CLEAR VIEW ALLIANCE, INC. DECEMBER 23, 2010

SOAH DOCKET NO. 473-10-5546 PUC DOCKET NO. 38354

APPLICATION OF LCRA	§	
TRANSMISSION SERVICES	§	
CORPORATION TO AMEND ITS	§	
CERTIFICATE OF CONVENIENCE	§	BEFORE THE STATE OFFICE
AND NECESSITY FOR THE	§	
PROPOSED McCAMEY D TO	§	OF
KENDALL TO GILLESPIE 345-Kv	§	
CREZ TRANSMISSION LINE IN	§	ADMINISTRATIVE HEARINGS
SCHLEICHER, SUTTON, MENARD,	§	
KIMBLE, MASON, GILLESPIE, KERR	§	
AND KENDALL COUNTIES	§	

CLEAR VIEW ALLIANCE, INC.'S EXCEPTIONS TO PROPOSAL FOR DECISION

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CLEAR VIEW ALLIANCE, INC.'S EXCEPTIONS TO PROPOSAL FOR DECISION

Introduction

In the conclusion of the Proposal for Decision ("PFD"), the administrative law judges ("ALJs") state that they "would prefer that Routes MK32 or 33 be approved by the Commission for the same reasons TPWD, Weinzierl, and CVA present" Clear View Alliance, Inc. 1 ("CVA") agrees with the ALJs' statement and encourages the Commission to approve Route MK33 with construction above ground on Link Y11 or MK32 instead of the route the ALJs ultimately recommend, Staff MK15. The comments submitted since this CREZ line was first proposed, the local government resolutions that have been adopted, and the testimony in the record all reveal the passion and depth of feeling among Texans for the protection of this extraordinary portion of the state. CVA presented a full case in this proceeding, with expert witnesses addressing land use and land fragmentation, endangered species, oak wilt, visual and aesthetic impacts, monopole costs and benefits, aviation concerns at the Kimble County Airport, and transmission line routing, in addition to landowner testimony. The record demonstrates that Route MK33 with construction above ground on Link Y11 best fulfills the criteria the

CVA is the authorized representative of approximately 240 individual landowners who have intervened in this proceeding. A list of the intervenors who designated CVA as their authorized representative was attached to its Joint Position Statement filed on September 28, 2010.

Commission must consider under PURA and its Substantive Rules, with MK32 a second best choice.

They conclude that, in light of past Commission decisions focusing on cost, their recommendation must forego avoiding the central part of the Hill Country. The Commissioners, however, can examine the balance between the costs of these routes and the very significant benefits to be gained by routing this line along established highways. The Commission can make the policy decision that, for Texas and the Hill Country, the best route should be approved. CVA urges the Commission to do just that.

I. Summary of Case and Recommendations

Commission Staff and the ALJs recognize that environmental concerns are important and recommend against LCRA TSC's preferred route, MK13. As CVA demonstrated in its initial brief, MK13 is among the worst possible choices for the proposed line because it cuts diagonally through the middle of the Hill Country, follows little existing right-of-way, and will have significant negative impacts due to land fragmentation, removal of wildlife habitat, and the increased risk of exacerbating oak wilt infestations. None of the landowner intervenors dispute these negative outcomes; rather, most of them either affirmatively support or do not oppose CVA's first choice for this line – MK33 with construction above ground on Link Y11 – or they support one of the other routes that significantly parallels I-10.²

Although Staff's MK15 is better than LCRA TSC's preferred route, it falls short of avoiding the central Hill Country and fails to maximize the use of compatible rights-of-way in three significant respects: (1) by cutting across the western portion of the study area along *no* compatible right-of-way, MK15 cuts through and fragments approximately 37 miles of ranch land and then uses Link b90 to reach I-10 along a small rural two-lane road;³ (2) by detouring north of the Kimble County Airport, MK15 goes back into the central Hill Country and injects a

See P-Line Initial Brief at 3-4, alternatively supporting one of the variations of MK15; Six Mile Ranch Initial Brief at 2, Saba Ranch Initial Brief at 10, Segrest group Initial Brief at 5, 16; AC Ranches Initial Brief at 2; Weinzierl Initial Brief at 3-6.

Staff witness Ally conceded that MK33 requires 27 miles fewer new right-of-way than the Staff's recommended route, thereby reducing the impact on the environment and on landowners. Tr. at 1080.

potential aviation danger with respect to the most common approaches from the north of the airport; and (3) by departing I-10 to cut through Tierra Linda Ranch and the southern part of the study area, it opts to protect primarily commercial land interests instead of homeowner interests and increases the risk of oak wilt spread.

MK33 and MK32 are expensive because they are long, and they are long because compatible right-of-way is scarce in the Hill Country. MK33 also is more expensive because LCRA TSC proposes to build approximately one-half mile of the route underground to avoid problems associated with constructing the transmission line south of the Kimble County Airport. The cost of LCRA TSC's proposed underground construction is \$54 million. It is CVA's position that the increased costs are not necessary and that a less expensive above-ground option is available.

The PFD correctly does not recommend construction of the transmission line on LCRA TSC's Preferred Route, MK13, or *any* of the other routes that go through the heart of the Hill Country. LCRA TSC selected as its Preferred Route a route that has two metrics strongly in its favor: a low number of habitable structures and relatively short distance. Route MK13 also costs less than many other routes, in large part because it approximates a straight, diagonal line between the end point substations. None of the routes viewed favorably by the ALJs is as inexpensive as the ruler-straight line envisioned in the CTO Study.

As the Commission knows, if the only requirements in selecting a route for a transmission line were to submit a handful of routes consisting of straight lines that affect few habitable structures and have a low cost, then there would be no need for a utility to submit a robust number of options from which the Commission could make its decision. In this case in particular, there would have been no reason to delay the filing of this Application so that less intrusive options that use more compatible right-of-way could be evaluated and the strongly held community values that desire protection and preservation of the Hill Country could be heard. This application was delayed expressly to permit LCRA TSC to study routing options that would take the line out of the middle of the Hill Country and locate it instead along existing right-of-way. LCRA TSC's and Staff's Joint Motion to delay the filing of the CCN application for this CREZ line recognized the public's urging that an "I-10 Route" be considered. MK33 and MK32 are that I-10 Route.

Paralleling existing rights-of-way to the maximum extent possible reduces the amount of new intrusion and new disturbance inevitable with construction of a CREZ line. MK33 best fulfills this objective. If the Commission declines to approve this route with construction above ground on Link Y11, CVA's position is that MK32 is the next best choice. The ALJs also find favorable Route MK62, which builds upon Staff's Route MK15 and utilizes a substantial amount of compatible right-of-way along I-10 as it approaches the Kendall Station in the eastern part of the study area.

The importance of the Commission's decision in this case cannot be overemphasized. As CVA witness Wyman Meinzer, the Texas State Photographer, testified, "[t]he Hill Country's beauty is both subtle and expansive. Its vistas of rolling limestone hills, fields of wildflowers, cold spring-fed streams and cypress-shaded rivers create landscapes that take your breath away. For miles and miles you can see unique juxtapositions of natural beauty: prickly cactus with dustings of snow, slow-moving streams sliding over craggy rocks, brightly colored wildflowers growing among granite boulders and barb-wire fences bounding acres of feathery tall grass or a sea of bluebonnets." CVA urges the Commission to recognize the unique nature of the area to be crossed by this proposed CREZ line and to conclude that, based on this record and in these circumstances, selection of a route that parallels existing highways to the maximum extent possible is the best outcome for Texas.

CVA's Key Arguments:

The best route is MK33 with construction above ground on Link Y11 Page 10

The best route in this case starts by paralleling Highway 277 and then parallels I-10 instead of cutting diagonally through ranchland where no compatible right-of-way exists and fragmenting the Hill Country. The best route in this case continues along I-10 south of the Kimble County Airport utilizing cost-effective and feasible above-ground construction instead of detouring into the central part of the Hill Country and crossing the Llano River where a 114-year old pecan grove is located. The best route in this case stays on I-10 through Kerrville and avoids exacerbating oak wilt concerns. The best route in this case is more expensive, but that greater initial expenditure is worth the investment in protecting a special part of Texas. Although the central routes are less expensive to build, placing a transmission line on any of them will have a significant, adverse impact on an area that otherwise has been touched lightly by man-made infrastructure. Damage to the Hill Country, to its environment and its beauty, cannot be avoided if the best route is not utilized.

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⁴ CVA Ex. 5 at 4.

Importance of the Hill Country

Page 13

The ALJs correctly recognized that appreciation of the Hill Country is an important community value; their recommendation that Staff MK15 be selected simply does not go far enough to protect this portion of the state.

Habitable Structures

Page 15

The focus on comparing the count of number of habitable structures on the various routes ignores the obvious fact that being close to a major highway, particularly an interstate, is neither an undisturbed environment nor a quiet area desirable for residential development.

Monopoles

Page 18

If any rural area of the State of Texas deserves to have monopoles utilized for the length of the approved route, the Texas Hill Country is that area. The efficiencies of scale justify the global approval of the use of monopoles where feasible.

Aesthetic Values

Page 23

The Staff MK15 route crosses for almost 50 miles through the very type of country where it would be more jarring to see the transmission line than along Highway 277 and I-10. At the eastern end of the route, Staff Mk15 goes through approximately 28 miles of Hill Country landscape instead of following I-10 through an increasingly commercial and developed area.

Land Fragmentation

Page 26

Routes MK33 (and MK32) would be least likely of all the proposed routes to precipitate additional land fragmentation. These routes follow US 277 and I-10 where land already has been bisected and fragmented by the presence of the highways.

Oak Wilt

Page 28

The areas within the study area most affected by oak wilt are Gillespie and Kerr counties, with a heavy concentration along Highway 16 from Fredericksburg to Kerrville over to Comfort and back to Fredericksburg. Selecting route MK33 (or MK32) would reduce the risk of spreading oak wilt and its devastation.

Endangered Species

Page 31

Every route would take significant amounts of existing wildlife habitat, but it would be much worse to cut a corridor through unfragmented wildlife habitat than to put one adjacent to an already fragmented habitat. When a right-of-way is placed along a wide corridor such as I-10, the effects to the species are lessened due to the fact that the potential habitat removed due to the right-of-way does not further fragment larger patches into numerous smaller patches.

Creeks, Streams, and Rivers

Page 34

Link b23a of the ALJs' recommended route would cross the riparian area adjacent to the Llano River in such a way that it will impact the historic Oliver Pecan Grove (est. in 1886). By contrast, the Llano River crossing of Y11 is routed to cross adjacent to the sewage disposal facility between Junction and I-10.

Wildlife Management

Page 35

Many landowners have a desire to see their land restored and/or conserved for its natural values – and this trend also provides huge benefits to local rural economies through increased nature-based tourism, hunting, bird-watching, canoeing and kayaking, and other forms of outdoor recreation. The wildlife and scenic resources of the Texas Hill Country are its greatest assets, and these are just as much a part of agricultural land use as is raising sheep and goats.⁵

Above-Ground Construction of Link Y11

Page 38

LCRA TSC has failed to demonstrate that it has accurately analyzed the construction options for an above ground transmission line at Link Y11 near the Kimble County Airport. It has misapplied the FAA's obstruction standards, resulting in a conclusion that the structure height must be lower than actually allowable by FAA rule. It then determined that the low structures would require security fences and would result in a conductor height that in a flood event would require it to take the line out of operation for hours or days. And, it concluded that the purposes of the CREZ transmission lines require it to ensure that this portion of the line never be taken out of operation. The upshot of this erroneous chain of conclusions was a proposal to build the line underground at a cost of \$54,000,000.

Best Balance of Costs, Compatible ROW, and Prudent Avoidance Page 51

Although CVA contends that LCRA TSC can construct route MK33 above ground at a significantly reduced cost than the underground alternative proposed by LCRA TSC, CVA would prioritize and describe these three other routes identified by the ALJs as follows: MK32 offers the extended paralleling of existing compatible rights-of-way for a vast majority of its length and is the best route of the three considered by the ALJs in their final analysis. MK62 is flawed by its disregard of property boundaries and fragmentation concerns at the western end of the study area, but its use of I-10 through Kerrville makes it a better route than Staff's MK15, the third best option of the three considered by the ALJs.

II. Procedural History, Notice, and Jurisdiction

Not addressed.

⁵ CVA Ex. 1, Wilkins Direct at 9.

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III. The Participants

The PFD describes CVA as

a group formed of hundreds of intervenors who all advocate for the line to be routed along Highway 277 and I-10, away from the central routes and parallel to existing paved highway. CVA included intervenors along almost every proposed link, and included individuals who live along I-10 who, as part of the group, advocate for the line to be built parallel to the highway, through or close to their properties, rather than through land in the central part of the study area.⁶

The PFD accurately reflects CVA's stated goals since its formation: The proposed line should be constructed along Highway 277 and I-10 and it should be built on monopoles. The primary objective has been to minimize the negative impact on the natural and in many areas unspoiled beauty of the Hill Country, wildlife habitat, environment, land use and recreational opportunities, attributes of this part of Texas that are widely appreciated and should be saved. When you consider the 100 to 160 foot corridor to be cleared for a distance of 130 to 160 miles, through the heart of the most unspoiled portions of the Hill Country, and lattice towers constructed where only natural bluffs now stand, the magnitude of the impact is profound. Once this part of Texas is altered, it will never be the same within our lifetimes. As CVA has said many times, once it is gone it is gone forever.

The testimony of CVA witness Dr. Neal Wilkins addresses at length and in specific detail his concerns about flaws in LCRA TSC's failure to analyze wildlife management in the Hill Country and his opinion on impacts on wildlife habitat, land fragmentation, and impacts to endangered species habitat. Dr. Nick Parker captured holistically the essence of the CVA case, addressing tourism and the economy of the Hill Country, culture, heritage, land use and fragmentation. Gene Gehring addressed oak wilt issues. Frank McIllwain addressed LCRA TSC's incorrect analysis of FAA regulations that serves as the basis for its decision to propose constructing Link Y11 underground. Russell Gulley addressed erosion and flood concerns on Link Y11. Dr. Jerry Wong provided in-depth testimony supporting the use of monopoles for this Project.

PFD at 4.

