Black-billed Cuckoo Conservation Plan

Radford's Run Wind Farm
Macon County, Illinois

April 6, 2021

Prepared for:

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c/o RWE Renewables Americas, LLC
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Table of Contents

LIST OF FIGURES

LIST OF APPENDICES

Illinois Department of Natural Resources
CONSERVATION PLAN
(Application for an Incidental Take Authorization)
Per 520 ILCS 10/5.5 and 17 Ill. Adm. Code 1080

150-day minimum required for public review, biological and legal analysis, and permitting

PROJECT APPLICANT: Radford's Run Wind Farm, LLC

PROJECT NAME: Radford's Run Wind Farm

COUNTY: Macon

LOCATION: Approximately 5 Miles Southwest of Maroa, Illinois and 12 Miles Northwest of Decatur, Illinois (Township 17N, Range 1E, Sections 1-12 and 15-18; Township 17N, Range 2E, Sections 2-11 and 15-18; Township 18N, Range 1E, Sections 1-36; Township 18N, Range 1W, Sections 1, 12-13, and 24; Township 18N, Range 2E, Sections 3-10, 15-22, 27-35; Township 19N, Range 1E, Section 31; Township 19N, Range 1W, Section 36; Township 19N, Range 2E, Sections 31-34)

Directions to the Project from Maroa, Illinois: Travel south along Highway 51, west on School Road, then north on Glasgow Road.

Directions to the Project from Decatur, Illinois: Travel north along Highway 51, west on School Road, then north on Glasgow Road.

1.0 INTRODUCTION

Radford's Run Wind Farm, LLC (RRWF or the Applicant) developed the Radford's Run Wind Farm (Project or Action) in Macon County, Illinois. The Project has been operational since December 2017.

RRWF developed a Bird and Bat Conservation Strategy (BBCS) in coordination with the United States Fish and Wildlife Service (USFWS) to minimize and avoid potential impacts to birds and bats at the Project. To monitor the Project's impacts on bird and bat species, the BBCS proposed fall post construction mortality surveys throughout the life of the Project.

During subsequent coordination with USFWS, a three-year bat deterrent study was designed to test whether a difference in total bat mortality exists among operational turbines fitted with NRG Systems' bat deterrent system (BDS), turbines operating with a cut-in speed of 5.0 meters per second (m/s), and control turbines feathered below the manufacturer's cut-in speed of 3.0 m/s. This study started in 2019 and is ongoing through 2021.

On September 22, 2020, during the second year of the deterrent study, a carcass believed to be either a yellow-billed cuckoo (*Coccyzus americanus*) or a black-billed cuckoo (*Coccyzus erythropthalmus*) was found. The black-billed cuckoo is listed as threatened in the state of Illinois; therefore, the Illinois Department of Natural Resources (Department or IDNR) was notified of the mortality. The IDNR concluded based on photographic evidence that the carcass was a black-billed cuckoo. Following coordination with the Department, RRWF prepared this Conservation Plan in accordance with the Illinois Endangered Species Protection Act (520 ILCS 10/5.5 and 17 Ill. Adm. Code 1080) (IESPA) in support of an application for an Incidental Take Authorization (ITA) under the IESPA. The purpose of this Conservation Plan is to

describe the impact likely to result from the proposed taking of the black-billed cuckoo, identify the measures that RRWF will take to minimize and mitigate that impact and the funding for those measures, describe the alternatives RRWF considered that would not result in take, and the reasons that each of those alternatives was not selected, and provide data and information to indicate that the proposed taking will not reduce the likelihood of the survival of the black-billed cuckoo in the wild within the State of Illinois, the biotic community of which the species is a part or the habitat essential to the species' existence in Illinois,.

Based on review of the National Land Cover Database (NLCD), land use within the Project area consists primarily of agricultural lands in rowcrop production (94.3%) and developed space (i.e., developed open spaces, low and high intensity; 4.5%). Woodlands (i.e., deciduous forest, evergreen forest, and woody wetlands) make up approximately 0.2% of the Project area and are typically associated with homesteads, shelterbelts, and forested fence lines (Homer et al. 2015).

