Mr. Brian Almon, P.E. Page Fight July 19, 2010

Recommendation: TPWD recommends the PUC select routes that would minimize impacts to natural resources, such as those referenced below.

Central A to Central C

IPWD recommends using or paralleling existing or approved transmission line routes whenever possible. Construction of Oncor's Central A to Tonkawa CREZ transmission line and Link C of Lone Star's Central A to Central C CREZ transmission line would result in two new 345-kV CREZ lines within only a few miles of one another. Construction of two transmission lines in essentially the same area will increase the removal and fragmentation of wildlife habitat and the risk of bird mortality due to collisions with the lines.

Of the routes evaluated in the EA for the Central A to Central C line. Route 9 appears to better minimize impacts to natural resources than Route 6. Although Route 9 is slightly longer than Route 6 and would cross a larger number of streams than Route 6, Route 9 would not cross the Clear Fork of the Brazos River. As stated above, Route 6 crosses the Clear Fork of the Brazos River twice. Route 9 also parallels more length of existing transmission lines than Route 6, and specifically parallels an existing 345-kV transmission line along Link L south and east of Lake Fort Phantom Hill. Route 9 would cross less upland woodland and less emergent wetland than Route 6. Route 9 is also shorter than the other routes that would not cross the Clear Fork of the Brazos River (Routes 5 and 7).

Central C to Sam Switch

IPWD supports efforts to identify and delineate potential habitat for protected species prior to the selection of a preferred alternative route. TPWD recommends Lone Star avoid using segments on which potential habitat for state- and federally-listed species has been identified during surveys.

Of the 14 routes carried forward as viable alternatives for the Centra. C to Sam Switch segment, Routes 220, 246, and 264 de not use links on which potential habitat for the Gulden-checked Waibler has been identified. Route 246 is the shortest route and would cross the third

Mr. Brian Almon, P.E. Page Nine July 19, 2010

shortest distance that does not parallel existing corridors (calculated by subtracting Line 7 from Line 1 in Table 7-1). Route 246 also crosses the second shortest distance through upland woodland, the second fewest mainteer of streams, and appears to better minimize overall potential impacts to natural resources than Lone Star's preferred Route 14.

As proposed, Route 246 crosses a navigable portion of the Brazos River south of Lake Whitney. Use of this route may recuire a Section 10 permit from USACE, as referenced earlier. The timeframe required to acquire the permit may delay the completion of the transmission line and the in-service date.

Route 230 would avoid crossing this portion of the Brazos River and identified habitat for the Golden-cheeked Warbler Route 230 would also cross the second smallest number of streams and parallel the shortest distance of streams. Route 230 crosses the third shortest distance that does not parallel existing corridors (calculated by subtracting Line 7 from Line 1 in Table 7-1), the shortest distance across upland woodland, and appears to better minimize impacts to natural resources than Lone Star's preferred Route 14.

However, as with Lone Star's preferred Route 14, Route 230 crosses 0.8 mile of a flowage casement managed by the USACE located north of Lake Whitney. Regardless of the alignment chosen, TPWD recommends that if USACE property cannot be avoided, impacts to riparian and wetland habitats be minimized in this area and mitigated to USACE standards or better where impacts do occur.

Sam Switch to Navarro

Based on the overall impacts of Route 4 described in the EA and testimony of Dan Mayers, this route appears to best minimize potential impacts to natural resources when compared to the other routes evaluated in the EA.

Pre-Construction

Federal Law

Mr. Bnaa Almon, P.E. Page Ten July 19, 2010

Endangered Species Act

Wheoping Crane

As stated above, the proposed project has the potential to impact the federaland state-listed endangered Whooping Crane during migration. In TWPD correspondence on previously approved CREZ CCN applications, TPWD recommended that routing of lines near known or potential Whooping Crane stopover habitat be avoided. In the final orders on these lines, the PHC found that "it is neither practical nor necessary to perform a comprehensive biological evaluation of the entire transmission line study area before the Commission issues a final order identifying the actual route to be used for constructing the transmission line." The PUC found that once the toute is selected, the transmission service provider "will have the right of entry to conduct the necessary surveys and to determine whether any federally-listed species habitat is present" (SCAH Docket No. 473-10-0398, Findings of Fact 87C). The PUC ordered that, upon approval of the transmission service provider's application, the provider should identify Whooping Crane locations and use best practices to avoid or minimize potential impact to that federallylisted species.

