

March 19, 2009

Ms. Natalie Gates U.S. Fish and Wildlife Service Ecological Services 420 South Garfield Avenue, Suite 400 Pierre, SD 57501 the U.S. Fish and Wildlife Service concurs with your senciusion that the described project will not adversely affect listed species. Contact this office if changes are made or new information becomes available.

Date Advances

RE:

Buffalo Ridge II Wind Project in Brookings and Deuel Counties, South Dakota

Topeka Shiner Update

Dear Ms. Gates,

Thank you for your continued coordination on the Iberdrola Renewables (IBR) Buffalo Ridge II Wind Project (Project). As you know, the Project is located in watersheds that ultimately drain into streams with known populations of the federally endangered Topeka shiner (*Notropis topeka*). IBR has been working with the U.S. Fish and Wildlife Service (USFWS) to define potential suitable habitat for the Topeka shiner within the Project area and appropriate construction methods to protect the species. This work has included:

- An on-site meeting on September 14, 2009 with Tim Seck and Sarah Emery of IBR, Mike DeRuyter of HDR, Natalie Gates of USFWS, and Silka Kempema of South Dakota Game Fish and Parks (SDGFP) to discuss the Project and specific infrastructure siting.
- 2. Based on your input at that meeting, IBR contracted HDR and Mr. Jesse Wilkens (USFWS identified specialist to conduct Topeka shiner surveys) to survey the site for potential suitable Topeka shiner habitat. A survey to map potential suitable habitat for Topeka shiner was conducted on September 25, 2009. The results of that survey were submitted to USFWS on October 5, 2009. In response to that report, you expressed concern in an email on October 9, 2009 that areas mapped as "No Habitat (Fall 2009)" could actually provide habitat during years or times of high precipitation.
- 3. On October 23 and 30, 2009, HDR and Mr. Wilkens conducted a second site survey to more thoroughly map the stream channels throughout the Project area and identify the potential suitable habitat considering variable precipitation. These results were submitted to the USFWS on November 5, 2009. You reviewed and approved the revised habitat map (November 17, 2009 email). However, you expressed concerns about the potential for in-stream construction and restoration activities to affect the species. You requested additional

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- information on proposed construction methods and restoration in a November phone call and emails dated November 5 and 17, 2009 (see the attached plans for details on construction and restoration).
- 4. In further evaluating the site, IBR's contracted biologists determined the northeastern portion of Project is within the Minnesota River Basin a basin where the Topeka shiner is not known to occur. On December 15, 2009, IBR submitted a revised site map to the USFWS that identified streams in the northeastern portion of the Project in the Minnesota River Basin as "No Habitat" for the Topeka shiner. You agreed with the revised mapping in an email dated December 22, 2009.

Attached is an updated technical memorandum (March 2010) prepared by HDR and Mr. Wilkens that presents the results of the site surveys. Mr. Wilkens' evaluation of the Project area showed that the many of the USGS mapped blue line streams in the Buffalo Ridge II Project area do not contain the potential suitable Topeka shiner habitat at any time of the year. Because of the lack of stream features, construction at any time of year within the "No Habitat (Year Round)" streams would not result in a "take" of the species. There are also many stream segments that Mr. Wilkens evaluated as having the potential for shiners to be present during high precipitation events (the yellow mapped streams - "No Habitat (If No Flowing Water)"). If there is water flowing in these stream segments, HDR and Mr. Wilkens recommend further evaluation prior to any in-stream activity. However, if these segments are dry at the time of proposed construction, construction at that time would not result in a "take" of the species. HDR and Mr. Wilkens recommend avoiding all in-stream temporary and permanent activity to streams identified as "Potential Habitat" for Topeka shiners. All in-stream activity in any unevaluated streams should also be avoided, until a qualified biologist can evaluate the presence or absence of potential habitat during a site visit.

