /B04-7/ B04-10/	DR	When the sensitivity analysis results of $\pm 10\%$ is given, please clarify what additional value addition is made by $\pm 5\%$ variation.	rCPA-B19	OK
B.2.3. Barrier analysis Step 3 or SSC additionality assessment					
B.2.3.1. Are there any barriers given which have a clear and direct impact on the financial returns of the project?	/02/		Barrier analysis has not been selected for the demonstration of the additionality. Hence this query of the check-list is not applicable.	NA	OK
B.2.3.2. Are the barriers described risk related (e.g technology failure, other performance related risks) or has the unavailability of sources of finance for the proejct been described and adequately substantiated?	/02/		Not Applicable	NA	OK
B.2.3.3. How is it justified and evidenced that the barriers given in the CPA-DD are real?	/02/		Not Applicable	NA	OK
B.2.3.4. How is it justified that one or a set of real barriers prevent(s) the implementation of the project activity and do not prevent the implementation of at least one of the alternatives?	/02/		Not Applicable	NA	OK
B.2.4. Common practice analysis Step 4					
B.2.4.1. Is the defined region for the common practice analysis appropriate for the	/02/ /B01/	DR	Common practice analysis does not conform to step 4 of Additionality Tool.	rCPA-B20	OK

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

technology/industry type?	/B04-2/ /B07-7/				
B.2.4.2. To what extent similar projects have been undertaken in the relevant region?	/02/ /B01/ /B04-2/ /B07-7/	DR	Please refer rCPA-B21 in section B.2.4.1. above	rCPA-B20	OK
B.2.4.3. In case similar projects are identified, are there any key differences between the proposed project and existing or ongoing projects and what kind of differences are observed?	/02/ /B01/ /B04-2/ /B07-7/	DR	Please refer rCPA-B21 in section B.2.4.1. above	rCPA-B20	OK
B.2.4.4. Has the detailed information on demonstration of additionality and determination of baselines, including related calculations, either integrated in the PoA-DD annex 3 or submitted as appendices to PoA-DD?	/02/ /B01/ /B04-2/ /B07-7/	DR	Please refer rCPA-B21 in section B.2.4.1. above	rCPA-B20	OK
B.2.4.5. Does the CPA description involves explanation according to the requirements laid by EB 62, Annex 13 (Guidelines on the demonstration and assessment of prior consideration of the CDM).	/02/ /B01/ /B04-2/ /B07-7/	DR	CPA does not explain the conformity to Annex 13, EB 62.	rCPA-B21	OK
B.3. Calculation of GHG Emission Reductions – Baseline emissions <i>It is assessed whether the baseline emissions are stated according to the methodology and the PoA-DD and whether the argumentation for the choice of default factors and values – where applicable – is justified.</i>					
B.3.1. Is the calculation of baseline emissions of the CPA in accordance with the procedure described in the PoA-DD and applies methodology?	/02/ /B02/ /B03/ /B04-2/	DR	gCPA does not appropriately provide a complete list of ex-ante parameters fixed at validation. Further it is also not clear whether the combined margin emission factor is fixed once at PoA level or will be monitored. The list of ex-ante parameters presented under section B.5.1 of gCPA and rCPA is not in line with ex-ante parameters presented under CDM-PoA-DD. Moreover, CARs PoA-E3 and PoA-E4 are raised under PoA-DD.	rCPA-B22	OK
B.3.2. Are CPA-specific conservative assumptions used when calculating the baseline emissions?	/02/ /B02/ /B03/ /B04-2/	DR	Please refer rCPA-B22 in section B.3.1. above rCPA-B23 Moreover, Additional information provided in the Annex 3 is	rCPA-B22 rCPA-B23	OK

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

			not clear whether it is baseline information or regarding the demonstration of additionality		
B.4. Calculation of GHG Emission Reductions – Leakage <i>It is assessed whether leakage emissions are stated according to the methodology and the PoA-DD and whether the argumentation for the choice of default factors and values – where applicable – is justified.</i>					
B.4.1. Is the calculation of leakage emissions of the CPA in accordance with the procedure described in the PoA-DD and applied methodology?	/02/ /B02/ /B03/ /B04-2/	DR	As in section B.5.2. of rCPA-DD, PP has referred explanation as per section E.6 of the PoA-DD. The closure of this query depends upon the closure of CARs PoA-E3 and PoA-E4 are raised under PoA-DD. Moreover, please refer rCPA-B22 in section B.3.1. above.	rCPA-B22	OK
B.4.2. Are CPA-specific conservative assumptions used when calculating the leakage emissions?	/02/ /B02/ /B03/ /B04-2/	DR	Please refer rCPA-B22 in section B.3.1. above.	rCPA-B22	OK
B.5. Emission Reductions <i>The emission reductions shall be real, measurable and give long-term benefits related to the mitigation of climate change.</i>					
B.5.1. Has it been demonstrated that the total emission reductions of the CPA of activities will be real, measurable and give long-term benefits related to the mitigation of climate change?	/02/ /B02/ /B03/ /B04-2/	DR	Please refer rCPA-B22 in section B.3.1. above.	rCPA-B22	OK
B.6. Monitoring Methodology and description of monitoring plan <i>It is assessed whether the CPA applies an appropriate monitoring methodology.</i>					
B.6.1. Is the monitoring plan for the CPA documented according to the approved methodology, in accordance with the programme of activities and in a complete and transparent manner?	/02/ /B02/ /B04-2/	DR	Operational and management structure has not been clearly described in the section B.6.1 of CPA-DD and hence it cannot be ascertained whether it is in compliance with the envisioned situation. Pending closure of PoA-A10, PoA-A11, PoA-E6 and PoA-E7 under PoA-DD.	rCPA-B24	OK
B.7. Data and Parameters Available at Validation <i>It is established whether appropriate values were selected for parameters determined ex-ante.</i>					
B.7.1. Does the applied methodology allow determining the selected values ex-ante and the same is appropriately provided in the CPA-DD?	/02/ /B02/ /B04-2/	DR	Please refer rCPA-B24 in section B.6.1. above.	rCPA-B24	OK
B.8. Ex-Post Monitoring <i>It is established whether the monitoring plan provides for reliable and complete emission data over time.</i>					
B.8.1. Does the monitoring plan provide for the collection and archiving of all relevant	/02/ /B02/	DR	Please refer rCPA-B24 in section B.6.1. above.	rCPA-B24	OK

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

data necessary for estimation or measuring the greenhouse gas emissions within the CPA boundary during the crediting period?	/B04-2/				
B.8.2. Is the measurement accuracy addressed and deemed appropriate? Are procedures in place on how to deal with erroneous measurements?	/02/ /B02/ /B04-2/	DR	Please refer rCPA-B24 in section B.6.1. above.	rCPA-B24	OK
B.8.3. Is the measurement <i>interval</i> identified and deemed appropriate?	/02/ /B02/ /B04-2/	DR	Please refer rCPA-B24 in section B.6.1. above.	rCPA-B24	OK
B.8.4. Are procedures identified for <i>maintenance</i> of monitoring equipment and installations? Are the calibration intervals being observed?	/02/ /B02/ /B04-2/	DR	Please refer rCPA-B24 in section B.6.1. above.	rCPA-B24	OK
B.9. CPA Management Planning <i>It is checked that programme implementation is properly prepared for and that critical arrangements are addressed.</i>					
B.9.1. Is the authority and responsibility of overall CPA management clearly described?	/02/ /B04-2/ /B04-5/	/DR	Please refer rCPA-B24 in section B.6.1. above.	rCPA-B24	OK
C. Environmental impacts					
C.1. Does the CPA-DD provide information on the environmental analysis whether the analysis is carried out at PoA or CPA level in accordance with CDM M&P and PoA-DD and CPA-DD-T?	/02/ /B04-2/	DR	Section C.3 of the rCPA-DD mentions that details have been mentioned in the PoA-DD. This is not acceptable by the DOE. As, the EIA is being conducted at the CPA level, PP has to provide the detailed discussion about the host Party laws/regulations in section C.3 of the rCPA-DD. Moreover PP has not discussed about the trans-boundary impacts in section C.2 of the rCPA-DD. PP has provided the EIA report, however, it is not evident that the report is approved by the concerned department of the host country.	rCPA-C1	OK
D. Stakeholder's comments					
D.1. Does the CPA-DD provide information that how comments by local stakeholders were invited. Has the summary of comments received are documented and how due account is being taken as applicable?	/02/ /B02/ /B04-2/	DR	The process of identifying and inviting the stakeholders as well as comment received is not detailed in a transparent manner in the CPA-DD. Section D.2 of CPA-DD is not complete with regards to the following points: 1. Date of advertisement for local stakeholder consultation	rCPA-D1	OK

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

			<p>invitation as well as meeting with the supporting evidences.</p> <ol style="list-style-type: none"> 2. Substantiate with evidences that a reasonable time for submission of comments was provided. 3. How the comments were invited, compiled for LSC in an open and transparent manner. 4. Provide a summary of comments received. 5. How due account was taken of any comments received. 		
D.2. Does CPA-DD provide information whether stakeholder consultation process done/will be done on PoA level or CPA level?	/02/ /B02/ /B04-2/	DR	Please refer rCPA-D1 in section D.1 above.	rCPA-D1	OK
D.3. Have all relevant stakeholders been consulted in order to get their views on the proposed CPA?	/02/ /B02/ /B04-2/	DR	Please refer rCPA-D1 in section D.1 above.	rCPA-D1	OK
D.4. Have mode of invitation of comments by local stakeholders been appropriately used, and sufficient time in order to receive local stakeholder's comments is given?	/02/ /B02/ /B04-2/	DR	Please refer rCPA-D1 in section D.1 above.	rCPA-D1	OK

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Table 2: Resolution of Corrective Action and Clarification Requests

The findings of validation process for rCPA-DD are summarized in the tables below.