The EA states that upon approval of a final route, Lone Star will consult with USFWS personnel to identify potential mitigation alternatives that may reduce potential impacts to the migrating whooping cranes. In addition, Lone Star will implement a program to educate construction contractors regarding methods to avoid and minimize impacts to the Whooping Crane. After the selection of a route, Lone Star plans to identify potential suitable stopover habitat for this species and install bird flight diverters in areas where suitable habitat is identified.

Recommendation: TPWD continues to recommend that Lone Star consider potential impacts to suitable Whooping Crane stopover habitat when siting proposed transmission lines and determining which alternative route should be constructed. However, if pre-selection route surveys are not feasible as indicated above, TPWD supports plans to consult with the USFWS regarding mitigation alternatives, educate contractors to minimize impacts during construction, and install bird flight diverters to minimize the risk of collisions with the lines.

Mr. Brian Almon, P.E. Page Eleven July 19, 2010

Golden-cheeked Warbler and Black-capped Vireo

Dan Mayers states that 1.5 miles of potential habitat for the Golden-cheeked Warbler was identified during helicopter surveys along link KK1 of Lone Star's preferred Rouse 14 for the Central C to Sam Switch segment. However, available habitat models that are based on remote sensing and incorporate factors such as canopy cover, composition, slope, soils, and habitat patch size predict significantly more suitable habitat for this species along this and many other alternative routes. As stated above, no habitat for the Black-capped Vireo was detected during aerial surveys. TXNDD records indicate several occurrences of this species in the area as shown on Figures 3-2A through 3-2F in the EA, and relatively accurate occurrences of this species have been documented very near links KK1 and ST. Suitable habitat for the Black-capped Vireo may be present within the ROW for several of the alternative routes but may not have been detectable during helicopter surveys.

Recommendation: Suitable habitat for the Golden-cheeked Warbler and Black-capped Vireo is more easily detected during ground surveys; therefore TPWD recommends that prior to construction (when Lone Star has access), on-the-ground surveys for suitable Golden-cheeked Warbler and Black-capped Vireo habitat be conducted on the approved route. Any suitable habitat found during on-the-ground habitat surveys should be surveyed for these species following USFWS protocols.

Migratory Bird Treaty Act

In TPWD correspondence on previously approved CREZ CCN applications, TPWD recommended that vegetation removal be avoided during the primary migratory bird nesting season, March through August, to avoid adverse impacts to this group. In the final order on these projects, the Commission found that there was no evidentiary basis for requiring the transmission service provider to avoid all clearing activities during the months of March through August (SOAH Docket No. 473-10-0398, Findings of Fact 87D).

Recommendation: To avoid a violation of the Migratory Bird Treaty Act (MBTA), measures should be taken to ensure that migratory bird species within and near the project areas are not adversely impacted by construction and maintenance activities. Please note that it is the responsibility of the project proponent to ensure compliance with the

Mr. Brian A.mon, P.E. Page Twelve July 19 2010

MBTA. The USFWS Migratory Bird Office can be contacted at (505) 248-7882 for more information on the MBTA.

As stated in the Project Description above, Lone Star proposes to use guy wires and anchors at line angle structures. In some casea, self-supporting steel poles on concrete foundations would be utilized where guying is not possible. In addition to the risks associated with the transmission lines, the use of guy wires increases the risk of bird mortality due to collisions with the wires. TPWD recommends avoiding the use of guy wires where feasible, particularly in areas with high bird use, such as near water resources.

If guy wires must be used, they should be marked with bird flight diverters to reduce the potential for bird strikes.

If cleaning vegetation during the migratory bird nesting season is unavoidable as indicated above, TPWD recommends Lone Star survey the area proposed for construction to ensure that no nests with eggs or young will be disturbed by construction. Any vegetation (trees, shrubs, and grasses) where occupied nests are located should not be disturbed until the eggs have hatched and the young have fledged. Additional measures to minimize impacts to migratory birds could include removing old, empty nests outside of the resting season in areas that are scheduled to be cleared; thereby preventing reuse of old nests.

