

VALIDATION REPORT FOR CROW LAKE WIND EMISSIONS REDUCTION PROJECT



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Summary:

The Crow Lake Wind Emissions Reduction Project (the Project) is a wind power project located east of Chamberlain, South Dakota, which delivers electricity to the Midwest Reliability Organization (MRO) regional electric grid. The Project consists of 108 1.5MW wind turbines and displaces electricity generated from fossil fuels, resulting in a net reduction of CO₂ emissions. Prairie Winds SD1, Inc. (PWSD1) owns 100 turbines which are operated by Basin Electric Power Cooperative (BEPC) pursuant to an Operations and Management Agreement; the Mitchell Technical Institute owns one turbine, and a consortium of over 600 landowners that are part of South Dakota Wind Partners owns the remaining seven turbines.

The validation process consists of the independent third-party assessment of the project design and emission reduction assertion against the criteria stated in the Verified Carbon Standard (VCS) Standard, 15 July 2011, v3.1 and the approved Clean Development Mechanism (CDM) methodology ACM0002. (Version 12.1.0).

During the validation process, First Environment, Inc. (First Environment) issued several clarification and corrective action requests – all of which were addressed sufficiently by Element Markets, LLC. In summary, First Environment is reasonably assured that the Project meets all relevant VCS Version 3 requirements and correctly applies the VCS-approved CDM methodology ACM0002.

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1 INTRODUCTION

This report is provided to Element Markets, LLC (Element Markets) as a deliverable of the Verified Carbon Standard (VCS) project validation process for the Crow Lake Wind Emissions Reduction Project (the Project). This report provides a description of the steps involved in conducting the validation and the findings of the validation performed on the basis of the VCS Standard, as well as criteria given to provide for consistent project operation, monitoring, and reporting of greenhouse gas (GHG) emission reductions. This validation report summarizes the findings of the validation.

As outlined in the VCS Project Description (VCS PD), the VCS-approved methodology applied to the project activity is the Clean Development Mechanism (CDM) methodology ACM0002 – *Consolidated baseline methodology for grid-connected electricity generation from renewable sources*, Version 12.1.0 (ACM0002). The Audit Team was provided the initial version of the VCS PD on September 19, 2011. Based on this documentation, a document review and desktop audit took place that resulted in corrective action requests (discussed later in this report) and revisions to the VCS PD. The final version, dated January 3, 2012, serves as the basis of the final conclusions presented herewith.

During the validation process, Element Markets acted as the project advisor for the project proponents, Basin Electric Power Cooperative (BEPC), Mitchell Technical Institute (MTI), and South Dakota Wind Partners (SDWP). As such, the Audit Team communicated directly with Element Markets regarding most validation activities.

1.1 Objective

The purpose of validation is to have an independent third party assess the Project's design. In particular, the Project's baseline, monitoring plan, and the Project's compliance with VCS requirements are validated. This is to ensure that the VCS PD, as documented, is sound and reasonable and meets the identified criteria. Validation objectives also include an assessment of the likelihood that the Project will achieve the emission reductions estimated by Element Markets. Validation is a requirement for all VCS projects and is seen as necessary to provide assurance to stakeholders of the quality of the Project and its intended generation of emission reductions.

1.2 Scope and Criteria

The validation scope is defined as an independent and objective review of the VCS PD. The VCS PD was reviewed against the following criteria:

- VCS Standard, 15 July 2011, v3.1 (VCS Standard), and
- CDM methodology ACM0002, *Consolidated baseline methodology for grid-connected electricity generation from renewable sources*, Version 12.1.0, including all methodological tools reference therein.

The Audit Team employed a risk-based approach, focusing on the identification of significant risks for project implementation and the generation of emission reductions. The validation process was also informed by the requirements stated in the VCS Standard; the VCS Program Guide, 19 October 2011, v3.1; and the ISO 14064-3 standard.

1.3 Level of assurance

First Environment, Inc. (First Environment) and Element Markets have agreed that a reasonable level of assurance be applied for the Projects.