Finding	rCPA-A1
Classification	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding (Validators)	Letter of Approval (LoA) from the host country (RSA) has not been provided to DOE for Validation.
Corrective Action #1 (PP shall write a detailed and clear corrective action as per finding)	The Letter of Approval (LoA) has been received and will be sent to the DOE.
DOE Assessment #1 (validators)	Letter of Approval from the host country DNA have been received. It mentions the title of the PoA "South African Grid Connected Wind Farm Programme", dated: 27/08/2012. Title of the project activity has been cross checked from the webhosted PoA-DD, which is found to be correct. Moreover, the official link of DNA (http://www.energy.gov.za/files/esources/kyoto/2012/CDM_Projects_Portfolio_19_June%202012.pdf) has been cross checked, and it has been found that title of the PoA for the said project is "South African Grid Connected Wind Farm PoA". PP is required to provide the justification for the same. CAR is Open.
Corrective Action # 2	Refer to the CCL correspondence with the DNA of the RSA done by Phiwe Mgubela. The DNA sent a confirmatory email dated 18/09/2012 on the authenticity of the LoAs for BWC's projects. Also check the file named <i>CPA-A1CAR 1-LoAs_Blue World Carbon Asset Management (Pty) Ltd.pdf</i>
DOE Assessment # 2	The email has been cross checked by the DOE, and found that email dated 18/09/2012 does not contain the name of project "South African Grid Connected Wind Farm Programme". Hence, DOE by themselves contacted DNA of RSA and confirmed if the released LoA for the same project titled is authentic or not. Then the DNA confirmed the authenticity of the released LoA titled "South African Grid Connected Wind Farm Programme" through an email reply dated 22/11/2012. It fulfils the requirement. CAR is closed.
Conclusion Tick the appropriate checkbox	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	rCPA-A2
Classification	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding (Validators)	Generic CPA DD (gCPA) should indicate the date format as DD/MM/YYYY under section A.1. Date of the completion of rCPA is also not provided in the required format i.e. DD/MM/YYYY
Corrective Action #1 (PP shall write a detailed and clear corrective action as per finding)	The necessary changes were introduced to the gCPA and rCPA. The date format was changed to the standard date format DD/MM/YYYY in section A.1 and A.2.
DOE Assessment #1 (validators)	The appropriate correction has been done in section A.1 and A.2 of the revised CPA-DD. CAR is closed.
Conclusion Tick the appropriate checkbox	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Finding	rCPA-A3
Classification	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	<p>gCPA section A.2 is not sufficiently provided with the requirements of this section inline with PoA-DD, as it lacks in the information regarding sectoral scopes, type and technology or measures employed, view of PP on sustainable development by each CPA.</p> <p>Description of rCPA under section A.2 of the CPA-DD is incomplete and not transparent, with regards to the following:</p> <ol style="list-style-type: none"> 1) Purpose of the CPA 2) Scenario prior to the project activity 3) how the proposed project activity reduces greenhouse gas emissions.
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	<p>The necessary changes were introduced to the gCPA and rCPA. Both documents were amended to include the definition: "This CPA falls under sectorial scope: Energy industries (renewable-/ non renewable sources); Type: Renewable energy; and category: Electricity generation and supply." in section A.2 and A.4.</p> <p>In the gCPA (refer to Section A.2 and Section A.4)</p> <p>The requirements for section A.2 were altered to include the following:</p> <ol style="list-style-type: none"> 1. The purpose of the CPA 2. 'Provide a description of the CPA and activities under it according to the following criteria: <ul style="list-style-type: none"> • Capacities of activities under the CPA and total CPA capacity; • Technology or measures to be employed; • Information on the Power Purchase Agreement which the CPA developers are going to sign (Government PPA or Private PPA); • Location of the activities under the CPA; • Names of the CPA developers; • Implementation schedule of the activities (in date format DD/MM/YYYY); • A description of the scenario prior to the CPA and how the CPA reduces greenhouse gas emissions; and • View of the CPA developers on the sustainable development; as well as • Other relevant information (if required).' <p>The requirement in section A.4 were altered to include the following:</p> <ol style="list-style-type: none"> 1. 'Brief description of the CPA, type of technology, measures, expected technology suppliers (if possible)' 2. The present CPA generates 'Capacity of CPA' MW and annually produces 'Net electricity production' MWh of electricity. The generated renewable electricity is then distributed to the national grid of the RSA. <p>In the rCPA(refer to Section A.2 and A.4)</p> <p>All the criteria from the gCPA, as amended according to CAR 3 CPA, are addressed in full in the rCPA.</p>

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Finding	rCPA-A3
DOE Assessment #1 (validators)	<p>Following consolidated findings in section A.2 of the rCPA-D has been raised:-</p> <ol style="list-style-type: none"> 1. Capacity of the proposed CPA do not confirms the decision of the board of CME/Implementor and every time changes in the project design from 10 MW to 43 MW to 25 MW does not clarifies the firmness in the decision making for the CPA. 2. The description says that from 01/01/2013 construction is expected to commence, whereas section A.4.2.1 mentions the expected EPC contract date of 01/01/2013. PP is required to justify whether on the same day of contract signing all the civil work will start on the same day. 3. Footnote number 4 mentions only information; however PP is required to make this information evident and traceable by providing the supporting document or any weblink. 4. Footnote number 3 does not provide the exact location (page number, paragraph number) in the document provided from where the evidence can be traced. 5. PP is required to elaborate all the sustainable development that is mentioned in the rCPA-DD. How the proposed CPA will help in sustainable development is not mentioned, PP is required to mention the same and the data provided for the employment is required to be made evident to the DOE. <p>CAR is Open.</p>
Corrective Action #2	<ol style="list-style-type: none"> 1. Refer to the BD dated 24/10/2012. The project capacity is 25MW. Check the file named <i>BD_Windlab_CPA001</i> 2. The rCPA-DD was modified; 01/01/2013 is specified as the expected EPC contract date through the rCPA-DD. 3. Footnote 4 refers to CDM-CPA-DD, Section A.2, where footnote 2 with the reference is provided. The same reference was inserted into rCPA-DD. 4. Footnote 3 was modified, the exact location was inserted. 5. The sustainable development that is mentioned in the rCPA-DD was elaborated. Refer to the file named <i>rCPA-A3CAR 3 - 5. Declaration.pdf</i> for employment.
DOE Assessment #2	<ol style="list-style-type: none"> 1. The referred document "BD_Windlab_CPA001" is dated 24/10/2012, which cannot accepted as the date of the document is much after the publication of rCPA-DD on the UNFCCC website for global stakeholder consultation. CAR point is Open. 2. The corrective action is taken appropriately, description in section A.2 of the rCPA-DD now mentions 01/01/2013 as the EPC contract date. CAR point is closed. 3. Corrective action #2 mentioned for the point 3 above is not understandable, PP is required to make it clear what PP wants to say against the assessment. CAR point is Open 4. Corrective action was found appropriate. CAR point is closed 5. The corrective action was found evident and the letter named as "rCPA-A3CAR 3 - 5. Declaration" is submitted to the DOE. CAR point is closed

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Finding	rCPA-A3
Corrective Action #3	<p>1. The investment decision to go ahead with CPA001 was done based on the information available in public domain and no offer letter was obtained at the time of preparation of the CPA and webhosting the same for global stakeholders' comments. During the validation, DOE has observed that the information available in public domain can at best be used to demonstrate the appropriateness of the costs considered and not as a primary information as the validation is for the candidate project. Therefore, it was decided to approach the wind mill suppliers and get the offer letters. As against an installed capacity of 10 MW envisaged in the web hosted CPA, it was decided to scale up the capacity to 25 MW for the first project and offer was sought from Goldwind Africa Pty Ltd. Goldwind Africa has since submitted the offer letter for 10 X 2.5 MW Wind Generators for the Brakfontein project. The offer is restricted to turbine, transportation and installation costs only. It does not include balance of plant (BOP). The company has prepared a cost estimate for the Bop, viz., civil works (like preparation of hard stand, improving existing roads, construction of new roads, ramped crossings, site building and foundation), net work and substation works (like switch gear, internal reticulation, on-site collector point, 66 kv line, ESKOM connection) and engineering and project management expenses. On 24/10/2012 Board discussed the offer letter and BOP prepared for CPA001 and finally decided to go ahead with 25 MW wind farm. Refer to file named "Board Note.pdf" for clarification.</p> <p>3. The footnote was corrected. Please refer to the revised CPA-DD</p>
DOE Assessment #3	<p>1. The supporting board notes provided make it evident that PP has decided to go ahead with 25 MW installation. CAR point is closed.</p> <p>3. Footnote is now corrected. CAR Point is closed.</p>
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	rCPA-A4
Classification	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	Under section A.3 of the rCPA-DD, the name of the entity responsible for this particular CPA (CPA 001) implementation is not consistent with Annex 1 of this rCPA; it is also not clear whether the PP is private or public entity.
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	<p>The necessary changes were introduced to the gCPA and rCPA.</p> <p>In the rCPA (Section A.3 and Annex 1)</p> <ul style="list-style-type: none"> The full stop was removed after the entity name in Annex 1. The entity name is consistent throughout the document." Windlab Developments South Africa (Pty) Ltd" In section A.3 it is stated that the entity is a private entity. The entity is also briefly described. <p>In the gCPA (Section A.3)</p> <p>Section A.3 of the gCPA was changed to specify whether the "entity/individual responsible for an activity under the CPA" is a private or public entity. Also a brief description of the entities is required.</p>

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Finding	rCPA-A4
DOE Assessment #1 <i>(validators)</i>	In section A.3 of the rCPA-DD, PP has mentioned that "Windlab Developments South Africa (Pty) Ltd" is a private entity. However all the information as per CDM-CPA-DD form version 01 has not been provided. However following information is not clear from the description:- Who is the CPA implementer is ambiguous. Whether CPA implementer is the project participant of the PoA. CAR is Open
Corrective Action #2	Section A.3 of the rCPA-DD was modified. It was stated there: "Windlab Developments South Africa (Pty) Ltd (Private entity) is an entity responsible for CPA implementation (Windlab Developments South Africa (Pty) Ltd is not a project participant of the present PoA)." "The Coordinating and Managing Entity (CME) of this programme is Blue World Carbon Asset Management (Pty) Ltd (BWC). BWC will act as a carbon consultant to develop all necessary CDM documentation, facilitate CPA inclusion, monitor the present CPA, and sell CERs in the international market. BWC receives a fee for their services."
DOE Assessment #2	Section A.3 of the rCPA-DD has been appropriately provided with the required information. CAR is Closed
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	rCPA-A5
Classification	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	Real case CPA (rCPA) under section A.4.1.2 provided with the information on the location of the programme (CPA) with unique identification in terms of geographical area. Which was checked and found to be correct. However, gCPA under section A.4.1.2 does not provide the provision to include the region/province and geo-coordinates (unique identification) of the CPA to be included.
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	The necessary changes were introduced to the gCPA. In the gCPA (Section A.4.1.2) Section A.4.1.2 was amended, and now provides a provision to include the region/province and GPS-coordinates of the location.
DOE Assessment #1 <i>(validators)</i>	<p>Following findings have been observed under section A.4 of the rCPA-DD:-</p> <ol style="list-style-type: none"> No technical description for the proposed project activity has been provided. PP is not confirming about the supplier of the wind turbines, as a result this conflict with the CDM requirement of real action for the CDM. <p>In section A.4. 1 of the rCPA-DD, PP has mentioned one coordinate, whereas the description shows that 10 WTGs of 2.5 MW each will be commissioned at the site. PP is required to provide the geo-coordinates for each machine, and should provide the supporting/evidence for the same.</p> <p>Moreover PP is required to provide the evidence for all the characteristics and values being used in the table specified in section A.4.1. of the rCPA-DD.</p> <p>CAR is Open</p>

