



VERIFICATION REPORT

DEMPSEY RIDGE WIND PROJECT



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Summary:

3Degrees (Technical Consultant) retained GHD Services, Inc. (GHD), to complete an independent third-party verification of the Dempsey Ridge Wind Project (Project Activity), Verified Carbon Standard ID: 780 located near Cheyenne, Oklahoma under the requirements of the Verified Carbon Standard (VCS). Dempsey Ridge Wind Farm, LLC (Dempsey Ridge) is the Project Proponent and Acciona, S.A. (Acciona) is the owner of the Project Activity. The verification was conducted for the 2019 monitoring period (January 1 to December 31, 2019).

The Project Activity consists of the installation and operation of 66 Gamesa G90/2000-IEC II A, 2.0 MW turbines for a total rated nameplate capacity of 132 MW. The turbines are located over an area of approximately 7,500 acres of rural and agricultural/grazing lands. Electricity generated by the turbines is upgraded from a 34.5 kilovolt (kV) collection line rating to a 230 kV rating at the Project Activity's substation and then transferred via approximately 15 miles of transmission line to the Sweetwater Substation (Point of Interconnection, POI) where the electricity is then delivered to the Southwest Power Pool (SPP) grid. The Project Activity's intent is to generate electricity from renewable sources and therefore displace electricity that otherwise would have been produced for or distributed to the SPP grid in the absence of the Project Activity.

The Project Proponent utilizes the United Nations Framework Convention on Climate Change (UNFCCC) Clean Development Mechanism (CDM) methodology ACM0002: Consolidated baseline methodology for grid connected electricity generation from renewable sources, Version 12.1.0.

The scope of this verification is such that GHD, as an independent third-party recognized as a Validation and Verification Body (VVB) by the VCS (Registration Number 027) is responsible for reviewing the Monitoring Report including accompanying materials, the previous Validation Report,

and the Project Description (PD). GHD utilized a risk-based analysis against the relevant requirements of both the interpretation from the CDM and of VCS Program Guide Version 4.0 (Program Guide) and VCS Standard Version 4.0 (Standard).

As part of the verification process, GHD reviewed the completeness, conservativeness, and accuracy of the underlying evidence for the assumptions and claims made, and data sources used. The results of this investigation were then, together with the results of the review of other areas, combined to form the necessary input for the verification report and opinion.

The verification report and associated appendices document a total of Nine (9) findings which include:

- One (1) Corrective Action Request (CAR)
- Eight (8) Clarification Requests (CLs)
- Zero (0) Forward Action Request (FAR)

Upon review of the documentation and explanations provided by the Project Proponent and Technical Consultant, all CAR and CL findings were closed in a clear and transparent manner. GHD is issuing a Positive Verification Opinion and therefore recommends/certifies that the registered Project Activity has obtained the reported emission reductions of 222,228 tonnes of carbon dioxide equivalent (tCO₂e).

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1 INTRODUCTION

1.1 Objective

On behalf of the Dempsey Ridge Wind Farm, LLC (Project Proponent), 3Degrees (Technical Consultant) retained GHD Limited (GHD), to complete an independent third-party verification of the following Verified Carbon Standard (VCS) Project Activity:

- Dempsey Ridge Wind Project located near Cheyenne, Oklahoma, U.S.A., VCS Project ID: 780. (Project Activity)

GHD completed the verification pursuant to the relevant requirements of the VCS guidance (the Program Guide and Standard) as well as translational guidance from the UNFCCC CDM. As detailed in Section 4.1 of the Standard, “Verification is the periodic ex-post independent assessment by a validation/verification body of the GHG emission reductions and removals that have occurred as a result of the project during the monitoring period, conducted in accordance with the VCS Program rules.” The objective of GHD, on behalf of the VCS, is to ensure that only Project Activities that meet the established criteria receive a positive and unconditional verification statement. Specifically, the criteria states that the registered Project Activity must result in emission reductions that are:

- Relevant
- Complete
- Consistent
- Accurate
- Transparent
- Conservative

In the verification of this Project Activity, GHD used a risk-based verification approach to focus and determine the detailed scope of the verification. The key risks associated with the project design, baseline, monitoring plan, emission reduction estimates, environmental impacts, and stakeholder comments are elements that are critical for meeting VCS criteria for achieving real, measurable, permanent, additional, independently audited, unique, transparent, and conservative greenhouse gas (GHG) reductions.

Per the VCS Validation and Verification Manual Version 3.2 (VVM), during verification VVBs must evaluate the Monitoring Report and assess the following:

- The extent to which methods and procedures, including monitoring procedures, have been implemented in accordance with the validated PD. This includes ensuring conformance with the monitoring plan.
- The extent to which GHG emission reductions and removals reported in the monitoring report are materially accurate

1.2 Scope and Criteria

The scope of the third-party verification services completed by GHD are as follows:

- Verification of the Dempsey Ridge Wind Project located near Cheyenne, Oklahoma, U.S.A for the monitoring period of January 1, 2019 through December 31, 2019 under the requirements of the VCS.

This Project Activity falls under Sectoral Scope 1 – Energy industries (renewable/non-renewable sources), which is one of the sectoral scopes for which GHD is accredited.

The Verification activities were completed pursuant to the most up-to-date related rules, requirements, regulations, modalities, criteria, guidelines, emission reductions yield, and principles in relation to the PD supplied by the Project Proponent. The Project Activity utilizes the UNFCCC CDM methodology ACM0002: Consolidated baseline methodology for grid connected electricity generation from renewable sources, Version 12.1.0.

GHD reviewed the PD, Monitoring Plan, Monitoring Reports, methodology, and related information along with preparing the Verification Report and Verification Deed of Representation (Verification Representation) for the crediting period.

For this verification, GHD applied the following criteria:

- VCS Program Guide, Version 4.0, dated 19 September, 2019 (VCS Program Guide)
- VCS Standard, Version 4.0, dated 19 September, 2019 (VCS Standard)
- VCS Validation and Verification Manual, Version 3.2, dated 19 October, 2016 (VVM)
- UNFCCC CDM ACM0002: Consolidated baseline methodology for grid connected electricity generation from renewable sources, Version 12.1.0
- ISO 14064-3:2006 Specification with guidance for the validation and verification of greenhouse gas assertions

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1.3 Level of Assurance

The verification was conducted to a reasonable level of assurance. Per the VCS Standard Section 4.1.8, “The threshold for materiality with respect to the aggregate of errors, omissions and misrepresentations relative to the total reported GHG emission reductions and/or removals shall be five percent for projects and one percent for large projects.”

Based on the reported emission reductions (i.e. less than 300,000 tonnes of carbon dioxide equivalent [tCO₂e]), the Project Activity is classified as a project, therefore the materiality was set at five percent.

1.4 Summary Description of the Project

The Project Activity consists of the installation and operation of 66 Gamesa G90/2000-IEC II A, 2.0 MW turbines for a total rated nameplate capacity of 132 MW. The turbines are located over an area of approximately 7,500 acres of rural and agricultural/grazing lands near Cheyenne, Oklahoma, United States. Electricity generated by the turbines is upgraded from a 34.5 kV collection line rating to a 230 kV rating at the Project Activity’s substation and then transferred via approximately 15 miles of transmission line to the POI at the Sweetwater Substation where the electricity is then delivered to the SPP grid. The Sweetwater substation is owned and operated by American Electric Power (AEP) West, which is an electric utility that is a member of Southwest Power Pool (SPP) grid. The Project Activity’s intent is to generate electricity from renewable sources thereby displacing electricity that would have otherwise been produced for or distributed to the SPP grid, in the absence of the Project Activity.

2 VERIFICATION PROCESS

2.1 Method and Criteria

GHD has assessed and verified that the implementation of the Project Activity, and the steps taken to report emission reductions, comply with the VCS criteria and relevant guidance provided by the VCS as well as the relevant criteria of the UNFCCC. The criteria used in the verification has been outlined in Section 1.2 above. The verification included a review of relevant documentation and records.

GHD followed a risk-based verification approach. GHD identified the key reporting risks related to the claimed emission reductions and assessed to what extent the Project

Activity's control systems are adequate for mitigating any perceived reporting risks. GHD did not conduct a Site visit during the verification as it was determined that there were no significant changes to the Site or Project Activities since GHD's previous Site visit on March 12, 2019, during the verification of the 2018 Monitoring Report. A Site visit was not required during the verification of this reporting period to achieve a reasonable level of assurance.