1.4 Summary Description of the Project

The Crow Lake Wind Emissions Reduction Project (the Project) is a wind power project located east of Chamberlain, South Dakota that delivers electricity to the Midwest Reliability Organization (MRO) regional

electric grid. The Project displaces electricity produced from fossil fuels, resulting in a net reduction of CO₂ emissions. Basin Electric Power Cooperative (BEPC) incorporated a subsidiary, Prairie Winds SD1, Inc. (PWSD1), who owns 100 turbines of the project. The Mitchell Technical Institute (MTI) owns one turbine, and a consortium of over 600 landowners that are part of South Dakota Wind Partners (SDWP) owns the remaining seven turbines. PWSD1 developed the site granted operational control to BEPC pursuant to an operations and maintenance agreement.

The VCS PD provides additional details regarding the project activity.

2 VALIDATION PROCESS

2.1 Method and Criteria

The following validation process was used:

- conflict of interest review;
- selection of validation team;
- initial interaction with Element Markets;
- development of the validation plan;
- desktop review of the project design and the baseline and monitoring methodology and other relevant project documentation;
- site visit;
- follow-up interaction with Element Markets and other project personnel for supplemental information and corrective action as necessary; and
- report development and issuance of final validation statement.

The validation process was utilized to evaluate whether the Project's approach, as outlined in the VCS PD, is consistent with the VCS Standard and the ACM0002 methodology. A validation conformance checklist was developed for the Project which summarizes the criteria used to evaluate the Project, the Project's conformance with each criterion, and the Audit Team's validation findings.

Conflict of Interest Review

Prior to beginning any validation project, First Environment conducts an evaluation to identify any potential conflicts of interest associated with the project. No potential conflicts were found for this project.

Audit Team

First Environment's Audit Team consisted of the following individuals who were selected based on their validation experience, as well as familiarity with renewable energy operations:

Michael Carim – Lead Auditor
 Iris Caldwell - Auditor
 Jeff Daley – Auditor
 Natali Ganfer – Auditor
 James Wintergreen – Internal Reviewer

Audit Kick-off

The validation process was initiated with a kick-off conference call on September 19, 2011 between First Environment and the primary Element Markets contact, Gauri Potdar. The communication focused on confirming the validation scope, objectives, criteria, schedule, and the information required for the validation.

Development of the Validation Plan

The Audit Team formally documented its validation plan as well as determined the sampling plan. The validation plan was informed by the kick-off meeting where key elements of the plan for validation were discussed, including project team members, project level of assurance, materiality threshold, and standards of reporting and validation. The validation plan also provided an outline of the validation process and established project deliverables. A separate sampling plan was designed to review all project elements in areas of potentially high risk of inaccuracy or non-conformance.

Desktop Review

The Audit Team performed a desktop review of the VCS PD and supporting documentation, as further described in Section 2.2 below.

Site Visit

Jeff Daley performed a site visit on September 28, 2011. The focus of the site visit was to interview relevant site personnel and project stakeholders; review the Project's operations, data collection procedures, and information management systems; as well as assess the Project's controls for sources of potential errors and omissions.

Corrective Actions and Supplemental Information

The Audit Team requested clarification and supplemental information as well as corrective actions during the validation process. The corrective action and clarification requests and the responses provided by Element Markets are summarized in Section 2.5.

Validation Reporting

Validation reporting, represented by this report for Element Markets, documents the validation process and identifies its findings and results.

2.2 Document Review

The Audit Team conducted the validation using the VCS Standard and ACM0002 as the criteria. Additionality, eligibility requirements, baseline scenario(s), project emissions, monitoring plan, and other pertinent criteria were assessed to evaluate the Project's approach as outlined in the VCS PD against the validation criteria. Discrepancies between the VCS PD and the validation criteria were considered material and identified for corrective action. Any deviations from the validation criteria required appropriate justification.

2.3 Interviews

Through the course of verification activities, First Environment interviewed the following project personnel to inform the verification process:

- Gauri Potdar, Senior Director, Renewable Energy – Element Markets
- Ken Nelson, Senior Vice President, Renewable Energy – Element Markets
- Ron Rebenitsch, Manager of Alternative Technologies – BEPC

2.4 Site Inspections

As described above, Jeff Daley performed the site visit on September 28, 2011.

2.5 Resolution of Any Material Discrepancy

The Audit Team identified several differences between the Project's approach, as outlined in the VCS PD, and the validation criteria that would constitute non-conformities or require approval as a methodology revision. Corrective action requests were issued accordingly. Additionally, First Environment requested several clarifications in order to inform the validation assessment.

Through communications with the Audit Team, Element Markets was able to resolve all corrective action and clarification requests made by the Audit Team during the validation process. The following tables summarize the corrective action and clarifications requested, as well as Element Markets' responses.