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Finding	rCPA-A5
Corrective Action # 2	<p>The Section A.4 was modified; the specification of applied wind turbines was given. Refer to file named <i>rCPA-A5 CAR 5 - Goldwind 2.5MW Wind Turbine Brochure.pdf</i>.</p> <p>The GPS coordinates of wind turbines were provided. Refer to file (from last submission) named <i>2. (CPA) Phomph, Brakfontein Wind Farm, Wind and Energy Model Validation.pdf</i>.</p> <p>The evidences for all the characteristics and values being used in the table specified in section A.4.1 of the rCPA-DD were provided. Refer to file (from last submission) named <i>12. (CPA) Goldwind, Brakfontein Wind Farm, Supply & Install Proposal.pdf</i> and <i>3. (CPA) Implementation schedule + prove of government PPA.pdf</i></p>
DOE Assessment # 2	<p>Under section A.4 of the rCPA-DD, following are the observations:-</p> <ol style="list-style-type: none"> 1. The technical description added for the proposed project activity is not found complete as per the supporting document provided "rCPA-A5 CAR 5 - Goldwind 2.5MW Wind Turbine Brochure". CAR point is Open 2. As the technical description is added and no EPC contract is yet signed, PP is required to confirm about the supplier of the wind turbines. CAR Point is Open 3. Section A.4.1 of the rCPA-DD is now provided with the geo-coordinates, however PP is required to mention all the geo-coordinates in the degree, minutes and second format. CAR point is Open
Corrective Action # 3	<ol style="list-style-type: none"> 1. The technical description was modified as per the supporting document. Please refer to the revised CPA-DD 2. Refer to file named "<i>Windlab Declaration for Technology used.pdf</i>" where the CPA developer confirmed that Goldwind's wind turbine generators GW109/2500 type will be used for the project 3. The GPS coordinates were specified as per supporting document. No changes are required.
DOE Assessment # 3	<ol style="list-style-type: none"> 1. Technical description has been appropriately added now in the revised rCPA-DD. CAR point is closed. 2. Declaration form Windlab is found appropriate. CAR point is closed 3. Supporting document for PLF estimation has been conducted by third party, and mentions the coordinates of the proposed project site, which is acceptable. CAR point is closed
<p>Conclusion</p> <p><i>Tick the appropriate checkbox</i></p>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	rCPA-A6
Classification	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	<p>gCPA is not provided the requirements for the information regarding operational life time for the rCPAs to be provided e.g. lifetime of the equipments as 0 Years, 0 Months etc.</p> <p>Whereas, the rCPA under section A.4.2.2 provides the expected lifetime of the "wind farm" and not the technical equipments i.e. WTGs. Moreover, evidence to support the technical lifetime is to be submitted to the DOE.</p>

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Finding	rCPA-A6
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	<p>The necessary changes were introduced to the gCPA, rCPA, and PoA-DD.</p> <p>In the rCPA (Section A.4.2.2) Evidence to support the technical lifetime is included as a reference in the rCPA.</p> <p>In the gCPA (Section A.4.2.2) The gCPA, section A.4.2.2 was amended and now requires the following: 'CPA technical lifetime in format (years, months) with reference'</p> <p>In the PoA-DD (Section B.2 and Section E.5.1) In section B.2 the lifetime of the PoA is stated to be 28 years (0 months). In Table E.5-1 (Section E.5.1) evidence is supplied to support the commercial lifetime of the wind farm.</p>
DOE Assessment #1 <i>(validators)</i>	<p>Evidence to support the technical life time for the WTGs of Goldwind (type: GW109/2500) is provided by the PP. As PP is not confirmed with the supplier of WTGs as stated in section A.4 of the rCPA-DD, hence this evidence cannot be accepted by the DOE.</p> <p>Table E.5-1 (Section E.5.1) was not found in the rCPA-DD. Corrective action is required by the PP for the same.</p> <p>CAR is Open.</p>
Corrective Action #2	<p>The letter to support technical lifetime for WTGs was provided by GW109/2500 manufacturer (Goldwind). Refer to file named <i>rCPA-A6 CAR 6 - Blue World Carbon Mail - Goldwind letter.pdf</i></p> <p>Table E.5-1 (Section E.5.1) of the PoA-DD is given in Section B.3 of the rCPA-DD as Table B.3-1.</p>
DOE Assessment #2	<p>The description in section A.4 still mentions that the expected supplier of the wind turbines is Goldwind, which do not confirms with the supplier.</p> <p>Moreover the referred document titled "<i>rCPA-A6 CAR 6 - Blue World Carbon Mail - Goldwind letter.pdf</i>" is an email letter, which cannot be accepted as the supporting evidence for the technical lifetime of the proposed project activity. As it is not in conformity with EB 50, Annex 15.</p> <p>CAR is Open</p>
Corrective Action #3	<p>Refer to file named "<i>Windlab Declaration for Technology used.pdf</i>" where the CPA developer confirmed that Goldwind's wind turbine generators GW109/2500 type will be used for the project.</p> <p>China General Certification, Statement of Compliance for the Design Assessment of the Wind Turbine GW109/2500 was used to determine the technical lifetime of the equipment, which is in conformity with Annex 15, EB 50. Refer to file named "<i>Annexure 3.pdf</i>".</p>
DOE Assessment #3	<p>The referred document for the technology implication is acceptable.</p> <p>The referred document in support of the technical life of the WTG is found inline with the requirement of EB50, Annex 15. CAR is closed</p>
Conclusion <i>Tick the appropriate checkbox</i>	<p><input type="checkbox"/> To be checked during the first periodic verification</p> <p><input type="checkbox"/> Outstanding finding (not closed)</p> <p><input checked="" type="checkbox"/> The finding is closed</p>

Finding	rCPA-A7
Classification	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	<p>Estimated amount of CERs under section A.4.4 of rCPA is inconsistent with section B.5, however the emission factor applied to calculate the emission reduction under section B.5 is not consistent with combined margin emission factor as calculated in CDM-PoA-DD.</p>

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Finding	rCPA-A7
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	The necessary changes were introduced to the rCPA. In the rCPA (Section B.5.2) A typographical error was made in section B.5.2 where the calculation of ER _y is shown. The amount of ER _y was calculated correctly. The correct value of the emission factor (0.988 tCO ₂ /MWh) was inserted.
DOE Assessment #1 <i>(validators)</i>	CER calculation is dependent upon the capacity of the proposed project. The webhosted rCPA-DD mentions capacity upto 10 MW, whereas currently PP has considered the 25 MW capacity. As all the decisions taken by the board are well recorded and maintained in usual business scenario, PP is required to provide the proof of board meeting that would have taken place before the webhosting of the rCPA, in which the decision to under this project with CDM was decided. CAR is open.
Corrective Action #2	Refer to the BD dated 24/10/2012. The project capacity is 25MW. Check the file named <i>BD_Windlab_CPA001</i>
DOE Assessment #2	The supporting document BD_Windlab_CPA001 submitted to the DOE is not acceptable as the decision prior to the webhosting of the rCPA-DD cannot be established by the same. The date of the supporting document is 24/10/2012, which is much later to the webhosting of the rCPA-DD. CAR is Open
Corrective Action #3	The investment decision to go ahead with CPA001 was done based on the information available in public domain and no offer letter was obtained at the time of preparation of the CPA and webhosting the same for global stakeholders' comments. During the validation, DOE has observed that the information available in public domain can at best be used to demonstrate the appropriateness of the costs considered and not as a primary information as the validation is for the candidate project. Therefore, it was decided to approach the wind mill suppliers and get the offer letters. As against an installed capacity of 10 MW envisaged in the web hosted CPA, it was decided to scale up the capacity to 25 MW for the first project and offer was sought from Goldwind Africa Pty Ltd. Goldwind Africa has since submitted the offer letter for 10 X 2.5 MW Wind Generators for the Brakfontein project. The offer is restricted to turbine, transportation and installation costs only. It does not include balance of plant (BOP). The company has prepared a cost estimate for the Bop, viz., civil works (like preparation of hard stand, improving existing roads, construction of new roads, ramped crossings, site building and foundation), net work and substation works (like switch gear, internal reticulation, on-site collector point, 66 kv line, Eskom connection) and engineering and project management expenses. On 24/10/2012 Board discussed the offer letter and BOP prepared for CPA001 and finally decided to go ahead with 25 MW wind farm. Refer to file named " <i>Board Note.pdf</i> " for clarification.
DOE Assessment #3	The supporting board notes make it evident that PP has decided to install 25 MW under the proposed CPA. Hence the calculation of CER for the 25 MW capacity is acceptable and found to be correct. CAR is closed.
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	rCPA-A8
Classification	<input type="checkbox"/> CAR <input checked="" type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	Information provided on public funding at gCPA level is not sufficient. Also PP needs to submit the evidence (declaration) for Non-ODA.