Construction

State Law

Parks and Wildlife Code

Section 68.015 of the Parks and Wildlife Code regulates state-listed species. Please note that there is no provision for take (incidental or otherwise) of state-listed species. A copy of TPWD Guidelines for *Protection of State-Listed Species*, which includes a list of penalties for take of species, is attached for your reference. State-listed species may only be handled by persons with a scientific collection permit obtained through TPWD. For more information on this permit, please contact the Wildlife Permits Office at (512) 389-4647.

Mr. Brian Almon, P.E. Page Thirteen July 19, 2010

Section 7.1.6.1 of the EA states that education of all construction personnel should be conducted to maximize avoidance strategies if the state-listed Texas horned lizard (*Phrynosoma cormuum*) and Timber raulesnake (*Crotalus horridus*) are encountered. Therefore, the EA states that it is unlikely that the proposed project would have a negative impact on these state-listed threatened species. Section 7.1.6.1 of the EA also states that the proposed transmission lines would span over all drainages to avoid impacts to waterways and respective inhabitants including the state-listed threatened Brazos water snake (*Nerodia harteri*) and Alligator snapping turtle (*Macrochelye temmunckii*). However, due to potential habitat removal, impacts to water quality, and damage to stream beds and banks by equipment crossing during installation and maintenance of the lines, TPWD believes that take of these state-listed species, as well as state-listed threatened freshwater mussels not discussed in the EA, may occur as a result of the proposed project.

Texas horned lizards are generally active in the western portion of the project area from mid-April through September. At that time of year, they may be able to avoid slow (less than 15 miles per hour) moving equipment, although when a threat is perceived they often flatten themselves against the ground to blend into their surroundings. The remainder of the year, this species hibernates only a few inches underground and they will be much more susceptible to earth moving equipment and compaction.

In TPWD correspondence on previously approved CREZ CCN applications, TPWD recommended that a permitted biological monitor be present during clearing and construction activities within habitat for state-listed species. In the final orders on these lines, the PUC found that the current practice, which is to employ a permitted biological monitor for only federally-listed species, is adequate and the transmission service provider is not required to hite an additional monitor for state-listed species (SOAH Docket No. 473-16-0398, page 3).

Recommendation: TPWD recommends a biological monitor be present during construction to try and relocate state-listed species. If the presence of a biological monitor during construction is not feasible as indicated above, state-listed threatened species observed during construction should be allowed to safely leave the site or relocated by a permitted individual to a nearby area with similar habitat that would not be disturbed during construction.

Mr. Brian Almon, P.E. Page Fourteen July 19, 2010

A mixture of cover, food sources, and open ground is important to the Texas horned lizard and its primary food source, the Harvester ant (Poyonomyrmex sp.). Disturbed areas within suitable habita, for the Texas homed lizard should be revegetated with site-specific native, patchy vegetation rather than sod-forming grasses.

To minimize impacts to the Brazes water snake, disturbance of rocky banks along waterways in the project area should be avoided during construction and maintenance of the line. To minimize impacts to all the same possible nather than installing temporary culverts or low water crossings.

Mitigation for Regulated and Unregulated Resources

for those habitats where impacts from the transmission line cam avoided or minimized. This would include impacts to species and habitats covered under federal law (wetlands and associated habitats, threatened or endangered species) and state resource high at 1 post not covered by state or federal law (nparian areas, native a film project is estimated to impact at least 5,770 acres. At a minimum, TPWD recommends a replacement ratio of 1:1 for state resource habitat types.

One opportunity for mitigation would be the active conversion and management of transmission line ROWs to native grassland travel corridors impland game hinds. Management activities would include avoiding and activities during the nesting season, leaving the appropriate grass hear and establishing and maintaining diverse plant composition. These corridors could be used to connect usable habitats in appropriate areas such as rangelands. Because trees cannot be allowed to remain in the ROW or planted in the ROW as compensatory mitigation for project impacts, the creation of native grassland travel corridors would provide benefit for wildlife in the area and be compatible with the proposed use of the ROW. This type of mitigation could be applicable on ranch properties with wildlife management interests, pending negotiation with willing landowners.