2.0 DESCRIPTION OF THE PROJECT

The Project is a 305.8-megawatt (MW) wind farm located across approximately 50,839.4 acres (ac) in Macon County, Illinois (Figure 1). The Project consists of 139 Vestas V110 2.2-MW wind turbine generators (WTGs) and associated access roads, collector lines, an overhead transmission line, a permanent meteorological (MET) tower, substation, and operations and maintenance (O&M) building (Figure 1). Commercial operation of the Project began in December 2017 and the Project is anticipated to be in operation for 30 years.

Each WTG consists of the tower, a nacelle that houses the generator and gearbox, and a three-blade rotor assembly. From the base of the tower to the tip of the blade, the total maximum height of the WTG is 492 feet (ft). Hub height is approximately 312 ft. Each WTG is anchored to a steel-reinforced concrete foundation. Each turbine pad is approximately 25 ft in diameter.

The Project includes an underground power collection system between the pad-mounted transformers and a collector substation. All collector lines are buried a minimum of 5 ft. An overhead transmission line connects the Project substation to the ComEd switchyard that was constructed in order to interconnect the Project to an existing 345 kV AEP transmission line. In addition to the WTGs and power collection system, access roads were constructed to provide access to the turbines. These access roads are approximately 16 ft wide and are constructed of crushed gravel/rock.

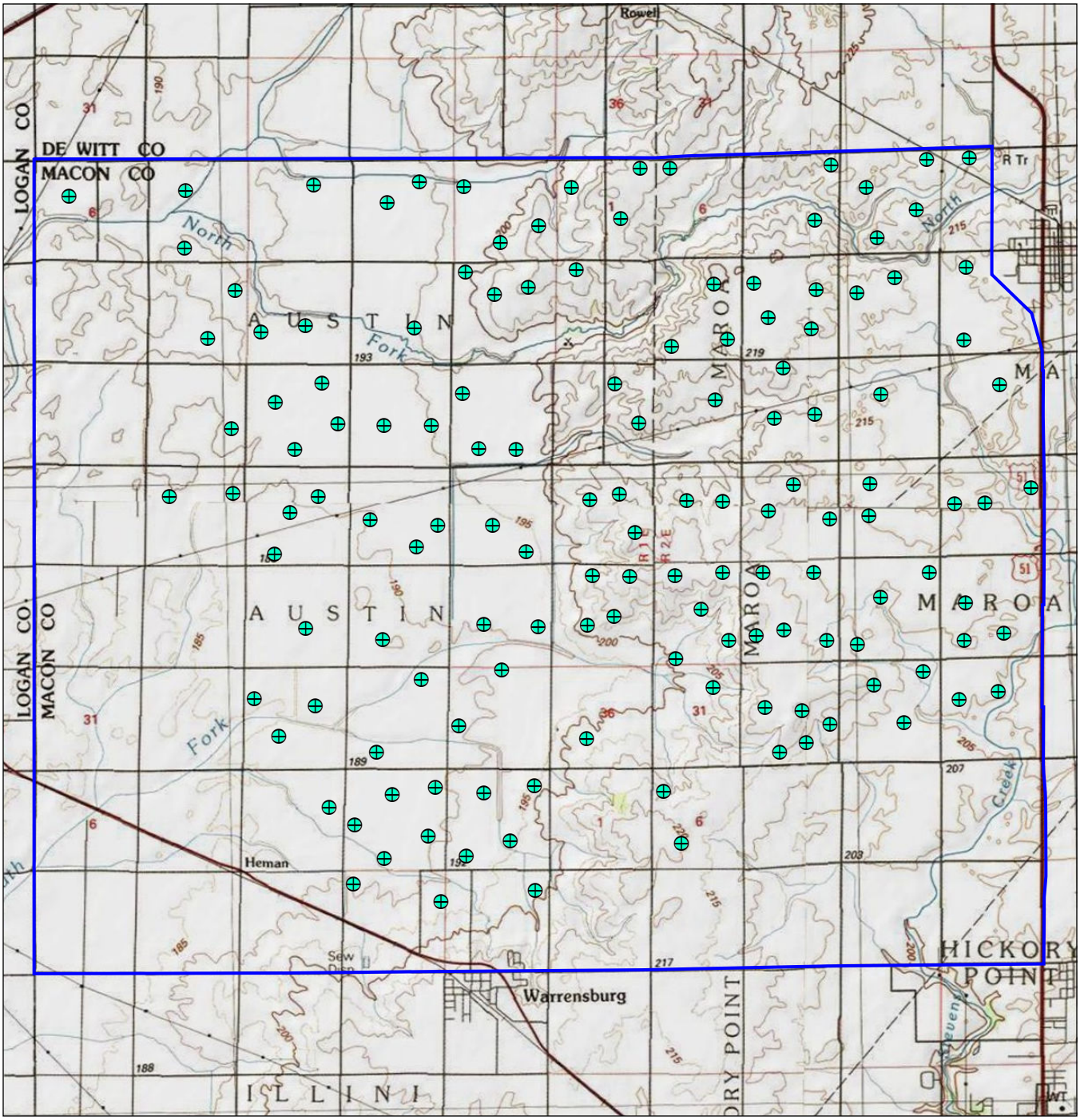
The Project O&M building is located adjacent to the Project substation and located near the corner of School Road and Glasgow Road in Macon County. The Project substation pad is approximately 315 ft by 360 ft (approximately 2.7 ac in size).