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Finding	rCPA-A8
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	The necessary changes were introduced to the gCPA and rCPA. In the gCPA (section A.4.5) The requirement of section A.4.5 on public funding of the CPA amended and now requires the following: "No public funding will be applied to the CPA" (Reference is given to section B.2 Eligibility Criterion 11) In the rCPA (section A.4.5) Documentary evidence is provided to the DOE in support of the claim that the project will not receive public funding. Reference is given to Eligibility Criterion 11 (No development aid).
DOE Assessment #1 <i>(validators)</i>	The supporting document submitted to support no ODA for the proposed CPA to DOE, is not found appropriate, as here again the capacity mentioned is 43 MW. Which is different from the project scenario. PP is required to justify the appropriateness of the supporting document. CL is Open
Corrective Action #2	Refer to the declaration from Windlab dated 05/11/2012. Check the file named <i>20121105_AE3.OfficialDeclarationCPA_JF.pdf</i>
DOE Assessment #2	The supporting document now submitted " <i>20121105_AE3.OfficialDeclarationCPA_JF</i> ", mentions the capacity of 25 MW. However, PP has not made it evident by providing the supporting document which make the decision making evident prior to the webhosting of the rCPA-DD. CL is Open
Corrective Action #3	The investment decision to go ahead with CPA001 was done based on the information available in public domain and no offer letter was obtained at the time of preparation of the CPA and webhosting the same for global stakeholders' comments. During the validation, DOE has observed that the information available in public domain can at best be used to demonstrate the appropriateness of the costs considered and not as a primary information as the validation is for the candidate project. Therefore, it was decided to approach the wind mill suppliers and get the offer letters. As against an installed capacity of 10 MW envisaged in the web hosted CPA, it was decided to scale up the capacity to 25 MW for the first project and offer was sought from Goldwind Africa Pty Ltd. Goldwind Africa has since submitted the offer letter for 10 X 2.5 MW Wind Generators for the Brakfontein project. The offer is restricted to turbine, transportation and installation costs only. It does not include balance of plant (BOP). The company has prepared a cost estimate for the Bop, viz., civil works (like preparation of hard stand, improving existing roads, construction of new roads, ramped crossings, site building and foundation), net work and substation works (like switch gear, internal reticulation, on-site collector point, 66 kv line, ESKOM connection) and engineering and project management expenses. On 24/10/2012 Board discussed the offer letter and BOP prepared for CPA001 and finally decided to go ahead with 25 MW wind farm. Refer to file named " <i>Board Note.pdf</i> " for clarification.
DOE Assessment #3	The supporting board note make it evident that PP has decided to install 25 MW capacity wind turbines under this CPA. Hence the declaration for no ODA mentioning the 25 MW capacity is acceptable to the validation team. CL is closed
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	rCPA-A9		
Classification	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Finding	rCPA-A9
Description of finding (Validators)	rCPA states under section A.4.6 that CP001 is not registered as an individual CDM project activity or as a part of another PoA. However the same is required to be appropriately substantiated by the CME and CPA implementer.
Corrective Action #1 (PP shall write a detailed and clear corrective action as per finding)	The necessary changes were introduced to the rCPA and gCPA. In the gCPA and rCPA (section A.4.6) a reference is provided to section B.2 – eligibility criteria 3 and 4.
DOE Assessment #1 (validators)	The supporting document provided as an “official declaration of no double counting” mentions the capacity of 43 MW, PP is required to justify the appropriateness of the supporting document. CL is open.
Corrective Action #2	Refer to the declaration from Windlab dated 05/11/2012. Check the file named <i>20121105_AE3.OfficialDeclarionCPA_JF.pdf</i>
DOE Assessment #2	The supporting document now submitted “ <i>20121105_AE3.OfficialDeclarionCPA_JF</i> ”, mentions the capacity of 25 MW. However, PP has not made it evident by providing the supporting document which make the decision making evident prior to the webhosting of the rCPA-DD. CL is Open
Corrective Action #3	The investment decision to go ahead with CPA001 was done based on the information available in public domain and no offer letter was obtained at the time of preparation of the CPA and webhosting the same for global stakeholders’ comments. During the validation, DOE has observed that the information available in public domain can at best be used to demonstrate the appropriateness of the costs considered and not as a primary information as the validation is for the candidate project. Therefore, it was decided to approach the wind mill suppliers and get the offer letters. As against an installed capacity of 10 MW envisaged in the web hosted CPA, it was decided to scale up the capacity to 25 MW for the first project and offer was sought from Goldwind Africa Pty Ltd. Goldwind Africa has since submitted the offer letter for 10 X 2.5 MW Wind Generators for the Brakfontein project. The offer is restricted to turbine, transportation and installation costs only. It does not include balance of plant (BOP). The company has prepared a cost estimate for the Bop, viz., civil works (like preparation of hard stand, improving existing roads, construction of new roads, ramped crossings, site building and foundation), net work and substation works (like switch gear, internal reticulation, on-site collector point, 66 kv line, ESKOM connection) and engineering and project management expenses. On 24/10/2012 Board discussed the offer letter and BOP prepared for CPA001 and finally decided to go ahead with 25 MW wind farm. Refer to file named “ <i>Board Note.pdf</i> ” for clarification.
DOE Assessment #3	The supporting board note make it evident that PP has decided to install 25 MW capacity wind turbines under this CPA. Hence the declaration for not registered as an individual CDM project activity or as a part of another PoA mentioning the 25 MW capacity is acceptable to the validation team. CL is closed
Conclusion Tick the appropriate checkbox	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	rCPA-A10
Classification	<input type="checkbox"/> CAR <input checked="" type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding (Validators)	It is observed that the crediting period has been changed from ‘fixed’ to ‘renewable’. Explain the reasons for the same.

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Finding	rCPA-A10
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	It has been decided to opt for renewable crediting period instead of fixed crediting period as given in the webhosted CPA.
DOE Assessment #1 <i>(validators)</i>	Though it is not appropriate to change the crediting period, since no regulations prevent PP from changing the crediting period option, it is accepted. CAR is closed
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	rCPA-B1
Classification	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	Section B.1 of the gCPA and rCPA-DD is not complete with regards to the reference of the registered PoA, which will be followed by subsequent CPA at the time of its inclusion to the PoA.
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	<p>The necessary changes were introduced to the gCPA and rCPA.</p> <p>In the gCPA (Section B.1 and A.4.1) In section B.1 the gCPA requests the PoA name followed by the CPA name. The CPA identification was also included in section A.4.1 the following was added: "CPA '###' (under the South African Grid Connected Wind Farm Programme)"</p> <p>In the rCPA (Section B.1 and A.4.1) The gCPA, section B.1 was changed to: "South African Grid Connected Wind Farm Programme - CPA 001" In section A.4.1 the following was added: "CPA 001 (under the South African Grid Connected Wind Farm Programme)"</p>
DOE Assessment #1 <i>(validators)</i>	Required changes were made in section B.1 of the rCPA-DD. CAR is Closed.
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	rCPA- B2
Classification	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	PoA-DD itself does not provide eligibility criteria for the inclusion for CPA inclusion into the PoA in accordance with the latest requirements stipulated as per §14 Annex 3 of EB 65 and also the gCPA and rCPA are also not in line with EB 65 Annex 3 § 14.
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	<p>The necessary changes were introduced to the gCPA and rCPA and PoA-DD.</p> <p>In the PoA-DD, (refer to section A.4.2.2 and CAR 9 PoA) Table A.4-2 was inserted according to EB 65 Annex 3 § 14.</p> <p>In the gCPA, (section B.2.) The requirements from Table A.4-2 (CDM-PoA-DD) were copied to section B.2. The CPA is required to demonstrate compliance with these requirements according to Table B.2-1.</p> <p>In the rCPA, (section B.2) The requirements from Table A.4-2 (CDM-PoA-DD) were copied to section B.2 (Table B.2-1) and appropriate responses and references are provided.</p>

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Finding	rCPA- B2
DOE Assessment #1 <i>(validators)</i>	<p>Under section B.2 of the rCPA-DD, PP is required to mentions the eligibility criteria same as mentioned in paragraph 14 of EB 65, Annex 03, and hence provide the compliance to the criteria mentioned and supporting evidences required for the same. The extra inclusion criteria if required can be added subsequently. Similarly make changes in the PoA-DD too.</p> <p>Also, PP is required to check all the details mentioned, inconsistency in providing the information has been observed (e.g. check the start date of the CPA in section A.4.2.1 and section B.2). Moreover, all the supporting documents related to the fixed project design as per the decision making time has to be submitted.</p> <p>CAR is Open</p>

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Finding	rCPA- B2
Corrective Action #2	<p>The required changes were introduced. All documents are valued on 24/10/2012</p> <p>For EC1 refer to (from last submission) file named <i>5. (CPA) ROD (Env Authorisation.DEA)_2011.09.02_Amakhala Emoyeni.pdf</i> and <i>PoA.1. LoA_wind PoA.pdf</i></p> <p>For EC2 refer to (from last submission) file named <i>1. (CPA) Amakhala Emoyeni FEIR - Full Report (final).pdf</i> and <i>2. (CPA) Phomph, Brakfontein Wind Farm, Wind and Energy Model Validation.pdf</i></p> <p>For EC3 refer to the declaration from Windlab dated 05/11/2012. Check the file named <i>20121105_AE3.OfficialDeclarionCPA_JF.pdf</i></p> <p>For EC4 refer to declaration from BWC, file is named <i>Declaration from BWC.pdf</i></p> <p>For EC5 refer to (from last submission) file named <i>1. (CPA) Amakhala Emoyeni FEIR - Full Report (final).pdf</i></p> <p>For EC6 refer to file named <i>rCPA- A11 CAR 11 - APPENDIX K1 - IPP PPA (Wind) Final 030811.pdf</i> and (from last submission)<i>3. (CPA) Implementation schedule + prove of government PPA.pdf</i></p> <p>For EC7 refer to file named (from last submission)<i>3. (CPA) Implementation schedule + prove of government PPA.pdf</i></p> <p>For EC8 refer to declaration from BWC, file is named <i>Declaration from BWC.pdf</i></p> <p>For EC9 refer to file named <i>Financial model and CER calculations_27.09.2012.xls</i> and Table B.3-1 of the CPA-DD</p> <p>For EC10 refer to (from last submission) file named <i>5. (CPA) ROD (Env Authorisation.DEA)_2011.09.02_Amakhala Emoyeni.pdf</i> and (from last submission)<i>8.1. (CPA) Appendix C- stakeholders database.pdf, 8.2. (CPA) Appendix D (Adverts).pdf, 8.3. (CPA) Appendix E (PPI).pdf</i></p> <p>For EC11 refer to the declaration from Windlab dated 05/11/2012. Check the file named <i>20121105_AE3.OfficialDeclarionCPA_JF.pdf</i></p> <p>For EC12 refer to the company incorporation certificate of Windlab Check the file named <i>WDSA_20080822_Certificate of Confirmation_CM26.pdf</i></p> <p>For EC13 refer to file named (from last submission)<i>3. (CPA) Implementation schedule + prove of government PPA.pdf</i></p> <p>For EC14 refer to declaration from BWC, file is named <i>Declaration from BWC.pdf</i></p>

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Finding	rCPA- B2
DOE Assessment #2	<p>Clarification is required how all documents are valued on 24/10/2012, since it is the date which is later to the date of webhosting of the rCPA-DD.</p> <p>Moreover following are the observations under section B.2 of the rCPA-DD:-</p> <ol style="list-style-type: none"> 1. PP is required to use the same wordings of eligibility criteria as mentioned in the paragraph 14 of EB 65, Annex 03 and PoA-DD. 2. Point 7, Start date of the CPA provided is found to be ambiguous, it is not consistent with the declaration provided “3. (CPA) <i>Implementation schedule + prove of government PPA.pdf</i>” 3. Point 9, As per the updation PP is required to forward the updated <i>Financial model and CER calculations.</i> 4. All the eligibility criteria mentioned in the rCPA-DD, must be same as mentioned in the PoA-DD <p>CAR is Open</p>
Corrective Action #3	<p>The investment decision to go ahead with CPA001 was done based on the information available in public domain and no offer letter was obtained at the time of preparation of the CPA and webhosting the same for global stakeholders’ comments. During the validation, DOE has observed that the information available in public domain can at best be used to demonstrate the appropriateness of the costs considered and not as a primary information as the validation is for the candidate project. Therefore, it was decided to approach the wind mill suppliers and get the offer letters. As against an installed capacity of 10 MW envisaged in the web hosted CPA, it was decided to scale up the capacity to 25 MW for the first project and offer was sought from Goldwind Africa Pty Ltd. Goldwind Africa has since submitted the offer letter for 10 X 2.5 MW Wind Generators for the Brakfontein project. The offer is restricted to turbine, transportation and installation costs only. It does not include balance of plant (BOP). The company has prepared a cost estimate for the Bop, viz., civil works (like preparation of hard stand, improving existing roads, construction of new roads, ramped crossings, site building and foundation), net work and substation works (like switch gear, internal reticulation, on-site collector point, 66 kv line, Eskom connection) and engineering and project management expenses. On 24/10/2012 Board discussed the offer letter and BOP prepared for CPA001 and finally decided to go ahead with 25 MW wind farm. Refer to file named “<i>Board Note.pdf</i>” for clarification.</p> <ol style="list-style-type: none"> 1. The CME has used the same wording as in PoA-DD. No changes are required. 2. The typing mistake was corrected. The starting date was specified in the reviewed CPA-DD as per the supporting document (01/01/2013). 3. Refer to file named “<i>Annexure 9.xls</i>” 4. The CME has used the same wording as in PoA-DD. No changes are required.
DOE Assessment #3	<p>The supporting board notes sufficiently describe that the decision making prior to the start of the CPA project activity date. The justification of the PP is acceptable to the validation team. CAR Point is closed</p> <ol style="list-style-type: none"> 1. All the eligibility criteria has been included in the rCPA-DD as per the PoA-DD. CAR point is closed. 2. Date has been corrected. CAR point is closed 3. Updated files have been submitted. CAR is closed 4. All the eligibility criteria has been included in the rCPA-DD as per the PoA-DD. CAR point is closed.