Local wildlife restoration efforts should be incorporated into mitigation plans. For instance, the Western Navarro Bobwhite Restoration Initiative (WNBRI),

Mr. Brian Almon, P.E. Page Fifteen July 19, 2010

recompassing the western third of Navarro County, is a strategic plan to rebound struggling and isolated populations of bobwhite quail with a goal to create and/or maintain approximately 30,000 acres of contiguous habitat for this species. Additional information on the WNBRI can be found at http://www.navarrequail.org. For additional information on the creation and maintenance of grassland confiders throughout the project area, please contact Jason Hardin, IPWD Upland Camebird Program Specialist, at (903) 322-2770 or jason.hardin@towd.state.tx.us.

Mitigation plans can be developed after the selection of a route when the acres of impact and the value of impacted habitats can be evaluated on-the-ground. However, mitigation costs and opportunities should be considered when selecting a route. Impact to federally-listed species and their habitats will need to be coordinated with the USFWS, and impact to wetlands will need to be coordinated with the USFWS.

I appreciate the opportunity to review and comment on this EA and CCN application. Please consact me at (512) 389-4579 if you have any questions.

Sincerely,

Julie C. Wicker

Wildlife Habitat Assessment Program

ulia (Wicker

Wildlife Division

JCW:gg.15102

Attachment

ee: Mr. David Turner, Lone Star (w/strachment)
Mr. Omar Bocanegra, USFWS (w/out attachment)

Protection of State Listed Species Texas Parks and Wilclife Department Guidelines

Protection of State-Listed Species

State law prohibits any take (incidental or otherwise) of state listed species. State listed species may only be handled by persons possessing a Scientific Collecting Permit or a Latter of Authorization issued to relocate a species.

- Section 68.002 of the Texas Parks and Wildlife (TPW) Code states that opecies of fish or wildlife indigenous
 to Texas are endangered if listed on the United States List of Endangered Native Fish and Wildlife or the list of
 fish or wildlife threatened with statewide extinction as filled by the director of Texas Park and Wildlife
 Department. Species listed as Endangered or Threatened by the Endangered Species Act are protected by both
 Federal and State Law. The State of Texas also lists and protects additional species considered to be threatened
 with extinction within Texas.
- Animals Laws and regulations pertaining to state-listed endangered or threatened animal species are contained in Chapters 67 and 68 of the Texas Parks and Wildlife (TPW) Code and Sections 65.171 65.176 of Title 31 of the Texas Administrative Code (TAC). State-listed animals may be found at 31 TAC §65.175 & 176.
- Plants Laws and regulations pertaining to endangered or threstened plant species are contained in Chapter 88 of the TPW Code and Sections 69.01 69.9 of the TAC. State-listed plants may be found at 31 TAC §69.8(a) & (b).

Prohibitions on Take of State Listed Species

Section 68.015 of the TPW Code states that no person may capture, trap, take, or kill, or attempt to capture, trap, take, or kill, endangered fish or wildlife.

Section 63.171 of the Texas Administrative Code states that except as otherwise provided in this subchapter or Parks and Wildlife Code, Chapters 67 or 68, no person may take, possess, propagate, transport, export, sell or offer for sale, or ship any species of fish or wildlife listed by the department as endangered or threatened.

"Take" s defined in Section 1.101(5) of the Texas Parks and Wildlife Code as.

"Take," except as otherwise provided by this code, means collect, hook, hunt, net, shoot, or snare, by any means or device, and includes an attempt to take or to pursue in order to take

Penaltics

The penalties for taxe of state-listed species (TPW Code, Chapter 67 or 68) are:

- 1^{5°} Offense = Class C Misdemeanor: \$25-\$500 fine
- One or more prior convictions = Class B Misdemeanor \$200-\$2,000 fine and/or up to 180 days in jail.
- Two or more prior convictions a Class A Miscemeanor \$500-\$4,000 fine and/or up to 1 year in jail.

Restitution values apply and vary by species. Specific values and a list of species may be obtained from the TPWD Wildlife Habitat Assessment Program.