

VALIDATION REPORT FOR SWISS CARBON VALUE, LTD



RUBY CANYON ENVIRONMENTAL

Document Prepared by Ruby Canyon Environmental, Inc.

Grand Junction, Colorado, USA

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Summary:

Swiss Carbon Value Ltd. contracted Ruby Canyon Environmental, Inc. (RCE) to perform the validation of the proposed Genneia Wind Projects in Argentina (Project) for Genneia S.A. (Project Proponent). The Project is a 223.38 megawatt (MW) wind power project consisting of six new (Greenfield) wind farms located in the Chubut, Rio Negro, and Buenos Aires provinces of Argentina. The technologies include a total of 71 wind turbines with an annual generation capacity of 1,094 GWh. The electricity generated will be delivered to the Argentina's electricity grid system (SADI) and displaces fossil fuel-generated electricity resulting in CO₂ emissions reductions.

The Project Proponent utilized the United Nations Framework Convention on Climate Change (UNFCCC) Clean Development Mechanism (CDM) methodology entitled: "Consolidated baseline methodology for grid connected electricity generation from renewable sources (ACM0002), Version 19.0" and the Project falls under CDM/VCS Sectoral Scope 1, Energy industries (renewable/ non-renewable sources). The validation activities were conducted against Verified Carbon Standard (VCS) Standard v4.0, 19 September 2019, and CDM Tools.

As part of the validation activities, RCE reviewed the completeness, conservativeness, and accuracy of the underlying evidence for the Project's assumptions and data sources used. During the validation process, RCE issued a total of 9 findings which include:

- 2 Corrective Action Requests (CARs)
- 3 Requests for additional documentation (ADRs)
- 4 Clarification Requests (CLs)
- 0 Forward Action Requests (FARs)

Based on documentation and explanations provided by the Project Proponent, RCE closed out all findings in a clear and transparent manner. RCE is reasonably assured that the Project meets all relevant VCS requirements and correctly applies the CDM Methodology and Tools.

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1 INTRODUCTION

1.1 Objective

The purpose of validation is to have an independent third party assess the Project's eligibility, baseline scenario, additionality, project description, and monitoring plan to ensure conformance with VCS requirements and adherence to the methodology. Validation objectives also include an assessment of the expected emission reduction claims made by the Project. The validation process also provides assurance to stakeholders of the quality of the Project and achieving real, permanent, measurable, and additional emission reductions.

1.2 Scope and Criteria

The validation scope is defined as an independent and objective review of the Genneia Wind Projects in Argentina Project Description (PD) v7, dated December 27, 2019. The Genneia Wind Projects in Argentina PD was reviewed against the following criteria:

- VCS Standard, v4.0, 19 September 2019
- VCS Program Guide, v4.0, 19 September 2019
- VCS Validation and Verification Manual, v3.2 19 October 2016
- ISO 14064-3:2006 "Greenhouse gases – Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions"
- Approved CDM large-scale methodology ACM0002 v19.0 – Grid connected electricity generation from renewable sources
- Applicable CDM Tools

RCE employed a risk-based approach throughout the validation process when reviewing the completeness, conservativeness, and accuracy of the data and evidence provided by the Project Proponent. The results of the validation activities provided the necessary input for the validation opinion, which was completed according to the VCS Program Guide v4.0, VCS Standard v4.0, and ISO 14064-3:2006.

1.3 Level of Assurance

RCE conducted the validation activities and prepared its validation opinion to a reasonable level of assurance.

1.4 Summary Description of the Project

The Project is a 223.38 megawatt (MW) wind power project consisting of six new (Greenfield) wind farms located in the Chubut, Rio Negro, and Buenos Aires provinces of Argentina. The technologies include a total of 71 wind turbines with an annual generation capacity of 1,094 GWh. The electricity generated will be delivered to the Argentina's national electricity grid system (SADI) and displace fossil fuel-generated electricity resulting in CO₂ emissions reductions.

The Project expects to generate an estimated annual average of 444,180 tonnes carbon dioxide equivalent (CO₂e) in GHG emission reductions, totalling 4,262,298 tonnes CO₂e over the 10-year crediting period.