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Finding	rCPA- B2
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	rCPA- B3
Classification	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	The CPA does not explain the appropriateness of the financial indicator selected to the project type and decision making context
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	The required clarification was inserted into the gCPA and rCPA. Since the financing pattern will involve a mix of debt and equity, post tax project IRR is used to determine the CPA financial viability
DOE Assessment #1 <i>(validators)</i>	Revised CPA explains the appropriateness of the financial indicator selected to the project type and decision making context. CAR is closed
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	rCPA- B4
Classification	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	The values given in the table (p.10) differ from the worksheet.
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	The new worksheet was provided.

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Finding	rCPA- B4
DOE Assessment #1 (validators)	<p>It has been synchronized with the worksheet. However, in this context, DOE would like to observe</p> <ol style="list-style-type: none"> a) Board resolution, being an internal document of CPA, is not acceptable evidence for the installed capacity. It has to be Approved Business Plan/FSR, EIA, offer letter, Purchase Order or PPA. b) Where the value is assumed as '0' there is no need to give explanation as it does not impact additionality c) Tariff is not acceptable as it does not conform to PoA-DD d) Source for total investment cost and O&M cost is not in conformity with PoA-DD. L3 information cannot be the basis e) When RSA allows 70:30 debt equity ratio for renewable energy projects, 50:50 cannot be considered to be 'standard market practice' and hence is not acceptable. The ratio is not in conformity with sub-step 2b of Additionality Tool. Moreover, CPA/CME is also advised to read guidance 17 of Annex 5, EB 62 carefully and understand in what context the debt equity ratio of 50:50 has been used. f) Cost of debt is not in conformity with PoA-DD g) Repayment period of 20 years and classifying it as 'conservative' is not backed by any evidence. Moreover, interest calculation in the worksheet is also incorrect. Consequently, the IRR is also incorrect h) The comment given for 'Initial grace period' is incorrect i) Depreciation rate assumed is not in conformity with SARS rules j) Finally, this is a futuristic project, which is expected commence construction after 2 years and commence operation after 3 years! Not even the technology supplier is certain and everything is futuristic. Clarify whether the objective of validation is assessing the additionality of a futuristic projects based on hypothetical figures or validation of a real project. Moreover clarify how the DOE can validated the appropriateness and correctness of input parameters 3 years hence as required under paragraph 95, 97 and 111 of VVM (01.2). <p>Moreover, no document has been submitted. CAR is open</p>
Corrective Action # 2	<p>Following corrections have been made to the worksheet:</p> <ol style="list-style-type: none"> a) Board resolution and offer letters have been submitted. The company has not yet issued Purchase Order or signed PPA. b) Explanation is removed in cases where the value is '0' c) The basis for the Tariff has been explained in the previous CAR d) Offer letter which provides Project cost and O&M cost has been submitted e) Debt equity ratio has been reckoned at 70:30 in the financial indicator calculations f) Cost of debt is now sourced from the Quarterly Bulletin of South African Reserve Bank g) Letter from the manufacturer on the operational life of WTG is submitted h) Since the financial closure has not yet been achieved 'Initial grace period' is assumed equivalent to implementation period. Explanation has been suitably modified i) Depreciation rate has been corrected in conformity with with SARS rules j) The costs are based on offer letters and the expected start date is Jan.2013. Necessary changes have been made in the CPA-DD and worksheet <p>All the supporting documents have been submitted</p>

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Finding	rCPA- B4
DOE Assessment # 2	Worksheet has been suitably corrected and all supporting documents have been submitted. CAR is closed
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	rCPA-B5
Classification	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	The IRR given in the rCPA is at variance with the figures given in worksheet.
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	The new worksheet was provided.
DOE Assessment #1 <i>(validators)</i>	Since interest calculation in the worksheet is incorrect, IRR is also incorrect. CAR is open.
Corrective Action # 2	Interest calculation has been corrected
DOE Assessment # 2	Interest has been considered based on the latest term lending rate published in the latest Quarterly Bulletin of South African Reserve Bank. Repayment period has been considered at 15 years, based on the public domain information as financial closure has not yet been achieved. For the same reason, moratorium period has been assumed for the construction period only. Interest computations have been accordingly corrected, which is appropriate. CAR is closed
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	rCPA- B6
Classification	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	Worksheet gives the additionality demonstration for a project of 10 MW installed capacity, which cannot fall under this PoA-DD.
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	The new worksheet was provided.
DOE Assessment #1 <i>(validators)</i>	The new worksheet is for 43 MW, which can fall under this PoA-DD. Please furnish the documentary evidence supporting the input parameters used. CAR is open
Corrective Action # 2	PP has decided to revise the capacity to 25 MW after evaluating the change in the policy of Dept. of Energy among others. Based on this decision, offer letters were obtained for 25 MW and the Board reconsidered the investment in the project in the meeting held in October 2012 and took the decision to implement the project with an installed capacity of 25 MW. The revised worksheet is submitted. CPA has also been accordingly revised.
DOE Assessment # 2	PP has submitted the Board Note, Board Resolution, Offer letters and PLF report all of which are for 25 MW. Accordingly, worksheet and CPA have also been modified. The revised installed capacity and the worksheets are accepted. CAR is closed
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	rCPA-B7
Classification	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Finding		rCPA-B7	
Description of finding <i>(Validators)</i>	Though sensitivity analysis forms part of the worksheet, it does not have any provision to check the correctness of the results		
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	The new worksheet was provided.		
DOE Assessment #1 <i>(validators)</i>	Revised worksheet contains provision for checking sensitivity analysis results. CAR is closed		
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed		

Finding		rCPA-B8		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR	
Description of finding <i>(Validators)</i>	Worksheets contain so many redundant sheets like Spreadsheet info, exchange rate and MWh and CER (which is given separately as ER worksheet).			
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	The new worksheet was provided.			
DOE Assessment #1 <i>(validators)</i>	Redundant rows have been removed. CAR is closed			
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed			

Finding		rCPA-B9		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR	
Description of finding <i>(Validators)</i>	The technical life time of the project considered does not conform to Annex 15, EB 50			
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	The Suzlon 2.1 MW S97 Technical Data were used, which is in line with Option (a) of Annex 15, EB 50			
DOE Assessment #1 <i>(validators)</i>	The supporting document provided for technical lifetime is not in-line with the corrective action #1. The supporting document submitted is from Goldwind, whereas PP has mentioned in corrective action #1 about Suzlon machine. CAR is open.			
Corrective Action # 2	Ten wind turbine generators of GW109/2500 type (manufactured by Goldwind) will be employed by the present CPA.			
DOE Assessment # 2	PP is required to provide the supporting document for technical life of the WTGs for the proposed CPA, as per the requirement laid in Annex 15, EB 50. CAR is open			
Corrective Action # 3	China General Certification, Statement of Compliance for the Design Assessment of the Wind Turbine GW109/2500 was used to determine the technical lifetime of the equipment, which is in conformity with Annex 15, EB 50. Refer to file named "Annexure 3.pdf".			
DOE Assessment # 3	Supporting document is acceptable and is found inline with the requirements of Annex 15, EB 50. CAR is closed			
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed			

Finding		rCPA-B10		
---------	--	----------	--	--

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Finding	rCPA-B10
Classification	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding (Validators)	The tariff and the argument relating to tariff is not acceptable.
Corrective Action #1 (PP shall write a detailed and clear corrective action as per finding)	<p>The required clarification was inserted into the rCPA. The following was inserted:</p> <p><i>"In November 2003 South African Department of Minerals and Energy released White Paper on Renewable Energy (White Paper)²⁴ where it sets out Government's vision, policy principles, strategic goals and objectives for promoting and implementing renewable energy in the RSA.</i></p> <p><i>White Paper, page i, "It is in this context that the Ministry is committed to this policy document which is intended to give much needed thrust to renewable energy; a policy that envisages a range of measures to bring about integration of renewable energies into the mainstream energy economy. To achieve this aim Government is setting as its target 10 000 GWh (0.8 Mtoe) renewable energy contribution to final energy consumption by 2013, to be produced mainly from biomass, wind, solar and small-scale hydro".</i></p> <p><i>In March 2009 the National Energy Regulator of South Africa (NERSA)²⁵ approved a Renewable Energy Feed - In Tariff²⁶ to meet the government target of 10 000 GWh by 2013. REFIT for wind farms was 1.25 ZAR/kWh. In March 2011 an updated REFIT tariff of 0.938 ZAR/kWh was published. On the 31st of July 2011 the Department of Energy released a competitive bidding scheme under which interested project developers may partake. Currently the REFIT for wind generated electricity must be below 1.15 R/kWh. The REFIT will only be allowed to increase according to the Cost Price Index (CPI).</i></p> <p><i>The policy pursued by NERSA falls under E- policy and it need not be taken into account, instead the benchmark analysis should refer to a hypothetical situation without NERSA's policy, as per paragraph 7 (b) of Annex 3, EB 22. Additional revenue which will be received due to E- policy should be excluded from the calculation of financial indicator as per paragraph 33 of Annex 21, EB 65. Electricity tariff which would have existed in the absence of such REFIT should be used to calculate the financial indicator.</i></p> <p><i>As of today there are no wind farms in the RSA implemented by private entities (see Annex 3 of the PoA-DD for details) as well as there are no FIT for Independent Power Producers, which are willing to supply power to the national grid of the RSA, other than REFIT and FIT for projects applying for Medium Term Power Purchase Programme, the programme to support implementation of co-generation projects. Therefore the latest applicable tariff for other private wind farm developers can't be searched and used as an applicable FIT to calculate the financial indicator. The CPA looks at other options to establish electricity tariff which would have existed in the absence of such REFIT.</i></p> <p><i>Besides the national grid of the RSA the electricity can be sold to municipalities or other willing consumers which buy electricity from Eskom. Therefore the electricity tariff should be equal or less than Eskom's electricity price, otherwise the municipality (or other willing consumer) would prefer to buy cheaper power from Eskom. To support this argument it should be noted that there are two private power plants in the RSA which supply the renewable generated power to the local municipalities, namely Friedenheim hydro power plant (3 MW) and Bethlehem hydro power plant (7 MW). Both of them supply power to municipalities at the price which are less than Eskom's electricity price. The Friedenheim power plant sells electricity to Nelspruit local municipality and is being paid 12% below the current price at which the municipality buys power from ESKOM.²⁷ Bethlehem power plant sells electricity to Dihlabeng local municipality at 0.22 ZAR/kWh²⁸ and it is also registered as a CDM project activity (registration number 2692).</i></p> <p><i>Thus, Eskom's standard average electricity price can be used as electricity tariff which would exist in the absence of REFIT. That is quite conservative as Eskom's price reflects transmission costs and transmission losses which take place from power plants to consumers. Basically the FIT should be less than Eskom's electricity price, since the wind farm developer would require paying Eskom for power transmission."</i></p>

²⁴ http://unfccc.int/files/meetings/seminar/application/pdf/sem_sup1_south_africa.pdf (White paper on renewable energy)

²⁵ <http://www.nersa.org.za/>

²⁶ 'REFIT' refers to a general REFIT determined by the government, which may adopt different strategies and change over time.