2.1 COVERED ACTIVITIES

Authorization is requested to permit take that may occur incidental to the continued commercial operation of the Project.

2.2 ACTION AREA

The black-billed cuckoo may be affected by operation of the Project. Therefore, the Action Area has been defined as the area within the RRWF Project boundary (50,839.4 ac in size; Figure 1), including 139 2.2-MW WTGs and associated access roads.



Legend

- Approximate Project Boundary
- Turbine

0 4,000 8,000 Feet

(At original document size of 8.5x11)
1:96,000

N

Notes

1. Coordinate System: NAD 1983 StatePlane Illinois East FIPS 1201 Feet
2. Data Sources: RWE, Stantec, Esri, USGS, NADS
3. Background: USGS 7.5' Topographic Quadrangle

Stantec

Project Location
Macon County,
Illinois

Prepared by SF on 2021-01-15
TR by JH on 2021-01-15
IR by BK on 2021-01-15

Client/Project
2028113231
RWE Renewables Americas
Radford's Run Wind Farm

Figure No.
1

Title
Project Location and Topography

2.3 PERMITTING REVIEWS

RRWF will continue to comply with all federal, state, and local regulations. Below is a summary of the consultation and permitting that has taken place to-date:

1. A BBCS was developed in coordination with the USFWS in 2015 to avoid and minimize potential impacts to birds and bats at the Project. The BBCS supported issuance of a Technical Assistance Letter (TAL) from USFWS in 2015.

2. During subsequent coordination, USFWS expressed interest in a bat deterrent study at the Project. As such, a three-year bat deterrent study was designed and subsequently initiated in 2019 and will continue through 2021. Turbines were randomly assigned a treatment type, including turbines operating at 3.0 m/s with a BDS, turbines operating with a cut-in speed of 5.0 m/s with no BDS, and control turbines feathered below the manufacturer's cut-in speed of 3.0 m/s with no BDS. These treatment types temporarily replace the operational guidelines included in the Project's BBCS.

3. A Special Use Permit for the Project was issued by Macon County.

2.4 TIMELINE OF PROJECT ACTIVITIES

RRWF proposes to continue operation of the Project for up to 30 years. Commercial operation of the Project began in 2017; therefore, take coverage is requested through 2047.

2.5 OWNERSHIP OF AFFECTED PROPERTIES

RRWF has lease agreements or easements for ownership over each parcel where Project infrastructure occurs. The terms of the individual lease agreements vary but the agreements are valid through the anticipated lifespan of the Project. The Project is anticipated to be operational for 30 years (beginning in 2017), after which time it may be repowered or decommissioned.

2.6 IMPLEMENTING AGREEMENT

An implementing agreement has been prepared for the Project that outlines the parties responsible for implementation of this Conservation Plan and the responsibilities of each party. The implementing agreement is found in Appendix A.

2.7 PROPOSED ACTION AND ALTERNATIVES CONSIDERED

2.7.1 Proposed Action

The Proposed Action includes continued operation of the Project through 2047 (26 years). One of the remaining operational years will be operated in accordance with the bat deterrent study protocols developed in coordination with USFWS. After completion of the bat deterrent study in 2021, the Project will revert to operational guidelines under the BBCS and TAL or update the operational guidelines as warranted. The final curtailment strategy will not meaningfully affect the take of the black-billed cuckoo (i.e., increase or decrease take) because changes in cut-in speed have not been shown to affect bird mortality (Marques et al. 2014).