2 VALIDATION PROCESS

2.1 Method and Criteria

RCE used a risk-based assessment approach to the validation process. The approach was used to develop the sampling plan as part of the validation activities. The sampling plan assessed the following:

- Accuracy of the baseline and emission reduction calculations
- Regulatory compliance
- Project ownership
- Application of the methodology
- Demonstration of additionality
- Monitoring plan
- Stakeholder consultation

Elements contained in the Chubut, Rio Negro, and Buenos Aires provinces of Argentina PD were the primary focus of the validation and sampling plan. RCE reviewed the PD for completeness and accuracy and used it as a basis to determine other relevant documents to review and personnel to interview. Based on the requirements of VCS PD and CDM Tools, RCE developed a sampling plan checklist. RCE found the largest validation risk items to be associated with conformance to the methodology and associated CDM Tools.

Following its initial review of all Project documents, RCE delivered an Issues Log to the Project Proponent with findings that included corrective actions, additional document requests, and clarifications. In addition to document review, RCE recalculated the electricity system emission factor calculations provided by the Project Proponent and found several minor errors. RCE checked the calculations used in ex-ante emission reduction calculations to be free of errors.

The Project Proponent provided responses to RCE for all identified issues, which led to three rounds of findings and responses until all items were closed out. As part of the response resolutions, RCE interviewed the Project Proponent.

Following the close-out of all open items, RCE completed a validation report, and submitted the validation for independent review.

2.2 Document Review

The validation activities relied heavily on a review of documents provided by the Project Proponent. RCE reviewed several versions of the Chubut, Rio Negro, and Buenos Aires provinces of Argentina PD as well as copies of underlying evidence, data, records, studies, permits, project site plans, and other supporting documents. In addition, RCE reviewed numerous independent studies and reports on renewable energy in Argentina, project owner's website, and the project location maps and photos to cross-check and compare to the documents provided by the Project Proponent. In addition, RCE conducted a site visit to two of wind farms during the first week of December 2019.

RCE completed a desk review to assess the following parameters:

1. Project details as per VCS PD
2. Applicability and appropriateness of CDM methodology used
3. Compliance with relevant laws and regulations
4. Correctness of application of baseline and monitoring methodology
5. Demonstration of additionality
6. Monitoring Plan
7. Stakeholders' comment
8. Proof of ownership
9. Supporting documents mentioned in the PD Interviews

As part of the validation activities, RCE completed interviews with Swiss Carbon Value, Southpole, and Genneia personnel. RCE's lead validator Bonny Crews, validation team member Paulina Fernandez, and financial expert Ronald Collings conducted several interviews in a series of teleconferences held on November 12 & 20, 2019 and December 5, 2019.

The following stakeholders were interviewed:

Name & Position	Organization	Items Discussed
Sebastian Del Valle Rosales, Senior Project Manager	Southpole	Chubut, Rio Negro, and Buenos Aires provinces of Argentina PD, CDM additionality requirements, electricity grid factor calculations, and project ownership.
Santiago Gonzalez Hernandez Project Manager		
Christian Ehrat, Consultant	Swiss Carbon Value	Financial additionality workbook inputs,
Edwin King, Project Manager	Genneia S.A.	Project activity and ownership

2.3 Site Inspections

The full Project is currently under construction; Chubut Norte I Wind Farm began operations December 12, 2018; the final wind farm, Chubut Norte II is expected to begin operation on January 1, 2020. RCE completed a site visit December 3-5, 2019 to Puerto Madryn in the Chubut region which contains the wind farms, Chubut Norte I and Chubut Norte II. On December 4, 2019, RCE personnel Bonny Crews and Paulina Fernandez toured the turbine construction facilities as well as the data gathering process. Sebastian del Valle Gonzalez (Southpole) and Edwin King (Genneia) led the site tour and thoroughly answered all questions.