²⁷ <http://www.microhydropower.net/rsa/friedenheim.php>

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Finding	rCPA-B10
DOE Assessment #1 <i>(validators)</i>	The explanation is not convincing. CPA should restrict itself to stating what tariff has been assumed and how it conforms to the conditions given in POA-DD. Given tariff does not conform to PoA-DD and hence not acceptable. PP is also advised to read EB's observation vide Para 27 of EB 55 which states "The board also agreed that possible impact of national and sectoral policies in the demonstration and assessment of additionality shall be assessed on a case by case basis". CAR is open.
Corrective Action # 2	It may be stated that CPA operator has not yet submitted the bid for the supply of electricity to the Government and hence, latest NERSA average tariff (ZAR 0.6066/kWh) has been used in the financial indicator calculation as stated in PoA-DD. In August 2011, the Department of Energy abandoned the Refit scheme in favour of a tender mechanism. Refit scheme was introduced in March 2009 and guaranteed purchase prices (ZAR 1.25/kWh) and long term contracts of 20 years. However, the tariffs that had been established in 2009 were due to be significantly reduced (ZAR 1.15/kWh) at a review on 26 th May 2011 before the programme was dissolved completely. Under tender mechanism bidders will have to propose tariff which will fall under technology dependent cap (ZAR 1150/MWh has been fixed for onshore wind power projects under this cap). The scheme also required the project developer should make a single adjustment to the proposed price on April 1 each year in line with <u>expected decreasing costs</u> . In selecting the bidders 70% weight is given to financial aspects of the project and 30% to economic development which includes job creation, local content, ownership, management control, preferential procurement, enterprise development and socio economic development. Hence, the tariff the project likely to get is not known at the time of decision making or even now. As per the unofficial information available from the second bids submitted, the tariff which the project is likely to get is estimated at ZAR 0.90 /kWh. However, even if the tariff is reckoned at ZAR 1.15/kWh (which represents the cap), the project remains additional as the IRR works out to 12.73% as against the benchmark of 14.15%.
DOE Assessment # 2	Since the Department of Energy has switched over to bidding system, it would not be possible for the PP to estimate the tariff, which the project would get. Hence, choosing NERSA average tariff for the financial indicator calculation is accepted. The project remains additional even at the highest "expected tariff". CAR is closed
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	rCPA-B11		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	PLF given does not conform to Annex 11, EB 48.		
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	The new PLF of 0.309 was inserted. The PLF was calculated based on calculations from project developers and independently verified by Hatch, which confirms to Annex 11, EB 48. Refer to Option (b).		
DOE Assessment #1 <i>(validators)</i>	The basis given for PLF – 'Based on calculations from Project Developer' is not acceptable an acceptable evidence, as it is not in conformity with Annex 11, EB 48 and PoA-DD. CAR is open		

²⁸ Journal Energize, May 2008, page 45

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Finding	rCPA-B11
Corrective Action # 2	PLF has been estimated by Phomph Wind Farm Engineering Services, a third party engineering consultant. The PLF therefore conforms to Annex 11, EB 48. Copy of the report is enclosed.
DOE Assessment # 2	Copy of the PLF report prepared by Phomph Wind Farm Engineering Services has been submitted and the PLF considered in financial indicator calculation is in conformity with the report and also Annex 11, EB 48. CAR is closed
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	rCPA-B12		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	Additionality has been demonstrated using REFIT recommended input values. Validation is not meant to ascertain the additionality of a hypothetical project, but a real project. The input parameters should be sourced either from offer letters or FSR conforming to paragraph 113 of VVM. At the maximum REFIT values can serve as L2 or L3 information.		
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	Since the approved FSR was not available at the time of decision making, the PP used REFIT value to assess the project financial viability which were standard in the market as per paragraph 29 of the Annex 21, EB 65. For this reason the range for the sensitivity analysis was expanded to -20%/+20%.		
DOE Assessment #1 <i>(validators)</i>	The response is not acceptable. Clarify whether the objective of validation is assessing the additionality of a futuristic projects based on hypothetical figures or validation of a real project. Moreover clarify how the DOE can validate the appropriateness and correctness of input parameters 3 years hence as required under paragraph 95, 97 and 111 of VVM (01.2). Also clarify the basis for 20% variation considered as it seems to imply that if Government values are used (though not acceptable to DOE), 20% variation is appropriate. CAR is open		
Corrective Action # 2	The costs are based on offer letters and the expected start date is Jan.2013. Necessary changes have been made in the CPA-DD and worksheet All the supporting documents have been submitted		
DOE Assessment # 2	Worksheet has been suitably corrected and all supporting documents have been submitted. CAR is closed		
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed		

Finding	rCPA- B13		
Classification	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	<p>All input parameters are required to be substantiated by appropriate documentary evidences and appropriate references to the DOE for the assessment.</p> <p>The plant load factor taken, as 27% is not in accordance with the EB 48 Annex 11 and also latest version of tool for the demonstration and assessment of additionality has not been applied.</p> <p>Moreover, Complete assessment of additionality is subject to acceptance on closure of CARs/CIs PoA-E1 and PoA-E2 raised on CDM-POA-DD.</p>		

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Finding	rCPA- B13
<p>Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i></p>	<p>The necessary changes were introduced to the rCPA, gCPA and PoA-DD.</p> <p>According to the latest information that is available from CPA developer and Eskom the following parameter that affect the IRR calculation and/or CERs were updated:</p> <ol style="list-style-type: none"> 1. Start date of construction and operation 2. Load factor 3. Exchange rate ZAR/USD 4. Grid electricity tariff 5. Capacity of plant 6. Crediting period <p>According to the latest information that is available from the CPA developer, the start date of construction of the project is 01/04/2014 and the commercial operational date is 01/03/2015.</p> <p>At the time of writing the CDM-PoA-DD the official load factor for the wind farm in rCPA was not specified. Therefore an estimated value from government documents was applied. According to the latest information that is available from the CPA developer the load factor for the wind farm in the rCPA is 30.9 %, which is 3.9% higher that the estimated value. [Refer to Energy Assessment - Suzlon wind turbine, page 4]</p> <p>Before recalculating the IRR the exchange rate was updated to the latest 6 months (up to February 2012: 7.92 ZAR/USD).</p> <p>The electricity tariff was adjusted to 0.6066 ZAR/kWh which is the latest information available from NERSA. The new IRR is 5.15%. The effect on the sensitivity analysis is that it ranges from 3.77% - 6.46% with 10% variation in the most significant parameters. The project remains to be additional (subject to acceptance on closure of CARs/CIs PoA-E1 and PoA-E2 raised on CDM-POA-DD.).</p> <p>Latest information from project developers states that the wind farm capacity can be up to 43 MW. This was adjusted accordingly.</p> <p>Following the latest information available for the project the choice of crediting period was changed from a '10 year fixed crediting period' to a '7 year renewable crediting period'.</p> <p>In the rCPA The following sections were amended: A.2; A.4; A.4.2.1; A.4.3; A.4.3.1; A.4.3.2; A.4.4; B.3; B.5.1; B.5.2; B.5.3; B.6.1 and Annex 3.</p> <p>In the gCPA The following sections were amended: A.4.3; A.4.3.2; A.4.4; B.5.3.</p> <p>In the PoA-DD (section E.6.3) In the CDM-PoA-DD, section E.6.3 the parameter LF was adjusted in accordance with the EB 48 Annex 11.</p>
<p>DOE Assessment #1 <i>(validators)</i></p>	<p>The corrective action #1 provided above is required to be checked by the PP, as information mentioned here and in the rCPA-DD is inconsistent.</p> <p>CL is Open</p>
<p>Corrective Action #2</p>	<p>The CPA-DD was checked; refer to Table B.3-1 of the CPA-DD.</p> <p>The start date of construction of the project is 01/01/2013 and the commercial operational date is 01/04/2014.</p> <p>The project capacity is 25MW.</p> <p>PLF is 26.7% based on third party estimation.</p> <p>Ten wind turbine generators of GW109/2500 type (manufactured by Goldwind) will be employed by the present CPA.</p>
<p>DOE Assessment #2</p>	<p>The required information has been made consistent in the table B.3-1 and corrective action #2 above. CL is closed</p>
<p>Conclusion <i>Tick the appropriate checkbox</i></p>	<p><input type="checkbox"/> To be checked during the first periodic verification</p> <p><input type="checkbox"/> Outstanding finding (not closed)</p> <p><input checked="" type="checkbox"/> The finding is closed</p>

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Finding		rCPA-B14		
Classification	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR	
Description of finding <i>(Validators)</i>	Please clarify the reasons for giving the IRR calculation with ZAR and USD when both of them give the same results.			
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	The IRR calculation with USD was removed.			
DOE Assessment #1 <i>(validators)</i>	IRR calculation with USD has been removed and the IRR is restricted to ZAR only in the revised worksheet. CL is closed			
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed			

Finding		rCPA-B15		
Classification	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR	
Description of finding <i>(Validators)</i>	IRR has been computed for only 'value added'. Clarify how this is considered appropriate for the project type and decision making context.			
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	The clarifications were inserted into the PoA-DD.			
DOE Assessment #1 <i>(validators)</i>	IRR calculation has been corrected in the revised worksheet. CL is closed.			
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed			

Finding		rCPA-B16		
Classification	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR	
Description of finding <i>(Validators)</i>	In the CPA, the explanation given for the benchmark and the calculations used to convert the commercial lending rate are neither correct nor acceptable.			
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	The required changes were introduced.			
DOE Assessment #1 <i>(validators)</i>	Benchmark selected is not in conformity with PoA-DD. CAR is open			
Corrective Action # 2	Post tax project IRR has been selected as the financial indicator for additionality demonstration and accordingly, the benchmark has been modified and the term lending rate as published in Quarterly Bulletin of South African Reserve Bank has been considered as benchmark, which conforms to guidance 12 of Annex 5, EB 62.			
DOE Assessment # 2	The benchmark has been corrected and the chosen reference is appropriate. Though the benchmark now identified is higher than the webhosted benchmark, it is observed that the benchmark conforms to guidance 12 of Annex 5, EB 62 and the project remains additional even if the benchmark is reckoned at 12.5%. Therefore, the benchmark is accepted. CAR is closed			
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed			