IV. Project Background

Not addressed.

V. Preliminary Order Issues

A. Preliminary Order Issue No. 1

Is LCRA TSC's Application to amend its CCN adequate? Does the Application contain an adequate number of reasonably differentiated alternative routes to conduct a proper evaluation?

Not addressed.

B. Preliminary Order Issue No. 2

Did the notice provided by LCRA TSC comply with P.U.C. PROC. R. 22.52(a)?

The PFD discusses an issue raised by ChiRoss Intervenors with respect to "overnotice" of landowners and LCRA TSC's position that the Commission's rules present only the minimum notice required.⁷ LCRA TSC argued that nothing in the Commission's rules preclude the noticing of additional property owners in order to provide the Commission with flexibility in its selection of a final route.⁸

Although CVA did not brief this issue, it appreciates the concerns raised by ChiRoss Intervenors and agrees that the Commission should not encourage or establish a precedent that would allow utilities to establish *ad hoc* boundaries for notice to landowners that vary from docket to docket. Under LCRA TSC's approach, transmission service providers conceivably could provide notice to all landowners in a county so that the Commission would have "flexibility" to select a route anywhere in the noticed county. While this scenario seems incredible, in some rural counties with large ranches and few landowners this scenario is not impossible to imagine. The practice suggested by LCRA TSC would place an unreasonable burden on landowners whose land is untouched by the proposed line, but who must consider participating in a case in order to avoid the possibility that the "flexibility" afforded the

⁸ PFD at 12.

⁷ PFD at 13.

Commission due to expanded notice will result in the proposed line being placed on their property.

CVA believes the better course would be a rulemaking to revisit the Commission's notice requirements. As a result of the CREZ cases it has handled during the past year, the Commission has extensive experience with landowner concerns regarding notice. This experience provides an opportunity to consider whether the notice boundary should be expanded.

C. Preliminary Order Issue No. 3

Does the Application meet the filing requirements set forth in P.U.C. SUBST. R. 25.216(g)(2) and (3)?

Not addressed.

D. Preliminary Order Issue No. 4

Did LCRA TSC submit the CCN application in compliance with the Orders in Docket Nos. 37928 and 36802 designating it as a CREZ Priority Transmission Plan facility? If not, should the Commission revoke the designation awarded to LCRA TSC and select another entity for the CREZ Priority Transmission Plan facility at issue in this docket pursuant to P.U.C. SUSST. R. 25.216(f)(1)?

Not addressed

E. Preliminary Order Issue No. 5

Will completion of the project proposed by LCRA TSC in this docket accomplish the intended result for the CREZ project designated as "McCamey D to Kendall to Gillespie 345-kV Transmission Line Project" in the CREZ Transmission Plan and ordered by the Commission in Docket Nos. 37928 and 36802?

Not addressed

F. Preliminary Order Issue No. 6

Which proposed transmission line route is the best alternative, weighing the factors set forth in PURA § 37.056(c)(4), excluding (4)(E), and P.U.C. SUBST. R. 25.101(b)(3)(B)?

The PFD states that, after weighing the factors, Staff MK15 is the best alternative because it best balances all of the relevant criteria. While MK32 and MK33 are better choices environmentally, the PFD states, they sacrifice cost and habitable structures to parallel existing

highway.⁹ While cost must be considered, the ALJs appear to have placed an understandable but disproportionate emphasis on cost compared to other factors and characteristics that make the Hill Country unique and both widely appreciated and highly valued by Texans.

Environmental issues, considered in the broadest sense, are especially important and should be given great weight in this case. The Hill Country of the Edwards Plateau is the least cultivated, least developed, and least disturbed, ecoregion in the state of Texas. ¹⁰ Much of this area exists today as when Europeans migrating into what was to become the Republic of Texas encountered the beautiful vistas of this unspoiled landscape. ¹¹

The ALJs recognize the importance of environmental integrity in their discussion of a number of specific concerns raised by the parties at hearing, and as a foundation for their decision to recommend Staff MK15. In their discussion of fragmentation, the greatest concern of the Texas Parks and Wildlife Department ("TPWD"),¹² the ALJs state that "the absence of a major highway or transmission line for much of the central study area argues against placing the line there and favors paralleling the I-10 corridor." Yet, Staff MK15 detours away from the compatible right-of-way of Highway 277 and I-10 and instead cuts diagonally through a large portion of the study area on links b14a, b14ba, b84, b86, and b90.

The ALJs further point to parties' arguments that routes along the I-10 corridor, such as MK32, MK33, and variants of MK15, and other previously disturbed areas should be used to the greatest extent practicable to minimize the impact and spread of oak wilt. The ALJs agree and identify minimizing the spread of oak wilt as another reason the I-10 corridor is superior from an ecological perspective.¹⁴ Yet, Staff MK15 turns away from I-10 through an area sensitive to oak

⁹ PFD at 17.

The Hill Country of the Edwards Plateau ecoregion, with 42 people per square kilometer, is only about 25 to 36 percent as densely populated as are the ecoregions with the more urban development. For comparison, the Gulf Central Prairies and Marshes ecoregion where Houston is located had 171 people per square kilometer and the Cross Timbers and Prairies ecoregion where most of Dallas and all of Fort Worth are located had 155 people per square kilometer in 2000. The Blackland Prairie ecoregion, containing the eastern part of Dallas and Austin, had 119 people per square kilometer. CVA Ex. 3, Parker Direct at 7-8.

¹¹ CVA Ex. 3, Parker Direct at 11 and Attachments NCP-10 and NCP-11.

¹² TPWD Ex. 4, Clary Direct at 13.

¹³ PFD at 51.

¹⁴ PFD at 56.

wilt instead of utilizing the compatible right-of-way corridor along I-10 that is already infected by oak wilt.

The ALJs expressly agree with TPWD, Weinzeirl, and CVA that paralleling Highway 277 and the I-10 corridor is the best way to avoid major fragmentation associated with the line's new right-of-way. As a result, they recommend MK32 or MK33 as the routes best designed to avoid all of the negative consequences of habitat fragmentation. But then, the ALJs pull back from recommending that the Commission approve either MK32 or MK33, recognizing that other factors weigh against selecting routes MK32 or MK33. "As a result, the ALJs recommend Staff MK15 as clearly preferable to any of the central routes in terms of minimizing habitat fragmentation."

The I-10 routes are far superior in protecting the environment of the Hill Country from the effects of the proposed transmission line. A review of the ALJs' conclusions illustrates just how strong the record in support of MK32 and MK33 and I-10 routes is compared to other routes, particularly LCRA TSC's preferred route and other routes in the middle of the study area. From an historical and archaeological perspective, the ALJs prefer routes parallel to I-10 as opposed to the central routes. [16] "[T]he routes along I-10 are better suited for the line than central routes such as MK13." Aesthetically, the ALJs conclude that placement along a highway is a far better choice from an aesthetic values perspective. [18] The ALJs discuss several recreation and park areas of concern: Old Tunnel WMA, Fort McKavett, Camp Sol Meyer, Tierra Linda Ranch, and Flat Rock Ranch. [19] The I-10 routes avoid all of those areas.

Importantly, the I-10 routes parallel existing compatible rights-of-way for the vast majority of their lengths.²⁰ There is very little compatible right-of-way along the other routes LCRA TSC proposed other than the northern routes that parallel an existing 138 kV transmission

¹⁵ PFD at 65.

¹⁶ PFD at 42.

¹⁷ PFD at 42.

¹⁸ PFD at 35.

¹⁹ PFD at 26-31.

In a recent order the Commission stated: "The Commission has indicated a strong preference for utilizing or paralleling existing compatible rights-of-way for new CREZ transmission lines." Docket No. 38140, Application of Oncor Electric Delivery Company LLC to Amend a Certificate of Convenience and Necessity for the Riley-Krum West 345-kV CREZ Transmission Line (Formerly Oklaunion to West Krum) in Archer, Clay, Cooke, Denton, Jack, Montague, Wichita, Wilbarger, and Wise Counties, Texas, Order on Appeal of Order No. 3 (Jul. 9, 2009).

line for much of their length. The I-10 routes are the routes that best comport with the important, expressed community value of paralleling existing rights-of-way.

The best route in this case starts by paralleling Highway 277 and then parallels I-10 instead of cutting diagonally through ranchland where no compatible right-of-way exists and fragmenting the Hill Country. The best route in this case continues along I-10 south of the Kimble County Airport utilizing cost-effective and feasible above-ground construction instead of detouring into the central part of the Hill Country and crossing the Llano River where a 114-year old pecan grove is located. The best route in this case stays on I-10 through Kerrville and avoids exacerbating oak wilt concerns. The best route in this case is more expensive, but that greater initial expenditure is worth the investment in protecting a special part of Texas. Although the central routes are less expensive to build, placing a transmission line on any of them will have a significant, adverse impact on an area that otherwise has been touched lightly by man-made infrastructure. Damage to the Hill Country, to its environment and its beauty, cannot be avoided if the best route is not utilized. The best route in this case is MK33 with construction above ground on Link Y11 and it should be approved for construction of the transmission line proposed in this case.

1. The Effect of Granting the Certificate on LCRA TSC and Any Electric Utility Serving the Proximate Area

Not addressed.

2. Community Values

The ALJs state that four strong indications of community values arose during the pendency of the case: the effect of the line on the Texas Hill Country; the effect of the line on habitable structures, particularly in developed areas, such as cities; the effect on rural residential subdivisions; and the use of monopoles.²¹

a. Texas Hill Country

The ALJs recognize in the PFD that avoiding "central" routes that would cut through undisturbed areas of the Texas Hill Country is one shared community value relevant to this proceeding.²² To the intervenors represented by CVA, it is the most important community value

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²¹ PFD at 18

²² *Id*.

and it is shared by all landowners, no matter where they are located in the study area. The ALJs correctly recommend against LCRA TSC's preferred route and *all* other central routes.²³

The Hill Country is important to the landowners in the study area, but it also is important to all Texans. While it is common in transmission line cases for a landowner to say their land is special or that their region is important, CVA witness Dr. Nick Parker provided testimony that illustrates why the Hill Country must be viewed as an important asset not just to the Hill Country region, but to Texas. Community values held among Texans with respect to their western heritage and the Hill Country landscape are reflected in the study performed for Texas Parks and Wildlife conducted in 2000 called TPWD 21st Century.²⁴ Dr. Parker, a co-author of the study, testified that during the 13 focus groups conducted as part of the TPWD 21st Century study, the researchers learned that:

Texans who do not own one square foot of land claim ownership of their western heritage, their history, and the magnificent vistas of the state and the Hill Country landscape. They appreciate and support parks and natural resource areas even if they never use them. They value the presence of the unspoiled lands and take pride in their being available for them to visit when, and if, they so wish. They value the presence of longhorns, chuck wagons, the cowboy lifestyle and the wide open spaces of the West.²⁵

Dr. Parker testified that the TPWD 21st Century study was the largest study of its kind and is still the most thorough and recent survey of views and attitudes of Texas citizens regarding natural resources, the need for public lands, and Texans' concern for their cultural heritage.²⁶ Dr. Parker further testified that the study showed:

There is an increasing need for outdoor recreation opportunities and for conserving natural resources. Texans have strong opinions about outdoor recreation and conservation issues, based on their love of the outdoors and the desire to protect natural resources. Texas citizens were in strong support of the Texas Parks and Wildlife Department. Local and state parks are in short supply given the size of the Texas population. Private landowners are critical to conservation efforts in Texas. Differences exist in interests and opinions among ethnic groups with regard to

²³ *Id.* at 20 (emphasis added).

²⁴ CVA Ex. 3, Parker Direct at 13.

²⁵ *Id.* at 15.

²⁶ *Id.* at 14.

conservation and recreation issues. Habitat conservation and restoration efforts are not at a scale adequate to preserve biologically sustainable habitats in all of the ecoregions of Texas.²⁷

The Hill Country is appreciated on a scope and scale well beyond the local and regional community. It is a Texas treasure and one that must be protected so that future generations of Texans may appreciate the magnificent vistas and the Hill Country landscape. The efforts taken to maintain this part of the state as an area where one can visit and experience the presence of longhorns, chuck wagons, and the cowboy lifestyle will benefit all Texans, not just Hill Country residents. The ALJs correctly recognized that appreciation of the Hill Country is an important community value; their recommendation that Staff MK15 be selected simply does not go far enough to protect this portion of the state.

b. Habitable structures

In contrast to the community value of preservation of rural spaces, the ALJs identify some intervenors who are concerned with habitable structures and city development. Those intervenors all oppose routes that travel through Kerrville, citing limiting impacts to residences as a strongly held community value.²⁸

CVA recognizes that the Commission must consider habitable structures when selecting a transmission line route. In this case, however, the habitable structures are near major highways and many of them are non-residential. Notably, none of the residents of Kerrville intervened in this proceeding. No homeowner in Kerrville submitted testimony expressing concern about the proposed transmission line. The voices for the "strongly held community values" were a car dealer and local governmental representatives whose concerns were expressed in terms of adverse impacts on *potential* future commercial developments along the interstate and speculation as to future tax revenues.

With respect to the proximity of the line to residences, these parties would have the Commission believe that "a habitable structure is a habitable structure" and that any structure identified by LCRA TSC as a habitable structure should be protected from being in proximity to the transmission line. CVA is not contending that a mansion deserves more protection than a modest home. CVA is contending that the facts of this case, where habitable structures already

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²⁷ *Id.* at 13.

²⁸ PFD at 20.

are near a highway, include mobile homes in an RV park, and include commercial businesses do not justify rejecting MK33 and MK32.