On December 5, 2019, RCE personnel met at Genneia's offices in Buenos Aires to discuss details of site operations, financial additionality inputs, and conduct a virtual visit of the other four wind farms. The remoteness of the Pomona I and II and the Villalonga I and II sites precluded site visits to those wind farms without a lengthy travel schedule. During the meeting at Genneia's offices in Buenos Aires, RCE participated in a virtual site visit to view the turbines and construction, as well as the data gathering process. The equipment and procedures employed at the six wind farms are very similar and consistent.

2.4 Resolution of Findings

RCE requested corrective actions, clarifications and supplemental information during the validation process. The Project Proponent and Technical Consultant responded to all requests, which were subsequently closed out.

During the validation process, RCE issued a total of 9 findings which include:

- 2 Corrective Action Requests (CARs)
- 3 Requests for additional documentation (ADRs)
- 4 Clarification Requests (CLs)
- 0 Forward Action Requests (FARs)

The resolution of findings is summarized in the table found in Appendix A.

2.4.1 Forward Action Requests

RCE did not issue any forward action requests as part of the validation activities.

3 VALIDATION FINDINGS

3.1 Project Details

The Project is a 223.38 megawatt (MW) wind power project consisting of three new (Greenfield) wind farms located in the Chubut, Rio Negro, and Buenos Aires provinces of Argentina. The technologies include a total of 71 wind turbines with an annual generation capacity of 1,094 GWh. Following are details of the six wind farms:

Chubut Norte I Wind Farm:

Chubut Norte I Wind Farm (PECN I) is a project to generate electricity through wind energy. The contracted power is 28.35 MW and the Plant will have a total installed nominal capacity of 28.8 MW. The generation will be carried out through a set of 8 wind turbines distributed on a plot of around 880 hectares located northwest of the city of Puerto Madryn, Province of Chubut. The connection to the SADI will be made by means of a 16.5 km long and 132kV high voltage line to the TRANSPA's 132 / 330kV Transformer Station Puerto Madryn.

Chubut Norte II Wind Farm:

With an installed capacity of 26.28 MW, Chubut Norte II wind farm (PECN II) is in the same plot of land of Chubut Norte I. It comprises 6 Nordex wind turbines. The connection to the SADI will be made through a double terna LAT 132kV, of which one terna will be connected at TRANSENER's ET 132/330kV Puerto Madryn and the other terna will be connected at TRANSENER's ET 132/500kV Puerto Madryn.

Pomona I Wind Farm:

Pomona I Wind Farm (PEPOM I) constitutes an electricity generation project using wind energy. In the development of the project is of 26 wind turbines of 3.9 MW, totaling 101.4 MW of wind power. The generation will be carried out through a set of wind turbines distributed on a property of about 2,440 hectares located in the vicinity of the town of Pomona, Province of Río Negro.

The connection to the SADI will be made through a new 33 / 132kV Transformer Station and a sectioning of the 132kV LAT linking the Choele Choe and Luis Transformer Stations Beltran.

Pomona II Wind Farm:

Pomona II Wind Farm (PEPOM II) is a project that generates electricity through wind energy. In the development of PEPOM II, 11.7 MW of wind power will be installed. The generation will be carried out by means of a set of 3 wind turbines distributed over an area of around 500 hectares located within a total of 4,500 hectares in the vicinity of the city of Choele Choe, Province of Río Negro. The PEPOM II will be adjacent to the Pomona I Wind Farm, awarded in the RenovAr program - Round 1.5.

The connection to the SADI will be made through the 33 / 132kV Transformer Station of the Pomona I Wind Farm awarded in the RenovAr program - Round 1.5.

Villalonga I Wind Farm:

The " Villalonga I Wind Farm" consists of the construction and operation of a wind farm with 15 wind turbines and an installed capacity of 51.75 MW. It is expected to generate 280.2 GWh per year on average. The wind turbines will be interconnected with each other by a medium voltage (33 kV) underground electrical grid, from which the energy will be conducted to the internal transformer stations (ET PEVI)¹. At the substation, the voltage will be increased to 132 kV and from there connecting project to the SADI between ET Pedro Luro and ET Carmen de Patagones.

