

CAPRICORN RIDGE 4 WIND FARM PROJECT



Document Prepared by NextEra Energy Resources

Project Title	Capricorn Ridge 4 Wind Farm Project
Version	05
Report ID	VCS468 Monitoring Report CapRidge4 v01
Date of Issue	12-December-2022
Project ID	468
Monitoring Period	01-January-2020 to 31-December-2021
Prepared By	Carlyle Bruno
Contact	NextEra Energy Resources 700 Universe Blvd Juno Beach, FL 33408 (561) 304-5805
	carlyle.bruno@nexteraenergy.com

CONTENTS

1	P	ROJECT DETAILS	3
	1.1	Summary Description of the Implementation Status of the Project	3
	1.2	Sectoral Scope and Project Type	3
	1.3	Project Proponent	3
	1.4	Other Entities Involved in the Project	4
	1.5	Project Start Date.	4
	1.6	Project Crediting Period	5
	1.7	Project Location	5
	1.8	Title and Reference of Methodology	5
	1.9	Participation under other GHG Programs	5
	1.10	Other Forms of Credit	6
	1.11	Sustainable Development Contributions	7
2	S	AFEGUARDS	8
	2.1	No Net Harm	8
	2.2	Local Stakeholder Consultation	8
	2.3	AFOLU-Specific Safeguards	8
3	I۸	APLEMENTATION STATUS	8
	3.1	Implementation Status of the Project Activity	8
	3.2	Deviations	8
	3.3	Grouped Projects	9
4	D	ATA AND PARAMETERS	9
	4.1	Data and Parameters Available at Validation	9
	4.2	Data and Parameters Monitored	13
	4.3	Monitoring Plan	14
5	G	UANTIFICATION OF GHG EMISSION REDUCTIONS AND REMOVALS	17
	5.1	Baseline Emissions	17
	5.2	Project Emissions	18
	5.3	Leakage	18
	5.4	Net GHG Emission Reductions and Removals	18
Al	PPEND	IX X: ATTACHMENTS	20



1 PROJECT DETAILS

1.1 Summary Description of the Implementation Status of the Project

The Capricorn Ridge 4 Wind Farm Project ("The Project") is the second phase of the Capricorn Ridge Wind Farm and became operational on May 20, 2008. The Project consists of 75 GE 1.5 MW wind turbines, with a capacity of 112.5 MW, and is interconnected to a substation owned by the Lower Colorado River Authority ("LCRA"). After undergoing a repowering in 2017, The Project is now capable of 1.62 MW per turbine and a capacity up to 121.5 MW. Meters at that substation provide the source of revenue-quality energy production data. Energy data is provided to the Project Proponent where it is remotely monitored and stored in the Project Proponent's data storage system, and to the Electricity Reliability Council of Texas ("ERCOT") where Renewable Energy Credits ("REC") are generated and tracked on the ERCOT registry. Station service load is provided by Concho Valley Electric Coop and metered separately.

During the monitoring period of this Monitoring Report (January 1, 2020 to December 31, 2021) the Project operated continuously as expected with any deviations that were addressed under section 3.2 of this report.

The total GHG emission reductions generated in the monitoring period of this Monitoring Report which are available for voluntary sales are 349,305 tCO₂.

1.2 Sectoral Scope and Project Type

The Project falls under UNFCCC CDM sectoral scope 01, "Energy Industries (renewable- /non-renewable resources)".

The Project is not a grouped project.

1.3 Project Proponent



Organization name	NextEra Energy Resources
Contact person	Carlyle Bruno
Title	Senior Renewables Analyst, Environmental Trading
Address	700 Universe Boulevard Juno Beach, FL 33408
Telephone	(561) 304-5805
Email	carlyle.bruno@nexteraenergy.com

1.4 Other Entities Involved in the Project

Organization name	N/A	
Role in the Project	N/A	
Contact person	N/A	
Title	N/A	
Address	N/A	
Telephone	N/A	
Email	N/A	

1.5 Project Start Date

May 20, 2008.



1.6 Project Crediting Period

The Project Crediting Period is 10 years, starting on January 01, 2020 and ending on December 31, 2029.

1.7 Project Location

The Capricorn Ridge 4 Wind Farm Project is located in Sterling City, Texas and consists of 75 GE 1.5 MW wind turbines.

