

TO: NextEra Energy Resources, LLC
FROM: Tetra Tech, Inc.
DATE: April 26, 2016
SUBJECT: Brady II Public Comment Received by PSC regarding Raptor Nests

John Wert contacted the North Dakota Public Service Commission (PSC) and reported active golden eagle nests in NE $\frac{1}{4}$ Section 14 and NW $\frac{1}{4}$ Section 4 of T136N R96W. Status of nests in these and nearby sections are given below.

NE $\frac{1}{4}$ of Section 14 T136N R96W

NextEra/Tetra Tech are aware of an active golden eagle nest in this $\frac{1}{4}$ section. During our spring aerial raptor nest survey conducted March 29-30, 2016 a golden eagle was seen incubating in a previously identified small stick nest (2015_39) located in a tree approximately 0.2 mile south of the proposed Brady II Project Area boundary. The nest was first discovered during a nest survey conducted in fall 2015 and based on overall size and shape along with stick size was classified as a small raptor (red-tailed hawk or ferruginous hawk) nest.

We began ground-based monitoring of the nest the week of April 4. USFWS was notified and a conference call which included Mr. Kevin Shelley (USFWS), Kim Wells and Melissa Hochmuth (NextEra), Dr. Chris Farmer (DNVGL) and Mark Martell (Tetra Tech) was held to discuss monitoring of the nest and implications for the project. Sandy Johnson at North Dakota Game and Fish Department (NDGF) was informed of the nest via email.

This nest is located 0.2 mi outside the Study Area boundary and 0.4 mi from the nearest turbine (#55). NextEra is removing turbine #55 from the Project array, and is moving all Project facilities out of a 0.5 buffer around the nest. The next closest turbine is #54, located 0.9 mile northwest of the nest location.

NextEra/Tetra Tech are continuing to monitor this nest.

NW $\frac{1}{4}$ of Section 4 T136N R96W

Our aerial and ground searches have found no stick nests in the NW $\frac{1}{4}$ of Section 4 T136N R96W. However, during a Brady II public comment session a nest was reported by the public on property owned by the Dorner family. Using public land records NextEra/TetraTech checked property owned by the Dorner family in the area and had a biologist search, from public roads, for any raptor stick nests. A small stick nest (2015_07) which we had previously recorded, was seen in the SE $\frac{1}{4}$ Section of T136N R96 W. This nest was unoccupied. Our biologist found no other nests during his search but noted that golden eagle nest 2015_39, noted above, was plainly visible from that area (email attached).

Nest 2015_07 is located 0.2 mi inside the Project Area boundary and 0.2 mi from the nearest turbine (#43).

On April 18, Sandy Johnson from NDGF reported to Tetra Tech a nest "within the footprint of the Brady Wind project" and asked us to confirm the status of this nest. Ms. Johnson reported the location of the nest as 46.626939, -102.710975 which corresponds to NW ¼ Section 2 T136N R96W. A Tetra Tech biologist checked this nest (now numbered 2016_24) on April 20, 2016 and found a dark-phase red-tailed hawk incubating on a nest. A second hawk was seen flying in the area close to the nest. Tetra Tech reported this information to Ms. Johnson on April 22, 2016 (email attached).

Nest 2016_24 is located 0.2 mi outside the Project Area boundary and 0.6 mi from the nearest turbines (#52 and #53).



CONFERENCE CALL NOTES
BRADY II WIND PROJECT
APRIL 12, 2016

In attendance:

- Kimberly Wells, NextEra
- Melissa Hochmuth, NextEra
- Kevin Shelley, U.S. Fish and Wildlife Service (USFWS)
- Mark Martell, Tetra Tech
- Chris Farmer, DNV GL

Background

The purpose of the call was to provide information to the USFWS regarding the recently discovered golden eagle nest (2015_39) just south of the southern boundary of the proposed Brady II project and receive feedback regarding next steps.

A golden eagle was found incubating in a small stick nest (2015-39) located in a tree just south of the proposed Brady II boundary during spring aerial raptor nest survey (March 29-30) conducted by Tetra Tech. The nest was first discovered in fall 2015 and based on overall size and shape along with stick size was classified as a small raptor (red-tailed hawk or ferruginous hawk) nest.