Villalonga II Wind Farm:

The Villalonga II Wind farm's generation will be carried out by means of a wind turbine distributed over an area of around 60 hectares located within a 727-hectare site in the vicinity of the city of Villalonga, Province of Buenos Aires. The project will be located next to the Villalonga I Wind Farm. It is expected to generate 14.3 GWh per year on average. The connection to the SADI will be made through the Transformer Station 33/132kV of the Villalonga Wind Farm I.

RCE confirmed that the Project is eligible under the VCS Program and uses the United Nations Framework Convention on Climate Change (UNFCCC) Clean Development Mechanism methodology "Grid-connected electricity generation from renewable sources, Version 19.0" and falls under CDM/VCS Sectoral Scope 1, Energy industries (renewable/ non-renewable sources).

The Genneia Wind Projects in Argentina PD Section 1.3 states that Genneia S.A. the Project Proponent and Project Owner. RCE confirmed this through a review of the environmental permits, transfer of legal authority and other Project documents, and through discussions at the site visit. In addition, the Genneia Wind Projects in Argentina PD Section 1.4 identifies Swiss Carbon Value Ltd. as the Technical Consultants.

¹ 33/132 kV transformer station inside the Villalonga wind farm (PEVI)

The VCS Standard, Version 4.0 defines the project start date as the "date on which the project began generating GHG emission reductions or removals". For this Project Activity, the date on which GHG emission reductions began corresponds to the date when the Chubut Norte I Wind Farm began operations, December 12, 2018. While on site, RCE reviewed an online database of SADI to confirm the date of electricity generation from the wind farms and to support the start date.

The Project's first crediting period is 10 years, beginning on the proposed Project start of operations of December 12, 2018 and ending on December 11, 2028. Based on the environmental assessment, the operational life of the project activity is expected to be 30 years.

RCE confirms the Project Activity is over the annual GHG emissions reduction threshold for large scale projects (300,000 tCO₂e) and therefore considered a large project per the VCS Standard 4.0. The Genneia Wind Projects in Argentina PD presents the estimated GHG emission reductions over the 10-year crediting period to be 4,262,298 tCO₂e.

RCE confirmed the coordinates of the wind farm locations via environmental permit documents, satellite photos and .kml files from Google Earth. The Chubut Norte I and II project locations were confirmed on the site visit.

Wind Farm Name	X	Y
Chubut Norte I	324,200	5,284,728
Chubut Norte II	320,172	5,280,304
Pomona I	262,600	5,616,937
Pomona II	261,325	5,613,239
Villalonga I	528,981	5,566,731
Villalonga II	529,190	5,567,732

Through research Argentina electricity markets, regulatory framework, and a review of Compañía Administradora del Mercado Mayorista Eléctrico (CAMMESA) information and statistics, RCE confirmed that conditions prior to the Project Activity are consistent with the baseline scenario of electricity being delivered to the SADI grid by the operation of grid-connected fossil fuel-fired power plants.

The Project Proponent provided sufficient evidence that they retain the full ownership and proof of title for the Project Activity. RCE confirmed this through review of the Project permits, lease agreements and purchase power agreements.

RCE confirmed there are no statutes or regulations in Argentina mandating the generation of electricity by wind turbines.

RCE found no evidence that the Project is participating in other GHG programs or has been rejected by GHG programs. RCE confirmed the Project is not seeking other environmental credits (i.e. renewable energy credits). There is no Argentina renewable energy credits trading program. RCE concludes that the Project description included in The Genneia Wind Projects in Argentina PD is accurate, complete, and provides an understanding of the nature of the Project.

3.2 Application of Methodology

3.2.1 Title and Reference

The Project Proponent utilized the UNFCCC Clean Development Mechanism methodology entitled: "Consolidated baseline methodology for grid connected electricity generation from renewable sources (ACM0002, Version 19.0)" which is valid starting on August 31, 2018 through 27 November 2019, which is later than the initiation of validation activities.

3.2.2 Applicability

Under ACM0002, Version 19.0, there is a series of applicability criteria presented as follows: "This methodology is applicable to grid-connected renewable power generation project activities that

- (a) install a Greenfield power plant;
- (b) involve a capacity addition to (an) existing plant(s);
- (c) involve a retrofit of (an) existing plant(s);
- (d) involve a rehabilitation of (an) existing plant(s); or
- (e) involve a replacement of (an) existing plant(s).