The Project Location is as follows (in NAD83 coordinates):

Project	Latitude	Longitude
Capricorn Ridge 4 Wind Farm	31.900878° N	-100.817413° W

1.8 Title and Reference of Methodology

The Project uses the following methodology and tools:

- UNFCCC CDM consolidated methodology ACM0002, "Consolidated methodology for grid connected electricity generation from renewable sources," Version 20.0.
- UNFCCC CDM methodological tool Tool07, "Tool to calculate the emission factor for an electricity system," Version 07.0.
- UNFCCC CDM methodological tool Tool03, "Tool to calculate project or leakage CO2 emissions from fossil fuel combustion," Version 03.

1.9 Participation under other GHG Programs

The Project does not participate in any other GHG emissions trading program and has not registered credits under any other GHG emissions trading program.



1.10 Other Forms of Credit

The Project produces RECs as a result of producing clean, renewable power within the ERCOT ISO. The RECs are issued within the ERCOT registry where the inventory of the RECs is maintained and tracked. Every one thousand (1,000) kilowatts of power produced and delivered into the ERCOT grid is the equivalent of one (1) megawatt (MW) of power produced and delivered. For every megawatt of power produced and delivered, one REC is created. For the purposes of this Monitoring Report, the Project has 357,501 MWs for FY 2020 and 353,709 MWs for FY 2021 which will be converted into verified carbon units (VCUs). The conversion calculations to convert RECs into VCUs is provided in Section 5 of this Monitoring Report. Please note that total generation for FY 2020 was 395,127. However, a small portion of the FY 2020 RECs (37,626) were used to satisfy obligations.

To prevent double counting, any and all Project VCUs pertaining to this Monitoring Report and issued under VCS will be as a result of the voluntary retirement of the corresponding quantity of Project RECs, where the quantity of RECs is determined by the quantity of the VCUs (in tCO₂) divided by the emission factor *EFgrid,CM* (in tCO₂/MWh). The voluntary retirement of the RECs has been completed as part of the protocol for the issuance of the VCUs. The voluntary retirement of these RECs will render the RECs unusable for use in meeting an RPS requirement. To avoid any doubt of possible double counting of the RECs and/or VCUs in the voluntary market, the following statement will be included in the ERCOT retirement memo field: "Voluntary Retirement for VCU Conversion." Evidence of this voluntary REC retirement --including the corresponding vintage, facility ID, serial numbers, quantity of RECs, its retirement status, and specific memo language as noted above-- shall be provided to the VCS registry under which the VCS issuance occurs in the form of a copy of the ERCOT REC Retirement Summary Detail report and/or this report.

In accordance with VCS Standard:

• The relevant REC program to which the RECs will be registered is the Electricity Reliability Council of Texas (ERCOT) State of Texas Renewable Energy Credit Trading Program. The address is:

Electric Reliability Council of Texas, Inc. 8000 Metropolis Drive (Building E), Suite 100 Austin, Texas 78744 Telephone: (512) 225-7000

Mailing address: 2705 West Lake Drive



Taylor, Texas 76574

1.11 Sustainable Development Contributions

The Project does not currently have any nationally stated sustainable development priorities, including any provisions for monitoring and reporting same.



2 SAFEGUARDS

2.1 No Net Harm

There are no identified environmental or socio-economic impacts of the project. As noted in the March 15, 2022 letter from NextEra Energy Resources, the project operates under the authority of ERCOT and the Public Utility Commission of Texas (PUCT). For calendar years 2020 and 2021, the project met the ERCOT and PUCT reporting protocols.

2.2 Local Stakeholder Consultation

As noted above the project operates under the authority of the PUCT. Stakeholders have a right to file a complaint with the PUCT. Any complaints deemed to be material would be coordinated between the project and the PUCT. Since the March 15, 2022 letter from NextEra Energy Resources indicated no notable operations events, it can be concluded that there were no material complaints relating to the project operations.

2.3 AFOLU-Specific Safeguards

This is a non-AFOLU Project.

3 IMPLEMENTATION STATUS

3.1 Implementation Status of the Project Activity

The Project operated as expected during the monitoring period of this Monitoring Report.

3.2 Deviations

2.1.1 Methodology Deviations

There are no methodology deviations for the monitoring period of this Monitoring Report.