Key reporting risks that are not sufficiently addressed by the Project Activity's control system represents residual risks. GHD conducted a detailed verification to investigate the residual risks. Key risks assessed during the verification included, but were not limited to, verification of correct use of emission factors, correct use of conversion factors, and consistency in aggregation of emissions data. Wherever practical, direct reading instruments were to be used to ensure that any reporting risks were kept within equipment and instrumentation performance limits. GHD included a Risk Assessment and Sampling Plan within the Verification Plan. The Verification Plan was updated throughout the verification as necessary. The Final Verification Plan has been provided as Appendix A.

During the verification process, the GHD Project Team considered both quantitative and qualitative information on emission reductions. Quantitative data was comprised of the Monitoring Report and accompanying information submitted to the GHD Project Team by the Project Proponent. Qualitative data was comprised of information on internal management controls, calculation procedures, and procedures for transfer, frequency of emissions reports, and review and internal audit of calculations/data transfers.

The outcome of the verification process was the creation of a Findings Assessment. The Findings Assessment was issued to the Project Proponent for response to any corrective actions or clarification requests. Upon closing all findings identified by GHD, a Draft Verification Report was prepared. The Technical Reviewer completed a peer review of the Draft Verification Report, and there were no additional findings that required additional response from the Project Proponent. GHD issued a Draft Verification Report to the Project Proponent for review and comment. GHD then incorporated the Project Proponent's comments, as applicable and issued the Final Verification Report along with a completed Verification Representation.

The Verification Representation conclusion was based on the interaction of three key verification principles as follows:

1. Compliance with the monitoring plan
2. Accuracy
3. Quality of evidence

2.2 Document Review

The VCS verification process relies heavily upon document review. The primary document for review is the Monitoring Report. The Project Proponent provided GHD with the Monitoring Report and revised Monitoring Report as detailed below:

Document Date	Date Issued to GHD	Version Number	Methodology
28 February 2020	29 February 2020	1	ACM0002 Version 12.1.0
16 March 2020	16 March 2020	2	ACM0002 Version 12.1.0

The above submissions were reviewed by GHD. No issues were identified in the Monitoring Report Version Number 2.

During the document review, GHD became familiar with the Project Activity in order to be able to compare the situation and status on Site with the situation as described in the underlying documentation. GHD completed the following:

- Review of the data and information presented to verify completeness
- Review of the PD and Monitoring Report, paying particular attention to the frequency of measurements, the quality of metering equipment including calibration requirements, and the quality assurance and quality control procedures
- Evaluation of data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions
- Review of the last revision of the previous verification and validation reports
- Review of operation licenses from local authorities
- Cross-check of available documentation with the registered PD and Monitoring Report

GHD followed the audit trails for specific indicators, and cross-checked with the applicable records.

As part of the verification process, additional documentation supplemental to the Monitoring Report was requested and reviewed by GHD. This supplemental information included the following documents:

Date Issued to GHD	Document	Description
28 February, 2020	Public Service 95633322000 082719 Public Service 95633322000 010720 Public Service 95633322000 020819 Public Service 95633322000 031219 Public Service 95633322000 040519 Public Service 95633322000 051319 Public Service 95633322000 060419 Public Service 95633322000 071119 Public Service 95633322000 090619 Public Service 95633322000 100919 Public Service 95633322000 110819 Public Service 95633322000 120419	AEP electrical invoices for electricity purchased from the grid.
28 February, 2020	PSO Sweetwater BU Test PSO Sweetwater PRI Test 20180822_PO_Dempsey Ridge WF 230KV Sub-PSO Sweetwater Fdr IPP BU_v1.7_x 20180822_PO_Dempsey Ridge WF 230KV Sub-PSO Sweetwater Fdr IPP PRI_v1.7_x	AEP revenue and check meter accuracy tests (2017 and 2018).
28 February, 2020	Acciona ION Meter Hourly Data 2019 (check meter - Dempsey) DEMPSEYBU2019 (check meter - AEP)	Acciona check meter data.
28 February, 2020	A - Calculation - Dempsey Ridge Production_2019	3Degrees calculation spreadsheet.
28 February, 2020	Dempsey capacity factor 2019	Site capacity factor information for the 2019 Monitoring Period.
28 February, 2020	Dempsey Ridge Performance 2019 – December	Site performance KPI information.
28 February, 2020	Dempsey Ridge Production_2019 (revenue meter - AEP)	AEP revenue meter data for 2019.
28 February, 2020	RP8 Monitoring Report	Version 1 of the Project's Monitoring Report for the 2019 Monitoring Period.
16 March 2020	Dempsey Ridge RP8 Monitoring Report	Version 2 of the Project's Monitoring Report for the 2019 Monitoring Period.
16 March 2020	074496-RPT1 – Dempsey Ridge Validation Report	Validation report.
16 March 2020	Emails – no complaints and capacity factor explanation	Evidence documenting any complaints received during the monitoring period and a more detailed explanation of the Site's capacity factor.

Date Issued to GHD	Document	Description
16 March 2020	2020-03-10 Dempsey REC Attestation form	Attestation form relating to the creation of RECs during the Monitoring Period.
16 March 2020	A-Calculation-Dempsey Ridge Production_2019 v2	Version 2 of the calculation spreadsheet.

During the conference call interview on 11 March, 2020, the Project Team requested further details regarding the quality assurance and quality control (QA/QC) procedures related to data collection and storage at the Site. Site personnel clarified that all data from the meters owned by Acciona are collected electronically, stored via a cloud software, and is backed up on a centralized server off-Site. The Project Team verified that the project's QA/QC procedures meet the criteria specified with Section 3.21.1 of the VCS Standard.

2.3 Interviews

GHD interviewed Nathan Schuster of 3Degrees periodically throughout the verification. GHD did not conduct any on-Site or in-Person interviews during the course of this verification. Alternatively, GHD conducted a conference call interview on 11 March, 2020. The following representatives were present during the conference call:

- Jason Clarke (GHD) – Lead Verifier and Technical Expert
- Benjamin Gerber (GHD) – Verifier
- Nathan Schuster (3Degrees) – Technical Consultant
- Helen Kyritsis (Acciona) – Settlements Department
- Jeremy Retzlaff (Acciona) – Operations and Maintenance
- Gary Barrett (Acciona) – Site Manager

During the conference call, the following topics were discussed:

- Site operational time during the 2019 Monitoring Period.
- Variation in emission reduction quantities between the 2018 and 2019 Monitoring Periods.
- Any major changes to Site conditions since the previous monitoring period.
- Issues related to environmental regulation and/or compliance.
- Any changes to the agreement in place between the Site and Southwest Power Pool (SPP).
- Discussion of meter calibration requirements.
- Review of data/document QA/QC protocol for the Site.
- Potential occurrence of curtailments during the Monitoring Period.
- Electricity usage of the on-Site administrative building.
- Data collection and management procedures for the Site.

Information related to the findings of the above topics are discussed within Section 4 of this report.

2.4 Site Inspections

GHD did not complete a Site inspection during the verification of the 2019 Monitoring Report. Prior to the outset of the verification, GHD confirmed with 3Degrees that there have been no significant changes to Site or Project conditions and as such it was determined that a Site inspection was not necessary to reach a reasonable level of assurance. In lieu of the Site inspection, GHD hosted a conference call on 11 March, 2020. Specific topics covered are described in Section 2.3 of this Report.

GHD conducted a Site inspection on 12 March, 2019 during the verification of the 2018 Monitoring Report. The Project Proponent has confirmed that Project conditions have remained consistent since the completion of the 2019 Site inspection.

During the previous Site inspection, GHD verified that the Site is located ten miles southwest of Cheyenne and thirty miles northwest of Elk City in Western Oklahoma at the following grid coordinates:

Latitude: 35.5°N

Longitude: -99.48°W

2.5 Resolution of Findings

GHD has provided the final Findings Assessment in Appendix B, which contains the findings, responses, and any changes applied to Project Activity documents. The Project Proponent was required to complete the appropriate responses and to provide, where necessary, documentation as evidence of their assumptions and/or responses. A summary of the number of findings per finding category is presented as follows:

Finding Category	Number of Findings
CAR	1
FAR	0
CL	8
Total	9

A description of each finding and resolution are discussed throughout the remaining sections of this report. No material discrepancies were observed by GHD in the verification of the Project Activity.