Additional conservation measures implemented by the Applicant, including measures to avoid and minimize impacts to the black-billed cuckoo, are found in Section 5.2.

2.7.2 Alternatives Considered But Dismissed

No Action Alternative

The purpose of the Project, which has already been constructed, is production of emissions-free, renewable electricity. Two No Action Alternatives were considered for the purposes of this Conservation Plan: 1) complete shutdown of the turbines; and 2) shutting down turbines at night during spring and fall migration when rotor strikes of black-billed cuckoo are most likely to occur. Neither of these No Action alternatives meets the Project purpose and need; therefore, RRWF rejected these alternatives and will continue operation of the Project under the Proposed Action (see Section 2.8.1).

3.0 BIOLOGICAL DATA ON AFFECTED SPECIES

3.1.1 Black-billed Cuckoo

Species Description
Black-billed cuckoos are slim, long-tailed birds. The upper side of the head and body is plain brown, while the underside is white. They have a black bill that curves downward. Adults have a reddish ring around the eyes. Juveniles look similar in appearance but with a yellowish ring around the eyes. Females and males look alike, though females are somewhat larger than males. They are a facultative brood parasite, occasionally laying eggs in nests of the similar species, yellow-billed cuckoo (*Coccyzus americanus*), and other passerine species. The black-billed cuckoo primarily forages on insects in woodlands, edge habitat, and thickets, typically within tree canopies but occasionally on the ground.

Habitat Requirements
Black-billed cuckoos typically nest in extensive tracts of open woodlands and thickets (Spencer 1943). They have been observed nesting in both deciduous and coniferous trees, as well as shrubs (Spencer 1943). They are often associated with older woodland edges, fencerows, riparian areas, and orchards and are less likely to use suburban areas (IDNR 2017; Kleen et al. 2004; Spencer 1943). Nests are made of small twigs lined with leaf scrap and pine needles (Spencer 1943). They are well concealed by overhanging branches and typically located lower to the ground (Spencer 1943). Some black-billed cuckoos nest on the ground, with nests concealed by tall vegetation (NatureServe 2020).

Migration
The black-billed cuckoo is a nocturnal, neotropical migrant species that spends the winter in South America (NatureServe 2020). Spring migrants arrive in Illinois in May and breeding occurs between May and August (IDNR 2017). Adult males arrive earlier than females in the spring (NatureServe 2020).

Species Status in Illinois
The black-billed cuckoo is listed as threatened in the state of Illinois. They are a common migrant throughout the state and an uncommon summer resident (IDNR 2017). Local population size and clutch size often directly correlate with infestations of various tent caterpillar species, a primary food source for both adults and nestlings (Graves 2001; Sealy 1978).

Status in the Action Area
The Project is located within the known range of the black-billed cuckoo. Woodlands (i.e., deciduous forest, coniferous forest, and woody wetlands) which provides suitable breeding habitat for this species, make up

approximately 0.2% of the Project area (Homer et al. 2015). During three years of mortality monitoring surveys (2018 – 2020), one black-billed cuckoo was found at the Project during a scheduled carcass search on September 22, 2020.

4.0 EFFECTS OF THE PROPOSED ACTION ON LISTED SPECIES

4.1 BLACK-BILLED CUCKOO

4.1.1 Direct Effects

No suitable habitat for the black-billed cuckoo (i.e., woodland or woodland edge) will be lost as a result of Project operation.

Operational impacts of wind facilities on birds include varying degrees of displacement from the wind turbines and surrounding habitat, and fatalities resulting from collisions with turbines, transmission lines, and other project-related structures (Winegrad 2004). Erickson et al. (2005) estimate that 500 million to 1 billion birds are killed annually in the United States due to anthropogenic sources. Fatality estimates at wind farms make up a fraction of that estimate.

Resident and migratory songbirds (passerines) represent the majority of fatalities at wind turbines nationwide (75%, excluding California; Erickson et al. 2001). Collision risk for passerines is likely greatest during take-off and landing, particularly when wind energy facilities abut migratory stopover sites. Additionally, poor weather conditions may lower the flight altitude of migrants which may put them at risk of collision if flying in the rotor swept areas (Kerlinger 1995). Since black-billed cuckoos typically forage and nest at heights below the rotor swept area, collision risk is likely greatest during migration for this species. Avian collision mortality estimates vary across the United States (and have not been calculated for the Project) but generally are not substantial enough to significantly affect passerine populations (Kuvlesky et al. 2007).