2.1.2 Project Description Deviations

There is a minor deviation to report which has been rectified. Within the PD, meter calibrations are listed as being conducted annually. However, there was some additions to the site which incorporated meters for another asset that had a difference in timing. The new meters had calibrations that were done biennially versus annually. As previously mentioned, this has been rectified and now all meter calibrations are done on an annual basis. The calibration frequency did not impact the accuracy of the meter data and the



deviation has no impact on the the applicability of the methodology, additionality or the appropriateness of the baseline scenario as required per this Monitoring Report. Specifically, the meters associated with this deviation are as follows:

M1-345 Meter - Serial Number: LJ-0801A481-01

M1-35 Meter - Serial Number: LW-1808BO21-02

M2-35 Meter - Serial Number: LW-1906A230-02

M3-35 Meter - Serial Number: LW-1808B022-02

M4-35 Meter - Serial Number: LW-1906A231-02

3.3 Grouped Projects

The Project is not a grouped project.

4 DATA AND PARAMETERS

4.1 Data and Parameters Available at Validation

Data / Parameter	Woм
Data unit	Percentage
Description	Weighting of operating margin CO2 emission factor.
Source of data	CDM Tool to calculate the emission factor for an electricity system, v7.0
Value applied	0.75
Justification of choice of data or description of measurement methods and procedures applied	Default value for wind power projects in the CDM Tool to calculate the emission factor for an electricity system, v7.0.
Purpose of Data	Calculation of the Combined Margin Emission Factor for the Project electricity system.
Comments	None



Data / Parameter	Wвм
Data unit	Percentage
Description	Weighting of build margin CO2 emission factor.
Source of data	CDM Tool to calculate the emission factor for an electricity system, v7.0
Value applied	0.25
Justification of choice of data or description of measurement methods and procedures applied	Default value for wind power projects in the CDM Tool to calculate the emission factor for an electricity system, v7.0.
Purpose of Data	Calculation of the Combined Margin Emission Factor for the Project electricity system.
Comments	None
Data / Parameter	FCi,m,y
Data unit	MMBtu
Description	Quantity of fuel type i consumed by power plant m in year y.
Source of data	EPA (eGrid) and EIA (860, 923) data sets.
Value applied	Varies by plant.
Justification of choice of data or description of measurement methods and procedures applied	Published values from the EPA and EIA dataset.
Purpose of Data	Calculation of the emission factor for all plants in the Project electricity system.
Comments	None
Data / Parameter	EFi,m,y
Data unit	kg CO2 / MMBtu
Description	CO2 emission factor for fuel type i consumed by power plant m in year y



Source of data	EPA (eGrid) and EIA (860, 923) data sets.
Value applied	Varies by plant.
Justification of choice of data or description of measurement methods and procedures applied	Published values from the EPA and EIA dataset.
Purpose of Data	Calculation of the emission factor for all plants in the Project electricity system.
Comments	None
Data / Parameter	EGm,y
Data unit	MWh
Description	Net quantity of electricity generated by power plant m in year y.
Source of data	EPA (eGrid) and EIA (860, 923) data sets.
Value applied	The expected generation capacity of 379,887 MWh/year was used to calculate the expected emission reductions
Justification of choice of data or description of measurement methods and procedures applied	Calculated according to CDM Tool to calculate the emission factor for an electricity system, v7.0.
Purpose of Data	Calculation of the operating and build margin emission factors for project electricity system.
Comments	None
Data / Parameter	NCV _{i,y}
Data unit	Plant annual CO2/Plant annual Heat Input
Description	Net caloric value of fuel type i in year y
Source of data	EPA (eGrid) and EIA (860, 923) data sets.
Value applied	Varies by plant.
Justification of choice of data or description of	Published values from the EPA and EIA dataset.