2.5.1 Forward Action Requests

No FARs were identified during the assessment of the information provided by the Technical Consultant and Project Proponent. However, there was a FAR raised during the initial verification of the first reporting and verification period. The FAR is as follows:

“Section 7.4 of the Interconnection Agreement dated 26 May 2009 states “if metering equipment fails to register, or if the measurement made by Metering Equipment during a test varies by more than two percent from the measurement made by the standard meter used in the test, Transmission Owner shall adjust the measurements by correcting all measurements for the period during which Metering Equipment was in error by using Interconnection Customer’s check meters, if installed.”

As detailed in Section 3.2 of the Monitoring Report, the monitoring equipment is an ION 8600 meter, of accuracy class 0.2. The PowerLogic brochure for the ION8600 meter specifies the accuracy of energy measurements is ANSI C12.20 class 0.2. The technical specification for the revenue and check meters is 0.2 percent, which differs from the 2 percent allowable error specified in the Interconnection Agreement. The CRA Project Team notes that the Metering equipment test measurements has not varied by more than 0.2 percent from the measurement made by the standard meter used in the test.

In order to maintain transparency, the CRA Project Team request that for future verifications, if the error identified during accuracy tests is greater than 0.2 percent (the accuracy of the meters), then the appropriate corrective actions must be taken irrespective of the Interconnection Agreement terms.”

GHD raised CL#4 to clarify if any changes were made to the agreement between Dempsey Ridge and AEP as a result of the FAR raised during the validation. No amendments have been made to the agreement as a result of the FAR. No error greater than 0.2 percent was identified during the accuracy testing. GHD performed recalculations associated with each set of meter data from the Project Activity and did not identify an error greater than 0.1 percent during the 2019 Monitoring Period.

2.6 Eligibility for Validation Activities

Validation activities were not performed as part of this verification.

3 VALIDATION FINDINGS

No validation activities took place during the verification of the 2019 Monitoring Report.

3.1 Participation under Other GHG Programs

No validation activities took place during the verification of the 2019 Monitoring Report.

3.2 Methodology Deviations

No validation activities took place during the verification of the 2019 Monitoring Report.

3.3 Project Description Deviations

No validation activities took place during the verification of the 2019 Monitoring Report.

3.4 Grouped Project

No validation activities took place during the verification of the 2019 Monitoring Report.

4 VERIFICATION FINDINGS

4.1 Project Implementation Status

The Project Activity received its Validation Representation with the VCS dated 19 December 2011 as a Renewable Energy Industries type project under Sectoral Scope 1 defined by the UNFCCC and adopted by the VCS. The Project Activity was registered utilizing the approved consolidated large-scale methodology ACM0002 titled “Grid connected electricity generation from renewable sources”, Version 12.1.0 with a renewable crediting period of ten (10) years commencing on the date the wind farm begins commercial operation, which was expected to be 15 December 2011 and expected to conclude on 15 December 2021.

Section 3.7 of the Standard states that “*The project start date of a non-AFOLU project is the date on which the project began generating GHG emission reductions or removals*”. The project reached commercial operation on 27 April 2012. The renewable 10-year crediting period began on 01 January 2012 and will conclude on 31 December 2022. The stated crediting period is in

accordance with the project crediting period Standard requirements. Monitoring data was provided for the 2019 Monitoring Period for the revenue meter and check meter owned by AEP as well as the revenue meter owned by Acciona. The monitoring data indicates the Project was in consistent operation for 2019, with no significant unplanned downtime events during the monitoring period. Additionally, during the 11 March 2020 conference call, Site personnel stated that operational time was during the 2019 Monitoring Period was fairly consistent with previous monitoring periods and that there were minor interruptions associated with generator failure. It was also noted that curtailments from the SPP also slightly lowered production relative to previous monitoring periods. GHD verified that the data collected in 2019 was in accordance with the monitoring requirements of the registered PD.

The Project Activity achieves GHG emissions reductions through the installation and operation of 66 Gamesa G90/2000-IEC II A, 2.0 MW turbines for a total rated nameplate capacity of 132 MW. The turbines are located in an area of rural and agricultural/grazing lands near Cheyenne, Oklahoma. Electricity generated by the turbines is upgraded from a 34.5 kV collection line rating to a 230 kV rating at the Project Activity's substation and then transferred via approximately 15 miles of transmission line to the POI at Sweetwater Substation where the electricity is then delivered to the SPP grid.

The implementation status of the Project Activity was confirmed during the 2019 Site Inspection (for the 2018 Monitoring Period) and during the verification of the 2019 Monitoring Report GHD verified that this information has remained unchanged. Specifically, GHD verified the following details:

- During the 2019 Monitoring Period, there were 66 turbines capable of operation with a total nameplate capacity of 132 MW.
- Monitoring of required parameters as per the approved PD is conducted via four (4) electricity meters; including one (1) revenue meter and one (1) check meter owned by AEP and one (1) revenue meter and one (1) check meter owned by Acciona. Each of the meters is classified as a bi-directional meter in that they record electricity supplied to, and taken from, the grid. Each meter monitors the net electricity generated as per the approved Monitoring Plan. The revenue meter, as per the signed interconnection agreement, is the meter of record. The Project Proponent does not have access to the revenue meter.

No discrepancies were identified between the Project Activity and the registered PD.

GHD verified that the monitoring data for the 2019 Monitoring Period was collected per the requirements of the PD. GHD reviewed the raw data from each turbine and then how the energy generation data is collected and stored from the Project Activity and determined that is was appropriate. During the conference call, Site personnel discussed the data flow and QA/QC procedures associated with the energy generation data. It was determined that all data is automatically recorded electronically and is backed up indefinitely via an off-Site cloud file storage system. This was determined to be adequate.

GHD raised CL#1 requesting that the Project Proponent provide a written attestation relating to whether or not the credits have been claimed under any other system within the crediting

period. The Project Proponent provided a letter from the Director of Power Marketing at Acciona (dated 10 March 2020) to GHD on 19 March 2019 attesting that no Renewable Energy Credits (RECs) associated with the 2019 monitoring period have been sold by the Project Proponent. GHD also verified that the Project Activity does not participate in any other system. GHD performed a check of other relevant registries and confirmed that the Project Activity does not participate in any other GHG programs or systems.

This Project Activity contributes to sustainable development through the generation of renewable electricity.

4.2 Safeguards

4.2.1 No Net Harm

No potential negative environmental and socio-economic impacts have been identified by the Project Proponent. The Project Activity does not require permits or approvals by the Oklahoma Department of Wildlife Conservation or the United States Fish and Wildlife Services as the Project Activity is located on private property and no federal nexus have been identified.

During the 11 March 2020 conference call, GHD requested that the Project Proponent clarify if there have been any changes to the operating permits for the Project Activity from previous verifications. GHD and the Project Proponent discussed that no changes have been made to the operating permits for the Project Activity during the 2019 monitoring period.

GHD confirmed that the Project Proponent actively takes steps to mitigate potential impacts and reviewed the United States Environmental Protection Agency (US EPA) Environment and Compliance History Online (ECHO) database. The ECHO database provided no information regarding regulatory requirements or information or indicate any violations.

4.2.2 Local Stakeholder Consultation

Extensive stakeholder consultation occurred during the development phase of the Project Activity. The site manager maintains a contact log to record any questions or complaints from local stakeholders and project neighbours. GHD requested a copy of the contact log as CL#6. GHD reviewed the contact log and determined that no complaints were raised by stakeholders during the 2019 Monitoring Period.

4.3 AFOLU-Specific Safeguards

This section is not required as this is a non-AFOLU project.

4.4 Accuracy of GHG Emission Reduction and Removal Calculations

Monitoring Parameters

The following is a list of the monitoring parameters that the Technical Consultant and Project Proponent monitored during the crediting period and recorded in order to calculate the claimed emission reductions for the monitoring period:

Symbol	Description (Units)	Frequency
EG _{facility,y}	Quantity of net electricity generation supplied by the project plant to the grid in year “y” (MWh/year).	Continuous/real-time measurement and at least monthly recording.