In addition, the methodology is applicable under the following conditions:

(a) The project activity may include renewable energy power plant/unit of one of the following types: hydro power plant/unit with or without reservoir, wind power plant/unit, geothermal power plant/unit, solar power plant/unit, wave power plant/unit or tidal power plant/unit;"

Based on the aforementioned applicability criteria conditions, RCE confirmed the Project Activity meets the applicability criteria of ACM0002 as an installation of a grid-connected wind power plant as a new Greenfield power plant.

The following methodological tools applied to the Project Activity are the following CDM approved tools:

- TOOL07 – Tool to calculate the emission factor for an electricity system, Version 07.0.0
- TOOL01 – Tool for the demonstration and assessment of additionality, Version 07.0.0
- TOOL24 – Common practice, Version 03.1

RCE confirms that the Project Proponent has applied the CDM Tools correctly and consistent with ACM0002.

3.2.3 Project Boundary

Under ACM0002, Version 19.0, the Project Boundary is defined as: "The spatial extent of the project boundary includes the project power plant and all power plants connected physically to the electricity system that the CDM project power plant is connected to".

The Project Proponent clearly states this project boundary in the Genneia Wind Projects in Argentina PD, Section 2.3, and has included diagrams and maps separately showing the Project Activity, exact metering locations, and proximity to the SADI grid. RCE confirms that the Project Proponent has applied the Project Boundary in a manner that is consistent with ACM0002.

RCE confirmed the selected SSRs for baseline and project emissions are correctly applied according to ACM0002. RCE confirmed the location of the project site, coordinates of the six wind farms' locations and electricity meters within the Project Boundary via the site visit, virtual site visit, environmental permit documents, site plans, satellite photos and .kml files from Google Earth.

RCE concludes the selected project boundary and SSRs are justified for the Project and in conformance with ACM0002, version 19.0.

3.2.4 Baseline Scenario

Under ACM0002, Version 19.0, the Baseline Scenario for a Greenfield power plant is defined as: "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 'TOOL07: Tool to calculate the emission factor for an electricity system'."

The Project Proponent clearly states this baseline scenario in the Genneia Wind Projects in Argentina PD, Section 2.4, and provided supporting evidence from Argentina's national electricity grid to demonstrate that the assumptions are reasonable and justified. The Project Proponent used data provided by CAMMESA to calculate the combined margin correctly for Argentina national grid using the CDM Tool. RCE confirmed the baseline emissions calculations to be a fair representation and materially correct.

RCE concludes that the identified baseline scenario reasonably represents what would occur in the absence of the proposed VCS Project Activity.

3.2.5 Additionality

The Project Proponent demonstrated and assessed additionality by applying the CDM "Tool for the demonstration and assessment of additionality" (Version 7.0.0), as stated in ACM0002, Version 19.0.

The Project Proponent identified alternative scenarios in the Genneia Wind Projects in Argentina PD including the baseline scenario. RCE confirms that neither 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 Project Proponent provided many of the documents containing confidential business information as well as public documents regarding wind power financing and investment, and valuing wind farm assets. The Project Proponent chose a post-tax internal rate of return (IRR) as the financial indicator. As part of the validation activities, RCE assessed commercially sensitive information provided by the Project Proponent including: capital and operating costs, production capacity factor, curtailment rates, taxes and tax credits, and PPA. RCE confirmed that the data and parameters used in the Project Proponent's financial investment analysis were appropriate and credible. RCE confirmed the investment analysis inputs, IRR calculations, and results were conducted accurately and free of errors.

The Project Proponent selected “Investment Analysis Option III – Apply benchmark analysis” as the analysis method and provided documents containing confidential business information as well as publicly available documents regarding wind power financing and investment. RCE confirmed the suitability of the benchmark method and rate used for the investment analysis. The benchmark was determined through WACC based on parameters standard in the market. The result is a post-tax WACC in real terms of 15.65%, which is the benchmark for investment analysis of the project activity.