Bird mortality at wind facilities has been reported from direct impact with a spinning turbine blade. Barotrauma, involving tissue damage to air-containing structures (e.g., lungs) caused by rapid or excessive pressure change, is not suggested as a cause of bird fatalities (Baerwald et al. 2008). Though barotrauma can contribute to bat fatalities at wind farms, differences in anatomy suggest that birds are less susceptible to barotrauma (Baerwald et al. 2008).

4.1.2 Indirect Effects

Wind turbines may displace birds from an area due to the creation of edge habitat, introduction of vertical structures, and/or disturbances directly associated with turbine operation (e.g., noise, shadow flicker). Disturbance impacts are often complex, involving shifts in abundance, species composition, and behavioral patterns. The magnitude of these impacts varies across species, habitats, and regions. Strickland et al. (2004) indicated that avoidance impacts to birds generally extend 246 ft to 2,624 ft from a turbine, depending on the environment and bird species affected.

Since the Project is already constructed and no addition of turbines or other infrastructure is proposed, additional disturbance and displacement impacts to birds, including the black-billed cuckoo, are not expected. Additionally, no breeding habitat for the black-billed cuckoo will be modified or lost as a result of ongoing operation of the Project.

4.1.3 Take Estimate

Nationwide, a total of 13 black-billed cuckoo fatalities had been reported as of 2019 at 10 facilities (Allison et al. 2019). Two wind farms in Illinois, California Ridge and Bishop Hill, have published Conservation Plans for the black-billed cuckoo based on known fatalities at both sites. At the Project, RRWF conducted fatality monitoring during the spring and fall migratory periods in 2018, and during the fall in 2019 and 2020. Of the 54 carcasses found in total during those three monitoring years, 1 was a black-billed cuckoo, resulting in a site-specific species composition of 1.8%.

The post-construction monitoring which has occurred at the Project has been designed for bats; therefore, no bird fatality estimates have been calculated and no searcher efficiency or carcass persistence trials specific to birds have been conducted. However, all birds found during monitoring are recorded in the same way as bats, and it is therefore possible to estimate a fatality rate by using the carcass persistence and searcher efficiency rates from the 2020 bat study (a carcass persistence of ~2.9 days and a searcher efficiency of ~81.8%). Applying these bias corrections to the bird carcasses found during the 2020 monitoring study at the Project results in a fatality estimate of 90.4 birds during the fall migratory season (August 1 through September 30), of which 1.8% are anticipated to be black-billed cuckoos, for a black-billed cuckoo fatality estimate of 1.7 per year.

RRWF is applying for a take limit of **2 black-billed cuckoo per year** which is not anticipated to reduce the survival or recovery of the species, the biotic community of which it is a part, or the habitat essential to its existence due to the implementation of conservation measures (see Section 5.2).

5.0 MINIMIZATION MEASURES, MITIGATION, AND MONITORING

5.1 PLANS FOR MANAGEMENT OF THE AREA

The Project began operating in December 2017. RRWF will continue to maintain existing turbines and Project infrastructure, including existing gravel access roads and pads through 2047. The use of cropped areas is determined by individual landowners; however, it is assumed that most areas will continue to be used for the production of rowcrops.

5.2 MEASURES TO AVOID AND MINIMIZE EFFECTS

The following Conservation Measures have been implemented by RRWF to avoid or minimize impacts to the black-billed cuckoo:

- RRWF has provided all contractors and employees with training and an environmental information package regarding the state-listed threatened black-billed cuckoo which has the potential to be affected by Project operation; this package includes information on how to identify the species and the protocols to follow if the species is encountered within the Action Area during operation of the Project.

- During development of the Project, RRWF implemented measures to avoid and minimize effects to bird species in accordance with the USFWS Land-Based Wind Energy Guidelines (WEGs; USFWS 2012), including:

    - Siting turbines at least 1,000 ft from woodlots
    - Avoiding siting turbines within wetland areas

  - Constructing tubular towers to eliminate perching opportunities and minimize the risk of rotor collisions
  - Installation of a self-supporting, unguyed, MET tower
  - Installation of an underground electrical collection system except in areas where it was impractical

- As part of Project operation, RRWF implemented measures to avoid and minimize effects to bird species in accordance with the USFWS WEGs (USFWS 2012), including:

  - Minimizing facility lighting to avoid attracting songbirds by using motion sensors where possible, directing lights downward, and lighting turbines in accordance with Federal Aviation Administration (FAA) minimum requirements
  - Temporary meteorological (MET) towers were replaced with non-guyed lattice towers

- If changed or unforeseen circumstances arise that reduce the effectiveness of the minimization measures described in this Conservation Plan, RRWF will coordinate with the Department to determine if additional conservation measures are warranted for the black-billed cuckoo.