Of the 153 habitable structures on MK33, nine are located on the side of the highway opposite from the proposed route. While each of those structures is within 500 feet of the transmission line, it is logical to expect that the impact in many ways would be less if the transmission line is across a U.S. Highway or Interstate Highway from a habitable structure than if the line is constructed in the yard of a home.²⁹ Of the remaining 142 habitable structures on MK33:

- A total of 16 are commercial and industrial structures, including an RV park office, a road construction workshop, a towing service, a car dealership, and an Exxon gas station.³⁰
- A total of 47 are mobile homes and 23 of those mobile homes are in one location.³¹
- The remaining structures are 73 single-family residences, one church, one cabin and 12 uncategorized structures.³²

Along Routes MK33 and MK32, habitable structures are located in clusters, with the largest number of such structures being located in the vicinity of the City of Kerrville. Fifty-nine (59) habitable structures are located on Links Y18 and Y19b, near I-10 in the vicinity of Kerrville. Of these 59 habitable structures, 17 would need to be relocated.³³ Of the 17 habitable structures identified as being located within the right-of-way near I-10 in the vicinity of Kerrville, only six would be within the right-of-way if LCRA TSC constructed the line using monopoles and used a 100' instead of a 140' right-of-way for this portion of the line.³⁴

To be clear, CVA agrees that each habitable structure is important to its owner, but it is CVA's position that an analysis of the data allows one to conclude that not all habitable structures are the same. A towing service or a road construction workshop along an interstate highway is unlikely to be affected in the same manner as a dream home built in the rural Texas Hill Country with one's retirement savings. CVA witness Ted McGavran testified that "if a natural corridor exists, it should be used because there are facilities already in place. The impacts

²⁹ CVA Ex. 6, McGavran Direct at 23.

³⁰ *Id*.

³¹ *Id*.

³² *Id.* at 23-24.

³³ Tr. at 706.

³⁴ Tr. at 1317-1324.

on a location that already has a transmission line or major highway would be of a marginal nature as opposed to impacts on land not already affected."³⁵ Mr. McGavran also testified that the number of habitable structures is relatively low on any of the routes, approximately 1 or less per mile.³⁶

The focus on comparing the count of number of habitable structures on the various routes ignores the obvious fact that being close to a major highway, particularly an interstate, is neither an undisturbed environment nor a quiet area desirable for residential development. Instead, areas along such highways are targeted for commercial development for which proximity to the highway is a major draw. Indeed, the City of Kerrville and Kerr County both are focused on commercial development of the interchange of U.S. 16 and I-10.³⁷ For many businesses, including car dealerships, a location near a major highway is a plus.³⁸ Over time, gas stations, fast food restaurants, motels and strip malls will gravitate to the highway; putting a transmission line adjacent to a highway has a far less intrusive and negative impact on these structures than does placing a line near a small country road and an otherwise largely undisturbed rural area. The fact that there are more habitable structures along U.S. 277 and along I-10 than there are in the middle of the Hill Country, and more structures from which the line will be visible, is not a reason by itself to reject MK33 with construction above ground on Link Y11 or to bypass I-10 near Kerrville.

c. Cities

Not addressed.

d. Other Community Values

Tierra Linda Ranch

Neither MK33, nor MK32, nor MK62 would affect Tierra Linda Ranch. The ALJs' recommended route would affect Tierra Linda Ranch.

P-Line Intervenors

Neither MK33, nor MK32, nor MK62 would affect the P-Line Intervenors.

³⁵ CVA Ex. 6, McGavran Direct at 22.

³⁶ *Id.* at 9.

Kerrville Ex. 1 at 5-6; Kerr County Ex. 1 at 7.

³⁸ CVA Ex.49; Atkission Responses to CVA's 1st RFIs, RFI No. 1-14.

Fort McKavett

Neither MK33, nor MK32, nor MK62 would affect Fort McKavett.

e. Monopoles

The ALJs state that they support the use of monopoles to the extent it is cost effective and particularly in any areas with denser population, such as along I-10 through population centers such as Sonora, Junction, and Kerrville if the line is ultimately routed through those communities.³⁹ They also state that there was strong support from almost all intervenors for the use of monopoles, which tends to show that the use of monopoles is a strong community value.⁴⁰ Ultimately, they conclude that the decision as to structure type necessarily rests with the Commission and its balancing of costs and benefits.⁴¹

LCRA TSC's witness Symank submitted rebuttal testimony that provides an evaluation of the cost implications of using monopole alternative structures for the line. He testified that the cost difference between lattice towers and various combinations of structure types has narrowed for this project. Although the estimates for construction using only lattice towers is still lower in cost than monopole alternatives, Mr. Symank concluded that using monopole tangents with lattice angles and dead-ends on a narrow right-of-way ("Mono/Lattice-100") results in an increase in estimated cost of only 15.8% on MK33.

The reduction in LCRA TSC's cost estimates for the use of monopoles is encouraging. CVA's position is that, wherever the line is built, it should be built using monopoles and not steel lattice towers. Monopoles have a smaller footprint and, as a result, occupy less land. They also are not as ugly and industrial to look at, an important consideration given that the supporting structures and the line will be a permanent fixture on the land. LCRA TSC has said that it will build the line with monopoles to the extent it is physically possible if the Commission orders it to do so. ⁴⁵ The Commission should issue that order.

³⁹ PFD at 25.

⁴⁰ *Id*.

⁴¹ *Id*

LCRA TSC Ex. 14, Rebuttal Testimony of LCRA TSC witness Curtis Symank at 6.

⁴³ *Id.* at 11.

Id. Ex. CDS-2REB at 5.

LCRA TSC Ex. 7, Direct Testimony of LCRA TSC witness Curtis Symank at 13.

Steel and spun concrete monopole structures are both proven technologies in the United States. When compared to other structures, the speed and ease of installation of monopoles is significantly better, the impact on land is less, and the economic decisions associated with easier installations and little post-installation maintenance result in low life-cycle costs. The use of monopole structures also allows much more flexibility with respect to width of right-of-way and height requirements for structures. Monopole structures are used successfully throughout the country, including the Horse Hollow NextEra line in the Hill Country. In constructing the transmission line along US 277 and I-10, use of monopoles would permit LCRA TSC in many instances to use a 100 foot right-of-way, rather than a 140 foot right-of-way. The use of monopole structures in this project is feasible, cost competitive in many instances and cost effective over the long run.

The impact on the land is much greater for steel lattice towers than for monopole structures. The time required on the landowner's property is greater for steel lattice towers than for monopole structures.⁵¹ The reduced time on the land reduces the impact on the landowner's use of his land and allows him to get back sooner to his normal operations.⁵² The footprint required for steel lattice towers is much larger than for monopole structures.⁵³ The reduced footprint can require less right-of-way, easier operation on the ground during construction, and allow for more natural uses of land after construction.⁵⁴

CVA witness Dr. Jerry Wong testified that no large company is manufacturing steel lattice towers in the United States. The production plants of companies that advertise lattice towers are outside the United States.⁵⁵ Generally, one needs to go to India, South America, Mexico, or Canada to buy lattice towers for large projects such as the CREZ transmission lines.⁵⁶

⁴⁶ CVA Ex. 8, Wong Direct at 12.

⁴⁷ *Id.*

⁴⁸ *Id.*

⁴⁹ *Id*.

⁵⁰ Tr. at 1274.

⁵¹ CVA Ex. 8, Wong Direct at 8.

⁵² *Id*.

⁵³ *Id*.

⁵⁴ *Id*.

⁵⁵ *Id.* at 9.

⁵⁶ *Id.*

When the production is outside of the United States, that situation adds complexities to the construction process and requires utilities to plan for possible problems in sourcing their towers due to problems in foreign countries.⁵⁷

Dr. Wong testified that there are several steel pole plants in Texas and a concrete pole manufacturer in Texas, outside of Houston. Lone Star Transmission, LLC is using that company for its monopole structures.⁵⁸ The availability of in-state manufacturers seems to be more supportive of the Texas economy than spending money for the manufacture of steel lattice towers in areas where Texans do not benefit from those expenditures.⁵⁹

Dr. Wong's testimony included other benefits of using monopoles, including reduced maintenance. He testified that, in Florida Power & Light's experience with over 20,000 spun concrete poles in the field, these poles are the least expensive solution when considering overall construction and life cycle costs. The spun concrete poles do not deteriorate as quickly as steel lattice towers. In considering the use of monopoles it is important to look at the overall costs over the expected life cycle of the transmission line, not just the costs of construction. Dr. Wong testified that although Florida Power & Light regularly inspects all of its transmission line structures, it does not budget for maintenance costs for spun concrete poles for the first fifteen years of their life cycle. Steel lattice towers often have to have regular maintenance activities to look for loose bolts and corrosion at their many joints.

Expected life span also should be taken into consideration in doing a life cycle cost analysis. Spun concrete poles have an expected life span of 75 years. Depending on the local conditions, a steel lattice may be expected to last for fifty years, or even less in a corrosive environment. Assuming that LCRA TSC's projected construction costs are accurate, they

⁵⁸ *Id.*

⁵⁷ *Id*.

⁵⁹ *Id.*

⁶⁰ *Id.*

⁶¹ *Id.*

⁶² *Id.* at 10

⁶³ *Id.*

⁶⁴ *Id*.

⁶⁵ *Id*.

⁶⁶ *Id.*

nonetheless do not provide a complete picture of the life cycle costs of the structures.⁶⁷ Dr. Wong testified that it has been Florida Power & Light's experience in many states and in many different environments that the life cycle costs of monopole structures, especially spun concrete, are lower than for steel lattice towers.⁶⁸

While there are differences between steel monopole and spun concrete monopole structures, they both are proven technologies in the United States. When compared to other structures, the speed and ease of installation of monopoles is significantly better, the impact on land is less, and the economic decisions associated with easier installations and little postinstallation maintenance result in low life-cycle costs.⁶⁹ The use of monopole structures also allows much more flexibility with respect to width of right-of-way and height requirements for structures.⁷⁰

LCRA TSC witness Mr. Curtis Symank testified that LCRA TSC is "not opposed to the monopole structures that many in the public request, and [that it] will build any feasible structure type ordered by the PUC if the Commissioners determine the structure type to be appropriate."71 He also testified at the hearing that there is an efficiency of scale in having a large number of monopoles.⁷² He indicated that was one of the adjustments LCRA TSC made in consulting with its contractor that allowed for a cost reduction on concrete poles.⁷³ Because LCRA TSC considered using monopoles for similar areas, the contractor did not have to estimate the cost of moving his cranes and crews from one area to the next. He thus would be able to utilize more efficient construction methods.⁷⁴

If any rural area of the State of Texas deserves to have monopoles utilized for the length of the approved route, the Texas Hill Country is that area. The efficiencies of scale justify the global approval of the use of monopoles where feasible. The Commission would be responding to a community value that has been expressed throughout the study area and helping to moderate the opposition of landowners who will bear the burden of the approved transmission lines.

⁶⁷ Id. 68

Id. 69

Id. at 12.

⁷⁰ Id.

⁷¹ LCRA TSC Ex. 7, Symank Direct at 13.

⁷² Tr. at 1277.

Id.

⁷⁴ Id.

3. Recreation and Park Areas

The ALJs' discussion of parks and recreation areas was based on data provided in the EA, which is limited to public recreation and parks areas.⁷⁵ Private recreational use of land, however, is increasingly important in the Hill Country. According to CVA witness Dr. Neal Wilkins, the top motive for buying land in Texas since the fall of 1994 has been for recreation.⁷⁶ The land is worth far more for what it looks like, its physical appearance, its aesthetics, its natural resources, and recreational attractiveness, than for what it can produce.⁷⁷

There are now over 1 million acres of Wildlife Management lands in the Texas Hill Country–by comparison, this exceeds the area of improved pastureland. In the counties impacted by McCamey D to Kendall alone, landowners declared Wildlife Management as the primary land use across some 300,000 acres, by 2007. Ranches with Wildlife Management officially declared as the primary land use in this area now exceed the combined area of cropland, pastureland, and orchards in the study area considered for McCamey D to Kendall. While this alone is an impressive statistic, it does not include the other millions of acres where landowners have demonstrated that wildlife management is a major determinant in their land use decisions.

a. Old Tunnel Wildlife Management Area

Neither MK33, nor MK32, nor MK62 would affect the Old Tunnel Wildlife Management Area.

b. Fort McKavett

The ALJs state that it is unclear what impact, if any, the lines would have on tourism at the Fort, but the ALJs agree with the Texas Historical Commission that the line would have a

LCRA TSC Ex. 9, Reid Direct at 26-27.

Neal Wilkins et al. Fragmented lands: Changing land ownership in Texas. The Agriculture Program. The Texas A&M University System.

CVA Ex. 3, Parker Direct at 18.

Texas Land Trends. Texas A&M Institute of Renewable Natural Resources. Accessible at http://texaslandtrends.org/index.aspx

⁷⁹ Id.

CVA Ex. 1, Wilkins Direct at 7-8.

negative impact on Fort McKavett's historic character, the Fort's view shed, and the aesthetic values associated with its preservation and isolation.⁸¹

The Preferred Route MK13 would cross and be visible from FM 1674, which is the road to historic Fort McKavett used by tourists who approach it following the directional signs on I-10. 82 Constructing the line on Staff MK15 would also be detrimental to visitors' experience of the Fort, because this route follows along FM 1674 for more than one-third of the distance between Fort McKavett and I-10 and would be highly visible. Although FM 1674 is paved, it is a small two-lane country road that runs across the Noguess' family section of land, and beyond to Fort McKavett and on to El Dorado. Its lack of sophistication in construction is illustrated by the low water crossing instead of a bridge across Copperas Creek. 83

It is the isolation of the Fort that adds immensely to the overall appeal of the site of Fort McKavett. To destroy that sense of isolation and solitude would be a disservice to those who wish to preserve and enjoy the historic heritage of the region.⁸⁴

c. Camp Sol Meyer

Neither MK33, nor MK32, nor MK62 would affect Camp Sol Meyer.

d. Tierra Linda Ranch

Neither MK33, nor MK32, nor MK62 would affect Tierra Linda Ranch. The ALJs' recommended route would affect Tierra Linda Ranch.

e. Flat Rock Ranch

Neither MK33, nor MK32, nor MK62 would affect Flat Rock Ranch. The ALJs' recommended route would affect Flat Rock Ranch.

4. Cultural, Aesthetic, and Historical Values

a. Aesthetic Values

The ALJs state that, as with community values, "the aesthetic impact of the line is largely a function of who is viewing it from where." The ALJs recommend that the line will have less

82 CVA Ex. 52 at 5.

PFD at 29.

CVA Ex. 13, Noguess Direct at 8; *see* photograph attached as Attachment BN-2 to CVA Ex. 19, Neiman Cross-Rebuttal, provided as Attachment A to these exceptions.