Methods for Recording Monitoring Parameters

Emission reductions regarding this Project Activity are entirely dependent upon the direct measurement of the electricity both supplied and consumed from the SPP grid. The net electricity generated is measured directly at the Project Activity substation. Located within this substation are four separate electricity meters; two revenue meters and two check meters. One revenue meter and one check meter are owned by AEP and one revenue meter and one check meter are owned by the Project Proponent. Each of the meters are bi-directional meters (they record electricity supplied to, and consumed from, the grid). The meters are programmed to include a loss compensation factor of 0.028 percent to account for energy losses between the Project Activity substation and the POI at the Sweetwater substation, per the registered PD. In the Validation Report Version 3, dated 19 December 2011, the GHD Project Team was satisfied that all transmission losses were correctly accounted for in the VCS PD. GHD confirmed during this verification that none of the meters installed during initiation of the Project Activity have changed and therefore it is understood and verified through interviews, that the programming remains unchanged since validation. GHD also verified the consistency of the data collected by all four meters and did not identify any significant discrepancies in the meter data.

Electricity generation and consumption are recorded by the AEP revenue meter and invoices tracking electricity consumption by the revenue meter were made available to GHD. Net electricity generated is recorded in the units of MWh.

The Project Proponent states in the Monitoring Report that the revenue meter alone is adequate for the purposes of monitoring, recording, and billing. Should the revenue meter fail to register, AEP will base the measurements on data recorded by their check meter. The Acciona owned meters allow the Project Proponent to confirm the total MWh invoiced by AEP.

All data recorded by the AEP revenue meter is accessed only by AEP personnel. The total amount of electricity consumed by the Project Activity is invoiced separately to the Project Proponent from AEP on a monthly basis. Monitoring of electricity occurs on a minute-by-minute basis, recording/billing then occurs on a five minute basis.

It is GHD’s opinion that the monitoring methods used by the Project Proponent meet the requirements of the registered PD, and provide a level of redundancy with the monitoring of net electricity generated with four individual meters; two of which are owned by AEP, and the other two owned by the Project Proponent.

Calculation of Emission Reductions

The value of net electricity supplied by the Project Activity is multiplied by the combined margin CO₂ emission factor for grid connected power generation that was established as an ex ante parameter during the validation stage. The combined margin CO₂ emission factor for this crediting period is 0.647 tCO₂/MWh per the registered PD and Monitoring Report.

As the Project Activity is displacing only carbon dioxide emissions from electricity production the resulting number value is then multiplied by the global warming potential of carbon dioxide as follows:

- $GWP_{CO_2} = 1 \text{ tCO}_2\text{e}/1 \text{ tCO}_2$

The calculations used to determine the total emission reductions by the Technical Consultant and Project Proponent are as follows:

Total Emission Reductions Calculation

Total emission reductions are calculated as follows:

$$ER_y = BE_y - PE_y - L_y$$

Where:

BE_y = Baseline emissions in year "y" (tCO₂e/year)

PE_y = Project emissions in year "y" (tCO₂e/year)

L_y = Leakage emissions in year "y" (tCO₂e/year)

Baseline Emissions Calculation

Baseline emissions are calculated as follows:

$$BE_y = EG_{\text{facility},y} * EF_{\text{grid},CM,y}$$

Where:

$EG_{\text{facility},y}$ = Quantity of net electricity generation that is supplied by the project plant to the grid in year "y" (MWh/year)

$EF_{\text{grid},CM,y}$ = Combined margin CO₂ emission factor (0.647 tCO₂/MWh)

Project Emissions Calculation

GHD verified that there are no projects emissions from the Project Activity.

GHD raised CL#2 requesting that the Project Proponent provide clarification and evidence related to the metering of the Administration building and the electricity consumed by it. GHD reviewed the consumption records and determined that since project implementation, 12,384 kW of electricity was consumed in by the administration building. GHD reviewed the total electricity consumption amount and determined that it represented less than 0.001 percent of the total electricity generated by the Project Activity during the monitoring period and therefore does not represent a material misstatement.

Leakage Emissions Calculation

Leakage emissions do not require emissions calculations based on the registered PD.

Re-Calculation of Emissions Reductions

GHD requested the full data set from the Technical Consultant and Project Proponent. Invoices for electricity supplied to the grid and electricity supplied by the grid for the Project Activity were provided. Consolidated raw data of electricity meter readings was also provided. GHD was successfully able to re-calculate the emission reductions based on the raw data received.

GHD raised CL#7 requesting the Project Proponent provide details of the capacity factor (%) for the Project Activity for the 2019 monitoring period. The annual capacity factor for 2019 was approximately 39.1 percent, which further verifies the operation of the Project Activity and magnitude of emissions associated with the data collected. This provided further evidence that the data reviewed was indicative of the overall operation of the Project Activity through the 2019 monitoring period.

Calculation Results

GHD reviewed the calculation of emission reductions and did not identify any errors or discrepancies.

4.5 Quality of Evidence to Determine GHG Emission Reductions and Removals

GHD requested and reviewed evidence to ensure the relevance, consistency, transparency, completeness, accuracy, and conservativeness of the statements and calculations made.

In accordance with Article 7, Section 7.4 of the Southwest Power Pool Interconnection Agreement for Gen 2006 035, Dempsey Ridge Wind Farm, LLC, the Transmission Owner (AEP Public Service Company of Oklahoma) is required to inspect and test all Transmission Owner owned Metering Equipment upon installation and at least once every two years thereafter.

If metering equipment fails to register, or if the measurement made by metering equipment during a test varies by more than two percent from the measurement made by the standard meter used in the test, the Transmission Owner shall adjust the measurements by correcting all measurements for the period during which metering equipment was in error by using Interconnection Customers check meters if installed. If no such check meters are installed or if the period cannot be reasonably ascertained, the adjustment shall be for the period immediately preceding the test of the metering equipment equal to one half the time from the date of the last previous test of the metering equipment.

The following table summarizes the calibrations and accuracy testing completed on the metering equipment.

Meter	Serial #	Manufacturer Calibration Frequency	Interconnection Agreement Acceptance Test Frequency	Initial Factory Calibration Date	Accuracy Testing Date
AEP 230kV Revenue Meter Manufacturer: Schneider Electric Model: PowerLogic ION8600 Error Class: +/- 0.2 percent	LT-1107A404-1	Calibration not required (digital device). Manufacturer does not specify frequency of accuracy checks.	Typically annually but required by the Interconnection Agreement the meter must be calibrated once every 2 years at minimum.	Not Required	16 August 2017 22 August 2018
AEP 230kV Check Meter Manufacturer: Schneider Electric Model: PowerLogic ION8600	LT-1107A405-1	Calibration not required (digital device). Manufacturer does not specify frequency of accuracy checks.	In accordance with Good Utility Practice	Not Required	16 August 2017 22 August 2018

Meter	Serial #	Manufacturer Calibration Frequency	Interconnection Agreement Acceptance Test Frequency	Initial Factory Calibration Date	Accuracy Testing Date
Error Class: +/- 0.2 percent					
Project Proponent 120kV Revenue Meter Manufacturer: Schneider Electric Model: PowerLogic ION8600 Error Class: +/- 0.2 percent	LT-1109A072-01	Calibration not required (digital device). Manufacturer does not specify frequency of accuracy checks.	In accordance with Good Utility Practice	08 September 2011	09 August 2017
Project Proponent 120kV Check Meter Manufacturer: Schneider Electric Model: PowerLogic ION8600 Error Class: +/- 0.2 percent	LT-1109A071-01	Calibration not required (digital device). Manufacturer does not specify frequency of accuracy checks.	In accordance with Good Utility Practice	08 September 2011	09 August 2017

GHD raised CL#3 to request that the Project Proponent provide clarification related to any corrections made as a result of a discrepancy between the revenue and check meters, or if there were no corrections made to the data during the 2019 monitoring period. Within the Findings Assessment, the Technical Consultant confirmed that there were no corrections or changes made to the meter data based on discrepancies identified between the meters. Based on GHD's review of the data there is minimal discrepancy between the revenue and check meters (0.047%) for a total discrepancy of 161.93 MWh which equates to 104.77 tCO_{2e}.

Within the conference call interview, GHD requested that the Project Proponent provide clarification regarding the calibrations and accuracy testing performed on the Acciona owned meters. GHD has reviewed calibration records for the AEP owned meters and determined they are in compliance.

GHD has determined that the Technical Consultant and Project Proponent have provided sufficient documentation to verify the quality of the data used to quantify GHG emission reductions. While not required for this Project Activity, the use of the check meters to compare to the revenue meter provides a level of redundancy in the determination of electricity generation.