5.3 MITIGATION

In addition to implementation of avoidance and minimization measures summarized in Section 5.2, RRWF has committed to a monetary contribution of $25,000 submitted to the Illinois Wildlife Preservation Fund to assist with management of, or bring conservation benefit to, the black-billed cuckoo.

5.4 MONITORING

Post-construction monitoring for the Project began in spring 2018, consistent with the BBCS. In 2019 and 2020, the first two years of post-construction monitoring associated with the bat deterrent study were conducted. Those monitoring events also recorded all bird species fatalities, including any black-billed cuckoo. One additional year of monitoring will be conducted in 2021 pursuant to the bat deterrent study. Thereafter, RRWF is committed to monitoring for black-billed cuckoo fatalities at a minimum of once every three years. In the absence of any other monitoring requirements (e.g., monitoring that may occur under subsequent research or incidental take permits for bats), post-construction monitoring would occur every three years after 2021 for the life of the Project. However, if other monitoring occurs, this three-year clock may be reset. For example, should monitoring occur in 2022, the next monitoring would occur in 2025.

Table 5.1 presents the post-construction monitoring protocols utilized in previous years, including those currently in effect under the bat deterrent study. Monitoring protocols are expected to change after completion of the bat deterrent study in 2021, depending upon whether a federal or state incidental take authorization for bats is determined to be necessary. In that case, RRWF will work with IDNR to develop a mutually agreeable monitoring plan, which may be less-intensive than the research-grade monitoring currently in place but will at minimum include weekly searches at 50% of the Project turbines (n=70) between August 1 and September 30, as specified in the BBCS.

Table 5-1. Post-construction Monitoring for Black-billed Cuckoo at Radford's Run Wind Farm

Protocols and Year(s)	Date	Roads and Pads or Full Plots	Search Interval	Results
TAL Monitoring (2018)	April 4 – May 11 August 6 – October 5	50% of turbines (n=70) Full plots (262 x 262 ft) at 14 turbines Roads and pads out to 262 ft at 56 turbines	7 days (weekly)	No black-billed cuckoos documented
Bat Deterrent Study (2019)	August 1 – September 30	100% of turbines (n=139) Full plots (328 x 328 ft) at 6 turbines Full plots (262 x 262 ft) at 69 turbines Roads and pads out to 230 ft at 64 remaining turbines	3 – 5 days	No black-billed cuckoos documented
Bat Deterrent Study (2020)	August 1 – September 30	100% of turbines (n=139) Full plots (131 ft radius) at 75 turbines Roads and pads out to 328 ft at 64 remaining turbines	3.5 days (twice weekly)	One black-billed cuckoo documented on September 22, 2020
Bat Deterrent Study (2021)	August 1 – September 30	Same as 2020	Same as 2020	n/a

Subsequent Monitoring (every 3 years)	August 1 – September 30	Minimum of BBCS-level effort, as was conducted in 2018; however, the Applicant may alter protocols as long as the same level of detection is achieved

5.5 FUNDING TO SUPPORT MITIGATION AND MONITORING

Funding for the implementation of the conservation measures outlined in this conservation plan has been dedicated as part of Radford Run's overall budget for the Project.

6.0 ADAPTIVE MANAGEMENT PRACTICES

Adaptive management is a process that will allow Radford's Run to adjust its actions to reflect new information or changing conditions to reach a goal, in this case, minimization of take and conservation of the black-billed cuckoo.

Information used in the adaptive management process will come from the post-construction mortality monitoring activities described above. If the conservation measures are not producing the desired results, adjustments will be made as needed in coordination with the Department.