Corrective Action Request	Summary of Participant Response	Validation Conclusion
Please justify the inclusion in the project activity of the turbine owned by the Mitchell Technical Institute.	The VCS PD was revised to identify Mitchell Technical Institute, as well as South Dakota Wind Partners, as two of the project proponents.	Response is acceptable.
The project's crediting period identified in Section 1.6 of the VCS PD begins before the project start date identified in Section 1.5.	Section 1.6 of the PD was updated to identify the project's crediting period beginning on the start date.	Response is acceptable.
The following parameters are not consistently referenced throughout the VCS PD: E_{gpj} E_{fgrid} CM_y	The VCS PD has been revised to consistently reference and identify all applicable parameters.	Response is acceptable.
Equation 11 from ACM0002 is not addressed in the VCS PD.	Section 3.4 of the VCS PD has been revised to include Equation 11 of the methodology.	Response is acceptable.
The following inconsistencies were identified between the VCS PD template and the PD submitted for validation: - The parameter tables in Section 4.2 do not include all the fields specified in the VCS template - Section 1.2 does not identify whether the project is a grouped project	Sections 1.2 and 4.2 have been updated to meet the requirements of the VCS Project Description template.	Response is acceptable.
The project boundary incorrectly includes project emissions from purchased grid electricity.	Section 3.2 of the PD was updated to exclude project emissions from purchased grid electricity.	Response is acceptable.

Clarification Request	Summary of Participant Response	Verification Conclusion
Please clarify why PWSD1 is not considered the project proponent.	BEPC incorporated PWSD1 as a wholly owned subsidiary to develop the Crow Lake project. Although PWSD1 is the owner of 100 of the project turbines, it has delegated operational control to its parent, BEPC, pursuant to an Operations and Management Agreement. Additionally, BEPC is purchasing power generated by all 108 turbines through its PPA with PWSD1, which in turn has executed PPAs with MTI and SDWP. For these reasons, BEPC is identified as one of three project proponents. Additionally, the Mitchell Technical Institute and South Dakota Wind Partners were identified as project proponents in the VCS PD.	Response is acceptable.

3 VALIDATION FINDINGS

3.1 Project Design

The Project applies the ACM0002 methodology, which is applicable to the project activity because it falls within the scope of the approved methodology. Specifically, the project activity involves the installation of a new wind power plant.

The project is located across the span of Aurora, Jerauld, and Brule Counties, East of Chamberlain, South Dakota on a 36,000-acre plot of land (latitude and longitude are 43.8° and -98.8°, respectively). The project technology consists of 108 General Electric 1.5 megawatt (MW) wind turbines, with a total nameplate capacity of 162 MW.

The project start date is February 1, 2011, which is the date on which the project was commissioned and electricity began being exported to the grid. The Audit Team reviewed records of the Midwest Renewable Energy Tracking System (M-RETS) in order to confirm the project start date. The first crediting period is February 1, 2011 to January 31, 2021. The forecasted emission reductions during the first crediting period are 4,321,282 mt CO₂e.

The Project complies with relevant laws and regulations. The Audit Team reviewed copies of permits as well as interviewed project personnel during the site visit in order to confirm that necessary regulatory requirements were met.

BEPC incorporated PWSD1 as a wholly-owned subsidiary to develop the project activity. Although PWSD1 is the project owner, operational control over the facility is exerted by BEPC to whom control was delegated pursuant to a Operations and Maintenance Agreement. The Audit Team also reviewed the power purchase agreement (PPA) between PWSD1 and BEPC in order to confirm the ownership and operational arrangement. First Environment confirmed during the site visit that BEPC, SDWP, and MTI maintain operational control over the wind power generation equipment and the interconnection infrastructure and net electricity metering. The PPAs between PSWD1 and MTI and SDWP were also reviewed and indicated that PWSD1 acquired the rights to GHG reductions associated with power produced from turbines owned by MTI and SDWP.

The Audit Team reviewed an attestation signed by BEPC stating that BEPC has not attempted to register the Project with another GHG program other than VCS, and the Project is not a part of any emissions trading programs or other binding emission limits or targets.

The Project is eligible to receive renewable energy certificates (RECs); however, BEPC attested that it does not intend to receive RECs for emission reductions that are registered under the VCS program. Because BEPC controls the environmental attributes of power purchased from MTI and SDWP through its PPAs with these entities, the attestation provided covers power generated from any of the 108 project turbines.