THC Ex. 4, Alexander Direct at 8-9.

aesthetic impact along a highway, concluding that "it would be far more jarring to see a 345-kV transmission line in a relatively remote and undeveloped area than to see it along I-10." Once again, CVA agrees with the ALJs in their analysis. The analysis does not support part of the ALJs' recommended line, however.

CVA witness Wyman Meinzer has been the official state photographer for the State of Texas since 1997. Mr. Meinzer has spent the last 28 years traveling all over the state photographing the landscapes of Texas. Mr. Meinzer's book *Texas Hill Country* is comprised of his photographs of the Hill Country and essays written by John Graves. Mr. Meinzer testified that the line should be designed and built so as to have the least impact on the countryside as possible. CVA's proposals to route the line along Highway 277 and I-10, and to use monopoles, would do the least harm to the Texas Hill Country's appearance. Representations of the State of the State of Texas Hill Country's appearance.

CVA witness Jonathan Ogren performed a viewshed analysis to determine the extent to which the proposed transmission line would be visible. A viewshed analysis indicates what a person would and would not be able to see from a particular vantage point. Some common uses for viewshed analysis include: determining where a good lookout could be placed, where to keep certain activities out of sight, or how a certain land use choice could affect views from the surrounding landscape. ⁹⁰

Mr. Ogren testified that locating the transmission line on the Preferred Route or otherwise located through the interior components of the Study Area would have a detrimental effect on the vast viewsheds that are a characteristic of the Hill Country. Some of Mr. Ogren's exhibits are attached as Attachment B to these exceptions. Other exhibits are included in his direct testimony.

The ALJs recognize that the line should be placed along I-10 for aesthetic value reasons. The Staff MK15 route crosses for almost 50 miles through the very type of country where it would be more jarring to see the transmission line than along Highway 277 and I-10. At the

⁸⁶ PFD at 38.

⁸⁵ PFD at 36.

CVA Ex. 5, Meinzer at 2.

⁸⁸ *Id.* at 4.

⁸⁹ *Id.* at 5.

OVA Ex. 4, Ogren Direct at 4.

⁹¹ *Id.* at 7.

eastern end of the route, the Staff Mk15 route goes through approximately 28 miles of Hill Country landscape instead of following I-10 through an increasingly commercial and developed area.

CVA's proposal to utilize compatible rights-of-way is supported by the ALJs in theory, but not in practice. The Commission should approve Route MK33 with construction above ground on Link Y11 to realize the full benefit of paralleling highways for aesthetic purposes.

b. Cultural, Historic, and Archaeological Sites

One historic site not discussed in the PFD is the Ivy Chapel, which would be significantly adversely affected by construction of the line on LCRA TSC's Preferred Route. One of Mr. Ogren's exhibits provided at Attachment B to these exceptions is a photograph of the Ivy Chapel. Ernie Broughton testified that Ivy Chapel is an actively used community church on his property that is over 110 years old and has been recognized as a historical site by the State of Texas for over a decade. Mr. Broughton also testified that the transmission line, if constructed on MK13, would intrude on and negatively affect the view of and aesthetic enjoyment of the Ivy Chapel and substantially degrade the views north of the Chapel. The ALJs' rejection of the Preferred Route would eliminate the adverse impact on the Ivy Chapel. Selection of MK33, MK32, or MK62 would not affect the Ivy Chapel.

5. Environmental Integrity

a. Background

Staff's witness provided testimony that included a simple analysis of the information presented in the EA regarding miles of rangeland/pastureland, upland woodland habitat, bottomland/riparian woodland, potential woodlands, known/occupied federally endangered or threatened species habitat, crossings of open water, streams and rivers paralleled, and number of streams and rivers crossed. This information is useful, but does not address two important environmental matters—land fragmentation and oak wilt disease.

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⁹² *Id*.

Photo Simulation: Ivy Chapel & the Preferred Route (B22), CVA Ex. 4, Ogren Direct Exhibit JO-4.

TPWD opposes the project on environmental grounds, but if a route must be selected it prefers construction of the line on routes MK32 and MK33 because they would have less impact on fish and wildlife resources.⁹⁴ The ALJs state that the scale of the Project and its potential for land fragmentation rivals that of the creation of the I-10 corridor through the Hill Country.⁹⁵

The ALJs acknowledge that TPWD's recommendation is based solely upon environmental impacts and does not account for other factors the Commission must evaluate when approving a route. Solely from an environmental standpoint, however, the ALJs agree with TPWD's preference for MK32 or MK33. From a fragmentation perspective, the ALJs conclude that MK32 and MK33 are superior to other routes.

b. Discussion

Land Fragmentation

In their discussion of land fragmentation, the ALJs identify land fragmentation as one of the greatest concerns of those parties opposed to the central routes. From a fragmentation perspective, the ALJs conclude that the absence of a major highway or transmission line for much of the central study area argues against placing the line there and favors paralleling the I-10 corridor. The ALJs obviously understand the importance of the fragmentation concerns expressed by TPWD and CVA. This is another example, however, of the ALJs understanding the importance of an environmental impact but nonetheless allowing cost considerations to result in a recommended route that only partially addresses those concerns. While it is beneficial to avoid the true central part of the study area, the ALJs' recommended route would contribute to fragmentation in the northern part of the study area and bisect several large properties.

CVA witness Dr. Neal Wilkins has studied and documented land fragmentation trends throughout Texas for over a decade. Since 1997 over 2.8 million acres of larger farms and ranches in the Trans Pecos, Edwards Plateau and South Texas were fragmented into mid-sized and smaller ownerships.⁹⁷ Dividing a large tract into smaller parcels causes a series of changes that are often negative from the standpoint of wildlife management, natural resource

PFD at 48, 50.

⁹⁵ PFD at 55.

⁹⁶ PFD at 51.

⁹⁷ CVA Ex. 1, Wilkins Direct at 11.

conservation, and agricultural production.⁹⁸ Dr. Wilkins testified about the effects of the proposed transmission line on land fragmentation⁹⁹ and the PFD references parts of his testimony.¹⁰⁰

Looking at the routes as they leave McCamey D, all but one of the proposed series of links cross Schleicher County (and parts of adjacent Sutton County) through native mixed grasslands and live-oak savannas that once characterized much of the native rangelands throughout the Edwards Plateau. Except for a small number of county roads and Highway 190, these native habitats are interrupted only by the mesquite flats and productive grasslands along the North and Middle Valley Prongs of the Concho River. The ranchland traversed by any of the Links b14a-c, b84, b86, b11-b16, and P1 would likely be impacted in such a way that current land uses and natural resource values would be damaged.

Preferred Route MK13 and Staff MK15 all cut diagonally across existing large ranches using Links b14a-c, b84 and b86. ¹⁰⁴ Further east, Links b34 and b36 of Preferred Route MK13 cross through the headwaters of the James River basin. ¹⁰⁵ MK13 approaches the Little Devil's River from the east across unfragmented grasslands and oak-juniper woodlands. ¹⁰⁶ As the route crosses the Little Devil's and James River, it comes in close proximity to the Eckert James River Bat Cave Preserve, with one of the largest known concentrations of breeding Mexican free-tailed bats anywhere. ¹⁰⁷ Routes MK33 (and MK32) would be least likely of all the proposed routes to precipitate additional land fragmentation. These routes follow US 277 and I-10 where land already has been bisected and fragmented by the presence of the highways.

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⁹⁸ *Id*.

⁹⁹ *Id.* at 10-14.

PFD at 52-53.

¹⁰¹ CVA Ex. 1, Wilkins Direct at 5.

¹⁰² *Id.* at 12.

¹⁰³ *Id*.

See for example, AC Ranches Ex. 5 and Ex. 6; LCRA Maps Sheets 5 and 9 of 28.

¹⁰⁵ CVA Ex. 1, Wilkins Direct at 13.

¹⁰⁶ *Id.* at 13-14.

¹⁰⁷ *Id.* at 13.

Oak Wilt

The ALJs discuss the concerns of CVA and other parties that the central portion of the Hill Country, which is currently impacted by very little oak wilt, could become susceptible to the disease as a result of the cutting and pruning necessary to clear and maintain the right-of-way for the proposed line. These parties argued that routes that follow existing disturbed corridors, where the trees are more likely to have been cleared or previously exposed to oak wilt, will pose less risk of increasing the spread of the disease. The PFD recognizes that these parties argued that routes along the I-10 corridor, such as MK32, MK33, and variants of MK15, and other previously disturbed areas should be used to the greatest extent practicable to minimize the impact and spread of oak wilt. The ALJs agreed and concluded that minimizing the risk of spreading oak wilt is another reason the I-10 corridor is superior from an ecological perspective. Unfortunately, the ALJs did not go far enough; their recommendation to select MK15 results in a route that leaves I-10 and goes into the most sensitive part of the study area that should be avoided for oak wilt avoidance.

CVA witness Mr. Gene Gehring testified regarding the risk and costs associated with oak wilt disease. Mr. Gehring is a certified arborist, has a Texas Oak Wilt certification and has 22 years of experience working with oak wilt. He worked for the Texas Forest Service for eight years as coordinator of the agency's Oak Wilt Suppression Project. His testimony included maps that illustrate the problems in the Hill Country with oak wilt and the relation to various routes proposed by LCRA TSC. Those exhibits are attached to these exceptions as Attachment C.

Mr. Gehring testified that all of the routes through the center of the study area are most likely to go through areas that have not been hard hit by oak wilt.¹⁰⁹ By placing new right-of-way through stands of oaks that have never been pruned or otherwise disturbed in a long time, you run the risk of devastating those areas with oak wilt.¹¹⁰ The construction of a transmission line would affect the spread of oak wilt by opening thousands of potential infection courts.¹¹¹ A single infection can result in the mortality of hundreds of oaks.¹¹² Any cut, break, or other action that exposes fresh sapwood is a potential invitation to a sap-feeding beetle that may be carrying

¹⁰⁸ PFD at 55-56.

¹⁰⁹ CVA Ex. 2, Gehring Direct at 10.

¹¹⁰ CVA Ex. 2, Gehring Direct at 13.

¹¹¹ CVA Ex. 2, Gehring Direct at 10.

¹¹² *Id*.

the oak wilt fungus.¹¹³ There also are concerns about trees that may be damaged getting the equipment and supplies to the site.¹¹⁴

The branches from trees, including oaks, growing outside the right-of-way will encroach into the right-of-way over time and will need to be cut. Mr. Gehring testified that most right-of-way contracts are bid based on linear distance and are performed in the fastest, most efficient way to meet the terms of the contract in order to make a profit. That process does not always lead to the best pruning practices or careful attention to painting all of the cuts. The live oaks are prolific at resprouting from stumps and roots. Every time the right-of-way is mowed and these sprouts are cut, there is a risk of infection. If the right-of-way is not mowed, sprouts will grow into small trees that will have to be removed, creating a risk of infection.

Combating live oak disease once an infected tree is found is expensive.¹¹⁹ Landowners who discover oak wilt may use trenching or injections in an effort to save their trees.¹²⁰ Mr. Gehring testified that he recommends treating all of the live oaks within 100' of symptomatic trees.¹²¹ On a small center (1 or 2 infected trees) there are generally 30-50 live oaks that would need to be treated.¹²² The average small rural site costs \$5,000 - \$10,000.¹²³

Mr. Gehring described the preventative measures to avoid spreading oak wilt. If preventative measures are not followed, he testified, new infection centers will become established and continue to expand until they run out of host type. From a single infection related to the clearing or pruning along the ROW, hundreds or thousands of oaks beyond the ROW would die. ROW would die.

Id.

Id.

Id.

Id.

¹¹⁷ *Id*.

Id.

Id. at 8.

¹²⁰ *Id*.

¹²¹ *Id*.

Id.

Id.

Id. at 7.

Id.

LCRA TSC does have an oak wilt policy that is taken from the best recommendations available. Even if all of LCRA TSC's contractors follow all precautions perfectly, however, new oak wilt infections are still likely because the recommendations are not perfect. The recommendations are based on current understanding of the disease and how the risk of infection can be reduced by modifying human action. The only way to reduce that risk to zero (or at least to a natural level) is to not disturb the site. Since it is impossible for everyone who will be on the site to do everything perfectly all the time, there will always be some risk of oak wilt.

Although LCRA TSC has established useful policies, Mr. Gehring testified that the potential for a new oak wilt infection associated with the transmission line construction is greatly increased over the risk of no one entering the site. Despite LCRA TSC's good intentions, there is a risk of oak wilt infection at any time of the year. High standards are good but rarely met. Not all of the wounds will be painted to prevent sap-feeding beetles from spreading infection. Even the best policies can fail when the responsible workers cannot properly identify all of the risks for oak wilt. 133

The areas within the study area most affected by oak wilt are Gillespie and Kerr counties, with a heavy concentration along Highway 16 from Fredericksburg to Kerrville over to Comfort and back to Fredericksburg.¹³⁴ Selecting route MK33 (or MK32) would reduce the risk of spreading oak wilt and its devastation. The current incidence of oak wilt along routes MK33 and MK32 is greater and in a greater concentration than elsewhere in the study area due to the high degree of disturbance that has already taken place. Therefore, the total number of healthy oaks that will be removed for construction of the transmission line will be less and the total number of potential infection sites will be less.¹³⁵

¹²⁶ *Id.* at 12

¹²⁷ *Id*.

¹²⁸ *Id*.

¹²⁹ *Id*.

¹³⁰ *Id*.

¹³¹ *Id*.

¹³² *Id*.

¹³³ *Id*.

¹³⁴ *Id.* at 13.

¹³⁵ *Id.* at 4-5.

The ALJs reached the right conclusion; CVA urges the Commission to implement that conclusion to fully protect the Hill Country and select MK33 with construction above ground on Link Y11.