All black-billed cuckoo fatalities will be reported to the Department within one business day of positive identification of the carcass. If documented take of black-billed cuckoo exceeds the authorized take level of 2 black-billed cuckoo per year (i.e., if 3 black-billed cuckoos are found within a single year), the following measures will be implemented:

- RRWF will meet and confer with the Department to determine whether the fatalities were natural or related to operation of the Project.
    - If one or more of the fatalities are determined to be due to natural causes, then no adaptive management measures will be implemented.
    - If all three fatalities are related to Project operations, then RRWF and the Department will determine whether there are any identified patterns in the fatalities:
        - Spatial
        - Temporal
        - Weather

      If a pattern exists, RRWF will develop targeted conservation measures as needed in coordination with the Department to reduce effects to this species. If additional conservation measures are implemented, post-constriction monitoring will be conducted again the following year to determine if the additional conservation measure(s) were successful at reducing mortality.

    - If the cause is not related to Project operation, no new conservation measures will be implemented.

- If additional conservation measures are implemented, post-construction monitoring will be conducted again the following year within the season in which the fatalities were documented to determine if the additional conservation measures were successful at reducing mortality.

If two additional monitoring years also document more than 2 black-billed cuckoo fatalities, RRWF will coordinate with the Department to determine if an amendment to the ITA is needed.

7.0 CONCLUSIONS AND EFFECTS DETERMINATION

The incidental take of black-billed cuckoo at the Project is not likely to reduce the survival or recovery of the species in Illinois, the biotic community of which it is a part, or the habitat essential to its existence for the following reasons:

- Although Project operation is anticipated to result in black-billed cuckoo take (mortality), for the purposes of this Illinois Conservation Plan, take of the black-billed cuckoo is estimated to be **1.7 black-billed cuckoo per year with a requested authorized take of 2 black-billed cuckoos per year.**

- Due to annual variation in environmental factors that may affect black-billed cuckoo population sizes and migration, annual mortality can be expected to differ from year to year. In an effort to be responsive to this variation, and to ensure that the 26-year take limits are not exceeded, this Conservation Plan includes post-construction monitoring (Section 5.4) and adaptive management take thresholds (summarized in Section 6.0).

- Mitigation measures have been incorporated into the Project to provide a long-term benefit to black-billed cuckoo that will mitigate for the impacts of the permitted levels of take. Mitigation measures include a monetary contribution of $25,000 submitted to the Illinois Wildlife Preservation Fund to assist with management of, or bring conservation benefit to, the black-billed cuckoo.

8.0 REFERENCES

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Appendix A IMPLEMENTING AGREEMENT

Implementing Agreement

Conservation Plan
For the
Black-Billed Cuckoo

Radford's Run Wind Farm
Macon County, IL

The Illinois Department of Natural Resources (IDNR) is responsible for the review of this Conservation Plan for the black-billed cuckoo (*Coccyzus erythropthalmus*) and for subsequent issuance of the Incidental Take Authorization (ITA). Upon approval of the Conservation Plan and issuance of the ITA, Radford's Run Wind Farm, LLC (RRWF) will be responsible for meeting the terms and conditions of the ITA and will allocate sufficient personnel and resources to ensure the effective implementation of the plan. RRWF will oversee all avoidance, minimization, and monitoring efforts identified within the Conservation Plan. Furthermore, RRWF will be responsible for planning, contract execution, and construction supervision for the entire project.

RRWF will implement this Conservation Plan in coordination with the IDNR as required in the ITA. RRWF will be responsible for coordinating and overseeing any onsite work that requires knowledge, skills, and expertise related to the listed species. Members of RRWF will be Officers of Record for this Conservation Plan and Implementing Agreement and bear the corporate responsibility for compliance with the terms and conditions of the ITA.

RRWF hereby certifies that it has authority and funding to complete this project and to implement all proposed monitoring activities and conservation measures included in this Conservation Plan. RRWF oversees this project and assures that all applicable federal, state, and local laws will be adhered to during the completion of the project.

The Senior Vice President of Development, who will oversee implementation of the Conservation Plan and on-site monitoring as required by the ITA is:

Paul Bowman
Senior Vice President of Development
Radford's Run Wind Farm, LLC
c/o RWE Renewables Americas, LLC
353 N. Clark, 30th Floor
Chicago, IL 60654
512-423-1878

As the Senior Vice President of Development, I, Paul Bowman, am responsible for the implementation of this Conservation Plan and the terms and conditions of the ITA.

Signature: Paul Bowman Date: May 12, 2021

Paul Bowman, SVP Development