RCE recalculated the sensitivity analysis to determine which inputs were most sensitive to the results, and assessed those inputs for accuracy, reasonableness, and uncertainty. RCE confirmed the outcome of the sensitivity analysis and confirmed the project was not financially attractive; therefore, a barriers analysis was not required in the additionality assessment. The Project Proponent used Argentine Interconnection System (SADI) obtained from the electricity wholesale market management company (CAMMESA), which RCE finds to be appropriate.

RCE confirmed that the Project Activity does not fall under any of the measure classes defined in the CDM Guidelines on common practice, Version 0.3.1. Accordingly, the Project Proponent completed Sub-step 4b of the common practice analysis and defined essential distinctions between the Project Activity and similar activities.

The Project Proponent performed the common practice analysis on the combined capacity of the three wind farms. RCE confirmed the Project Proponent properly completed each of the four steps which concluded that the Project passes the common practice additionality test (i.e., the Project is not considered common practice).

Step 1 identified the +/-50% range of the installed capacity of each wind farm. Step 2 then identified the cohort of operational power plants in the SADI grid (CDM and non-CDM projects) that fall within that range for each wind farm, and that apply the same measure (“switch of technology with or without change of energy source including energy efficiency improvement as well as use of renewable energies”). Step 3 identified the projects resulting from Step 2 that are neither registered CDM, VERRA or GS project activities, project activities submitted for registration, nor project activities undergoing validation. These projects are identified as $N_{all} = 0$.

Step 4 identified the projects from Step 3 that apply technologies that are different to the Project technologies (i.e., are not wind farms). These projects are identified as $N_{diff} = 0$. The Project Proponent properly calculated the factor, $F = 1 - N_{diff}/N_{all}$ for each of the wind farms. As per the tool, a project is considered a common practice within a sector in the applicable geographical area if the factor F is greater than 0.2 and $N_{all} - N_{diff}$ is greater than 3.

RCE confirmed the reasonableness of assumptions made in the demonstration of additionality, and concludes the supporting evidence provided, data, parameters, and assumptions relevant to the financial analysis, benchmark selection, and common practice analysis to be adequate and sufficient to justify the additionality of the Project.

3.2.6 Quantification of GHG Emission Reductions and Removals

RCE confirmed that the emission reductions are quantified in accordance with the procedures described in ACM0002 Version 19.0 and relevant CDM tools. The equations are correctly identified in the Genneia Wind Projects in Argentina PD, and the GHG emission reduction

calculations are presented in a clear and transparent manner, incorporating all relevant GHG sources, sinks, and reservoirs.

Baseline Emissions

Baseline emissions are estimated ex-ante based on the quantity of electricity expected to be generated by the Project multiplied by the combined margin CO₂ emission factor for the SADI national electricity grid. RCE confirmed through review of calculation spreadsheets, underlying raw data, and publicly available databases for the SADI electricity grid (CAMMESA statistics) that the combined margin emission factor is calculated in accordance with the CDM TOOL07: Tool to calculate the emission factor for an electricity system, Version 7.0. RCE confirmed the operating margin (OM) to be correctly calculated as 0.4885 tCO₂/MWh using the simple operating margin calculation method. The build margin (BM) is correctly calculated as 0.3282 tCO₂/MWh, and the weighted combined margin (CM) is correctly calculated as 0.4484 tCO₂/MWh. RCE confirmed that the combined margin was correctly calculated according to the CDM Tool using a 75 percent operation margin weight and a 25 percent build margin weight.

RCE confirmed the correct equation was applied for the baseline emissions where the quantity of electricity is multiplied by the combined margin:

$$BE_y = EG_{\text{facility},y} \times EF_{\text{GRID},CM}$$

The ex-ante calculation option is selected by the Project Proponent for both the operating and build margins and remains fixed for the duration of the first crediting period.

Project Emissions

For wind renewable energy power generation project activities, $PE_y = 0$.