4.6 Non-Permanence Risk Analysis

The Project Activity is not an AFOLU project, therefore a non-permanence risk analysis is not required.

5 VERIFICATION CONCLUSION

GHD as a VVB is responsible for reviewing the Monitoring Report and any supporting documentation to ensure that the principles of Program Guide and Standard are met, specifically that the registered Project Activity has resulted in emission reductions that are:

- Relevant
- Complete
- Consistent
- Accurate
- Transparent
- Conservative

Per the VVM, during the verification GHD evaluated the Monitoring Report and assessed the following:

- The extent to which methods and procedures, including monitoring procedures, have been implemented in accordance with the validated PD. This includes ensuring conformance with the monitoring plan.
- The extent to which GHG emission reductions and removals reported in the monitoring report are materially accurate.

Verification Opinion

The verification was performed in accordance with Version 4.0 of the Program Guide and Standard. Through the construction of a 66 turbine wind power project with a total nameplate capacity of 132 MW, the registered Project Activity has resulted in a reduction of GHG emissions that are relevant, complete, consistent, accurate, transparent and conservative.

It is GHD's opinion that all relevant VCS criteria have been satisfied. Within the Monitoring Report it was demonstrated and confirmed by GHD that the Project Proponent has applied the monitoring plan per the registered PD. GHD confirms the Project Activity has been implemented in accordance with the registered PD. Therefore, it is GHD's opinion that the emission reductions attributable to the registered Project Activity during the monitoring period of 1 January 2018 to 31 December 2018, are materially correct and are a fair representation of the implemented Project Activity per the PD. The Verification Deed of Representation is provided as Appendix C.

All CARs and CLs raised by GHD have been satisfactorily closed by the Project Proponent and Technical Consultant. No material error was identified by GHD. GHD confirmed that the Project Activity has been implemented in accordance with the registered PD.

GHD is issuing a Positive Verification Opinion in regards to this Project Activity and therefore recommends/certifies that the Project Activity has obtained the reported emission reductions as follows:

Verification period: 01 January 2019 to 31 December 2019

The Deed of Representation is included as Appendix C.

Verified GHG emission reductions and removals in the above verification period:

Year	Baseline emissions or removals (tCO ₂ e)	Project emissions or removals (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Net GHG emission reductions or removals (tCO ₂ e)
2019	222,228	0	0	222,228
Total	222,228	0	0	222,228

All of Which is Respectfully Submitted,



Jason Clarke, P. Eng. (Lead Verifier)

APPENDIX A: Final Verification Plan



March 31, 2020

Reference No. 11210652

Mr. Nick Facciola
Director, Carbon Projects
3Degrees
235 Montgomery St., Suite 320
San Francisco, CA 94104

Dear Mr. Facciola:

Re: Verification Plan for the 2019 Monitoring Period of January 1, 2019 to December 31, 2019, Dempsey Ridge Wind Power Project under Verra: Verified Carbon Standard (VCS), Oklahoma, United States of America (VCS ID: 780)

1. Introduction

3Degrees, Inc. retained GHD Services, Inc. (GHD) to complete an independent third-party verification of the Dempsey Ridge Wind Power Project (Project Activity and/or Facility/Site), registered under Verra: Verified Carbon Standard (VCS), Project ID: 780. The Project Activity is located near Cheyenne, Oklahoma, United States of America. Dempsey Ridge Wind Farm, LLC (Dempsey Ridge) is the Project Proponent and Acciona, S.A. (Acciona) is the owner of the Project Activity. 3Degrees Group, Inc. (3Degrees) is the Technical Consultant for the Project). This verification is for the January 1, 2019 to December 31, 2019 monitoring period.

The VCS defines verification as "the periodic ex-post independent assessment by a validation/verification body of the [greenhouse gas (GHG)] emission reductions and removals that have occurred as a result of the project during the monitoring period, conducted in accordance with the VCS rules".¹ This Verification Plan has been prepared in accordance with the requirements presented in the following documents:

- VCS Program Guide, Version 4.0, dated 19 September, 2019 (VCS Program Guide)
- VCS Standard, Version 4.0, dated 19 September, 2019 (VCS Standard)
- VCS Validation and Verification Manual, Version 3.2, dated 19 October, 2016 (VCS VVM)

In accordance with the VCS Program Guide, eligible GHG emissions reductions projects are to be evaluated by an accredited Validator/Verifier who has been approved under an accredited GHG program. GHD is a recognized Validator/Verifier under the VCS for projects within the following sectoral scopes:

- Sectoral Scope 1 - Energy industries (renewable/non-renewable sources)
- Sectoral Scope 4 - Manufacturing industries
- Sectoral Scope 5 - Chemical industry
- Sectoral Scope 10 - Fugitive emissions from fuels (solid, oil, and gas)

¹ https://verra.org/wp-content/uploads/2019/09/VCS_Standard_v4.0.pdf



- Sectoral Scope 12 - Solvents use
- Sectoral Scope 13 - Waste handling and disposal

This Project Activity falls under Sectoral Scope 1 for which GHD is accredited.

2. Verification Objective

The objective of the verification is to provide 3Degrees, Acciona, and the VCS with an opinion on whether the Project's Monitoring Report contains any material discrepancies and whether the emission reductions were determined in accordance with the VCS requirements detailed in the Methodology and the Standard.

3. Level of Assurance

GHD will conduct the verification to a reasonable level of assurance.

4. Verification Standards and Criteria

GHD will apply the following documents as the verification criteria:

- VCS Program Guide, Version 4.0, dated 19 September, 2019 (VCS Program Guide)
- VCS Standard, Version 4.0, dated 19 September, 2019 (VCS Standard)
- VCS Validation and Verification Manual, Version 3.2, dated October 19, 2016 (VCS VVM)
- UNFCCC CDM ACM0002: Consolidated baseline methodology for grid connected electricity generation from renewable sources, Version 12.1.0
- ISO 14064-3:2006 Specification with guidance for the validation and verification of greenhouse gas assertions

5. Verification Team

5.1 Roles and Responsibilities

Lead Verifier and Technical Expert – Jason Clarke, P.Eng. – Mr. Clarke will lead the verification and is responsible for the development of the verification report. Mr. Clarke will review the risk assessment, recalculating the raw data, data management and drafting the findings. Mr. Clarke will prepare and sign the verification statement and verification report.

Verifier – Ben Gerber, MCC – Mr. Gerber will participate in the review of raw data and the development of the draft findings.



Independent Peer Reviewer and Technical Expert – Gordon Reusing, M.A.Sc., P.E., P. Eng. –
Mr. Reusing will conduct a peer review of the verification plan the risk assessment and the verification report and findings.

5.2 Qualifications

Jason Clarke, P.Eng.

Role: Lead Verifier

Professional Summary | Jason is a licensed professional engineer in the Province of Ontario, and has been with GHD since 2012. Jason has practical and field experience associated with solid waste management engineering, construction oversight/administration, and a range of greenhouse gas (GHG) validation and verification activities. Jason has been a Lead Verifier for the verification of Ontario based facilities under O. Reg. 452/09 and 390/18. Jason is also a Lead Verifier and Landfill Project Specialist under the Climate Action Reserve and a Lead Verifier under the California ARB. Further, Jason has been a validation/verification team member for a variety of GHG Validation and Verification projects registered under ANSI and UNFCCC CDM. Jason has been involved in the preparation of GHG Validation and Verification plans, issues logs, draft and final validation/verification reports, and findings assessments for various GHG projects associated with the Ontario Ministry of the Environment and Parks (MECP), ANSI, TCR, Massachusetts Department of Environmental Protection (MassDEP), VCS, and the UNFCCC CDM. Jason also has experience with the internal and external auditing related to GHG Verification and Validation projects in Ontario, Quebec, Alberta, British Columbia, and Massachusetts.

Benjamin Gerber, MCC

Role: Verifier

Professional Summary | Ben is a Climate Change Specialist and has been with GHD since 2018. Benjamin has practical experience completing greenhouse gas verifications and other GHG consulting work. Ben has been a member on GHG assurance teams for projects registered under a variety of programs and regulations including the Climate Action Reserve's Climate Forward program, Verra's VCS program, the American Carbon Registry, O. Reg. 390/18, the California ARB's cap-and-trade program, the Government of Canada's Output-Based Pricing System and Alberta's Carbon Competitiveness Incentive Regulation. Additionally, Ben has been a team member on teams conducting studies for provincial governments seeking to implement a carbon offset program within their jurisdiction.