Finding		rCPA-B17		
Classification	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR	

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Finding	rCPA-B17
Description of finding (Validators)	Clarify whether the methodology adopted for determining the benchmark has been recommended by the methodology ,guidance or any standard text book recommends such approach.
Corrective Action #1 (PP shall write a detailed and clear corrective action as per finding)	The new methodology adopted was changed. The following was inserted: "Commercial lending rate of 9.0% is used as an appropriate benchmark. The rate was sourced from the latest Quarterly Bulletin published by the Reserve Bank of South Africa ²⁹ available at the time of decision making"
DOE Assessment #1 (validators)	Benchmark has been corrected. However, the benchmark considered is not in conformity with PoA-DD. CL is open.
Corrective Action # 2	Benchmark has been modified and the term lending rate as published in the latest (at the time of decision making) Quarterly Bulletin of South African Reserve Bank has been considered as benchmark, which conforms to guidance 12 of Annex 5, EB 62.
DOE Assessment # 2	The benchmark has been corrected and the chosen reference is appropriate. Though the benchmark now identified is higher than the webhosted benchmark, it is submitted that the benchmark conforms guidance 12 of Annex 5, EB 62 and the project remains additional even if the benchmark is reckoned at 12.5%. CL is closed
Conclusion Tick the appropriate checkbox	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	rCPA-B18
Classification	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding (Validators)	Sensitivity analysis section does not explain the conformity of the parameters selected or the variations to which they have been subjected to guidance 20 and 21 of Annex 5, EB 62.
Corrective Action #1 (PP shall write a detailed and clear corrective action as per finding)	Since the PP used REFIT value to assess the project financial viability the range of +20%/-20% was used.
DOE Assessment #1 (validators)	<p>In the first place, REFIT values are not acceptable as they are not L1 information. Using REFIT values results in assessing additionality of a hypothetical project, which does not enable DOE to conform to paragraph 95, 97 and 111 of VVM (01.2). Moreover, it is not clear on what basis 20% variation is considered appropriate if Government values are used. CAR is open</p> <p>Though the explanation given for not subjecting electricity tariff and load factor to sensitivity analysis is appropriate, based on EB's questions in the past, both tariff and generation should be subjected to sensitivity analysis separately, though both will give the same results. Moreover, PoA-DD also provides for the same. CAR is open.</p>
Corrective Action # 2	The section on sensitivity analysis has been corrected. The basis for selection of the parameters and the variation to which they have been subjected to, have been explained in the revised CPA-DD. Financial indicator with expected tariff is also presented, which demonstrates the additionality of the project even with expected tariff.
DOE Assessment # 2	CPA has been modified and the revised CPA explains the conformity of sensitivity analysis to guidance 20 and 21 of Annex 5, EB 62. Revised CPA-DD also demonstrates the continued additionality of the project even with the expected tariff. CAR is closed.

²⁹ www.reservebank.co.za

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Finding	rCPA-B18
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	rCPA-B19
Classification	<input type="checkbox"/> CAR <input checked="" type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	When the sensitivity analysis results of $\pm 10\%$ is given, please clarify what additional value addition is made by $\pm 5\%$ variation.
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	Unnecessary range was deleted from the text.
DOE Assessment #1 <i>(validators)</i>	Variation of $\pm 5\%$ has been removed in the revised worksheet. CL is closed.
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	rCPA-B20
Classification	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	Common practice analysis does not conform to step 4 of Additionality Tool.
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	The step 4 of the additionality test was adjusted properly.
DOE Assessment #1 <i>(validators)</i>	Revised CPA states, "The investment climate changed after 2008 global recession, the selected time frame for the similar project is South Africa starts from the beginning of 2008". Clarify whether the investment climate as stated in Additionality Tool is concerned with global recession. CAR is open
Corrective Action # 2	There was a mistake in the earlier presentation. The REFIT programme was introduced in 2009 and accordingly, necessary changes have been made. The revised common practice analysis reveals that the project is 'first-of-its-kind' and hence as per Additionality Tool common practice analysis is not necessary.
DOE Assessment # 2	There are only 3 wind power projects operational in South Africa and none of them fall within the $\pm 50\%$ range of the proposed installed capacity of the candidate project. Hence, the project is 'first-of-its-kind' in South Africa. Since the project is 'first-of-its-kind', common practice analysis is not necessary as per Additionality tool. CAR is closed.
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	rCPA-B21
Classification	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	CPA does not explain the conformity to Annex 13, EB 62
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	Except entering into land lease agreement, no activity has been undertaken for the implementation of the project so far. Therefore, the implementation of the project has not yet "started". Since the CPA has been webhosted and request has been made for inclusion of CPA under the PoA even before the "start" date, as per paragraph 2 of Annex 13, EB 62, demonstration of prior consideration is not required. This has been stated in the revised CPA-DD

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Finding	rCPA-B21
DOE Assessment #1 <i>(validators)</i>	<p>Since the project implementation has not yet 'started', as per paragraph 2 of Annex 13, EB 62, the project has seriously considered CDM benefits. Suitable modifications have been made in CPA-DD..</p> <p>However, the documentary evidence submitted (though not received) for the start date of the project (see item 7 in p.8) does not conform to Glossary of CDM terms. CAR is open</p>
Corrective Action #2	The expected date of signing the EPC contract (01/01/2013) was used as a project starting date.
DOE Assessment #2	The expected date of signing EPC contract mentioned in section B.2 (Table B.2-1), section A.4.2.1. of revised rCPA-DD version 02.3 and corrective action 2 is not consistent. Moreover, PP is required to provide the declaration letter confirming the expected date. CAR is Open.
Corrective Action #3	The rCPA-DD was modified; 01/01/2013 is specified as the expected EPC contract date through the rCPA-DD. Refer to file named (from last submission) <i>3. (CPA) Implementation schedule + prove of government PPA.pdf</i>
DOE Assessment #3	The expected date of signing EPC contract is still not made evident in the provided supporting document " <i>3. (CPA) Implementation schedule + prove of government PPA</i> ", 01/01/2013 is mentioned as start of construction. Proper justification is required to be provided. CAR is Open
Corrective Action #4	Please refer to revised declaration (file named " <i>Implementation schedule + prove of government PPA.pdf</i> ").
DOE Assessment #4	The revised declaration is acceptable. CAR is closed
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	rCPA-B22
Classification	<input type="checkbox"/> CAR <input checked="" type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	<p>gCPA does not appropriately provide a complete list of ex-ante parameters fixed at validation. Further it is also not clear whether the combined margin emission factor is fixed once at PoA level or will be monitored.</p> <p>The list of ex-ante parameters presented under section B.5.1 of gCPA and rCPA is not in line with ex-ante parameters presented under CDM-PoA-DD.</p>

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Finding	rCPA-B22
<p>Corrective Action #1 (PP shall write a detailed and clear corrective action as per finding)</p>	<p>The necessary changes were introduced to the rCPA and gCPA and PoA-DD.</p> <p>In the gCPA and rCPA For additional clarification the parameter EF was also included in section B.5.1.</p> <p>In the PoA-DD For additional clarification the parameter EF was also included in section E.6.3.</p> <p>Additional clarification (PoA-DD) The parameters that are fixed at validation are listed in section E.6.2 of the CDM-PoA-DD. The title of section E.6.2 is: “<i>Equations, including fixed parametric values, to be used for calculation of emission reductions of a CPA</i>”. From this title it is very clear that the values listed under this section will be used in the CPA.</p> <p>Furthermore the gCPA does not specifically request the inclusion of fixed parameters. This makes sense since these values are listed in the PoA-DD for generic use by all CPAs, (since these values will not change during the first crediting period).</p> <p>Also, the combined margin emission factor is fixed once at PoA level. Refer to the Section E.6.2 in the PoA-DD, in the $EF_{grid,CM}$ table. “This value will be applied as a constant for the whole crediting period.”</p> <p>Additional clarification (rCPA and gCPA) (Section B.5.1 and Section B.5.2) Section E.6.3 in the CDM-PoA-DD requires the data and parameters that are to be reported in the CDM-CPA-DD (Section B.5.1 gives the data and parameters that are available at validation).</p> <p>For additional clarification it is mentioned in section B.5.2 (gCPA) that the fixed parameters are presented in section E.6 of the PoA-DD.</p> <p>Also, in section B.5.2 it says: “Combined margin CO₂ emission factor for grid connected power generation calculated ex ante is <u>fixed for all CPAs of the PoA</u> (see Section E.6 of the PoA-DD) and equal to 0.988 tCO₂/MWh.</p> <p>From this information it is clear that the emission factor will not be monitored.</p>
<p>DOE Assessment #1 (validators)</p>	<p>Following are the observations under section B.5.1 of the rCPA-DD:-</p> <ol style="list-style-type: none"> Version #, EB # and Annex # of the “Tool to calculate the emission factor for an electricity system” is required to be mentioned . “Justification of the choice of data or description of measurement methods and procedures actually applied” is not found to be appropriate. The power capacity to be installed is solely dependent upon the decision of PP. PP is required to provide the combined margin Emission factor calculation demonstration in the spreadsheet, along with the CER calculation. <p>CL is Open</p>
<p>Corrective Action #2</p>	<ol style="list-style-type: none"> “(Version 02.2.1, EB 63, Annex 19)” was inserted in Section B.5.1 In the line “Justification of the choice of data or description of measurement methods and procedures actually applied” additional clarification was inserted. Refer to files named <i>GEF calculations.xlsx</i> and <i>CER calculations.xls</i>
<p>DOE Assessment #2</p>	<ol style="list-style-type: none"> OK. CL point is Closed Appropriate correction has been made. CL is Closed The referred files <i>GEF calculations.xlsx</i> and <i>CER calculations.xls</i> has not been submitted. CL point is Open
<p>Corrective Action #3</p>	<ol style="list-style-type: none"> Refer to file named “<i>Annexure 9.xls</i>”
<p>DOE Assessment #3</p>	<p>Excel file demonstrating the GEF have been received by DOE. CL is closed</p>