Leakage Emissions

Based on Section 5.6 of the ACM0002, version 19.0 methodology, no leakage emissions are considered ($LE_y = 0$)

Emission Reductions

RCE reviewed the quantification procedure and supporting evidence and concludes that the methodologies and the applicable tools have been applied correctly to calculate baseline emissions, and net GHG emission reductions and removals. RCE confirmed that because the Project comprises Greenfield wind power plants, there are no project or leakage emissions, thus total emission reductions are equal to total baseline emissions. RCE concludes that the data, parameters, references, and sources used in the Genneia Wind Projects in Argentina PD to determine the baseline emissions are appropriate and reasonable in the context of the Project Activity.

3.2.7 Methodology Deviations

The Project Proponent has stated in the Genneia Wind Projects in Argentina PD, Section 2.6 that there are no methodology deviations for this Project Activity. RCE validation activities have confirmed this statement is correct.

3.2.8 Monitoring Plan

RCE confirmed the Project correctly applies the monitoring plan as described in the ACM0002 methodology. Accordingly, the only parameter to be monitored is the amount of electricity supplied to the electricity grid. The monitoring plan described in the Genneia Wind Projects in Argentina PD includes all relevant data and parameters required to calculate emission reductions.

The monitoring plan includes a complete description of the data parameters, methods of estimation, frequency and unit of measurement, and procedures for recording, storing, and reporting activities. The monitoring plan also ensures accurate measurements through the installation of appropriate metering equipment and identifies appropriate quality assurance and quality control procedures for meter calibration and maintenance.

3.3 Non-Permanence Risk Analysis

Non-permanence risk analysis is not applicable to the Project Activity.

4 SAFEGUARDS

4.1 No Net Harm

Based on the evidence reviewed, RCE confirms that no potential environment or socio-economic issues were found during the Project's planning and permitting process.

4.2 Environmental Impact

The Project Proponent has provided environmental impact assessments (EIA). The assessments included applicable environmental regulations, site characterization, air quality modelling, archaeological study, flora and fauna report, landscape report, the environmental implications of the Project Activity, relationship between the Project and the regional policies and community development, and voluntary environmental commitments. The assessments concluded the Project will contribute to the sustainable development of the Republic of Argentina.

4.3 Local Stakeholder Consultation

The stakeholder engagement was carried out for the six separate locations of the wind farms. The Project Proponent provided sufficient evidence that local authorities and landowners were engaged in a series of workshops, meetings, discussions, and communications. The Project Proponent provided details regarding the community meetings with numerous local municipalities regarding cultural and social risks and using local labour and providers. Additional meetings were held with tourism and educational institutions exploring the benefits of a wind project.

The Project Proponent has a process in place to address any ongoing public comments via their website.

4.4 Public Comments

The Project Proponent provided sufficient evidence that all concerns or issues were raised during the local stakeholder consultation process have been addressed.

No public comments were received as part of the VCS public comment period ending on December 11, 2019.

5 VALIDATION CONCLUSION

RCE confirms that the validation was performed in accordance with the VCS Program Guide, Version 4.0, and VCS Standard, Version 4.0 in addition to UNFCCC CDM methodology and tools. Through the construction of a wind power project with a total nameplate capacity of 223.38 MW, the Project Activity will result in a reduction of GHG emissions that is relevant, complete, consistent, accurate, transparent and conservative.

Upon completion of the validation process RCE concludes that all relevant VCS validation criteria have been satisfied and the Project Activity properly applies the criteria of ACM0002 Version 19.0. RCE concludes that the listed baseline alternatives were credible and that the emission reductions attributable to the Project Activity are additional to any emission reductions that would occur in the absence of the Project.

All CARs, ADRs, and CLs raised by RCE have been satisfactorily resolved by the Project Proponent. The *ex-ante* emission reductions from the Project Activity are estimated to be 4,262,298 tonnes of CO₂e over a 10-year crediting period from December 12, 2018 to December 11, 2028, resulting in an average of 444,180 tonnes of CO₂e annually throughout the crediting period. RCE considers it likely that the estimated quantity of emission reductions may be achieved by the Project Activity should the assumptions and operational conditions remain the same.

RCE issues a positive validation opinion for Genneia S.A. and recommends the Project for VCS registration without limitations of qualifications.

Lead Validator Signature



Bonny Crews
Senior Environmental Scientist

Independent Reviewer SignatureA handwritten signature in black ink, appearing to read "Phillip Cunningham", written in a cursive style.