Gordon Reusing, M.A.Sc., P.Eng.

Verification Team Role: Senior Internal Reviewer

Professional Summary | Mr. Reusing holds a Masters of Science Degree in Engineering from the University of Waterloo. He has over 20 years of extensive Canadian and US industrial sector experience, including the cement manufacturing sector, and has completed many GHG quantification studies for a wide variety of facilities. Mr. Reusing is very familiar with the GHG intensive processes and sources. Mr. Reusing is identified as an air emissions expert for quantification of emissions reductions in accordance with GHD's role as a DOE in the UNFCCC. Mr. Reusing's responsibilities include air emissions quantification, economic assessments, and project characterization for projects relating to municipal, solid and hazardous waste management, energy industries, manufacturing industries, and chemical industries. Mr. Reusing has acted as a Lead Verifier and Technical Expert for verifications of offsets and compliance reports under the Alberta Specified Gas Emitters Regulation, verifications and validations under British Columbia's GHG reporting and offsets regulations, validations under TCR programme and validations under The Gold Standard programme.

6. Project Operations

The Project Activity consists of the installation and operation of 66 Gamesa G90/2000-IEC II A, 2.0 MW turbines for a total rated nameplate capacity of 132 MW. The turbines are located over an area of approximately 7,500 acres of rural and agricultural/grazing lands. Electricity generated by the turbines is upgraded from a 34.5 kilovolt (kV) collection line rating to a 230 kV rating at the Project Activity's substation and then transferred via approximately 15 miles of transmission line to the Sweetwater Substation (Point of Interconnection, POI) where the electricity is then delivered to the Southwest Power Pool (SPP) grid. The Project Activity's intent is to generate electricity from renewable sources and therefore displace electricity that otherwise would have been produced for or distributed to the SPP grid in the absence of the Project Activity.

7. Verification Scope

7.1 Scope of Services

The scope of services to be completed by GHD are as follows:

- Verification of the Dempsey Ridge Wind Power Project located near Cheyenne, Oklahoma, U.S.A for the monitoring period of January 1, 2019 through December 31, 2019 under the requirements of the VCS.

This Project Activity falls under Sectoral Scope 1 – Energy industries (renewable/non-renewable sources), which is one of the sectoral scopes for which GHD is accredited. GHD understands for the purposes of the works associated with the verification scope of work, all correspondence with respect to this Project Activity will be with 3Degrees unless otherwise noted.



The Verification activities will be completed pursuant to the most up-to-date related rules, requirements, regulations, modalities, criteria, guidelines, emission reductions yield, and principles in relation to the PD supplied by the Project Proponent. The Project Activity utilizes the UNFCCC CFM methodology ACM0002: Consolidated baseline methodology for grid connected electricity generation from renewable sources, Version 12.1.0.

GHD will review the PD, Monitoring Plan, Monitoring Reports, and related information along with preparing a Verification Report and Verification Deed of Representation (Verification Representation) for the crediting period. GHD will submit the Verification Report and Verification Representation to 3Degrees for submission to the VCS Registry, irrespective of the outcome of the Verification.

7.2 Use of this Report

This report has been prepared for the use of 3Degrees, Acciona and the VCS.

Statements from GHD's Verification Plan must reference the date of issuance of GHD's report, the applicable verification period and the associated program for which the verification was conducted. The GHD mark shall not be used by 3Degrees or Acciona in any way that might mislead the reader about the verification status of the organization. The GHD mark can only be used with the expressed consent of GHD and, then, only in relation to the specific period verified by GHD.

7.3 Verification Issues Log

During the verification process, the Verification Team may identify issues related to the Project Activity's ability to meet VCS requirements and achieve credible emission reductions. Although there are different methods of reporting such results, it is imperative that these issues are transparently identified, discussed, and concluded in the Verification Report.

If during the verification of the Project Activity, the Verification Team identifies issues that need to be addressed to confirm that the Project Activity meets the VCS requirements, the Lead Verifier will provide an Issues Log to the Project Proponent. Iterations of these requests will be continued until such a time as the Lead Verifier can adequately resolve or "close out" the identified issues.

8. Verification Timelines

GHD is committed to providing efficient and effective services to all of its clients. In order for GHD to maintain a strict schedule, it is additionally the responsibility of 3Degrees to maintain adherence to the proposed schedule.

The following table presents the proposed timelines based on the general information provided by the Project Proponent with regard to the date on which the PD will be available to GHD. A key component to maintaining the proposed timelines is the timely and complete response of the Project Proponent to the issues identified in the Issues Log.



GHD reserves the right to revise or change the proposed timelines and the associated fees given the following occurrences:

- An issue in the Issues Log is not adequately responded to in accordance with VCS standards within thirty (30) days of submittal of the request by GHD to the Project Proponent.
- The VCS guidance related to the verification is revised during the verification process.

Assuming that none of the previously mentioned events occur during GHD's verification assessment such that the verification process timelines would be altered, the following table presents the proposed timelines for completing the verification.

Table 1 Proposed Verification Timeline

Date/Timeline	Milestone	GHD Deliverable
Start Date (February 18, 2020)	Contract is Duly signed by 3Degrees and GHD	Duly signed contract
Start Date (Week of February 24)	GHD submits Verification Plan and 3Degrees provides VCS Monitoring Report, Monitoring Plan, and PD	Verification Plan
Start Date + 2 Weeks (Week of March 9)	Verification Team reviews the documentation and formulates issues and provides a Issues Log to 3Degrees	Issues Log
Client Dependent (up to 10 days) (Week of Mar. 16)	3Degrees submits documentation to GHD addressing the issues raised in the Issues Log.	Not applicable
Issues Log Closeout (Week of Mar. 16)	Verification Team will review the additional supporting documentation and any changes to the PD or the Monitoring Report. If required, GHD provides 3Degrees with additional/revised issues. Upon closure of all issues GHD will provide the Draft Verification Report to Technical Reviewer.	Revised Issues Log, if applicable
Peer Review (Week of Mar. 24)	Final review of the Monitoring Report and Draft Verification Report by the Technical Reviewer. Revisions to the Draft Verification Report to address Technical Review comments.	A request for any additional information required resulting from the Technical Review Draft Verification Report
Draft/Final Report (Week of Mar. 24)	Revisions to the Draft Verification Report to address 3Degrees comments. Preparation of Final Verification Report and Statement.	Submit of the Final Verification Report and Statement to VCS



8.1 On-Site Assessment

GHD has completed the verifications for the first, third, fourth, fifth, sixth, and seventh reporting years and therefore does not anticipate that an on-Site assessment will be required to verify the 2019 reporting period to a reasonable level of assurance. GHD has also had initial discussions with 3Degrees pertaining to the conditions on-Site and understands that there have been no significant changes to the emission sources since the previous verification. Should any significant changes to the emissions sources or site conditions be identified during the verification, GHD reserves the right to complete an on-Site assessment to verify the changes. GHD will notify 3Degrees should any significant changes be identified and provide an updated cost estimate for the completion of the on-Site assessment.

9. Assessment of Risk and magnitude of Potential Errors, Omissions or Misrepresentations

GHD will follow a risk-based verification approach. As such, GHD will identify the key reporting risks related to the claimed emission reductions and assess to what extent the project operator's control systems are adequate for mitigating any perceived reporting risks.

Key reporting risks that are not sufficiently addressed by the project operator's control system represents residual risks. The Verification Team will conduct a detailed verification to investigate the residual risks. Key issues in verification include, but are not limited to, verification of correct use of emission factors, correct use of conversion factors, and consistency in aggregation of emissions data. Wherever practical, direct reading instruments are to be used to ensure that any reporting risks are kept with equipment and instrumentation performance limits.

Potential Risk Area	Percentage of total Site Emissions (%) and Percent Change of Source Specific Emissions Year Over Year	Risk Type (Inherent, Control, Detection)	Risk Level (High, Medium, Low)	Justification
Data Acquisition and Control: - Net Electricity Generated	100% (4.3% decline since previous reporting period)	Inherent	Low	There are redundant meters, two revenue and two check meters. One set of meters are controlled by a third party and the other by the Project Proponent. Therefore, the inherent risk has been set to low.
		Control	Low	There are four sets of the same data, therefore, the control risk is set to low.
		Detection	Low	Corroboration of four sets of data will allow for identification of errors in the meter data.