IBR began construction of the access roads and turbine foundations the week of October 12, 2009. Construction was completed for the season on December 8, 2009 and is scheduled to restart in late March 2010. All construction activities completed thus far have avoided in-stream disturbances.

During 2010, IBR proposes the following construction activities related to streams in the Project area:

- 1. Streams identified as "Potential Habitat" (red lines) would have no in-stream construction activities (e.g., no culverts, no crane mats, no trenching). While these streams may have electrical line crossings that are either overhead or directionally bored under channels, there will be no in-stream disturbances.
- 2. Streams identified as "No Habitat (Year Round)" (green lines) could have potential for in-stream construction activities such as installing crane mats

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- and/or trenching electrical lines. Any of these activities would be consistent with other state or federal permitting requirements.
- 3. Streams identified as "No Habitat (If No Flowing Water)" (yellow lines) would also have potential for in-stream construction activities similar to "No Habitat (Year Round)" streams. However, for these yellow streams, a biological monitor would determine if the channel is wet and there is any potential for Topeka shiners to be present. If there is potential for Topeka shiners, then no in-stream activities would occur similar to activities in "Potential Habitat" streams.

IBR has been working with the Project design and construction teams to develop methods and protocols to avoid impacts to Topeka shiners. These include the following:

- 1. Previously we discussed the potential to install culverts to move cranes across some drainages. The construction contractor has reviewed the December 15, 2009 Topeka shiner map and developed a crane route that avoids all "Potential Habitat" streams. Further they will only install wood mats for short term (1-3 days) crane crossings of drainages that are "No Habitat (Year Round)" or dry "No Habitat (If No Flowing Water)" (please see detail Temporary Stream Crossing with Crane Mats). They will avoid crossing wet "No Habitat (If No Flowing Water)" drainages.
- 2. The access roads have been designed to avoid crossing any streams. The access roads do cross two mapped USGS blue lines but during the delineation they were determined to not be streams because of no defined bed and bank and no hydrology. These are mapped as "No Habitat (Year Round)".
- 3. The underground electrical installation will be trenched or bored depending on the channel type. Streams that are identified as "Potential Habitat" will be directional bored (please see plan sheet BR-2-E-520-04-RB.pdf for details on construction and restoration). Streams that are identified as "No Habitat (Year Round)" or dry "No Habitat (If No Flowing Water)" may be trenched (please see plan sheet BR-2-520-03-RC.pdf for details on construction or restoration). If a "No Habitat (If No Flowing Water)" is found to have water, then the crossing will be directional bored.
- 4. The aboveground electrical lines have been designed so the structures are a minimum of 35 feet from streams. During construction waterways will be protected by silt fence and no vehicles or equipment are allowed in "Potential Habitat" or wet "No Habitat (If No Flowing Water)" streams.
- 5. IBR construction has committed to protecting "Potential Habitat" or wet "No Habitat (If No Flowing Water)" streams during equipment deliveries and will use special bridges, if needed, to upgrade roadway crossings to avoid in-channel work.

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We request the USFWS review the technical memorandum, design details, and our suggested construction protocol. We also request that you please concur that the proposed construction methods and protocols will avoid take of Topeka shiners.

I appreciate your time and feedback on this matter. If you require further information or have questions regarding this matter, please call me at (612) 309-2713 or email me at sarah.emery@iberdrolausa.com.

Sincerely,

Sarah Emery

Senior Permitting Manager

Sand L. Energy

Iberdrola Renewables

Enclosures:

- Topeka Shiner Survey Memo for Buffalo Ridge II Wind Project, Brookings and Deuel Counties, South Dakota, Update December 2009
- Topeka shiner habitat map
- Detail of Temporary Stream Crossing with Crane Mats
- Electrical design drawings BR-2-E-520-04-RB.pdf and BR-2-520-03-RC.pdf

cc: Tim Seck, Iberdrola Renewables Richard Ellis, Iberdrola Renewables Joyce Pickle, HDR Engineering, Inc. Aaron Mylnek, Westwood