The Project is currently listed in MRETs. A third party – WAPA - reports the number of megawatt-hours (MWh) generated by the Project each month to MRETs, which assigns a unique serial number to each MWh generated. For the creation of Verified Carbon Units (VCUs), the RECs for which VCUs are being claimed—each representing one MWh of production—will be retired in the system and the reason for retirement will be documented in the system. The retirement is permanent and cannot be reversed once such a designation is made. A screenshot of the retirement will be provided during the verification process to confirm the eligibility of power generated. The retirement of these RECs and subsequent identification of the reason for retirement will ensure that RECs will not be double sold and that VCUs can be created with confidence.

Commercially sensitive information related to the project design and finances has been redacted from the public version of the VCS PD. The Audit Team reviewed all business confidential information and determined that the classification as “commercially sensitive” is appropriate.

3.2 Application of Methodology

3.2.1 Title and Reference

The VCS-approved methodology applied to the project activity is the CDM methodology ACM0002, *Consolidated baseline methodology for grid-connected electricity generation from renewable sources*, Version 12.1.0

3.2.2 Applicability

The project activity complies with the applicability requirements of ACM0002. The table below lists the relevant applicability requirements and identifies how the Project meets them.

ACM0002 Requirement	Project Conformance	Comments/Findings
The project activity is the installation, capacity addition, retrofit, or replacement of a power plant/unit of one of the following types: hydro power plant/unit (either with a run-of-river reservoir or an accumulation reservoir), wind power plant/unit, geothermal power plant/unit, solar power plant/unit, wave power plant/unit, or tidal power plant/unit;	Yes	The Project is the installation of a new wind power plant.

3.2.3 Project Boundary

The project boundary is defined by the geographical extent of the Crow Lake Wind South Dakota plant area where the wind power is generated and the electric power grid to which the electricity is exported. For the purpose of calculating the combined margin emission factor, the project boundary also includes the grid-connected power plants in the MRO regional grid.

3.2.4 Baseline Scenario

The baseline scenario is defined in accordance with the requirements of the ACM0002 methodology for the installation of new grid-connected renewable power plant. Specifically, the baseline scenario is:

Electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in the *"Tool to calculate the emission factor for an electricity system."*

3.2.5 Additionality

The additionality of the Project is demonstrated through an investment analysis via application of the *Tool for the demonstration and assessment of additionality*, version 5.2.1 consistent with guidance from the VCS Association for renewable energy projects in the United States. The VCS PD follows the stepwise procedure as further described below:

Step 1: Identification of alternatives to the project activity consistent with current laws and regulations.

The VCS PD identifies several alternatives to the project activity, including:

- the Project undertaken without being registered as a VCS project activity;
- generation of electricity from the operation of grid-connected power plants and the addition of new generation resources, as reflected by the combined margin emission factor; and
- procurement of other renewable energy generation sources, such as solar, or biogas.

The procurement of other renewable energy generation sources is eliminated as a realistic and credible alternative because the other renewable energy technologies do not provide a comparable level of service to the Project. The Audit Team reviewed evidence of average capacity factors for several of the technologies, BEPC's limited biogas installations, and other technological concerns from BEPC's 2007 Resource Alternative assessment report to confirm that this alternative scenario could be eliminated from consideration. None of the alternatives identified are mandated by any enforced law, statute, or other regulatory framework, nor is the project activity mandated by any applicable law, statute, or other regulatory framework. The Audit Team reviewed evidence of BEPC's current renewable energy generation in order to confirm that BEPC had sufficient renewable energy resources in their portfolio in order to meet mandatory state Renewable Portfolio Standards through the end of the crediting period prior to the construction of the Project.

Step 2: Investment Analysis

An investment analysis is applied consistent with the requirements of the *Tool for the demonstration and assessment of additionality*. The investment analysis is considered from the perspective of BEPC, because it served as the key decision-maker, drove the development process, and bore the majority of the investment cost and risk as compared to MTI and SDWP.

Sub-step 2a: Determine Appropriate Analysis Method

The project activity and alternatives identified in Step 1 generate revenues from the sale of electricity; therefore, the Simple Cost Analysis (Option I) cannot be applied. Instead, the VCS PD identifies Benchmark Analysis (Option III) as the appropriate analysis method.