Warbler and Vireo

The ALJs concluded that Vireo and Warbler habitat are likely to be present throughout the Project area, regardless of the route chosen and that some impact on the Vireo or Warbler should be assumed. The fact that the geographic scope of likely impact on these species habitat is wide is not a reason to assume that the magnitude of habitat loss is the same for all routes. To the contrary, CVA witness Dr. Wilkins testified that MK33 (and other routes that follow I-10) would actually result in some of the least ecological consequences to endangered Golden-Cheeked Warblers. The project area is a superscript that the project area is a superscript. The project area is a superscript to be present throughout the Project area is a superscript. The project area is a superscript that the project area is a superscript. The project area is a superscript that the project area is a superscript. The project area is a superscript that the project area is a superscript. The project area is a superscript that the project area is a super

The EA relied on a standardized model for predicting potential habitat; however, the analysis in this transmission line case did not provide a reliable metric for expressing the likely impact of transmission line construction.

The EA's conclusions regarding likely impacts to endangered Golden-cheeked Warblers were dependent solely on the cumulative length that a route would pass through potential Golden-cheeked Warbler habitat. The effect was to overstate the potential impact on habitat of a route along I-10. The exclusive use of a simple linear metric results in a "least favorable" recommendation for a route where essentially all of the potential Golden-cheeked Warbler habitat that would be impacted would be along an existing corridor (I-10) where the fragmentation impact of a linear disturbance has already occurred. By assuming that linear distance of habitat removed is directly related to species impact, the EA has over-stated the impact in some areas (e.g., I-10 Corridor) and by comparison understated the impact along other alternatives.

Dr. Wilkins testified that there is strong evidence that both the occupancy and abundance of Golden-cheeked Warblers is closely related to patch size of habitat. These birds react to what

¹³⁶ PFD at 58.

¹³⁷ CVA Ex. 1, Wilkins Direct at 17.

¹³⁸ *Id.* at 14.

¹³⁹ *Id*.

¹⁴⁰ *Id*.

¹⁴¹ *Id*.

is called a "patch size threshold" when choosing their breeding habitat. The most recent analysis of statewide warbler data found that for potential habitat, the occupancy rate for patches of more than 250 acres is almost double that of patches smaller than 250 acres (about 72% occupied vs. 37% occupied). This illustrates the common situation whereby much of the real habitat loss for the species occurs when large patches are divided into smaller areas of habitat, each with a lower likelihood of being used as breeding habitat by the warbler. By contrast, if the same amount of habitat is cleared from the boundary of a patch, because a large enough patch above threshold size for use by the species remains, that could occur with minimal impact. As a result, it is not necessarily the length of potential habitat cleared that is relevant, but it is the ultimate habitat fragmentation created that is the most relevant metric.

Why this matters is readily apparent if one compares the EA's data on the potential Golden-cheeked Warbler habitat along two contrasting alternative routes. For the Preferred Route MK13 the EA reported 3.34 miles of right-of-way length across potential habitat compared to 13.23 miles for MK33. ¹⁴⁷ If one looks at the cumulative length metric in isolation one might conclude that locating the line along MK13 would have the least impact on this endangered species. But when you begin to look at the blocks of habitat that would be impacted, and how they would be changed through loss and fragmentation, a more accurate accounting of impact emerges. ¹⁴⁸

Dr. Wilkins testified that [w]hen considering the inventory of larger blocks of habitat (those greater than 250 acres), the projected consequences of the proposed right-of-way construction would be a loss of 818 acres along MK13 – representing a 14% reduction; by comparison, the loss of area in larger patches along MK33 would be 251 acres – a 2%

142 *Id.* at 15.

¹⁴³ *Id*.

¹⁴⁴ *Id*.

Morrison, M. L., R. N. Wilkins, B. A. Collier, J. E. Groce, H. A. Mathewson, T. M. McFarland, A. G. Snelgrove, R. T. Snelgrove, and K. L. Skow. 2010. Golden-cheeked warbler population distribution and abundance. Texas A&M Institute of Renewable Natural Resources, College Station, Texas, USA. Available at: http://irnr.tamu.edu/Publications/Detail.aspx?pub=23

¹⁴⁶ CVA Ex. 1, Wilkins Direct at 14-15.

¹⁴⁷ *Id.* at 14.

¹⁴⁸ *Id.* at 15-16.

reduction.¹⁴⁹ The reason for the big difference here is that the habitat along most of route MK33 has already been fragmented by I-10. Most additional impacts from right-of-way construction along MK33 would not result in additional loss of habitat area in larger blocks because the proposed right-of-way along most of I-10 does not bisect additional intact habitat in such a way as to divide it into increasingly smaller patches.¹⁵⁰

Research has demonstrated that patch size has an important influence on whether habitat is used by Golden-cheeked Warblers. A transmission line right-of-way has the potential to fragment blocks of habitat into patches (blocks) of habitat that are less likely to be occupied – those patches less than 250 acres in size are only half as likely to be used as those patches that are larger. When a right-of-way is placed along a wide corridor such as I-10, the effects to the species are lessened due to the fact that the potential habitat removed due to the right-of-way does not further fragment larger patches into numerous smaller patches. 153

Dr. Wilkins testified that the impacts to Golden-cheeked Warblers would likely be three times greater along MK13 as compared to MK33. The metric used by LCRA TSC in the EA – cumulative length across potential habitat – did not accurately take account of the likely impacts of habitat fragmentation. As a consequence, MK33 (and the other routes that significantly follow the I-10 corridor) would actually result in some of the least ecological consequences to endangered Golden-cheeked Warblers.¹⁵⁴

Staff MK15, while better than the Preferred Route, still results in a significant amount of new habitat fragmentation. Staff MK15 is approximately 142 miles long and of that length 102 miles (72%) would cut across unfragmented wildlife habitat on the Edwards Plateau. Most of the new fragmentation – 54 miles – would occur along the western edge, crossing diagonally between Junction and the McCamey D substation. The additional miles of fragmentation would occur in going around Junction and bypassing Kerrville. ¹⁵⁵

149 *Id.* at 16.

¹⁵⁰ *Id.*, Attachment NW-1.

¹⁵¹ *Id.* at 17.

¹⁵² *Id*.

¹⁵³ *Id*.

¹⁵⁴ *Id*.

¹⁵⁵ TPWD Ex. 5, Clary Cross-Rebuttal at 5.

As one would expect, by far, the most fragmented existing wildlife habitat in the Study Area is located along the 400-600 foot wide I-10 right-of-way corridor. Every route for the transmission line would take significant amounts of existing wildlife habitat, but it would be much worse to cut a corridor through unfragmented wildlife habitat than to put one adjacent to an already fragmented habitat. 157

Creeks, Streams, and Rivers

"The ALJs find that issues associated with potential risks to mussel sanctuaries, karstic formations, and ESSS as factors that reinforce the unattractiveness of the P-Lines, MK13, and other central routes from an environmental perspective. . . . In particular, streams, rivers, and floodplains along I-10 have already been impacted, unlike much of the central and northern Project areas." CVA agrees that routing the line along I-10 is the best choice with respect to these environmental concerns, but urges the Commission to go beyond the protections that using Staff MK15 provides.

CVA witness Dr. Wilkins testified that Link b23a, which is part of Staff MK15 – the route the ALJs recommend – would cross the riparian area adjacent to the Llano River in such a way that it will impact mature trees in the historic Oliver Pecan Grove (est. in 1886). By contrast, the Llano River is crossed by MK33 at Link Y11 which places the crossing adjacent to the sewage disposal facility between Junction and I-10. 160

Dr. Wilkins was not alone in recommending crossing at Link Y11. Segrest et al. witness Tom Van Zandt determined that, because all route alternatives would have to cross the Llano River, it would be useful to focus attention on that critical environmental element in the route selection and address the question: Where would the most optimal crossing of the Llano River occur in view of the PUC's requirement to balance environmental, land use, and other criteria. Mr. Van Zandt's opinion is that the I-10 crossing on Link Y11 would be preferable to the middle

TPWD Ex. 5, Clary Cross-Rebuttal at 5.

TPWD Ex. 5, Clary Cross-Rebuttal at 5.

¹⁵⁸ PFD at 62.

¹⁵⁹ CVA Ex. 1, Wilkins Direct at 20.

¹⁶⁰ *Id*.

Segrest Ex. 7 at 6-7.

crossings that he reviewed and probably equivalent, possibly a little bit more suitable than the northern routes he looked at.¹⁶²

MK33 offers a clear advantage compared to other routes that cross rivers and streams at other locations. MK33 parallels the highway for over 82% of its length. It follows logic and reason that the highway engineers who designed I-10 took notice of terrain when considering routing alternatives and then incorporated that consideration into the routing of I-10. When considering the risks presented by topography, combined with the unique conservation value of many of the Hill Country's rivers and streams, a route that closely parallels the existing I-10 corridor to the greatest extent possible would pose a lesser risk to the unique high-conservation value habitats associated with streams and rivers in this part of the Edwards Plateau. 164

Old Tunnel WMA and Bat Issues

Neither MK33, nor MK32, nor MK62 would affect the Old Tunnel WMA or other bats located in the Eckert James River Bat Cave Preserve, with one of the largest known concentrations of breeding Mexican free-tailed bats.

Agricultural Uses--Wildlife Management

The ALJs did not address the agricultural uses of the land that is within the study area, but the way this land is being used and the basis for its value are reasons for rejecting the Preferred Route and avoiding routes that cut through the center of the Hill Country. The EA inaccurately assumes that the principal land use is for livestock grazing; instead a primary use for the native rangeland in much of the Study Area is wildlife management.¹⁶⁵

There are now over 1 million acres of Wildlife Management lands in the Texas Hill Country – by comparison, this exceeds the area of improved pastureland. In the counties impacted by McCamey D to Kendall alone, landowners declared Wildlife Management as the primary land use across some 300,000 acres, by 2007. Ranches with Wildlife Management officially declared as the primary land use in this area now exceed the combined area of

Tr. at 546-547.

A topographic profile comparison of Routes MK13 and MK33 are provided as Attachment D to these exceptions.

¹⁶⁴ CVA Ex. 1, Wilkins Direct at 23.

¹⁶⁵ *Id*.

¹⁶⁶ *Id.* at 7.

Texas Land Trends. Texas A&M Institute of Renewable Natural Resources. Accessible at http://texaslandtrends.org/index.aspx

cropland, pastureland, and orchards in the study area considered for McCamey D to Kendall. ¹⁶⁸ While this alone is an impressive statistic, it does not include the other millions of acres where landowners have demonstrated that wildlife management is a major determinant in their land use decisions. ¹⁶⁹

On well-managed properties, the revenue from hunting leases can exceed revenue from livestock – but this is not the only factor driving land use decisions.¹⁷⁰ Grazing, wildlife and recreation are all part of that, but there is an authentic motive of land stewardship behind many of the land use decisions in the area.¹⁷¹ Dr. Wilkins testified that many landowners have a desire to see their land restored and/or conserved for its natural values – and this trend also provides huge benefits to local rural economies through increased nature-based tourism, hunting, birdwatching, canoeing and kayaking, and other forms of outdoor recreation.¹⁷² The wildlife and scenic resources of the Texas Hill Country are its greatest assets, and these are just as much a part of agricultural land use as is raising sheep and goats.¹⁷³

Across the counties impacted by McCamey D to Kendall, the appraised market values for agricultural lands increased by almost 4-fold during 1997-2007. Land values have similarly increased even in the extremely rural four-county area in the western part of the study area.¹⁷⁴.

The Preferred Route (and all of the proposed links located in the center of Hill Country) cut through the middle section of the lands managed by the Doss-Harper Wildlife Management Association (WMA).¹⁷⁵ Having been formed in the early 1980s, the Doss-Harper WMA is one of the oldest such cooperatives in the state, and has served as a template for state agency efforts that have resulted in several million acres under cooperative wildlife management in more than 140 wildlife management associations.¹⁷⁶ Preferred Route MK13 would run through the center of the Doss-Harper WMA for approximately 12 miles.¹⁷⁷ The right-of-way and its maintenance would create permanent challenges to wildlife management across those lands that have been

¹⁶⁸ CVA Ex. 1, Wilkins Direct at 8.

¹⁶⁹ *Id.* at 7-8.

¹⁷⁰ *Id.* at 9.

¹⁷¹ *Id*.

¹⁷² *Id*.

¹⁷³ Id

Schleicher, Sutton, Kimble, and Menard. *Id.*

¹⁷⁵ *Id.* at 12-13.

¹⁷⁶ *Id.*

¹⁷⁷ *Id.* at 13.

intentionally managed and conserved for wildlife as an integral part of the ranch and agricultural operations in the area. 178

The ALJs reached the right result—rejection of the Preferred Route—but failed to include analysis of this important environmental consideration.

c. Conclusion

Environmental concerns and the adverse impact this transmission line will have on the Hill Country rise to the level that the Commission should approve a route that best protects the Hill Country even if that route is very expensive. Only by following compatible right-of-way to the greatest possible extent can the Commission protect against fragmentation, limit the spread of oak wilt infestation, preserve the greatest amount of endangered species habitat, limit the damage caused by crossing streams and rivers, and protect private wildlife management efforts. MK32 and MK33 are the two routes that best protect the Hill Country. Although MK62 helps protect the eastern part of the study area against further Oak Wilt infestation, this routes still contributes to fragmentation concerns because it uses Links b84 and b86 that cut across existing ranches.

6. The Effect of Granting the Certificate on the Ability of this State to Meet the Goal Established by Section 39.904(a)

Approving the certificate will not affect the ability of the state to meet the goal established by Section 39.904(a). As discussed *infra*, CVA supports above-ground construction of Route MK33 that may require, from time to time, that LCRA TSC take the McCamey D to Kendall circuits out of operation at a time of concern and that this could be done in advance of an anticipated flooding event that has the potential to create a safety or reliability concern. On cross-examination by LCRA TSC on this issue, Mr. Dauphinais disagreed that the purposes of CREZ would be compromised by this situation, stating that the purposes of CREZ would only be limited for a number of hours or days.¹⁷⁹ Mr. Dauphinais further testified that the power would be distributed on the transmission system in a controlled manner.¹⁸⁰

¹⁷⁸ *Id.* at 12-13.

¹⁷⁹ Tr. at 891.

¹⁸⁰ *Id*.