Phillip Cunningham
Environmental Scientist

6 APPENDIX A: RESOLUTION OF FINDINGS

Issues Log version:	Final		
Project Name:	Genneia Wind Projects in Argentina		
Project ID:	PL 1987		
Project Proponent	Genneia S. A.		
Corrective Action, Additional Documents, or Clarification	Finding	Project Proponent Response	Validation Conclusion
CAR 1	In the PDD, the references for the equations used to calculate the operating margin are incorrect (e.g. the equation labeled Eq. 2 is actually Eq. 3 in the Tool, etc.).	11/25/2019: It has been added on the PD next to each equation the reference it has on its source, being this the tool or methodology.	11/27/2019: RCE verified that the PDD was updated. RCE now understands that the equation numbers were unique to the tool rather than references to equations methodology and/or tools, but the additional text helps to clarify the source of the equations.

CAR 2	Please provide a new version of the PD; the most recent version (191213) does not have emission reduction numbers from the latest EFSADI workbook (191125).	12/27/2019: Southpole: We updated the PD. Regarding the ERs, they are the same as in the EFSADI, now, what might be a bit confusing is that we used for the yearly ERs is not the average over the 10 year period, but when we did the publication, VCS asked us to use the figure from the "full implementation" 444,180 tCO2 per year.	
ADR 1	The documentation provided for ownership's evidence for some parks is on the document Genneia Prospecto.pdf . Additionally, can you provide the attestations, the legal titles to the plants and/or legal titles to the project's equipment (i. e. wind turbine generators)?		12/5/2019: Southpole and Genneia all documents for viewing at the site Buenos Aires. Clear ownership of the project by Project Proponent, Genneia
ADR 2	Inside Genneia Prospecto.pdf the name of Chunor appears as Chubut, it is the same park?	Yes, Chunor Norte is the same park than Chubut	Sufficient explanation

ADR 3	Please provide the VCS project listing document. The document on the VCS pipeline database is actually an email pertaining to the version of template to use.	12/26/2019: Please see emails send on December 12th. It's the original communication with VCS regarding the publication on their website.	RCE viewed the APX declaration of The VCS staff member present at the visit mentioned he will upload the list document to VCS. I will follow up.
CR 1	Please explain the relationship between Swiss Carbon Value and Southpole	Swiss Carbon and South Pole are sister companies.	RCE viewed documentary support at site visit
CR 2	In the calculation of the Build Margin EF, explain how the determination was made that none of the power plants included in the SET _{sample} started to supply electricity to the grid more than 10 years ago.	11/25/2019: This has been extensively revised and the 10 years are because of the paragraph 75 of the Tool 07 v7.0, were is stated that 20% of the generation of the whole country (with CDM) had to be taken into account. We had considered 11 years, not the 10 years as it is stated on the tool, in order to achieve the 20% of generation, all CDM and a couple of plants that started before the 10 year mark had to be included. The date of commissioning has been taken from this public site: http://portalweb.cammesa.com/memnet1/Pages/descargas.aspx File .MDB named as "Opstart" table "Base_Generadores" column "FECHA_DESDE_COM" Cammesa, which is the energy market regulator in Argentina, only started to operate in first quarter 1994, before this date there are no official records acknowledge of operation of energy plants in Argentina.	11/27/2019: RCE verified that the calculations have been revised in accordance with the Tool 07 v7.0.

CR 3	Please confirm the start dates of the wind farms that have started electricity generation	12/26/2019: The date of commissioning has been taken from this public site: http://portalweb.cammesa.com/memnet1/Pages/descargas.aspx File .MDB named as "Opstart" table "Base_Generadores" column "FECHA_DESDE_COM" the operation start date of each operational wind farm are correct	Confirmed.
CR 4	On the financial analysis spreadsheet, the - 10% tax value was incorrectly calculated.	12/27/2019: Southpole submitted a final version of the FA spreadsheet with the error corrected. The projected IRR decreased slightly but remains well below the threshold.	Confirmed.
Recommendations for Improvement			
RFI 1	None		