measurement methods and procedures applied	
Purpose of Data	Calculation of the weighted average Operating Margin
Comments	None
Data / Parameter	EFgrid,OM
Data unit	tCO2 / MWh
Description	Simple Operating Margin CO2 emission factor, calculated ex ante for the Project's second crediting period
Source of data	EPA (eGrid) and EIA (860, 923) data sets. No off-grid power plants were used in the computations.
Value applied	.5862
Justification of choice of data or description of measurement methods and procedures applied	Calculated according to CDM Tool to calculate the emission factor for an electricity system, v7.0.
Purpose of Data	Calculation of the Combined Margin Emission Factor for the Project electricity system.
Comments	None
Comments	None
Comments Data / Parameter	None EFgrid,BM
Data / Parameter	EFgrid,BM
Data / Parameter Data unit	EF _{grid,BM} tCO2 / MWh Build Margin CO2 emission factor, calculated ex ante for the
Data / Parameter Data unit Description	EF _{grid,BM} tCO2 / MWh Build Margin CO2 emission factor, calculated ex ante for the Project's second crediting period
Data / Parameter Data unit Description Source of data	EFgrid,BM tCO2 / MWh Build Margin CO2 emission factor, calculated ex ante for the Project's second crediting period EPA (eGrid) and EIA (860, 923) data sets.



Comments	None
Data / Parameter	(EFgrid, CM,y) Combined Margin CO2 Emission Factor
Data unit	tCO ₂ /MWh
Description	The combined margin CO ₂ emissions factor (EF _{grid} ,CM,y) for a grid connected power generation plant in year y, will be calculated using the latest version of CDM Tool to calculate the emission factor for an electricity system, v7.0.
Source of data	The Combined Margin Emissions Factor (EF _{grid} ,CM,y) used for the NextEra project will be calculated from the operating margin (EF _{grid} ,OM,y) and build margin (EF _{grid} ,BM,y) according to the CDM methodology as described. Both EPA (eGrid) and EIA (860, 923) data sets were used to compute the Combined Margin, which also serves as the underlying data for the operating margin and build margin calculations.
Value applied	.49114
Justification of choice of data or description of measurement methods and procedures applied	Calculated according to CDM Tool to calculate the emission factor for an electricity system, v7.0.
Purpose of Data	Calculation of the baseline GHG emission reductions representing the Project emission reductions.
Comments	None

4.2 Data and Parameters Monitored

Data / Parameter	Electricity Supplied to the Grid (EGfacility,y)
Data unit	MWh
Description	Electricity supplied by the Project activity to the grid
Source of data	Shared substation meters (See calculation methods and Comments row)



Description of measurement methods and procedures to be applied	The electricity supplied to the grid is measured continuously by the Project Meter and is sent to the ERCOT electronic data gathering system. NextEra compiles the continuous readings into monthly reports. The generation is also confirmed via the ERCOT registry as the RECs from the Project are issued based on the power generated.
Frequency of monitoring/recording	Continuously; This is done on an hourly, daily, monthly, and annual basis.
Value applied	The available generation was 357,501 MWh from 2020 and 353,709 MWh from 2021, which will be used to calculate the expected emission reductions. Note: Total generation for 2020 was 395,127. However, a small portion of 2020 RECs (37,626) were used to satisfy obligations.
Monitoring equipment	Project Meter Name: Cap Ridge 4 M1-35; Model: ION 8650A; Serial Number: LW-1808B021-02
QA/QC procedures to be applied	At a minimum, all meters identified within the calculation methodology row are calibrated annually.
Purpose of data	Calculation of baseline emissions
Calculation method	Cap Ridge electricity generation is determined from total substation generation allocation based on the following shared substation meters (5 meters: M345 M1, M1-35 M2, M3-35 M3, M2-35 M4, M4-35 M5). Electricity generation allocation is performed in accordance with "CAP RIDGE WIND IV, LLC & BLUEBELL SOLAR METERING PROTOCOL" (May 1, 2020, Version 5)
Comments	The Project is using a shared substation. Electricity generation from solar feeders pass through the substation and associated meters. However, generation from each individual generator must be known for ERCOT reporting purposes. As such, a process for metering and generation allocation was developed: CAP RIDGE WIND IV, LLC & BLUEBELL SOLAR METERING PROTOCOL" (May 1, 2020, Version 5). This document explains in detail the process by which generation allocation and reporting occurs.

4.3 Monitoring Plan

Responsibility



Overall responsibility for monitoring and carrying out the monitoring following this monitoring plan lies with NextEra Energy. The Site Manager is responsible for the monitoring and reporting of the wind farm. The Production Manager will assist the Site Manager to complete the monitoring and reporting.

Training

The Project VCU project management office will assign and train the dedicated people carrying out the monitoring work.