7. Engineering Constraints

Kimble County Airport and Llano River Floodplain

Summary of the situation:

The proposed location of Link Y11 south of the Kimble County Airport concerned LCRA TSC's engineers, so they retained the services of a consultant who never visited the airport but advised LCRA TSC that he believed the Federal Aviation Administration would object to the location of transmission line structures unless they were less than 40 feet tall. This revelation caused the LCRA TSC engineers to determine that they would have to construct a fence around the area of reduced height structures. Because the Llano River is located in that same location, LCRA TSC became concerned that flood waters could rise too close to the conductors, causing LCRA TSC to have to shut down the line during 100-year flood events. That possibility caused LCRA TSC to have concerns about reliability and the ability of the transmission line to carry CREZ-generated electricity. LCRA TSC then concluded that it would have to build a half of a mile of the transmission line underground, something it has never done, at a cost of \$54 million.

Summary of CVA's position:

CVA's aviation engineer testified that the transmission line can be built on structures as tall as 60 feet high. No fence would have to be built. Only rare, 100-year flood events may require the temporary shutting down of the transmission line. Those events could be predicted and planned for, possibly not even having any impact on the transfer of electricity in the region. If curtailment of wind generation were required, it would be temporary and able to be restored after the flood event was over and LCRA TSC performed its evaluation of the line and completed any repairs. The future costs of any curtailment would be substantially less than \$54 million

In Docket No. 38140 Oncor Electric Delivery Company LLC identified reliability and security concerns so it retained the services of ABB to conduct studies addressing those concerns. After a hearing on the issue, the ALJ and the Commission determined that Oncor's

reliability concerns were valid and precluded the paralleling of certain transmission lines due to reliability and security concerns. 181

In Docket No. 38517, Oncor again identified reliability concerns related to paralleling of transmission lines. It commissioned ABB to conduct a dynamic stability analysis to determine how the grid would respond if the Proposed Project were constructed parallel to one of the existing 345 kV lines in the study area and a loss of both parallel lines occurred simultaneously. ABB analyzed three different outage scenarios. After Oncor's engineer, Ken Donohoo, reviewed the studies, he testified that none of Oncor's filed links create sufficient grid reliability or security concerns to justify not utilizing any particular link. 182 Commission Staff subsequently relied on the ABB study to make its recommendation in the case for paralleling of links that originally were a cause of concern for Oncor. 183

In this case, however, LCRA TSC provided no study projecting how frequently or for how long flood events could require LCRA TSC to shut down the transmission line. LCRA TSC provided no analysis or projections of ERCOT's ability to reallocate load to other lines during those times that the McCamey D to Kendall line would be shut down. LCRA TSC provided no analysis or even an estimate of the temporary curtailment of wind generation that would result from shutting down the McCamey D to Kendall line for flood events that occur in the 100 year floodplain. Having based its entire conclusion on an erroneous analysis of FAA regulations, LCRA TSC submitted its application to the Commission claiming that the only way it could build the proposed transmission line on Link Y11 would be to bury the line underground at a cost of \$54 million.

Had LCRA TSC expended as much effort analyzing the Airport and the FAA's rules as it has spent trying to avoid construction on Link Y11, a complete picture of the considerations and

¹⁸¹ See, SOAH Order No. 9 and Order on Appeal of Order No. 9, Docket No. 38140, Application of Oncor Electric Delivery Company LLC to Amend a Certificate of Convenience and Necessity for the Riley-Krum West 345kV CREZ Transmission Line (Formerly Oklaunion to West Krum) in Archer, Clay, Cooke, Denton, Jack, Montague, Wichita, Wilbarger, and Wise Counties, Texas. See also, Oncor's Post-Hearing Brief on Route Adequacy at 3 and 7-12.

Supplemental Testimony of Kenneth A. Donohoo at 2-5, Docket No. 38517, Application of Oncor Electric Delivery Company LLC to Amend its Certificate of Convenience and Necessity for the Clear Crossing to Willow Creek CREZ 345-kV Transmission Line in Haskell, Jones, Throckmorton, Shackelford, Young, Stephens, Jack, Palo Pinto, Wise, and Parker Counties.

Direct Testimony of Mark Sullivan at 14, Docket No. 38517, Application of Oncor Electric Delivery Company LLC to Amend its Certificate of Convenience and Necessity for the Clear Crossing to Willow Creek CREZ 345-kV Transmission Line in Haskell, Jones, Throckmorton, Shackelford, Young, Stephens, Jack, Palo Pinto, Wise, and Parker Counties.

potential solution as would have been presented in the Application and in LCRA TSC's direct case. Instead, the burden fell to intervenors to perform the analysis LCRA TSC should have performed at the outset. CVA and its witnesses provided evidence that not only can a transmission line be constructed above ground on Link Y11, but it also can be done economically and in a manner that does not endanger safety or the reliability of the transmission line.¹⁸⁴

a. Kimble County Airport and Llano River Floodplain

i. Links b19c and b19d, North of the Airport

Not addressed.

ii. Link Y11, South of the Airport

Although the ALJs agree with CVA and TPWD that environmentally, the best choice for the line would be to parallel I-10 as much as possible, they conclude underground construction along Link Y11 is too expensive to recommend. They determined that the weight of the evidence does not support CVA's contention that Link Y11 can be built above ground. Given that LCRA TSC is responsible for ensuring that the line is safe and reliable, the ALJs state that the better option is to route the line north of the Kimble County Airport. Staff, Weinzierl, and CVA alternate proposal MK32 all route around the airport along Links b19b and b19c. Staff MK15 best balances the factors of cost, paralleling ROW, prudent avoidance, and environment. MK32 and 33 are better in terms of the environmental factors but are poor on cost and prudent avoidance. Therefore, the ALJs recommend Staff MK15.

No aviation safety concern, no reliability concern and no erosion concern requires that the transmission line be buried at Link Y11.

See generally, CVA Ex. 7, McIllwain Direct; CVA Ex. 6, McGavran Direct at 20-21; CVA Ex. 18, Gully Rebuttal.

PFD at 70.

¹⁸⁶ *Id*.

¹⁸⁷ *Id.*

¹⁸⁸ *Id.*

The credible evidence in the record proves that LCRA TSC can construct the transmission line above ground on Link Y11 south of the Kimble County Airport. What the hearing revealed as well, however, is that it does not want to do so and it has focused its case on stating the reasons why it made the decision to bury the line. LCRA TSC's position is untenable. It is based on an erroneous analysis of the Federal Aviation Administration's ("FAA") rules, misstated and overstated concerns about reliability, and a false assumption as to its obligations to wind generators.

If the Commission accepts LCRA TSC's flawed analysis, Route MK33 almost certainly is cost prohibitive. CVA agrees that an expenditure of \$54 million to bury a portion of the line would not be a wise investment of ratepayers' funds. Fortunately, that expenditure is unnecessary and the line can be built above ground.

The reasons LCRA TSC states for not wanting to build the transmission line above ground are: possible danger to air navigation; flood events and reliability concerns associated with lower height transmission structures; and erosion.¹⁹² Three of the four reasons LCRA TSC cites to justify its recommendation of underground construction are related to the height of the structures, so the proper analysis of and understanding of the FAA's rules is critical to a determination of how to construct the line on Link Y11. Structures in proximity to an airport runway that are too tall will be objected to by the FAA. At the same time, because of the Airport's location near the North Llano River, the supporting structures will be in a flood plain. If the height of the structures is reduced below a certain level, the conductors could be located at a height that causes reliability concerns if a flood event were to occur.¹⁹³ So long as the structures are sufficiently tall, however, the conductors will be enough high above the water to eliminate any reliability concern during a flood event. If the structure height issue is resolved,

CVA recognizes there are two separate issues associated with the Kimble County Airport: construction on Link Y11 that may affect the southern approach to the airport on Runway 35 and construction on Link b19c that may affect the northern approach on Runway 17. These exceptions focus on the Runway 35 approach and the reasons supporting construction of the transmission line on Route MK33, including Link Y11.

¹⁹⁰ Tr. at 1466.

LCRA TSC Ex. 7 at 35-36; LCRA TSC Ex. 14 at 35-38; LCRA TSC Ex. 15. LCRA TSC also stated that any one of those reasons, by itself, would not prevent above-ground construction. LCRA TSC Ex. 14 at 38.

¹⁹² LCRA TSC Ex. 14 at 37-38.

¹⁹³ LCRA TSC Ex. 7 at 35.

then LCRA TSC's reliability concerns should be eliminated¹⁹⁴ and the distances between the transmission lines and the flood plain would be increased to a point that they should no longer be a problem.

Possible Danger to Air Navigation

When a transmission line is to be constructed in proximity to a public airport, the FAA performs an aeronautical study to review potential impacts of the proposed construction on navigable airspace. The FAA's applicable regulations are contained in Federal Aviation Regulation ("FAR") 14 CFR part 77, commonly referred to as Part 77. Part 77 sets forth its notice requirements for proposed construction or alteration of projects, such as transmission lines, and provides standards for determining whether such projects will create obstructions to navigable airspace. After the aeronautical study is completed, the FAA regional office normally will issue either a "No Objection," "Conditional No Objection," or an "Objection" to the proposed project. 197

CVA witness Frank McIllwain, P.E. is an engineer with 12 years of airport design experience; he also is a pilot. Mr. McIllwain testified that it is his opinion that the FAA will not object to construction of the transmission line on Link Y11 if the heights of the structures do not exceed 61 feet.¹⁹⁸ Mr. McIllwain's direct testimony includes an exhibit that depicts the Runway 35 approach and shows the results of his calculations based on the FAA's regulations.¹⁹⁹ The exhibit indicates how tall the structure could be without being determined to be an obstruction.²⁰⁰ Copies of engineering drawings included in Mr. McIllwain's direct testimony are provided with these exceptions as Attachment E. The northern approach is identified as Runway 17; the southern approach is identified as Runway 35.

Mr. McIllwain testified that the FAA applies a 20:1 slope requirement to the Approach Surface when it evaluates whether it will issue an objection for a project that may affect a visual

¹⁹⁴ Tr. at 1305.

¹⁹⁵ *Id.* at 4.

¹⁹⁶ *Id*.

Id. at 5. The FAA applies FAR 14 CFR § 77.25 for its evaluation associated with construction projects that affect civil airports.

¹⁹⁸ *Id.* at 6.

Id. at 19 (Attachment FOM-3).

²⁰⁰ *Id.* at 7.

approach (as with the existing Runway 35 approach at Kimble County Airport).²⁰¹ A 20:1 approach slope means that when a plane is taking off, for example, within a distance of 200 feet, the pilot should expect to climb 10 feet; in a distance of 2,000 feet, a pilot should expect to climb 100 feet.

LCRA TSC's expert witness, William Griffin, P.E. acknowledged on cross examination that a structure 60 feet tall would not be determined by the FAA to be an obstruction to air navigation. Mr. Griffin, however, said in his prefiled rebuttal testimony that he believes the FAA will object to the construction in the configuration that Mr. McIllwain concluded is acceptable, because it would violate what Mr. Griffin referred to as an "Obstacle Clearance Slope." Mr. Griffin emphasized the Obstacle Clearance Slope and recommended not building a structure that required a change in the Obstacle Clearance Slope. The Obstacle Clearance Slope that Mr. Griffin applied, however, is a flatter 34:1 obstruction clearance slope, not the 20:1 standard Mr. McIllwain identified as what the FAA would use to determine whether it objects to construction of the transmission line.

When questioned on this at the hearing, Mr. Griffin was unable to substantiate his statements. When asked if he based his belief on any FAA rule, Mr. Griffin stated: "And as far as I know, the FAA doesn't publish rules — or all of the rules associated with their OE in-houses (sic)." Upon further cross-examination, Mr. Griffin acknowledged that the FAA does have a 350-page handbook for its obstruction evaluations. He did not identify any rule, order, or

Id. at 5-6. The FAA establishes "imaginary surfaces" that it uses to identify or determine whether obstructions to air space exist or would exist if built around airports. The Approach Surface is longitudinally centered on the extended centerline of the runway, beginning at the end of the Primary Surface. The Primary Surface is aligned with the runway and extends 200 feet beyond each end of the runway. Thus, the Approach Surface begins 200 feet from the end of the runway at a width of 500 feet and it flares (like a cone) to 1,000 feet at a distance of 5,000 feet from the end of the Primary Surface. The surface slope for a visual approach is 20:1; the surface slope for a non-precision instrument approach is 34:1. The existing approach for Runway 35 is a visual 20:1 approach.

Tr. at 1303. Mr. Griffin repeated this assertion in his redirect testimony at the hearing but again did not provide justification for his belief. Tr. at 1462.

LCRA TSC Ex. 15, Griffin Rebuttal at 10 and 12. Mr. Griffin acknowledged that he used the term "Obstacle Clearance Slope" in his testimony instead of the precise definition "obstruction clearance slope." Tr. at 1293.

LCRA TSC Ex. 15 at 12. Mr. Griffin stated that he believed the FAA is "very likely to object to the construction of Link Y11 in the configuration Mr. McIllwain describes."

²⁰⁵ Tr. at 1300.

²⁰⁶ *Id*.

precedent that was the basis for his belief that the FAA will object to construction of the proposed transmission line as Mr. McIllwain proposes. To be clear, Mr. McIllwain's proposed construction height for the transmission line supporting structure is higher than the existing obstruction clearance slope at the Airport, but it is *below* what is required by the FAA Part 77 Approach Slope Surface. In other words, there is "head room" in Part 77 to erect a structure near the Airport that is taller than structures or natural obstacles (such as trees) that exist there now. The existing obstruction clearance slope upon which Mr. Griffin relies for his belief that the FAA will object to the proposed construction is not listed in the list of surfaces considered by the FAA in FAR 14 CFR § 77.25.

The record thus establishes that LCRA TSC may construct, without an FAA objection, transmission line structures that are up to 60 feet tall in the area that is within the aircraft approach surface.

What LCRA TSC mistakenly concluded is that a flatter approach slope and a different obstruction standard apply to the Airport instead of the 20:1 visual runway Approach Surface standard established in FAA Part 77. As a result, LCRA TSC restricted its structure heights to under 40 feet, thereby creating a potential reliability concern because of the proximity to the flood waters.