Potential Risk Area	Percentage of total Site Emissions (%) and Percent Change of Source Specific Emissions Year Over Year	Risk Type (Inherent, Control, Detection)	Risk Level (High, Medium, Low)	Justification
				Therefore there is a low risk of not detecting an error.
Compliance: - Implementation with PD - Implementation with Monitoring Plan	N/A	Inherent	Low	Project Activity and monitoring has been established since 2012. Inherent risk is therefore set to low.
		Control	Low	There have been no modifications to the Project Activity or monitoring over time and applicable meters are calibrated by a third-party at appropriate intervals. Therefore, the control risk has been set to low.
		Detection	Low	Since the implementation of the PD has been established since 2012 and the monitoring is completed with meters that are third-party calibrated, there is a low risk of not detecting an error.
Accuracy: - Calibrations - Data checks - Consolidations	N/A	Inherent	Low	Accuracy of the metered data is based electricity production meters calibrated by a third-party, therefore inherent risk is low.
		Control	Medium	Given four sets of data are collected from each of the four electricity production meters there is a medium risk that there may be a discrepancy between one or more sets of data, therefore the control risk is set to medium.
		Detection	Low	GHD will review all the data, collection methods, meter calibration certificates, and associated documentation, therefore there is a low risk of not detecting an error.

During the review, any new risks or material concerns that could potentially lead to errors, omissions and misrepresentations will be identified, reviewed and assessed.



10. Sampling Plan

GHD has developed a draft sampling plan based on review of the objectives, criteria, scope, and level of assurance detailed above. The sampling plan is dynamic and will be revised, as required, throughout the course of the verification. The following table summarizes the sampling plan:

Data/Information Description	Percentage of total Site Emissions (%)	Data/Information Source	Collection Frequency	Sample Size/Assessment Method
Net Electricity Generated	100%	Electricity meters	Monthly, Aggregated Annually	100 percent of data will be sampled including revenue meter and check meter data
Emission Factor	N/A	Fixed data point from PD	N/A	Value is fixed (ex-ante) as stated in the PD and validated
Calibration Records	N/A	Electricity meter calibration records	Specified by electricity meter manufacturer	Review all calibration records applicable to the monitoring period
Detailed Process Overview	N/A	- Review of Process Details - Process flow diagram for the Facility	N/A	Interview Project Participant/ Technical Consultant personnel as applicable
Back up of data acquisition systems	N/A	- General Data Management System - Controls and QA/QC procedures - Document retention policy	N/A	- Review frequency of data backup - Interview Project Proponent/Technical Consultant personnel as applicable
Data acquisition and flow from meters to data collection/process monitoring system software to data historian	N/A	- Project Proponent - Technical Consultant	N/A	- Review data systems - Interview Project Participant/ Technical Consultant personnel as applicable
Compliance with PD	N/A	Project Description	N/A	- Monitoring Plan - Interview Project Proponent/Technical Consultant personnel as applicable



Data/Information Description	Percentage of total Site Emissions (%)	Data/Information Source	Collection Frequency	Sample Size/Assessment Method
Compliance of the Monitoring Plan	N/A	- Project Description - Monitoring Plan	Annual	- Ensure Monitoring Plan and supporting documents are complete, verifiable, and in accordance with VCS requirements - Review any changes to the Project Activity, as applicable
Accuracy	N/A	Electricity Meters	Continuous records and calibration records	Review calibration certificates and meter data

11. Quantitative Testing

Quantitative data or raw data will be made available to GHD. GHD will evaluate annual GHG emission calculation methodologies and will recalculate the emission estimates based on the underlying activity data (i.e., invoices, electricity production records, etc.). GHD will also compare the reported emissions to emissions from previous years, where available, to identify any inconsistencies, which may indicate potential errors in reporting.

12. Materiality Level

Facility quantitative materiality for this verification is set at plus or minus 5 percent for the reporting period. In addition, a series of discrete errors, omissions or misrepresentations or individual or a series of qualitative factors, when aggregated may be considered material.

13. Verification Procedures

The review procedures used in this verification will be used to assess the following:

1. Accuracy and completeness of annual Monitoring Report
2. Uncertainty of external data sources used
3. Emission assumptions
4. Accuracy of emission calculations
5. Potential magnitude of errors and omissions



To sustain a risk-based assessment, the GHD Project Team will identify and determine risks related to annual GHG emissions during both the desk reviews and the follow-up interviews. The GHD Project Team will particularly focus on the accuracy and completeness of provided information. The components of the document review and follow-up interviews are:

- Document Review:
 - Review of data and information to confirm the correctness and completeness of presented information.
 - Cross-checks between information provided in the Monitoring Plan and information from independent background investigations.
 - Determine sensitivity and magnitude analysis for parameters that may be the largest sources of error.
 - Comparison of emissions from current monitoring period with emissions from previous monitoring period.
- Follow-up Interviews:
 - Via telephone
 - Via email

The document review shall establish to what degree the presented Monitoring Plan and associated GHG calculation documentation meets the verification standards and criteria.

The GHD Project Team's document review during the review process shall comprise, but not be limited to, an evaluation of whether or not:

- The documentation is complete and comprehensive and follows the structure and criteria given in the Program Manual, Protocol, and its associated guidance.
- The methodologies are justified and appropriate.
- The assumptions behind the inventory are conservative and appropriate.
- The GHG emission calculations are appropriate and use conservative assumptions for estimating GHG emissions.
- The GHG information system and its controls are sufficiently robust to minimize the potential for errors, omissions, or misrepresentations.
- The Facility GHG calculations are justified and appropriate.

The GHD Project Team will interview Facility personnel to:

- Cross-check information provided
- Test the correctness of critical formulae and calculations
- Review data management and recording procedures



14. Closure

The Verification Plan is considered to be a dynamic document that will require modification and adaptation to conditions as encountered during the completion of the Verification process. GHD will communicate the changes to the verification plan with 3Degrees throughout the verification.

All of Which is Respectfully Submitted,

Sincerely,

GHD

A handwritten signature in blue ink, appearing to read 'Jason Clarke'.

Jason Clarke, P. Eng. (Lead Verifier)

BG/mg/2

Encl.

cc: Benjamin Gerber (Verifier)
Gordon Reusing (Senior Internal Reviewer)