Monitoring

- Tetra Tech has conducted ground-based monitoring of the nest
- Golden eagle sitting (incubating posture) on the nest
- Observed nest exchanges between male and female eagles.
- Biologists are mapping flight paths associated with the nest, and flights observed thus far have been to the South-southeast.

Local Prey Resource Availability

DNV GL/NextEra provided a description of prey resource inventory efforts and findings to date:

- Prairie dog towns – locations mapped and activity noted, but areal extent not known
- Mapping of land parcels belonging to cattle operations conducted
- Winter aerial surveys of ungulates conducted – looking for concentration areas



Avoidance Measures

- NextEra described willingness to commit to the ½ -mile nest buffer recommended by NDGF, and asked for Mr. Shelley's thoughts regarding this.
- NextEra asked if it would be beneficial to move or remove the nest in this situation

Feedback from Kevin Shelley:

- Should look to prey resources to help understand flight patterns and predict additional movements
- NDGF wildlife staff did a modeling effort for deer fawning areas focusing on woody draws, which could prove helpful in predicting deer natal areas here; they may also have data regarding the location of traditional natal areas for deer and pronghorn. The contact would be Jeb Williams, Chief of the Wildlife Division – 701-328-6686.
- Nest buffer size is variable and depends on space use; however he suggests using a 2-mile buffer as a starting point. The appropriate buffer may be larger or smaller, depending on movements of birds and location of prey resources.
- He has no inherent reservations about a smaller buffer, but thinks it needs to be based on information from the site
- Noted that juvenile mortality is the primary problem for golden eagles in ND, and most of the mortality comes from interaction with anthropogenic factors.
- There are permits that allow for nest removal, but the practice is generally frowned upon and discouraged
- There is uncertainty regarding the continued viability of a relocated nest
- Suggests increasing effort at nest observations to have a biologist follow adults when they leave the nest to identify prey resource locations – if artificial nest platforms are added, they may be most likely to succeed if located between current nest and prey areas
- He will ask for input from Migratory Birds regarding nest move or alternate nest platforms.

Action Items

- NextEra/Tetra Tech will follow-up with Mr. Williams of NDGF regarding ungulate study.
- NextEra/Tetra Tech will develop a protocol for extended monitoring the nest which will include attempts to determine foraging areas and extend through nestling fledging.
- USFWS will contact Migratory Birds office to get their input regarding nest removal or relocation and alternate nest platforms

Brian R. Bjella

From: Martell, Mark <Mark.Martell@tetrattech.com>
Sent: Thursday, April 21, 2016 11:25 AM
To: Johnson, Sandra K.; Low, Tara
Cc: Wells, Kimberly; Young, Rich
Subject: RE: Raptor Nest in Brady Wind Project
Attachments: RTHA nest 46.6N_102.7W_TetraTech.JPG

Sandy,

Thank you for providing us with the report of a raptor nest located at: 46.626939 -102.710975.

Tetra Tech/NextEra had a biologist observe the site from a public roadway and he was able to confirm the presence of a nest at that location. The biologist was able to positively identify an incubating dark phase red-tailed hawk at the nest. He saw this bird leave the nest for a short period and return – allowing him to confirm his identification. He also observed a second red-tailed hawk flying in the vicinity of the nest.

I have attached a photo of the nest taken through a spotting scope.

Mark Martell | Senior Ecologist

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Think Green - Not every email needs to be printed.

From: Johnson, Sandra K. [mailto:sajohnson@nd.gov]
Sent: Monday, April 18, 2016 4:06 PM
To: Low, Tara <tara.low@tetrattech.com>; Martell, Mark <Mark.Martell@tetrattech.com>
Subject: Raptor Nest in Brady Wind Project

Hi Tara and Mark,

There is another nest within the footprint of the Brady Wind project that was not included in the data Anne-Marie sent. It is located at: 46.626939 -102.710975. One of the local landowners had seen a large raptor in it last week and over the weekend another landowner believes he saw a golden eagle in it. Do you still have surveyors in the area that could confirm the status of this nest?

Thanks,
Sandy

Sandy Johnson
Conservation Biologist
North Dakota Game and Fish Department
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