LCRA TSC's Concerns about Reliability

Because LCRA TSC limited itself to building transmission structures that are lower than what will be permitted by the FAA,²⁰⁷ the lower height structures became the cause of LCRA TSC's flood and reliability concerns. Specifically, the use of lower height structures means that the conductors will be closer to the ground than if the supporting structures are the standard 120 to 180 foot towers. LCRA TSC anticipated that the lower height lines would have to be fenced with security fences.²⁰⁸ The Airport is located near the North Llano River and the route LCRA TSC selected for the transmission line in this location includes Link Y11 which crosses a 100-year flood plain. The National Electrical Safety Code and LCRA TSC's safety standards require that a minimum separation of 26 feet be maintained between conductors and any ground or water

LCRA TSC investigated a 2,500 foot section using low-profile structures with a minimum ground clearance of 18 feet. The estimated cost for that option was \$3,168,000. CVA Ex. 38, LCRA TSC Response to CVA RFI 6-22 at 2.

²⁰⁸ LCRA TSC Ex. 7 at 35.

surface.²⁰⁹ In the event of a flood, rising water would make the gap between the conductors and the water level smaller. Floodwaters also could damage the security fences.²¹⁰

LCRA TSC did not raise concerns about cascading outages, but expressed concerns that the McCamey D to Kendall circuits will be required to be removed from operation. It also said that reenergizing the circuits could be delayed if the security fences are damaged. LCRA TSC witness Mr. Garza acknowledged that ERCOT will have the appropriate measures in place to address the new issues being introduced into the grid by the full CREZ environment and continue to operate the grid in a safe, reliable and prudent manner as long as the TSCs provide them with reliable facilities. He did not raise concerns about power outages at the hearing; rather, LCRA TSC's main concern appeared to be that the wind generators would be curtailed during the time the line was out of operation.²¹¹

Saba Ranch expert witness Mr. Dauphinais testified that, if there were no structural damage to the supporting structures of the transmission line, restoration of service could be accomplished relatively quickly after a flood event.²¹² Questioned further by LCRA TSC, Mr. Dauphinais testified that "we're talking about an event that is not going to occur very frequently, and it may not – may not damage the secured area when it occurs."²¹³ Mr. Dauphinais also testified that the power would be distributed on the transmission system in a controlled fashion.²¹⁴

Planning for weather events that may affect transmission line reliability is not unusual in Texas. Mr. Dauphinais testified that: "It is not unusual to have some lines that may have special operating procedures associated with them." Mr. Dauphinais further testified that LCRA TSC could take the McCamey D to Kendall circuits out of operation at a time of concern²¹⁶ and that this could be done in advance of an anticipated flooding event that has the potential to create a

²⁰⁹ CVA Ex. 24 at 20.

²¹⁰ Tr. at 1209.

Tr. at 891-894.

Tr. at 889.

²¹³ Tr. at 891.

Tr. at 891-892.

²¹⁵ Tr. at 886.

²¹⁶ *Id*.

safety or reliability concern.²¹⁷ A process to take a transmission line out of operation is not different than other types of reliability events we experience in Texas.²¹⁸

If a flooding event were to require that the line be taken out of operation, the potential consequence identified by Mr. Dauphinais is that "[i]t might reduce transfer capability during the period of time that it is out of operation." This would have an effect on the ability to accept wind power on the ERCOT grid during the period of the outage. Mr. Dauphinais, however, stated that he would expect "the economic impact of the reduction of transfer capability to be substantially less than the additional cost incurred to put the line underground." ²²¹

On cross-examination by LCRA TSC on this issue, Mr. Dauphinais disagreed that the purposes of CREZ would be compromised by this situation, stating that the purposes of CREZ would only be limited for a number of hours or days. Mr. Dauphinais further testified that the power would be distributed on the transmission system in a controlled manner. 223

Based on the record evidence, it is CVA's position that the concerns LCRA TSC has raised regarding reliability are misplaced and overstated. If LCRA TSC were in fact required to build the line using structures shorter than 60 feet, LCRA TSC is at most faced with the prospect of shutting down the line for a relatively brief period of time during a flood event. LCRA TSC has not contended that ERCOT cannot safely and reliably operate the transmission grid in the event the line is out of operation for a time. CVA is confident that LCRA TSC will be able to carry out its responsibilities to operate the line safely and LCRA TSC has not said otherwise.

What CVA considers incredible is LCRA TSC's decision that burying the line at a cost of \$54,000,000 is an appropriate means of ensuring that a flood at this location will not cause any curtailment of CREZ generating capacity. CVA cannot in conscience ask the Commission to approve and the ratepayers to pay for a half-mile of buried cables in this location when a tornado or an ice storm is equally capable of causing an outage in this or any other CREZ 345 kV line.

²¹⁷ *Id*.

²¹⁸ *Id*.

²¹⁹ *Id*.

²²⁰ Tr. at 886-887.

²²¹ Tr. at 887.

²²² Tr. at 891.

²²³ *Id*.

CVA is aware of no guarantees to any wind generator made by the Public Utility Commission of Texas that there will be a continuous and maximum capacity operating CREZ system for the next 100 years. CVA believes that no individual generator is entitled to any specific level of production or a system topology.

If, due to infrequent flood events, the McCamey D to Kendall circuits are out of operation for a matter of hours or even days, CVA is confident that ERCOT will manage the grid so that power is reliably delivered to Texas customers. An investment of \$54 million to assuage LCRA TSC's concerns for wind generation is not warranted or cost-effective. LCRA TSC can construct the transmission line above ground on Link Y11 so that power is transferred on a reliable and consistent basis without charging Texas ratepayers for its proposed underground facilities.

Erosion

LCRA TSC did raise a concern that is not related to the height of the transmission structures: erosion in the flood plain crossed by Link Y11. Yet, LCRA TSC apparently ignored the use of cost-effective options that would allow it to construct Link Y11 without erosion concerns. Instead, LCRA TSC raises the unsupported specter of erosion even affecting I-10.

CVA witness Russell Gully, P.E., R.P.L.S. is a Professional Engineer, Registered Professional Land Surveyor and the owner of SKG Engineering. Mr. Gully performed an inperson examination of the area of the North Llano River where Link Y11 would be constructed and did not observe active erosion of the river bank in this area. Mr. Gully testified that in his expert opinion there are few, if any, erosion concerns associated with the area south of the Kimble County Airport and that those concerns can be addressed in an efficient and economic manner. Description of the River and Professional Engineer, Registered Prof

Mr. Gully testified that the right-of-way will be in the floodplain, not in the floodway, and discussed large, old oak trees that are located north of the river. He also testified that an oak tree is similar to the concrete post of a power line. It is effectively the same scenario, except

²²⁴ CVA Ex. 18, Gully Cross-Rebuttal at 5. Mr. Gully testified that there were no areas where there are gullies or ravines from overland flow eroding the bank. The floodway is fairly wide and deep in the area.

²²⁵ *Id.* at 3.

Id. at 8. The oak trees have a 2 foot diameter base and have vegetation and grasses growing around them.

the tree would be closer to the river.²²⁷ Mr. Gully testified that there is not active erosion where the trees are located, so he would not expect there to be erosion problems with the transmission lines.²²⁸

Mr. Gully's rebuttal testimony included 5 aerial photographs showing the location in question, dating back to 1939.²²⁹ Contrary to LCRA TSC's claims, these photographs show that the river bank does not appear to be eroding or endangering the interstate or the area where the transmission line would be located. What Mr. Gully's testimony makes clear is that LCRA TSC's erosion concerns are not supported by any evidence, and LCRA TSC has undertaken no effort to determine what solutions are available, solutions that Mr. Gully testifies exist and can address LCRA TSC's concerns in an efficient and economic manner. LCRA TSC's parent company is a well-regarded custodian of many of the rivers and lakes in central Texas. CVA is confident that LCRA TSC can address any erosion concerns that arise during construction and operation of the transmission line on Link Y11.

In conclusion, LCRA TSC has failed to demonstrate that it has accurately analyzed the construction options for an above ground transmission line at Link Y11 near the Kimble County Airport. It has misapplied the FAA's obstruction standards, resulting in a conclusion that the structure height must be lower than actually allowable by FAA rule. It then determined that the low structures would require security fences and would result in a conductor height that in a flood event would require it to take the line out of operation for hours or days. And, it concluded that the purposes of the CREZ transmission lines require it to ensure that this portion of the line never be taken out of operation. The upshot of this erroneous chain of conclusions was a proposal to build the line underground at a cost of \$54,000,000.

Purported Easement

The final point on this issue concerns the purported easement to which LCRA TSC refers in its Initial Brief. CVA has searched the record and can find *nothing* to support LCRA TSC's claim that such an easement exists. Notably LCRA TSC cites to no exhibit substantiating the claimed existence of the easement. There is no mention of any easement in Mr. Symank's direct

²²⁷ *Id.* at 8.

²²⁸ *Id.* at 8.

Id. 21-25. Those photographs are provided with these exceptions as Attachment F.

testimony, nor any in his rebuttal testimony. LCRA TSC witness Mr. Griffin does not refer to the purported easement in his rebuttal testimony and at hearing testified that he based his belief that the FAA would object to the construction of the transmission line upon the obstacle clearance slope. Nothing in the record indicates that Mr. Griffin was aware of any purported easement.

Furthermore, in LCRA TSC's response to Staff's RFI 3-7, it stated the reasons for the decision to propose and support underground, rather than overhead, construction on Link Y11. 230 There is no mention of any easement, no reference to the purported easement to which LCRA TSC now refers in its brief in that discovery response. LCRA TSC did not supplement its response in any subsequent filing or at hearing. All that is in the record is a statement made by Mr. Symank on redirect where he referred to airspace easements associated with the Airport and he alleged that the construction of the transmission line in a manner that affects the obstacle clearance slope "would require a condemnation of those easements." Mr. Symank is neither an expert in real estate nor an expert in aviation or airports; his statement is nothing but speculation. LCRA TSC has not provided any evidence of the existence, much less the content, of the purported easements referred to by Mr. Symank or the easement to which it refers in its Initial Brief. LCRA TSC has gone outside the record in an effort to substantiate its failed analysis and erroneous conclusions. The Commission's decision in this case must be based on the record evidence. It cannot be based on speculation; it cannot be based on purported easements that no party has seen.

Proposed Ordering Paragraph

1. LCRA TSC's Application to build the McCamey D to Kendall double circuit 345 kV transmission line is approved. The Project will follow the segments identified as Route MK33, except that LCRA shall construct Link Y11 below the south approach surface of the Kimble County Airport, using structures that do not exceed 60 feet in height rather than burying the line.

Staff's Ex. 6.

Tr. at 1463 (emphasis added).

In a contested case, the ALJs and the Commission are confined in their considerations to what is in the record of the contested hearing. The ALJs cannot make recommendations to the Commission in reliance on matters outside the evidentiary record. Moreover, findings of fact may be based only on the evidence and on matters that are officially noticed. Tex. Gov't Code § 2001.141(c). Of course, the briefs themselves are not considered evidence; CVA points out the absence of record evidence regarding the purported easements referenced in LCRA TSC's Initial Brief and urges that the references be disregarded by the ALJs in developing their recommendation to the Commission.

b. P-Line Concerns

Neither MK33, nor MK32, nor MK62 would affect the P-Line Intervenors.

8. Costs, Using Existing Compatible ROW, and Prudent Avoidance

a. Tension Between Cost, Paralleling ROW and Prudent Avoidance

Construction of the proposed transmission line between McCamey D and Kendall on one of the routes that follows the greatest amount of compatible right-of-way will minimize the adverse environmental and aesthetic impacts on the Texas Hill Country, while preserving its value to the state as a source of tourist revenues.

Of the proposed transmission line routes between McCamey D and Kendall, Route MK33 is the most desirable route because it parallels existing compatible right-of-way for the greatest percentage of its length (82.12%), is most consistent with community values, does not cross the Llano River at the most environmentally sensitive point, does not come within the viewshed of historic Fort McKavett or historic Ivy Chapel, has a significantly lower impact on ecological resources and endangered species habitat, reduces the bisecting of landowner property by limiting the creation of new right-of-way, and on balance best meets the considerations set forth in the Commission's Preliminary Order in this docket.

Compatible Corridors

CVA's primary goal with respect to the location of this transmission line has been to locate it next to compatible right-of-way to the greatest possible extent. TPWD suggested that the Project be constructed on routes that adjoin compatible rights-of-way, such as Route MK33 or Route MK32; from a wildlife protection and preservation perspective, TPWD considers routes that use US 277 and I-10 to have the least amount of environmental impact.²³³

The use of compatible right-of-way was supported by those who attended the open houses. In every case it gets at least a 50% rating as the most important criteria in selecting a

TPWD Ex. 5 at 6, Tr. at 826, Staff Ex. 7, Deposition of Dr. Karen Clary.

route for the project and even received a rating of over 80%. In many cases it rises to the primary concern among the public in the route selection.²³⁴

No state highway connects the McCamey D and Kendall substations. To drive from one point to the other, one must either take US 277 to 190 to US 83 to TX 29 to US 87 or one must drive south on US 277 to Sonora and then take I-10 east to Kendall. Of the 60 routes proposed by LCRA TSC, about 54 went through the middle of the study area and 6 went on the perimeter of the study area. The 54 routes through the middle of the study area tend to have low scores with regard to compatible right-of-way simply because there is not a great deal of compatible right-of-way in that part of the study area. LCRA TSC's Preferred Route MK13 does not parallel any existing US Highway. Preferred Route MK13 parallels an existing transmission line for 9.14 miles and parallels other compatible right-or-way for 30.20 miles or 29.1% of its length.

Moreover, none of the proposed routes that go through the center of the Texas Hill Country parallel apparent property boundaries to any significant extent. A review of LCRA TSC's aerial maps with property boundaries reveals that the diagonal, straight line segments of the proposed routes do not often coincide with property boundaries.

It is the routes that are located on the perimeter of the study area, particularly MK33 and MK32, that offer the best chance of using compatible right-of-way. These routes are the longest and have some increased capital costs due to that distance, but the advantages they offer are minimum impact to land and wildlife habitat in this beautiful part of the state. Route MK33 parallels existing highway corridors for 82.5% of its length; MK32 parallels existing highway corridors for 79.2% of its length. Staff MK15 and MK62 all parallel significantly more compatible rights of way than LCRA TSC's Preferred Route MK13.