APPENDIX B: Final Findings Assessment

TABLE 1
FINDINGS ASSESSMENT
DEMPSEY RIDGE WIND PROJECT
2019 MONITORING PERIOD VERIFICATION

Rev. No.	Date Issued
0	March 3, 2020

CL #	Clarification Request	Explanation/Response	Changes applied to Project Documents	Status
1	GHD is requesting that the Project Proponent provide a written attestation relating to whether or not the credits have been claimed under any other system within the 2019 Monitoring Period.	3Degrees has provided this attestation in "Additional and Revisions" folder	New document "2020-03-10-Dempsey REC Attestation form" produced	Closed
2	GHD is requesting that the Project Proponent provide clarification relating to the metering of the Administration building and the electricity consumed by it. The Project Proponent to provide energy consumption from the Administration Building during the 2019 Monitoring Period.	The consumption at the Administration building is included at the "Aux" column in the main calculation spreadsheet. This column is populated by the revenue meter. The quantity is confirmed based on the AEP power purchase invoices.	File "A - Calculation - Dempsey Ridge Production_2019 v2" provided in "Additional and Revisions" folder to show this calculation.	Closed
3	GHD requests that the Project Proponent provide clarification related to any corrections made as a result of a discrepancy between the two meters, or if there were no corrections made to the data during the 2019 Monitoring Period.	No corrections were made as the AEP check meter does not reflect any material difference in MWh production. The difference is ~0.01%, which is less than the threshold for correction (0.2%).		Closed
4	GHD requests that the Project Proponent clarify if any changes were made to the agreement between Dempsey Ridge and AEP as a result of the FAR raised during the validation.	3Degrees notes that there do not appear to be any FARs raised during validation. In any case, the agreement has not been changed.	Final version of Validation Report from VCS registry included as "074496-RPT1 - Dempsey Ridge Validation Report" in "Additional and Revisions" for reference.	Closed
5	GHD is requesting the Project Proponent clarify if there have been any changes to the operating permits for the Project Activity from previous verifications.	There have not been any changes to the operating permits from previous verifications.		Closed
6	GHD is requesting the Project Proponent provide a copy of the contact log referenced in Section 2.4.2 of the Monitoring Report or identify whether or not any questions or complaints have been raised during the 2019 monitoring period.	No complaints were raised during the 2019 Monitoring Period. This was indicated by Acciona on the call on 11 March 2020, as well as in email document indicated.	Document "Emails - no complaints and capacity factor explanation" added to "Additional and Revisions"	Closed
7	GHD is requesting the Project Proponent provide details of the capacity factor (%) for the Project Activity for the 2019 Monitoring Period.	Capacity factor breakdown by month and PowerPoint showing operation were provided. Also, general explanation provided in email document.	Document "Emails - no complaints and capacity factor explanation" added to "Additional and Revisions"	Closed
8	GHD is requesting the Project Proponent provide evidence that data collection associated with the Project Activity meets data retention requirements of the VCS Standard which states that documents pertaining to verification must be kept for a minimum of two years after the end of the crediting period. Alternatively, please confirm that data/document retention procedures for the Site have remained unchanged since the 2018 Monitoring Period.	The data/document retention has remained unchanged since the 2018 Monitoring Period.		Closed
CAR #	Corrective Action Request	Explanation/Response	Changes applied to Project Documents	Status
1	The supplied 2019 Monitoring Report was completed on "Version 3" of the VCS Monitoring Report template. GHD notes that Version 4 of the template is available and required to be used at this time.	The Monitoring Report has been moved to Version 4.	"Dempsey Ridge RP8 Monitoring Report" in "Additional and Revisions"	Closed
FAR #	Forward Action Request	Explanation/Response	Changes applied to Project Documents	Status

APPENDIX C: Deed of Representation

VCS VERIFICATION DEED OF REPRESENTATION

BY

GHD LIMITED

THIS DEED OF REPRESENTATION is made on March 31, 2020

BY

GHD Limited (as **VVB**)

455 Phillip Street

Waterloo, Ontario, Canada

N2L 3X2

THIS DEED WITNESSES as follows:

1. **INTERPRETATION**

1.1 In this Deed:

"Accountholder" means any person holding a VCU account with a Verra Registry;

"AFOLU" means agriculture, forestry and other land use;

"GHG" means greenhouse gas;

"GHG Program" means a formal or organized program, scheme or arrangement for the recognition of activities leading to Reductions, or the crediting or issuance of instruments representing, or acknowledging, Reductions;

"Project" means Dempsey Ridge Wind Project;

"Project Crediting Period" means the time period for which GHG emission reductions or removals generated by the Project are eligible for issuance as VCUs (the rules with respect to the length of such time period and the renewal of the project crediting period are set out in the *VCS Standard*);

"Project Ownership" means the legal right to control and operate the project activities. Distinct from proof of right;

"Project Proponent" means an individual or organization that has overall control and responsibility for the Project, or an individual or organization that together with others, each of which is also a Project Proponent, has overall control or responsibility for the Project. The entity(s) that can demonstrate Project Ownership in respect of the Project. For the avoidance of doubt where an individual executes this Representation in their capacity as an authorized office holder of the company who is the Project Proponent, this Representation is made by the company, not the authorized office holder;

"Reduction" means a reduction or removal of one tonne of CO₂e caused by the activities of a Project during the Project Crediting Period;

"Validation/Verification Body" or **"VVB"** means an organization approved by Verra to act as a validation/verification body in respect of providing validation and/or verification services in accordance with the VCS Program Rules;

"VCS Program" means the GHG Program operated by Verra which establishes the rules and requirements that operationalize the VCS to enable the validation of GHG projects and the verification of GHG emission reductions and removals;

"VCS Program Rules" means the rules and requirements set out in the *VCS Program Guide*, the *VCS Standard* and the other VCS Program documents, as such rules and requirements may be updated from time to time;

"Verification Report" means the written report of verification covering the Reductions generated by the Project from 01 January 2019 to 31 December 2019 and prepared by the VVB in accordance with the VCS Program Rules; and

"Verified Carbon Unit" (VCU) means a unit issued by, and held in a Verra Registry representing the right of an Accountholder in whose account the unit is recorded, to claim the achievement of a Reduction that has been verified by a validation/verification body in accordance with the VCS Program Rules. Recordation of a VCU in the account of the Accountholder at a Verra Registry is *prima facie* evidence of that Accountholder's entitlement to that VCU.

"Verra Project Database" means the central project database that records all projects registered and VCUs issued under the VCS Program, and provides public access to all project and VCU information, including retirement and tracking of the AFOLU pooled buffer account;

"Verra Registry" means a registry operating within the Verra Registry System and holding a current, valid agreement with Verra to provide registry services on behalf of Verra. Verra Registries interact with the Verra Project Database to issue VCUs, and hold, transfer (to and from other Verra registries), retire, suspend, cancel and provide custodial services for VCUs on behalf of its Accountholders;

"Verra Registry System" means the system established by the VCS Program, comprised of the Verra Project Database and the Verra Registries, to provide project proponents with the ability to register projects, and issue, transfer, hold and retire VCUs;

- 1.2 Documents referred to in this Deed but not defined shall be the VCS Program documents, as updated from time to time, to which the relevant term relates.

2. REPRESENTATIONS

- 2.1 I am the Validation/Verification Body in relation to the verification of the Project.

- 2.2 I hereby represent and warrant that:

- 2.2.1 I have independently verified the Reductions generated by the Project in accordance with the VCS Program Rules;
- 2.2.2 In relation to any validation findings and conclusions provided in the Verification Report, I have independently validated the Project's compliance with the VCS Program requirements as set out in the VCS Program Rules; and
- 2.2.3 All factual information that I provide in relation to this Deed or have provided in the Verification Report is to the best of my knowledge following due inquiry true, accurate and complete in all material respects and I have not made or provided, and will not make or provide, false, fraudulent or misleading statements or information in relation to this Deed or the Verification Report.

- 2.3 I hereby acknowledge and agree that:

- 2.3.1 The following persons may rely on and enforce the terms of this Deed:

- (a) Verra;
 - (b) each person who is an Accountholder holding VCUs relating to the Project at any given time;
 - (c) each person on whose behalf VCUs relating to the Project were retired by an Accountholder; and
 - (d) each of the successors and assigns of those persons listed in clauses 2.3.1(a), 2.3.1(b) or 2.3.1(c);
- 2.3.2 Neither Verra, the Verra Registries, nor any of their respective affiliates, directors, employees, agents, licensors and/or contractors, shall be liable with respect to any claims whatsoever arising out of this Deed or erroneous information within the Verification Report submitted to the Verra Registry System for indirect, consequential, special, punitive or exemplary damages, including, without limitation, claims brought against Verra or the Verra Registries by Accountholders, other Verra Registries, Project Proponents, other Validation/Verification Bodies or any other third party. This paragraph shall apply regardless of any actual knowledge or foreseeability of such damages;
- 2.3.3 I have read, understood and will abide by the VCS Program Rules; and
- 2.3.4 Verra has an absolute right to amend any of the VCS Program Rules at any time and shall not bear any liability for loss or damage or liability of any kind sustained by the Validation/Verification Body or any other party involved in the Project in any way under the VCS Program as a consequence of such amendment.

3. GOVERNING LAW AND JURISDICTION

This Deed is governed by and interpreted in accordance with English law, and the English courts shall have exclusive jurisdiction to settle any dispute arising from or connected with this Deed including a dispute regarding the existence, validity or termination of this Deed or the consequences of its nullity.

4. SOVEREIGN IMMUNITY

To the extent that the Validation/Verification Body enjoys any right of immunity from set-off, suit, execution, attachment or other legal process with respect to its assets or its obligations under this Deed, the Validation/Verification Body waives all such rights to the fullest extent permitted by law.

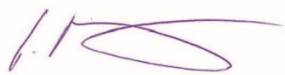
5. COUNTERPARTS

This Deed may be executed in any number of counterparts, each of which when executed and delivered is an original and all of which together evidence the same deed.

6. DELIVERY

This Deed is delivered on the date written at the start of the Deed.

EXECUTED by GHD Limited as a deed



Gordon Reusing, Principal

Signature of director

Name of director

Signature of director/secretary

Name of director/secretary