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Finding	rCPA-B22
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	rCPA-B23
Classification	<input type="checkbox"/> CAR <input checked="" type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	Additional information provided in the Annex 3 is not clear whether it is baseline information or regarding the demonstration of additionality.
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	The necessary changes were introduced to the rCPA. (Annex 3) In the rCPA (Annex 3) A caption was inserted for the table that shows information for the IRR calculation.
DOE Assessment #1 <i>(validators)</i>	Annex 3 now clearly reveals the information provided in section Annex 3 is IRR calculation. CL is closed
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	rCPA-B24
Classification	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	Operational and management structure has not been clearly described in the section B.6.1 of CPA-DD and hence it cannot be ascertained whether it is in compliance with the envisioned situation. Please also refer section A.4.4.1 and E.7.2.1 under PoA –DD of this report.
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	The necessary changes were introduced to the gCPA and rCPA. In the rCPA and gCPA (Section B.6.1) Section B.6.1 of CPA-DD requires only monitoring information. For the sake of clarification in Section B.6.1 the reader is referred to: <ul style="list-style-type: none"> • The Management System for the South African Grid Connected Wind Farm Programme (Version 1). • Section A.4.4.1 and E.7.2.1 of the PoA-DD.
DOE Assessment #1 <i>(validators)</i>	As per EB 65, annex 03, paragraph 17, CME is required to develop the management system at the PoA level and should be discussed in section A.4.4.1 of the PoA-DD. As the inclusion of CPA requirements are to be satisfied, PP is required to demonstrate at the CPA level too how the planned management system is being followed at the CPA level. Hence this is required to be discussed in section B.6.1. of the rCPA-DD. Moreover PP is required to submit the signed copy of the supporting document “The Management System for the South African Grid Connected Wind Farm Programme (Version 1)”. However following information are required under section B.6.1. of the rCPA-DD:- <ol style="list-style-type: none"> 1. Evidence for the description of monitoring plan discussed. 2. Accuracy class of the meters installed at the site. 3. During the emergency preparedness, PP has to discuss how the generation will be accounted for failed meters. 4. Source of data used for $EG_{CPA,y}$ is to be justified, how the on-site measurement will be recorded and accounted for net electricity generation. CAR is open.

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Finding	rCPA-B24
Corrective Action #2	<ol style="list-style-type: none"> 1. Refer to files named <i>RSA Distribution Metering Code Ver 5_1.pdf</i> and <i>SANS474_Code of practice for electricity metering.pdf</i> 2. The clarification was inserted. The Class 0.5 S meters will be used 3. The following was inserted into the monitoring plan “Electricity meter will be equipped with the check meter. In case of failure of main meter the reading of check meter will be used. In case both meters (main and check) fail net electricity generation will not be accounted for which is conservative” 4. Please refer to line “Description of measurement methods and procedures to be applied” in Table “the parameter to be monitored” in Section B.6.1
DOE Assessment #2	<p>The corrective action #2 taken by the PP has not been fully covered, PP is required to refer the complete DOE Assessment #1. Corrections as per EB 65, annex 03, paragraph 17 is not done. Also, as per the requirement signed copy of the supporting document “The Management System for the South African Grid Connected Wind Farm Programme (Version 1)” has not been provided.</p> <p>Moreover,</p> <ol style="list-style-type: none"> 1. PP is required to mention the paragraph number and page number on the referred documents. CAR point is Open. 2. OK, CAR point is closed 3. Discussion is acceptable. CAR point is closed 4. From the description mentioned it cannot be concluded how this measured value will be formalised for accounting the electricity generation and hence for the sale of electricity. CAR point is Open.
Corrective Action #3	<p>Please refer to revised PoA-DD and signed management system (file named “<i>Signed MS.pdf</i>”). Corrections as per EB 65, annex 03, paragraph 17 were done.</p> <ol style="list-style-type: none"> 1. The paragraph number and page number on the referred documents were mentioned in the reviewed CPA-DD. 4. “Source of data to be used” line was modified. Please refer the revised CPA-DD.
DOE Assessment #3	<p>Revised PoA-DD, appropriately covers requirement set in EB 65, annex 03, paragraph 17. Signed copy of the Management system has been submitted to DOE.</p> <ol style="list-style-type: none"> 1. Corrective action has been taken. CAR point is closed. 4. Source of data has been suitable corrected. CAR point is closed
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	rCPA-C1
Classification	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	<p>Section C.3 of the rCPA-DD mentions that details have been mentioned in the PoA-DD. This is not acceptable by the DOE. As, the EIA is being conducted at the CPA level, PP has to provide the detailed discussion about the host Party laws/regulations in section C.3 of the rCPA-DD.</p> <p>Moreover PP has not discussed about the trans-boundary impacts in section C.2 of the rCPA-DD.</p> <p>PP has provided the EIA report, however, it is not evident that the report is approved by the concerned department of the host country.</p>

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Finding	rCPA-C1
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	The clarification was inserted in Section C.3. The clarification was inserted in Section C.2. EIA report was approved by Department of Environmental Affairs. Refer to file (from last submission) named5. <i>(CPA) ROD (Env Authorisation.DEA)_2011.09.02_Amakhala Emoyeni.pdf</i>
DOE Assessment #1 <i>(validators)</i>	Section C.3 and C.2 has been appropriately updated. CAR is Closed
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

Finding	rCPA-D1
Classification	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding <i>(Validators)</i>	<p>The process of identifying and inviting the stakeholders as well as comment received is not detailed in a transparent manner in the CPA-DD.</p> <p>Section D.2 of CPA-DD is not complete with regards to the following points:</p> <ol style="list-style-type: none"> 1. Date of advertisement for local stakeholder consultation invitation as well as meeting with the supporting evidences. 2. Substantiate with evidences that a reasonable time for submission of comments was provided. 3. How the comments were invited, compiled for LSC in an open and transparent manner. 4. Provide a summary of comments received. <p>How due account was taken of any comments received.</p>
Corrective Action #1 <i>(PP shall write a detailed and clear corrective action as per finding)</i>	<p>The necessary changes were introduced to the rCPA and gCPA.</p> <p>In the gCPA (section D.2) The requirements of section D.2 have been updated according to CAR 15.</p> <p>In the rCPA (Section D.2, D.3, and D.4) The correct references and evidences are provided in section D.2 to substantiate the claims of rCPA-C1.</p>
DOE Assessment #1 <i>(validators)</i>	<p>It is not evident from the supporting documents provided that the stakeholders were aware of the CDM project activity. PP is required to justify it, also, PP is required to demonstrate how the requirement laid in paragraph 128 of EB 55, Annex 01, is fulfilled.</p> <p>CAR is Open</p>
Corrective Action #2	<p>Prior to the publication of the PDD on the UNFCCC website the CPA developer considered the opinion of local stakeholders as of prime importance and conducted many rounds of formal and informal stakeholder consultations which are well documented in the final EIA report. The CPA developer considered and identified everyone as a relevant stakeholder as well as invited the local stakeholders for consultation on the proposed project activity through local press: <i>The Herald</i> (on 28/09/2010) and <i>Somerset Budget & Pearston Advocate</i> (30/09/2010) newspapers. Invitations to review the project activity were also placed in the surrounded area. The project description was made public available at prominent places in the city like Bedford Library, Cookhouse Library as well as private websites like www.savannahsa.com. The meeting was conducted on 07/10/2010 in local language (English) at Bedford Club. It was specified that the wind energy project is qualified as a CDM project activity. Refer to page 17 of final EIA report (document was already submitted to the DOE).</p>

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Finding	rCPA-D1
DOE Assessment #2	The justification provided for the stakeholder consultation conducted was found appropriate, since the stakeholders were invited through newspaper advertisement prior to the publication of rCPA-DD on the UNFCCC website, and the stakeholder consultation was conducted prior to the start of the project activity. CAR is closed
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Outstanding finding (not closed) <input checked="" type="checkbox"/> The finding is closed

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

Table3: Forward Action Requests

Forward request	action	Reference to Table 2	Response by project participants Validation Conclusion
		-	-

VALIDATION REPORT

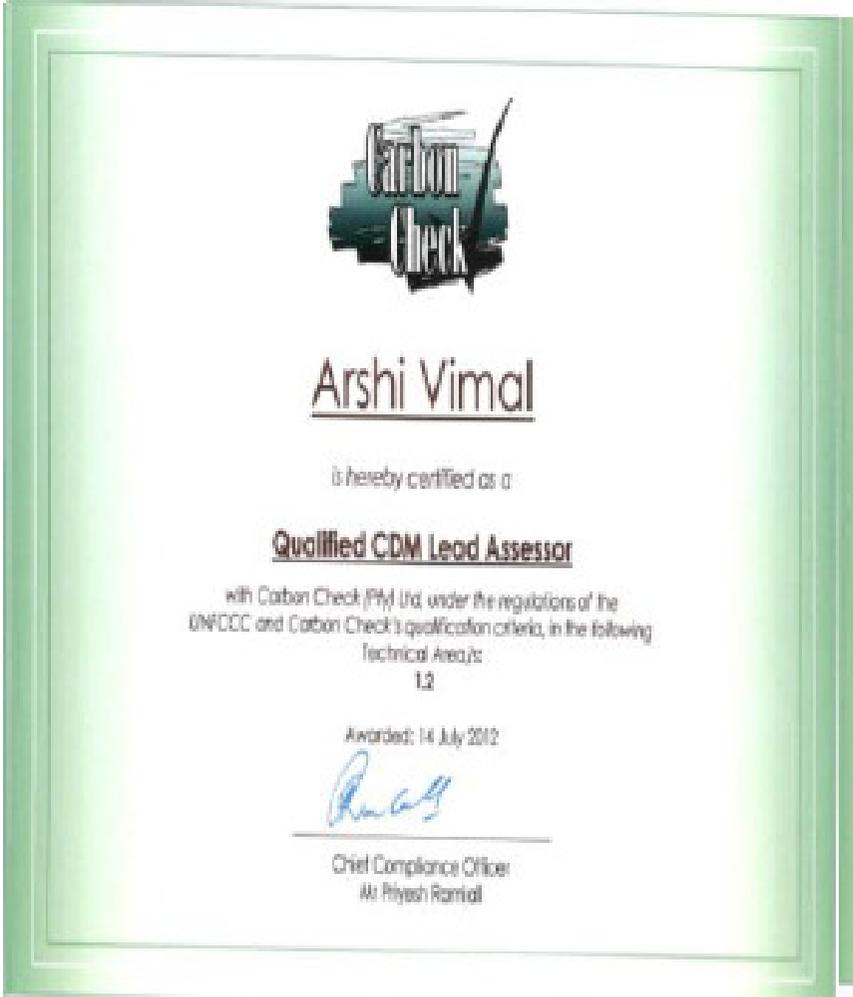
CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011

APPENDIX B

CERTIFICATE OF COMPETENCE

VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011



VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011



VALIDATION REPORT

CDM VALIDATION REPORT NO CCL0025/SAGCWF/15072011



Prakash Kumar Mishra

is hereby certified as a

Qualified CDM Lead Assessor

*with Carbon Check (Pty) Ltd, under the regulations of the
UNFCCC and Carbon Check's qualification criteria, in the following
Technical Area/s:*

1.2

Awarded: 06 December 2011

A handwritten signature in blue ink, appearing to read "Adam Simcock", written over a horizontal line.

Chief Executive Officer
Mr Adam Simcock