Using compatible rights of way for a proposed transmission line reduces the impacts of the line so that they are of a more marginal nature as opposed to going across unencumbered territory and creating major impacts.²³⁶ CVA witness Edward McGavran, P.E., testified that areas that have already been impacted by other transmission lines, highways, pipelines, and railways will have a lower marginal degree of impact than areas that have not been previously

²³⁴ CVA Ex. 6, McGavran Direct at 9.

²³⁵ CVA Ex. 9, Neiman Direct at 9.

CVA Ex. 6, McGavran Direct at 8.

impacted by the same type of projects mentioned. In other words, new impact is more severe than additional impact.²³⁷

Mr. McGavran testified that a general objective in land use planning and infrastructure siting is to establish from a land use perspective the highest and best use of available land. If we have established over time what appears to be a corridor for utility and transportation infrastructure, the best and highest use of that land is to serve as a conduit for that infrastructure for two reasons. One, we have an established corridor to utilize and we can maximize the use of the nonaffected land for other purposes that could be considered "highest and best use" such as recreational areas, wildlife habitat, commercial and industrial development, housing development, etc. ²³⁸ Two, we add predictability to the land use question on a regional basis. This results in maximizing the predictable total land use of the region as opposed to having an unpredictable land use situation which can harm both preservation of environmentally sensitive areas and long term economic development. ²³⁹

The routes that best comport with the goal of paralleling compatible right-of-way are MK33 and MK32.

Prudent Avoidance

LCRA TSC considered and reasonably avoided population centers and other locations where people gather and live when routing all of its alternative routes for the Project. All of the routes proposed in LCRA TSC's Application comply with the Commission's policy of prudent avoidance. Route MK33 has the largest number of habitable structures located within 500 feet of its centerline with 153, and MK32 has the next largest number with 151. Staff MK15 has 55 habitable structures located within 500 feet of the route's centerline. For all of the reasons discussed above concerning habitable structures, the presence of more such structures on MK33 is not a reason to reject this route.

²³⁷ CVA Ex. 6, McGavran Direct at 12.

²³⁸ *Id.* at 13.

²³⁹ *Id*.

b. Best Balance of Cost, Paralleling, and Prudent Avoidance

Notwithstanding the many favorable aspects of CVA-supported routes MK33 and the next best alternative MK32, the ALJs state that the parties agree that running the transmission line along I-10 south of the Kimble County Airport is prohibitively expensive. Therefore, they state, "a better recommendation is to follow I-10 as much as possible, as Staff MK15 does, deviating north of the Kimble County Airport, and deviating north of Kerrville." Staff MK15 does not follow I-10 as much as possible, however. It cuts through the north central part of the study area, cutting through some of the largest ranches in this part of the Hill Country and fails to follow the available compatible rights-of-way along Highway 277 to I-10 and then from I-10 at Sonora to Link Y5cc. The ALJs correctly state that given the length of this line, the characteristics of the Hill Country, and the tremendous opposition to routing the line through the Hill Country, a better solution is to parallel more existing cleared ROW, such as I-10. The additional compatible I-10 right-of-way on MK33 and MK32 is approximately 36 miles and the compatible US Highway 277 right-of-way is another 27 miles. By recommending Staff MK15, rather than MK33, 63 miles of available, compatible right-of-way is not followed.

The ALJs conclude their analysis by saying that Staff MK15, CVA's second choice of MK32, and MK62 provide a better balance of the factors of cost, paralleling existing ROW, and prudent avoidance. Although CVA contends that LCRA TSC can construct route MK33 above ground at a cost that is significantly less than the underground alternative the utility claims is necessary, CVA would prioritize these three other routes identified by the ALJs as follows: (1) MK32 offers the extended paralleling of existing compatible rights-of-way for a vast majority of its length and is the best route of the three considered by the ALJs in their final analysis; and (2) although MK62 is flawed by its disregard of property boundaries and fragmentation concerns at the western end of the study area, its use of I-10 through Kerrville makes it a better route than Staff's MK15, the third best option of the three considered by the ALJs.

c. EMF

Not addressed.

²⁴⁰ PFD at 74

²⁴¹ *Id*.

G. Preliminary Order Issue Nos. 7 and 8

Are there alternative routes or facilities configurations that would have a less negative impact on landowners? What would be the incremental cost of those routes? If alternative routes or facility configurations are considered due to individual landowner preference: (a) have the affected landowners made adequate contributions to offset any additional costs associated with the accommodations; and (b) have the accommodations to landowners diminished the electric efficiency of the line or reliability?

Not addressed.

1. Alternative Routes Evaluated by LCRA TSC

Not addressed.

2. Routing Adjustments Evaluated by LCRA TSC

Several intervenors represented by CVA submitted direct testimony identifying modification requests on the record.²⁴² LCRA TSC did not evaluate the requests, but because the landowners wanted to ensure that the Commission is aware of their requests for modifications, CVA submitted their direct testimonies. Other intervenors represented by CVA discussed modifications with LCRA TSC. Those modifications are included in LCRA TSC's Supplemental Attachment 13 to its Application.

If the Commission approves a route that includes any landowners represented by CVA and who submitted modification requests in either CVA Ex. 15 or LCRA TSC's Supplemental Attachment 13, CVA requests that the Commission approve the landowner-requested modifications.

H. Preliminary Order Issue No. 9

Has LCRA TSC proposed modifications to the transmission improvements described in the CREZ Order? If so: (a) would such improvements reduce the cost of transmission or increase the amount of generating capacity that transmission improvements for the CREZ can accommodate; (b) would such modifications speed up the project's implementation timeline, achieve other technical efficiencies, or

See, CVA Ex. 15, Direct Testimonies of Intervenors Who Appointed Clear View Alliance, Inc. as Their Authorized Representative and Submitted Limited Direct Testimony Including a Response to Staff's First Requests for Information. (These testimonies are a subset of PUC Interchange Item No. 2624).

otherwise be cost effective and consistent with the CREZ Transmission Plan; and (c) have all such modifications been submitted to the Electric Reliability Council of Texas (ERCOT), and has ERCOT made a recommendation to LCRA TSC to be filed in this proceeding?

Not addressed.

I. Preliminary Order Issue No. 10

Are there discrepancies between the estimated total cost included in the Application in this docket and the cost identified for the proposed project in the CREZ Transmission Plan? If so, what are the reasons for the discrepancies?

The CTO Study assumed straight line lengths for the transmission line routes, which does not account for topography or related constraints in estimating the size and cost of transmission line projects. That assumption proved unrealistic. On September 16, 2009, In Docket No. 37049, Comments Concerning LCRA Transmission Corporation's Proposed CREZ Priority Transmission Lines, LCRA TSC and Staff submitted their Joint Motion to delay the filing of the applications for three CREZ transmission lines. LCRA TSC specifically requested additional time to study two particular routes: the "I-10 Route" and the "Mason-Menard Route" for the proposed CREZ line between McCamey D and Kendall. LCRA TSC stated that it was adding these routes in response to public input and requests from governmental officials, and to provide the Commission with additional options. The Joint Motion expressly recognized that both of these routes are longer than the other routes LCRA TSC already had been examining.

The CTO Study did not contemplate construction of the McCamey D to Kendall line using a route that parallels US Highway 277 and I-10 (MK33, MK32), or that parallels I-10 for any significant distance. All of the routes that parallel compatible right-of-way to any significant extent are unlike the almost straight-line, diagonal routes through the middle of the Hill Country that LCRA TSC originally proposed for this line, and instead are necessarily longer and therefore cost more than was estimated in the CTO Study.

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Staff Ex. 1, Ally Direct at 20.

J. Supplemental Preliminary Order Issue No. 1.

On or after September 1, 2009, did the Texas Parks and Wildlife Department provide any recommendations or informational comments regarding the Application pursuant to Section 12.0011(b) of the Texas Parks and Wildlife Code?

Not addressed.

VI. Conclusion

CVA presented a full case in this proceeding, including the testimony of affected landowners and experts knowledgeable in routing transmission lines, endangered species, natural resources, wildlife habitat, land use, land planning, ecotourism, oak wilt, monopoles, viewscapes, an aviation engineer, a civil engineer, and the Texas State Photographer. Its witnesses demonstrated that Route MK33 with construction above ground on Link Y11 best fulfills the criteria the Commission must consider under PURA and its Substantive Rules.

These exceptions stress the importance of the Hill Country and the reasons why the Commission should improve upon the ALJs' recommendation of Staff's MK15. CVA understands why Staff and the ALJs did not recommend the routes that require a greater initial investment and that they worked to balance costs with compatible routing priorities, environmental concerns, and compliance with the Commission's policy of prudent avoidance. The Commission is the appropriate body to perform this analysis and base its decision to improve the use of compatible rights-of-way for policy reasons as well as the other factors required by PURA and Commission rules.

The ALJs recommend Staff's MK15, which goes through Tierra Linda Ranch, but identified many reasons why the Commission could make the policy decision to continue to parallel I-10 and route the proposed line through the Kerrville area. The ALJs identified the use of monopoles as a policy decision appropriately left for the Commission to decide. CVA requests that the Commission make one or more policy decisions that will improve the Staff MK15 route and address CVA's and the Commission's concerns for the Hill Country: (1) order that the route follow Highway 277 and I-10 instead of including Links b84 and b86; (2) require LCRA TSC to construct Link Y11 below the south approach surface of the Kimble County Airport using structures that do not exceed 60 feet in height, rather than burying the line; (3) construct the line parallel to I-10 through Kerrville.

CVA is not asking the Commission to spend money foolishly or wildly. CVA understands the importance of cost in the Commission's analysis. The Proposal for Decision is replete with instances in which the ALJs preferred Route MK32 or MK33 but stopped short of ultimately recommending one of those routes. It appears to CVA that the ALJs left it to the Commission to make the policy decisions to make the additional initial expenditures to parallel more compatible right-of-way in the Hill Country.

Although the PFD is extensive and well prepared, the ALJs did not discuss one issue that was raised by several intervenors – tourism and the potential effect of the proposed transmission line on Hill Country tourism. CVA witness Dr. Nick Parker addressed tourism issues in his testimony, so CVA wishes to conclude by emphasizing that intangible issue as yet another reason why the Commission should maximize the use of compatible rights-of-way by utilizing Highway 277 and I-10 to the greatest extent possible.

Dr. Parker explained that the Edwards Plateau, and especially the western part of the Hill Country, had no natural resources that were easily exploitable in a way that would alter the landscape. For example, the rocky, karst landscape is not attractive as farmland to be cultivated. The region has little to no oil deposits. It has no quantities of minerals to attract large-scale mining activity to alter the landscape. Rather, its greatest value is in the renewable natural resources and as rangeland. Beginning with the Native Americans and continuing with the arrival of the early Spanish inhabitants and the later influx of settlers in the mid- to late 1800's, the people who came to the Hill Country valued this land for its natural resources and as rangeland. Today, the greatest value derived by many ranches and businesses in the region is based on recreation and ecotourism. These sustainable activities are highly dependent upon a high-quality environment including unspoiled vistas. 245

Dr. Parker testified that tourism is an important industry in Texas. Many parties expressed concerns about the possible impacts of transmission line on their local tourism revenues. A June 2010 report prepared for the Office of the Governor–Texas Economic Development and Tourism valued the gross domestic product (GDP) of the travel industry at \$22.4 billion in 2009. This value was exceeded only by oil and gas production and related manufacturing, as reported in the Texas Workforce Commission-2009 Q3 – Employment and

²⁴⁴ CVA Ex. 3, Parker Direct at 8

²⁴⁵ *Id*.

Wages, Annual Survey of Manufacturers, 2008 as reported from www.governor.state.tx.us/ecodev. In 2008, 194 million domestic visitors traveled to and within Texas spending \$60.6 billion. That same year, the GDP for the travel industry was \$23.8 billion. For comparison, the 2007 market value of Agricultural production in Texas was \$12 billion. Revenue generated by direct spending for tourism in the eight counties of the project area was \$255.39 million in 2009. Revenue by county was as follows: 247

Schleicher	\$ 450,000
Sutton	7,300,000
Menard	2,420,000
Kimble	14,850,000
Mason	2,440,000
Gillespie	76,890,000
Kerr	85,000,000
Kendall	$66,040,000^{248}$

Dr. Parker testified that it is hard to place value on the vistas that may be lost, but those vistas are worth far more in the long run, and perhaps even in one year, than the full cost of this project. The value of tourism generated in two years in these eight counties would be greater than the most expensive route proposed. He acknowledged that not all of the tourist dollars will be lost, but cautioned that tourists are free to go elsewhere and many of them can be expected to do just that.²⁴⁹ The total cost of the Project is minor when compared to the value of the tourism industry in the affected counties in just one year. An important consideration in determining the route for this Project is to avoid jeopardizing this revenue source for the region.

Individuals active in CVA have followed this process for almost two years. CVA appreciates the dedication and hard work in this case and the other CREZ cases put forward by the ALJs, Commission Staff, other parties, and the Commissioners. CVA understands that decisions in this process are not easy and that everyone is trying to do their best for the State of Texas, the Hill Country, affected landowners, and the ratepayers who ultimately will pay for this project. As it reaches the end of the process after these many months, CVA takes this opportunity

²⁴⁶ *Id.* at 15.

Based on data from the Dean Runyan Associates report, "The Economic Impact of Travel on Texas: 1990-2009 Summary Tables; 1994-2009 Detail of Tables prepared for the Office of the Governor, Texas Economic Development on Tourism, June 2010.

²⁴⁸ CVA Ex. 3, Parker Direct at 17.

²⁴⁹ *Id.* at 18-19.

to state again the principles of its formation: Site transmission lines along existing utility rights-of-way and highways rather than hacking corridors through pristine wilderness and ranch land and use monopoles instead of giant industrial lattice towers to minimize the visual impact on our scenic vistas. Route MK33 with construction above ground on Link Y11 best meets CVA's goals and, CVA believes, the needs of the State of Texas.

Respectfully submitted,

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ATTORNEYS FOR CLEAR VIEW ALLIANCE, INC.

CERTIFICATE OF SERVICE

I hereby certify that on December 23, 2010, a copy of Clear View Alliance, Inc.'s Exceptions to Proposal for Decision was served in accordance with SOAH Order Nos. 1 and 2.

Bradford W. Bayliff