Sub-step 2b: Apply benchmark analysis (Option III)

The VCS PD identifies the annual avoided cost rate as the appropriate benchmark indicator. The annual avoided cost rate is reported to the Rural Utility Service (RUS) under the Public Utilities Regulatory Policy

Act and represents the fuel displacement value of the marginal generation unit that would operate in absence of the Project. This indicator meets option (e) as given in Sub-step 2b of the *Tool for the demonstration and assessment of additionality*. The VCS PD provides appropriate justification regarding the appropriateness of this indicator and also why other benchmark options are not applicable.

Sub-step 2c: Calculation and Comparison of Financial Indicators

The Audit Team reviewed annual RUS reports from 2005 through 2011 as well as BEPC's internal coal price forecasts in order to confirm the calculation of the avoided cost rate over the term of the PPAs. Coal pricing is used as a reference because coal-fired power represents BEPC's lowest marginal generation cost for dispatchable load. The Audit Team was also provided copies of the PPAs between BEPC and PWSD1 and between PWSD1 and the other project proponents in order to confirm the contract prices. The annual avoided cost rate is compared to the average weighted PPA price over the entire contract term. For the entire term, the average weighted PPA price exceeds the avoided cost rate which demonstrates that the Project cannot be considered financially attractive. The Audit Team also reviewed BEPC's 2007 Power Supply Analysis and company communications in order to confirm that revenue from carbon credits was an important consideration for BEPC when evaluating the investment decision.

Sub-step 2d: Sensitivity Analysis

A sensitivity analysis is presented in the VCS PD to demonstrate that the financial analysis is robust to reasonable variations in critical assumptions. Specifically, the escalator used to forecast the avoided cost rate through the end of the PPA contract terms is varied by ± 10 percent. The results show that this variation does not affect the conclusion that the Project is not financially attractive.

Step 3: Barriers Analysis

Since the outcome of the sensitivity analysis identified that the project is not financially attractive, a barriers analysis is not required in the assessment of additionality.

Step 4: Common Practice Analysis

The VCS PD includes an assessment of common practice among several similar wind projects located in the MRO region. Similar wind projects are defined as other wind projects developed by electric cooperatives. The VCS PD provides evidence that projects less than 5 MW are not utility-scale and should not be considered similar. Additionally, projects developed by Independent Power Producers (IPPs), Investor Owned Utilities (IOUs), or community wind developers (i.e., private individuals) are not considered similar because they have significantly different corporate structures and organization, face different financing options, have less permitting risk, and in the case of IPPs and IOUs, benefit from economies of scale. The Audit Team reviewed evidence of the benefits available to IPPs and IOUs in the tax equity market, the extensive permitting process required for projects that trigger the National Environmental Policy Act (NEPA) permitting requirements (which most private developments do not), and the large project portfolio and wind development expertise that several of the primary developers in MRO can draw upon when evaluating or developing new projects. The remaining projects that are considered similar are four projects developed by several different electric cooperatives in Iowa and Nebraska.

In accordance with Sub-step 4b of the *Tool for the demonstration and assessment of additionality*, the VCS PD identifies essential distinctions between the Project and the other wind projects developed by electric cooperatives. Most significantly, the other four projects were not subject to NEPA permitting, whereas the Project's permitting process took approximately three years and required significant resources for the development of the environmental assessment and environmental impact statement and purchase of conservation offsets. The Audit Team reviewed adequate evidence for this distinction and concluded that the common practice analysis appropriately complements the investment analysis described above. Based on this, the Audit Team confirmed that the Project is additional.

3.2.6 Quantification of GHG Emission Reductions and Removals

The VCS PD presents a procedure for quantifying emission reductions that is consistent with the procedures described in the ACM002 methodology and relevant CDM tools. The equations are correctly identified and the calculation of GHG emission reductions is presented in a transparent manner, incorporating all relevant GHG sources, sinks, and reservoirs.

Baseline emissions are estimated ex-ante based on the quantity of electricity generated by the Project during calendar year 2010. The Audit Team confirmed through review of calculation spreadsheets and underlying raw data that the combined margin emission factor is calculated in accordance with the *Tool to calculate the emission factor for an electricity system*, Version 2.2.1. The operating margin is calculated as 0.98542 tCO₂/MWh using the simple operating margin calculation method. The build margin is calculated as 0.4126 tCO₂/MWh. The weighted combined margin is calculated as 0.8422 tCO₂/MWh. Because wind power units are not dispatchable and are intermittent in nature, the combined margin was calculated using a 75 percent operation margin weight and a 25 percent build margin weight. The ex-ante calculation option is selected for both the operating and build margins, so both remain fixed for the duration of the first crediting period.