Installation of meters

The net electricity supplied to the grid will be monitored through the main revenue meter installed at the point of interconnection into the Lower Colorado River Authority's Divide Substation power grid in Coke County. The Project also has a back-up meter installed at the Capricorn Ridge 4 substation.

In addition, at the project site, electricity from the turbines and the transmission lines connected to the turbines are controlled by a computerized turbine control and data systems. The turbines are monitored by site personnel and are also monitored remotely by a 24- hour control room.

The substation or transmission lines with the Capricorn Ridge 4 wind farm are currently shared. Separate meters installed allow for the calculation of each projects share of the net supply to the grid. This process is explained more in depth within the "Additions to the proposed generating capacity" section below.

Calibration

The metering equipment at the point of interconnection is required to be maintained and calibrated in accordance with good utility practice and ERCOT requirements.

The main and back-up meters shall be jointly inspected and sealed on behalf of the parties concerned and shall not be interfered with by either party except in the presence of the other party or its accredited representatives. All the meters installed shall be tested by a qualified entity after: the detection of a difference larger than the allowable error in the readings of both meters; the repair of all or part of meter caused by the failure of one or more parts to operate in accordance with the specifications.

At a minimum, all meters identified are calibrated annually.

Monitored data

During the next ten operating years, the net electricity supplied to the grid (EG_{faclity,y}) will be monitored and recorded following the procedures above.

Meter failure



Should any previous months reading of the main meters be inaccurate by more than the allowable error, or otherwise function improperly, the net energy output shall be determined by: (a) reading the backup meter installed, unless a test by either party reveals it is inaccurate; (b) if the backup system is not within acceptable limits of accuracy or is otherwise performing improperly the developer and Grid Company shall jointly prepare an estimate of the correct reading; or, (c) if the Grid Company and the developer fail to agree then the matter will be referred for arbitration according to agreed procedures.

Additions to the proposed generating capacity

The Project shares the substation with other projects. Project specific generation, losses, curtailments, etc. for the shared substation will be based on individual meters dedicated to each project sharing the substation along with an allocation method/calculation used by the project Production/Site managers to determine periodic activity.

To elaborate further, the output data from turbines and other relevant data are monitored and used to calculate the share of the project in the overall net output. NextEra utilizes Schneider Electric 8650ION meters for these purposes. Specifically, the "M1-35" meter is dedicated to the Capricorn Ridge 4 Wind Farm's periodic activity and is the Master meter. The meters are interconnected via Ethernet communications. The Master meter polls all other meters for the data required to perform the calculations for determining the net supply of each project and/or generator to the grid. This meter will assist in performing the calculations and record the determined net energy for each of the generators. This meter will then provide real-time data for the NextEra SCADA system which can be shared with the various NextEra entities that require this information as well as with the LCRA. There is a formal write-up, known as the "CAP RIDGE WIND IV, LLC & BLUEBELL SOLAR METERING PROTOCOL" (May 1, 2020, Version 5), that has this process documented and is updated as there are revisions to the site or protocols.

7. Quality control

Net electricity supplied to the grid will be double checked with receipt of sales and purchases and relevant commercial data and will be approved and signed off by VCU manager before it is accepted and stored.

This internal audit will also identify potential improvements to procedures to improve monitoring and reporting in future years. If such improvements are proposed these will be reported to VCS and only operated after approval by VCS and the validator and verifier.



8. Data management system

Physical document such as paper-based maps, diagrams and environmental assessments will be collected in a central place. In order to facilitate auditors' reference of relevant literature relating to The Project, the project material and monitoring results will be indexed. All paper-based information will be stored by the technology department of The Project and all the material will have a copy for backup. The Project will also follow the VCS Standard record retention policy and shall archive all data collected as a part of the project monitoring electronically and keep all paper and electronic records for at least 2 years after the end of the last crediting period.

9. Reporting

The necessary steps to meet the requirements for emissions reduction monitoring include:

- NextEra reviews the ERCOT meter readings continuously for The Project.
- NextEra generates monthly reports of the readings.
- NextEra carries out an internal audit and reports the readings to VCS before the verification is requested.

10. Verification

NextEra will facilitate the verification of The Project by providing the verification body with all required necessary information at any stage.