The Project is not a hydro or geothermal project, and does not combust any fuels to operate. Therefore, there are no project emissions.

No leakage emissions are considered under ACM0002.

Because there are no project or leakage emissions, total emission reductions are equal to total baseline emissions.

3.2.7 Methodology Deviations

No deviations were identified between the VCS PD and the stated criteria.

3.2.8 Monitoring Plan

The Project applies the approved monitoring methodology described in ACM0002. The primary variables monitored in order to determine and account for emission reductions are shown below.

Parameter	Method of Estimation	Frequency of Measurement	Unit of Measurement	Frequency of Recording
Electricity supplied to the grid ($EG_{\text{FACILITY}, y}$)	Revenue meter	Continuous	MWh	Hourly, aggregated Monthly

The monitoring plan specified within the VCS PD includes all relevant data and parameters required to obtain a reliable result of generated emission reductions and meets the requirements of ACM0002. The VCS PD includes a complete description of the frequency, responsibility, and procedures for recording, monitoring, measurement, and reporting activities. The monitoring plan ensures the adequate measurement of emissions occurring from GHG sources through the installation of appropriate metering equipment. The monitoring plan also identifies appropriate procedures for quality assurance and quality control of project data and includes procedures for responding to extraordinary events.

3.3 Environmental Impact

BEPC conducted an environmental impact assessment as a condition of a loan guarantee from RUS and of interconnection from WAPA. This triggered a review of the project under the National Environmental Protection Act (NEPA).

An Environmental Impact Statement (EIS) was developed for comparison of project construction at the chosen site (Crow Lake) versus alternative sites. The EIS identified impacts relating to wildlife and land use. In response to the identified impacts, BEPC obtained conservation offsets and funded a conservation easement to address all identified issues.

Through review of the EIS, both RUS and WAPA concluded that environmental impacts were minimized at the project site.

First Environment reviewed all relevant permits, copies of the Final Environmental Impact Statement, the WAPA and RUS decisions in the federal register approving the projects, and the letter detailing BEPC's payment for a conservation easement to confirm that BEPC complied with all necessary processes in implementing the Project.

3.4 Comments by stakeholders

Stakeholder consultation was required as part of the EIS process for the Project. All issues raised during stakeholder engagement were resolved through the NEPA permitting process.

4 VALIDATION CONCLUSION

First Environment has performed a validation of the Project's approach, as outlined in the VCS PD, as part of the VCS validation process. The validation was performed on the basis of VCS Standard, the ISO 14064-3 standard, and the approved CDM methodology ACM0002, *Consolidated baseline methodology for grid-connected electricity generation from renewable sources*, Version 12.1.0.

The review of the VCS PD and the satisfaction of corrective action and clarification requests have provided First Environment with sufficient evidence to determine the fulfilment of stated criteria.

The Project correctly applies the approved CDM baseline and monitoring methodology, ACM0002, as well as relevant CDM tools referenced therein. By producing renewable energy and displacing electricity that would otherwise have been generated through the combustion of fossil fuels, the project activity results in reductions of GHG emissions that are real, measurable, and give long-term benefits to the mitigation of climate change. An analysis of the additionality test demonstrates that the proposed project activity is not a likely baseline scenario. Emission reductions attributable to the Project are hence additional to any that would occur in the absence of the Project.

The total emission reductions from the Project are estimated to be 4,321,282 metric tonnes of CO₂e over the selected 10-year crediting period. The emission reduction forecast has been checked, and it is deemed likely that the stated amount will be realized given that the underlying assumptions do not change.

In summary, it is First Environment's opinion that the Crow Lake Wind Emissions Reduction Project as described in the VCS PD of January 3, 2012, meets all relevant VCS requirements and correctly applies the approved methodology ACM0002.

The validation of the Project is based on the information made available to us and the engagement conditions detailed in this report. First Environment cannot guarantee the accuracy or correctness of this information. Hence, First Environment cannot be held liable by any party for decisions made or not made based on this report or opinion.

5 LEAD VALIDATOR SIGNATURE



Michael Carim
Associate

6 INDEPENDENT REVIEWER SIGNATURE



James Wintergreen
Senior Associate