All units are controlled by a computerized turbine control and data system. The turbines are monitored by site personnel and are also monitored remotely by a 24-hour control room.

Generation for The Project is metered at the point of interconnection into the Lower Colorado River Authority's Substation in Coke County. Routine/standard maintenance is performed on the control and data system as needed. Total generation from the control and data system is frequently compared to the generation metered at the point of interconnect.

5 QUANTIFICATION OF GHG EMISSION REDUCTIONS AND REMOVALS

5.1 Baseline Emissions



BE2020-2021 = $EG_{PJ,2020-2021} \times EF_{grid,CM,2020-2021}$; Note: $EG_{PJ,2020-2021} = EG_{facility,2020-2021}$

Where:

BE₂₀₂₀₋₂₀₂₁ = Baseline emissions from January 1,2020 to December 2021 (tCO₂e/year)

 $EG_{PJ,2020-2021}$ = Quantity of net electricity generation that is produced and fed into the grid from January 1, 2020 to December 31, 2021 (MWh / y)

EF_{grid,CM,2020-2021} = Ex ante combined margin CO₂ emission factor for grid connected power generation in 2020-2021 (eGrid and EIA 2016-2019 data to apply to 2020-2021)

EGfacility, 2020-2021 is the Project's net MWh (after previously issued REC sales are excluded). This value is 711,210 MWh (357,501 MWh from 2020 and 353,709 MWh from 2021).

EFgrid, CM, 2020-2021 is calculated at 0.49114 in accordance with the UNFCCC CDM methodological tool Tool07, "Tool to calculate the emission factor for an electricity system", and detailed in Attachment "Emission Factor Calculation.doc".

The resulting calculation of Baseline Emissions, BE2020-2021, is:

$$BE_{2020-2021} = 711,210 \text{ MWh} \times 0.49114 \text{ tCO2/MWh}$$

= 349,305 tCO_2 .

5.2 Project Emissions

For most renewable energy power generation project activities, PEy = 0. Project emissions are not applicable to the Project's activities.

5.3 Leakage

Leakage emissions are no longer considered per the CDM Methodology.

5.4 Net GHG Emission Reductions and Removals

Total Emissions Reductions are calculated in accordance with the Methodology:

$$ER_{2020-2021} = BE_{2020-2021}$$



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)	Buffer pool allocation	VCUs eligible for issuance
2020	175,584	0	0	0	0	175,584
2021	173,721	0	0	0	0	173,721
Total	349,305	0	0	0	0	349,305



APPENDIX X: ATTACHMENTS

	Document Description	Source	Filename
1	ERCOT Nodal Protocols; Section 14: State of Texas Renewable Energy Credit Trading Program	https://www.ercot.com/mktrul es/nprotocols/current/	ERCOT Nodal Protocols Section 14 December 31, 2020.doc
2	Calculation of emission factor and emission reduction	NextEra Energy Resources	Emission Reduction Calculation 2020_2021 Final.xlsx
3	Emission factor calculation methodologies description	NextEra Energy Resources	Emission Factor Calculation 2020_2021 Final.doc
4	Project hourly MWh from MV90 data/summary	NextEra Energy Resources	Cap Ridge 4 2020 Through 2021 Generation.xlsx
5	ERCOT Metering Design Proposal for Project	NextEra Energy Resources	Cap Ridge 4 meter design specs.pdf
6	ERCOT report showing REC creations	NextEra Energy Resources	Cap Ridge 4 2020 Through 2021 Generation.xlsx
7	Meter calibration tests	NextEra Energy Resources	NextEra Capricorn Ridge Meter testing 0236032.pdf; NextEra_Energy_Meter_T est_Form_2020.pdf
8	Site map	NextEra Energy Resources	Site Map WCR 4.pdf
9	EIA Information Quality Guidelines and generation data	U.S. DOE EIA website; http://www.eia.gov/about/infor mation_quality_guidelines.cf m; https://www.eia.gov/electricity /data.php	About EIA - Policies - U.S. Energy Information Administration (EIA) and data is available for download
10	ERCOT generation data	U.S. EPA eGRID data: https://www.epa.gov/energy/e missions-generation- resource-integrated- database-egrid	Also available to download from website
11	ERCOT report showing REC Ownership	NextEra Energy Resources	Cap Ridge 4 2020 Through 2021 Generation.xlsx